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Catalogue 2021

Pumps ı Automation
Building ı Water ı Waste Water ı Industry

24-MONTH WARRANTY

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Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

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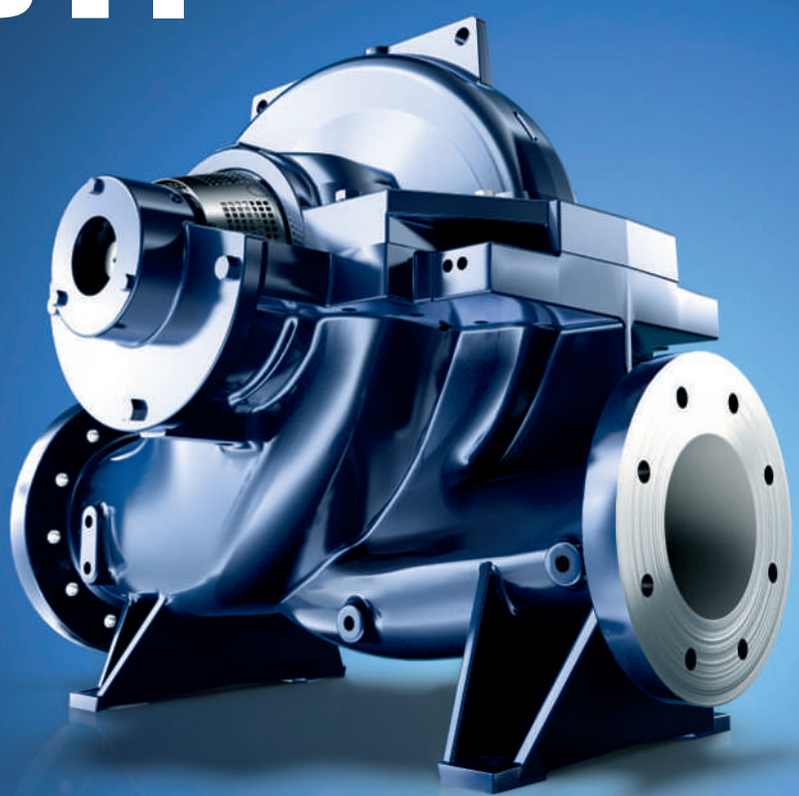

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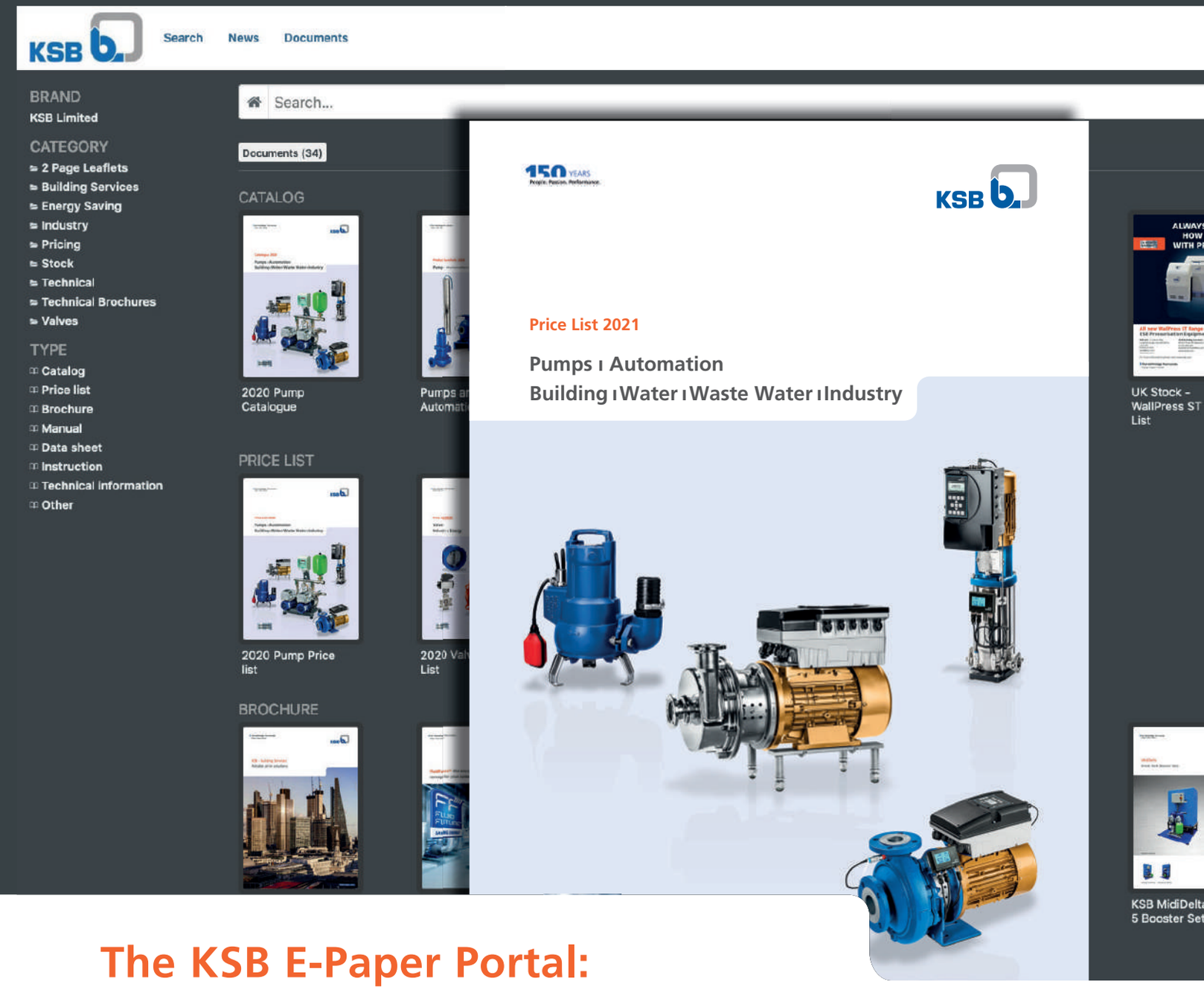
*only valid for Europe



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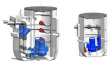
Drainage Pumps / Waste Water Pumps

Design / Application

Type series		Free passage	Q	H	T[1]		Waste water	Spray irrigation	General irrigation	Brackish water	Fire protection	Service water (industry)	Pressure boosting	Water containing faeces	Heating	Industry / process engineering	Air conditioning	Food processing / pharmaceutical industry	Seawater	Grey water	Swimming pools	Drinking water	Water supply
		max.	max.	max.	min.	max.																	
		[mm]	[m³/h]	[m]	[°C]	[°C]																	
Submersible Waste Water Pumps																							
	Ama-Drainer N (⇨ Page 10)	≤ 35	≤ 16,5	≤ 12	≥ 0	≤ +50	-	-	-	✗	-	-	-	-	-	-	-	-	✗	✗	✗	-	-
	Ama-Drainer 4 / 5 (⇨ Page 17)	≤ 35	≤ 50	≤ 24	≥ 0	≤ +40	-	-	-	✗	-	-	-	-	-	-	-	-	✗	✗	✗	-	-
	Ama-Drainer 80/100 (⇨ Page 28)	≤ 12	≤ 130	≤ 26	≥ 0	≤ +50	-	-	-	-	-	-	-	-	-	-	-	-	-	✗	-	-	-
Waste Water Pumps / Condensate Pumps																							
	Rotex (⇨ Page 33)	≤ 18	≤ 24	≤ 14	≥ 0	≤ +90	-	-	-	-	-	-	-	-	-	-	-	-	-	✗	-	-	-
Waste Water Pumps / Condensate Pumps / Heat Transfer Fluid Pumps																							
	MK (⇨ Page 39)	≤ 18	≤ 36	≤ 19	≥ -10	≤ +200	✗	-	-	-	-	-	-	-	-	-	-	-	-	✗	-	-	-
Submersible Motor Pumps with and without Explosion Protection																							
	Amarex N (⇨ Page 49)	≤ 100	≤ 190	≤ 49	-	≤ +40	✗	-	-	✗	-	-	-	✗	-	-	-	-	✗	✗	✗	-	-
	Amarex (⇨ Page 63)	-	≤ 320	≤ 42	-	≤ +40	✗	-	-	✗	-	-	-	✗	-	-	-	-	✗	✗	✗	-	-
	Amarex KRT (⇨ Page 115)	≤ 202	≤ 10080	≤ 120	-	≤ +60	✗	-	-	✗	-	-	-	✗	-	-	-	-	✗	✗	✗	-	-
	CK 1000 Pump Station (⇨ Page 123)	≤ 40	≤ 40,3	≤ 37,2	-	≤ +40	✗	-	-	-	-	-	-	✗	-	-	-	-	-	✗	-	-	-
Submersible Motor Pumps without Explosion Protection																							
	Ama-Porter (⇨ Page 129)	≤ 60	≤ 40	≤ 16	-	≤ +40	✗	-	-	-	-	-	-	-	-	-	-	-	-	✗	-	-	-
	Ama-Porter CK Pump Station (⇨ Page 143)	≤ 60	≤ 40	≤ 16	-	≤ +40	✗	-	-	-	-	-	-	-	-	-	-	-	-	✗	-	-	-
Dry-installed Volute Casing Pumps																							

1 T = fluid temperature

Type series		Free passage	Q	H	T[1]		Waste water	Spray irrigation	General irrigation	Brackish water	Fire protection	Service water (industry)	Pressure boosting	Water containing faeces	Heating	Industry / process engineering	Air conditioning	Food processing / pharmaceutical industry	Seawater	Grey water	Swimming pools	Drinking water	Water supply
		max.	max.	max.	min.	max.																	
		[mm]	[m³/h]	[m]	[°C]	[°C]																	
	KWP (⇨ Page 148)	≤ 250	≤ 15000	≤ 100	≥ -40	≤ +140	✗	-	-	✗	-	-	-	✗	-	-	-	-	✗	✗	-	-	-
	Sewabloc (⇨ Page 154)	≤ 120	≤ 1000	≤ 90	-	≤ +70	✗	-	-	✗	-	-	-	✗	-	-	-	-	-	✗	-	-	-
	Sewatec (⇨ Page 156)	≤ 280	≤ 10000	≤ 115	-	≤ +70	✗	-	-	✗	-	-	-	✗	-	-	-	-	-	✗	-	-	-
Automatic Waste Water Lifting Units																							
	Ama-Drainer-Box Mini (⇨ Page 158)	≤ 10	≤ 10	≤ 6,5	-	≤ +50	-	-	-	✗	-	-	-	-	-	-	-	-	✗	✗	✗	-	-
	Ama-Drainer-Box (⇨ Page 162)	≤ 35	≤ 46	≤ 24	-	≤ +40	-	-	-	✗	-	-	-	-	-	-	-	-	✗	✗	✗	-	-
	Evamatic-Box N (⇨ Page 172)	≤ 60	≤ 40	≤ 21	-	≤ +40	✗	-	-	-	-	-	-	✗ [2]	-	-	-	-	-	✗	-	-	-
Floodable Sewage Lifting Units																							
	mini-Compacta (⇨ Page 178)	≤ 40	≤ 36	≤ 25	-	≤ +40	✗	-	-	✗	-	-	-	✗	-	-	-	-	✗	✗	✗	-	-
	Compacta (⇨ Page 212)	≤ 80	≤ 140	≤ 24,5	-	≤ +40	✗	-	-	✗	-	-	-	✗	-	-	-	-	✗	✗	✗	-	-

2 Please note: The pump is not approved for use in countries stipulating explosion-proof units for handling waste water containing faeces.

Submersible Waste Water Pumps

Ama-Drainer N 301/302/303/358

http://shop.ksb.com/catalog/k0/en/product/ES000771

Product benefits

- Ready-to-connect, easy installation and commissioning
- Maintenance-free with grease-packed bearings sealed for life
- Low-weight, corrosion-resistant, impact-resistant, abrasion-resistant, noise-dampening high-quality plastic housing with robust handle

Further information

Prices on request

Characteristic curves 13
Dimensions 14

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	LevelControl Basic 2 (⇨ Page 1038)	Level-dependent pump control and monitoring unit with display for either 1 or 2 pumps.

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certifications

Overview

Label	Effective in:	Comment
	Europe	-

Fluids handled

- Sizes 301, 302, 303:
  - Solid particles with a particle size of up to 10 mm
- Size 358:
  - Solid particles with a particle size of up to 35 mm

Material variant A (standard variant)

- Slightly contaminated waste water (up to 50 °C max.)
- Wash water (up to 90 °C max. for short periods t ≤ 3 minutes)
- Waste water without faeces
- Waste water
- River water, lake water and groundwater

Material variant C (for aggressive fluids)

- Seawater
- Brackish water
- Water containing salt

Main applications

- Drainage
- Disposal
- Drainage systems
- Lowering groundwater levels
- Maintaining groundwater levels
- Draining of pits, shafts, etc.

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 16,5
	Q [l/s]	≤ 4,6
Head	H [m]	≤ 12
Fluid temperature	T [°C]	≤ +50 (continuous duty)
		≤ +90 (short-time duty)

Design details

Design

- Fully floodable submersible motor pump
- Close-coupled design
- Single-stage
- Integrated swing check valve (301, 302, 303)
- Pump controlled via integrated float switch
- Enclosure IP68 (permanently submerged) to EN 60529 / IEC 529
- Wetted parts made of materials coated with anti-corrosive
- Maximum immersion depth: 2 m

Installation

- Vertical installation
- Wet-installed transportable model

Drive

- Jacket-cooled single-phase AC motor
- Integrated temperature switches
- Power cable incl. shockproof plug

Shaft seal

- Drive end , 1 shaft seal ring
- Pump end, 2 shaft seal rings
- Liquid reservoir between the seals for cooling and lubrication

Bearings

- Enclosed bearings, grease-packed for life

Designation

Example: Ama-Drainer N 301 S E / C

Designation key

Code	Description	
Ama-Drainer N	Type series	
301	Code number	
	301, 302, 303, 358	
S	Float switch	
	S	With float switch
	N	Without float switch
E	Motor	
	E	Single-phase AC motor
C	Material variant	
	C[3]	Variant for aggressive fluids
	-[4]	Standard design

Materials

Overview of available materials

Part No.	Description	Material variant A		Material variant C
		N 301/302/303	N 358	N 301/302/303
79-1	Float switch (float)	Polypropylene		
101	Pump casing	Polypropylene, 30 % glass fibre reinforced		
107	Discharge casing	Polypropylene, 30 % glass fibre reinforced		
161	Casing cover	Polypropylene with 20 % talc (PP-TS 20)		
210	Shaft	1.4057	1.4057	Chrome nickel molybdenum steel (1.4571)
230	Impeller	Noryl GNF2	Polyamide	Noryl GNF2
811	Motor housing	Chrome nickel steel (1.4301)	Chrome nickel steel (1.4301)	Chrome nickel molybdenum steel (1.4571)

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

3 Ama-Drainer N 301/302/303 only
4 Blank

Characteristic curves

Ama-Drainer N 301, 302, 303; n = 2800 rpm, multi-vane impeller

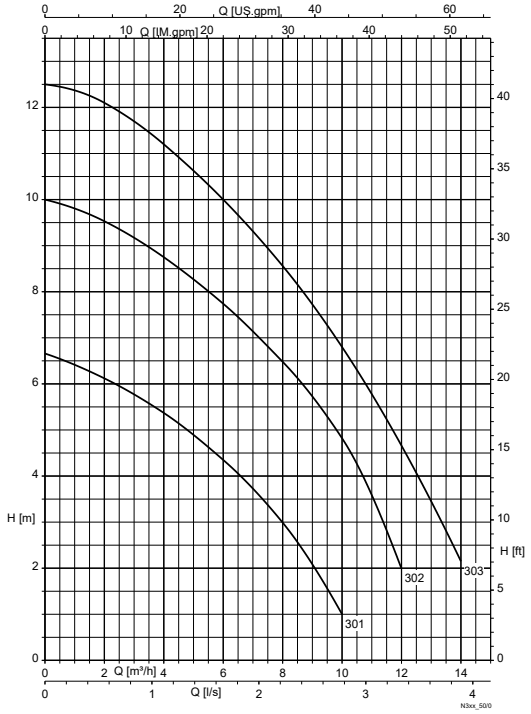


Fig. 1: Free passage: 301/302/303 = 10 mm

Ama-Drainer N 358; n = 2800 rpm, F impeller

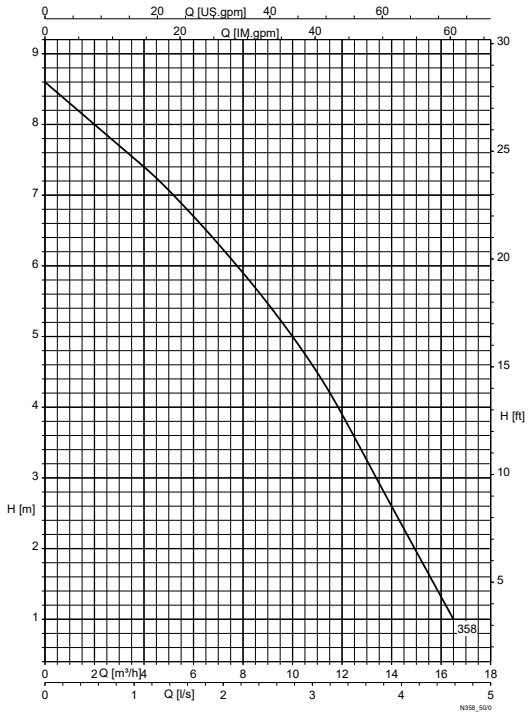


Fig. 2: Free passage: 358 = 35 mm

Dimensions

Ama-Drainer N 301, with float switch, single-phase AC motor

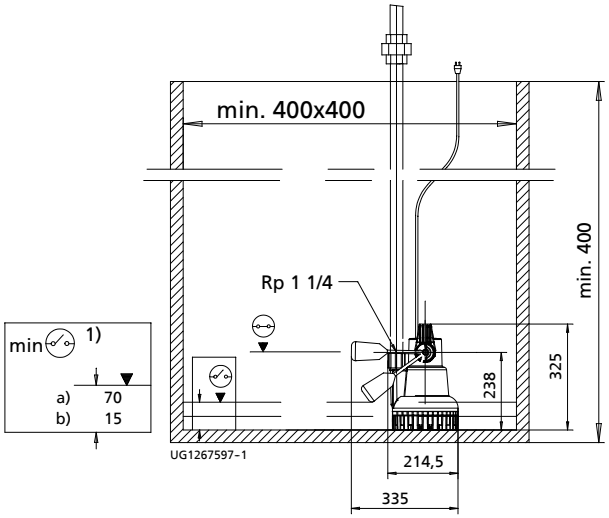


Fig. 3: Ama-Drainer N 301, with float switch, single-phase AC motor

1)	Residual water level
a)	Automatic
b)	Manual

Ama-Drainer N 302 / 303, with float switch, single phase AC motor

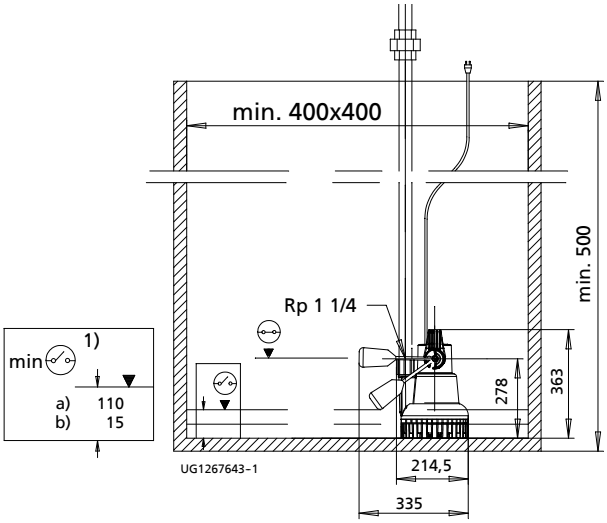


Fig. 4: Ama-Drainer N 302 / 303, with float switch, single phase AC motor

1)	Residual water level
a)	Automatic
b)	Manual

Ama-Drainer N 358

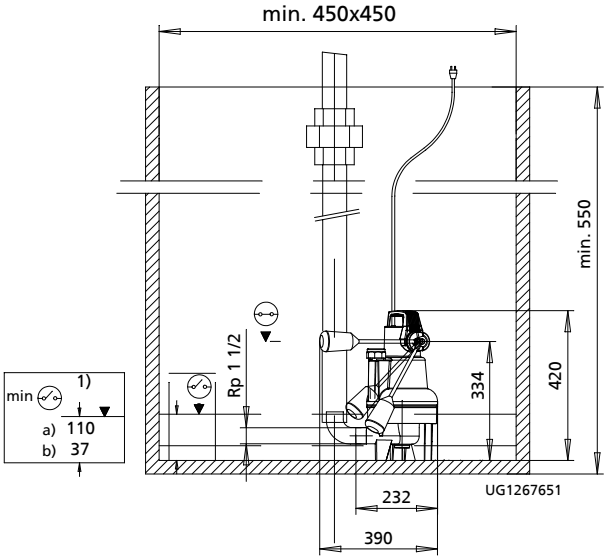


Fig. 5: Ama-Drainer N 358

1)	Residual water level
a)	Automatic
b)	Manual

Ama-Drainer N 301/302/303, dual-pump station

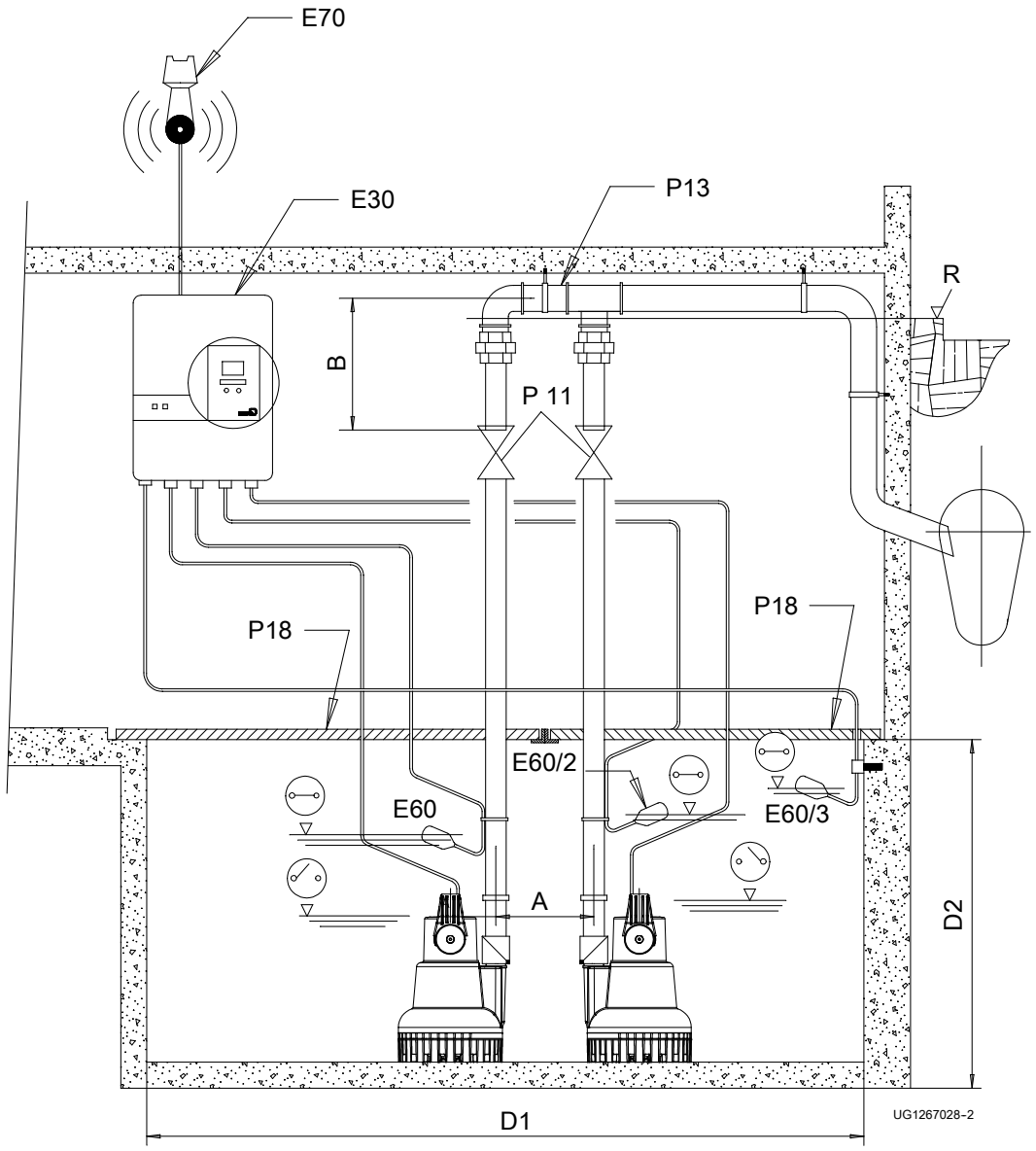


Fig. 6: Installation example of an Ama-Drainer N 301 NE / 302 NE / 303 NE dual-pump station

1)	Residual water level
a)	Automatic
b)	Manual
R	Flood level

Item	Description	Item	Description
E30	Control unit	E70	Horn
E60	Float switch, base load	P11	Gate valve
E60/2	Float switch, peak load	P13	Y-pipe
E60/3	Float switch, high water alert	P18	Cover plate

Dimensions of a dual-pump station

Ama-Drainer N	A	B	D1	D2
	[mm]	[mm]	[mm]	[mm]
301	275	320	1060 × 500	400
302	275	320	1060 × 500	500
303	275	320	1060 × 500	500

Ama-Drainer N 358, dual-pump station

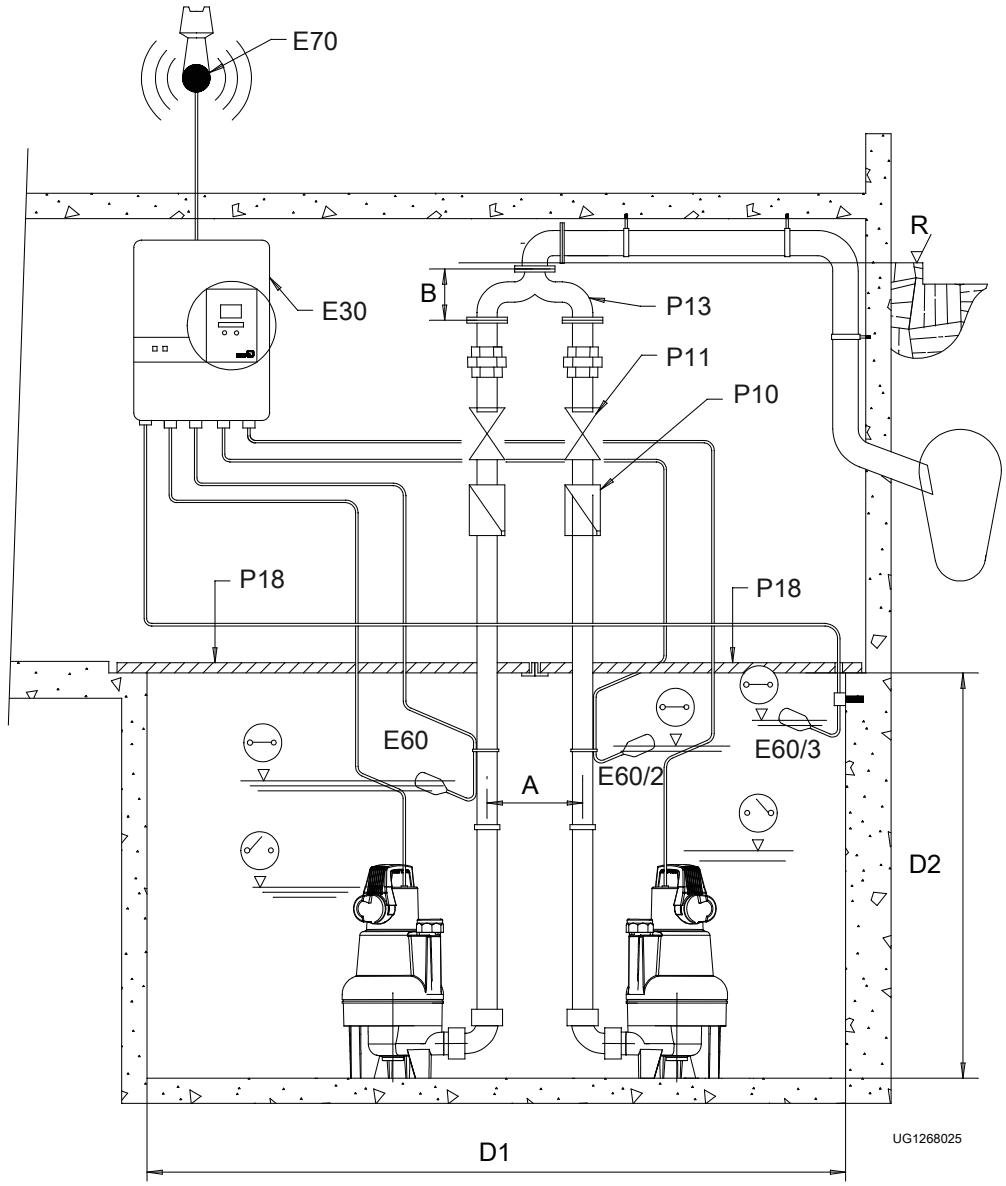


Fig. 7: Installation example of an Ama-Drainer N 358 NE dual-pump station

1)	Residual water level
a)	Automatic
b)	Manual
R	Flood level

Item	Description	Item	Description
E30	Control unit	P10	Lift check valve
E60	Float switch, base load	P11	Gate valve
E60/2	Float switch, peak load	P13	Y-pipe
E60/3	Float switch, high water alert	P18	Cover plate
E70	Horn		

Dimensions of a dual-pump station

Ama-Drainer N	A	B	D1	D2
	[mm]	[mm]	[mm]	[mm]
358	275	180	1060 × 500	550

Submersible Waste Water Pumps

Ama-Drainer 4 / 5

http://shop.ksb.com/catalog/k0/en/product/ES000078

Product benefits

- Ready-to-connect, easy installation and commissioning
- Reliable shaft sealing by SiC/SiC mechanical seal with good dry-running characteristics, with oil reservoir
- Maintenance-free with grease-packed bearings sealed for life

Further information

Prices on request

Characteristic curves 21
Dimensions 22

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	LevelControl Basic 2 (⇨ Page 1038)	Level-dependent pump control and monitoring unit with display for either 1 or 2 pumps.
	MSE / MSD (⇨ Page 1035)	Compact switchgear for level-dependent control
	Multi-functional plug, type Hyper (⇨ Page 1036)	Compact switchgear for level-dependent control

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certificates

Overview

Label	Effective in:
Type Tested and Monitored TÜVRheinland CERTIFIED www.tuv.com ID 0217007933	Europe

Fluids handled

Free passage 10/11 mm:

- Solid particles with a particle size of up to 10 or 11 mm

Free passage 35 mm:

- Waste water containing long fibres and stringy material
- Solid particles with a particle size of up to 35 mm

Material variant A (standard variant)

- Chemically neutral waste water
- Slightly contaminated waste water (up to 40 °C max.)
- Wash water (up to 90 °C max. for short periods t ≤ 3 minutes)

Material variant C (for aggressive fluids)

In addition to standard variant:

- Swimming pool water[5)]
- Brackish water
- Seawater
- Water containing salt
- Aggressive fluids
- Condensate from heat recovery applications

Variant R (for fluids handled containing oil / oil emulsions)

In addition to standard variant:

- Oil emulsions and cutting oils
- Waste water containing oil

Main applications

- Drainage
- Disposal
- Drainage systems
- Lowering groundwater levels
- Maintaining groundwater levels
- Draining of pits, shafts, etc.

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 50
	Q [l/s]	≤ 14
Head	H [m]	≤ 24
Fluid temperature	T [°C]	≤ +40 (continuous duty)
		≤ +90 (short-time duty, ≤ 3 minutes)
Immersion depth	ET [m]	≤ 7

Design details

Design

- Fully floodable submersible motor pump
- Close-coupled design
- Single-stage
- To EN 12050-2
- Vertical discharge nozzle
- With or without level control

Installation

- Vertical installation
- Wet-installed transportable model
- Wet-installed stationary model

Drive

- Motor winding to IEC 60038
- Motor design to EN 60043 T1/IEC 34-1
- Thermal class F
- DOL starting
- Enclosure IP68 (permanently submerged) to EN 60529 / IEC 529

Ama-Drainer NE/SE 10/35

- AC motor
- Integrated temperature switches
- 10-metre power cable
- Shockproof plug

Ama-Drainer SD 10/11/35

- Three-phase motor
- Integrated temperature switches
- 10-metre power cable
- CEE plug (3L+PE+N) with motor contactor and phase inverter

Ama-Drainer ND 10/11/35

- Three-phase motor
- Integrated temperature switches
- 10-metre power cable with free cable end and protective cap

Shaft seal

- Pump end, 1 bi-directional mechanical seal
- Drive end , 1 shaft seal ring
- Liquid reservoir between the seals for cooling and lubrication

Impeller type

- Open multi-vane impeller
- Free-flow impeller

Bearings

- Maintenance-free
- Grease-packed rolling element bearings sealed for life

5 Swimming pool water (0.4 to 1.4 mg/l free chlorine, max. 0.6 mg/l combined chlorine, pH 6.9 to 7.7, water hardness 10 to 30 °dH, max. salt content 7 g/l)

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Designation

Example: Ama-Drainer A 4 22 S D / 10 K

Designation key

Code	Description	
Ama-Drainer	Type series	
A	Material variant	
	A	Standard design
	C	Variant for aggressive fluids
	R	Variant for fluids handled containing oil / oil emulsions
4	Nominal discharge nozzle diameter	
	4	~ 40 mm (G 1 1/2)
	5	~ 50 mm (G 2)
22	Motor rating [kW x 10]	
	05	0,55 kW
	07	0,75 kW
	11	1,1 kW
	15	1,5 kW
	22	2,2 kW
S	Float switch	
	S	With float switch
	N	Without float switch
D	Motor	
	D	Three-phase motor
	E	Single-phase AC motor
10	Free passage [mm]	
	10	10 mm
	11	11 mm
	35	35 mm
K	Cooling jacket	
	K	With cooling jacket
	-[6]	Without cooling jacket

Materials

Overview of available materials for material variant A

Part No.	Description	Nominal discharge nozzle diameter [mm]			
		~ 40	~ 40	~ 50	~ 50[7]
		Free passage [mm]			
		10	35	10[8]	11
81-45	Float	Polypropylene (PP)			
81-78	Stator case	Chrome nickel steel (1.4301)			
101	Pump casing	Chrome nickel steel (1.4301)			Grey cast iron EN-GJL-250
102	Volute	Acrylonitrile butadiene styrene copolymer (ABS)			-
162	Suction cover	Chrome nickel steel (1.4301)			Grey cast iron EN-GJL-250
182	Pump foot	Polypropylene (PP)	Chrome nickel steel (1.4301)	Polypropylene (PP)	Polyethylene (PE)
210	Shaft	Chrome steel (1.4021)			
230	Impeller	Polyamide (PA)			
433	Mechanical seal	Silicon carbide (SiC/SiC)			
824	Motor power cable	Polychloroprene rubber (CR)			
-	O-rings	Acrylonitrile butadiene rubber (NBR)			
-	Cooling jacket	-	-	Polyoxymethylene (POM)	-
-	Oil supply	Liquid paraffin (environmentally friendly)			

6 Blank
7 Motor rating 2.2 kW
8 With cooling jacket

Overview of available materials for material variant C

Part No.	Description	Nominal discharge nozzle diameter [mm]		
		~ 40	~ 50	~ 50[7]
		Free passage [mm]		
		35	10[8]	11
81-45	Float	Polypropylene (PP)		
81-78	Stator case	Chrome nickel molybdenum steel (1.4401)		
101	Pump casing	Chrome nickel molybdenum steel (1.4401)		Chrome nickel molybdenum cast steel (1.4408)
102	Volute	Acrylonitrile butadiene styrene copolymer (ABS)		-
162	Suction cover	Chrome nickel molybdenum steel (1.4401)		Chrome nickel molybdenum cast steel (1.4408)
182	Pump foot	Polypropylene (PP)		Polyethylene (PE)
210	Shaft	Chrome nickel molybdenum steel (1.4571)		
230	Impeller	Polyamide (PA)		
433	Mechanical seal	Silicon carbide (SiC/SiC)		
824	Motor power cable	Polychloroprene rubber (CR)		
-	O-rings	Acrylonitrile butadiene rubber (NBR)		
-	Cooling jacket	-	Polyoxymethylene (POM)	-
-	Oil supply	Liquid paraffin (environmentally friendly)		

Overview of available materials for material variant R

Part No.	Description	Nominal discharge nozzle diameter [mm]	
		~ 50	~ 50[7]
		Free passage [mm]	
		10[8]	11
81-45	Float	Polypropylene (PP)	
81-78	Stator case	Chrome nickel steel (1.4301)	
101	Pump casing	Chrome nickel steel (1.4301)	Grey cast iron EN-GJL-250
102	Volute	Acrylonitrile butadiene styrene copolymer (ABS)	-
162	Suction cover	Chrome nickel steel (1.4301)	Grey cast iron EN-GJL-250
182	Pump foot	Polypropylene (PP)	
210	Shaft	Chrome steel (1.4021)	
230	Impeller	Polyamide (PA)	
433	Mechanical seal	Silicon carbide (SiC/SiC)	
824	Motor power cable	Polyurethane (PUR)	
-	O-rings	Fluorocarbon rubber (FPM)	
-	Cooling jacket	Polyoxymethylene (POM)	-
-	Oil supply	Liquid paraffin (environmentally friendly)	

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Characteristic curves

Ama-Drainer 4 / 5, n = 2800 rpm, multi-vane impeller

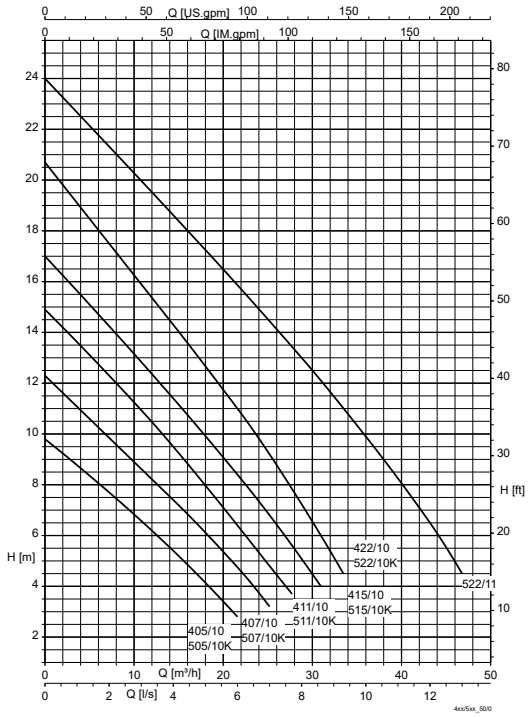


Fig. 8: Free passage: 405 - 515 = 10 mm, 522 = 11 mm

Performance tolerance to ISO 2548 Class C (water under standard conditions)

The characteristic curves shown are those of the respective pumps. Hydraulic losses caused by the discharge-side piping, both inside and outside of the Ama-Drainer-Box lifting unit, must be taken into account during product selection.

Ama-Drainer 4, n = 2800 rpm, F impeller

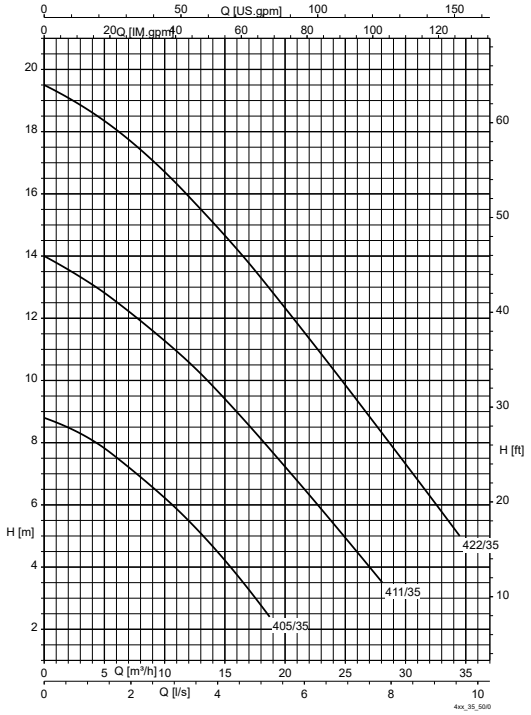


Fig. 9: Free passage: 405/411/422 = 35 mm

Performance tolerance to ISO 2548 Class C (water under standard conditions)

The characteristic curves shown are those of the respective pumps. Hydraulic losses caused by the discharge-side piping, both inside and outside of the Ama-Drainer-Box lifting unit, must be taken into account during product selection.

Dimensions

Ama-Drainer 4, free passage 10 mm, without cooling jacket

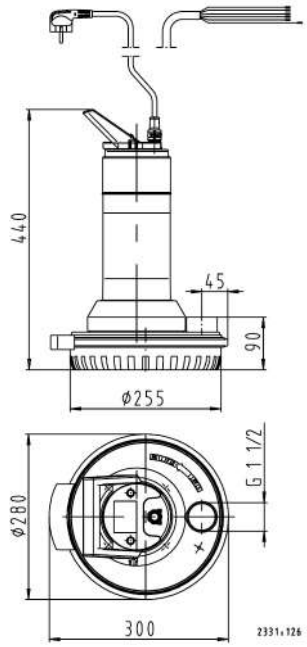


Fig. 10: Ama-Drainer 4, free passage 10 mm, without cooling jacket

Ama-Drainer 4, free passage 35 mm, without cooling jacket

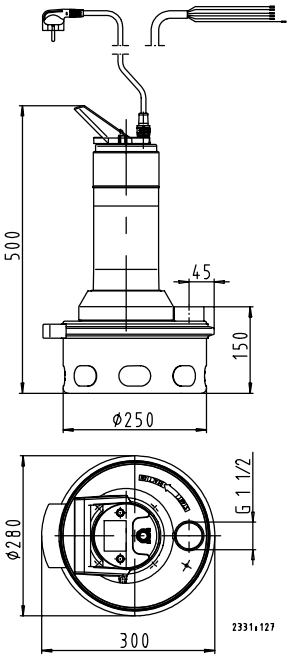


Fig. 11: Ama-Drainer 4, free passage 35 mm, without cooling jacket

Ama-Drainer 5, free passage 10 mm, with cooling jacket

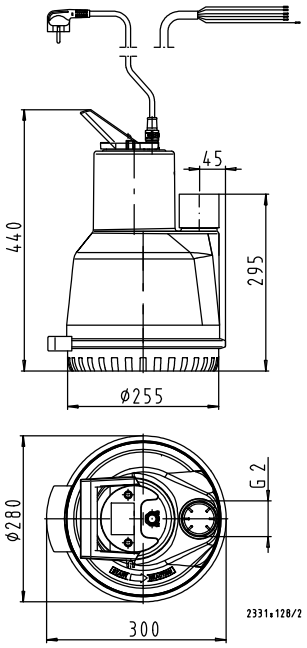


Fig. 12: Ama-Drainer 5, free passage 10 mm, with cooling jacket

Ama-Drainer 5, free passage 11 mm, without cooling jacket

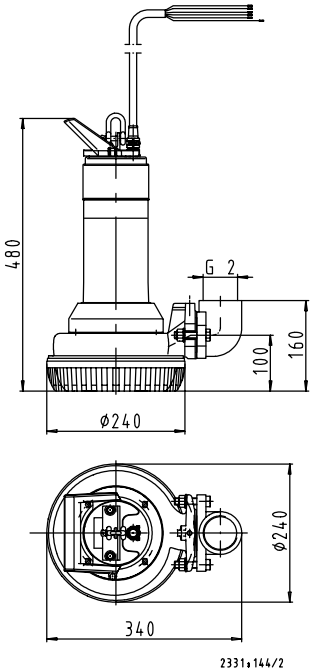


Fig. 13: Ama-Drainer 5, free passage 11 mm, without cooling jacket

Ama-Drainer 4, single pump, free passage 10 mm, with float switch, single-phase AC motor, without cooling jacket

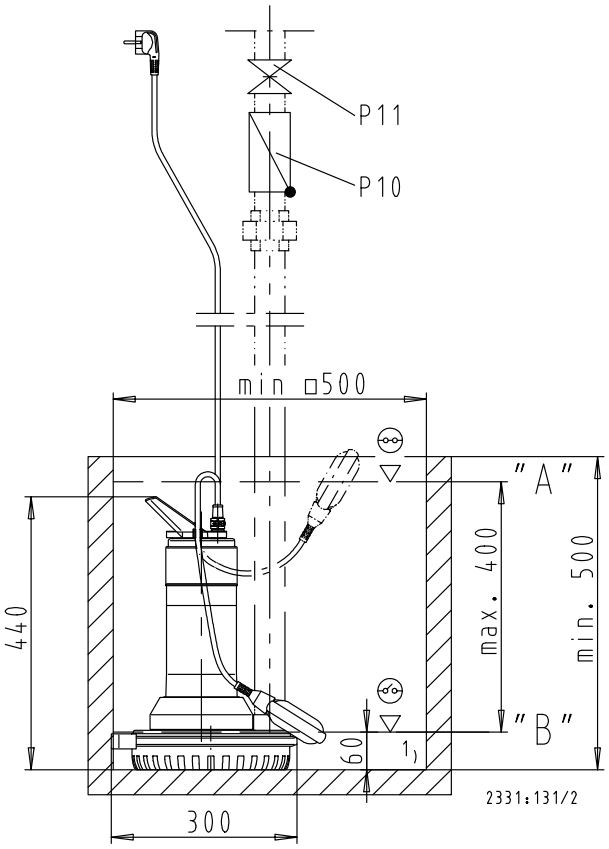


Fig. 14: Ama-Drainer 4, single pump, free passage 10 mm, with float switch, single-phase AC motor, without cooling jacket

1)	Residual water level
A	Start-up level
B	Stop level

Pos.	Description
P10	Swing check valve
P11	Gate valve

Ama-Drainer 4, single pump, free passage 35 mm, with float switch, three-phase motor, without cooling jacket

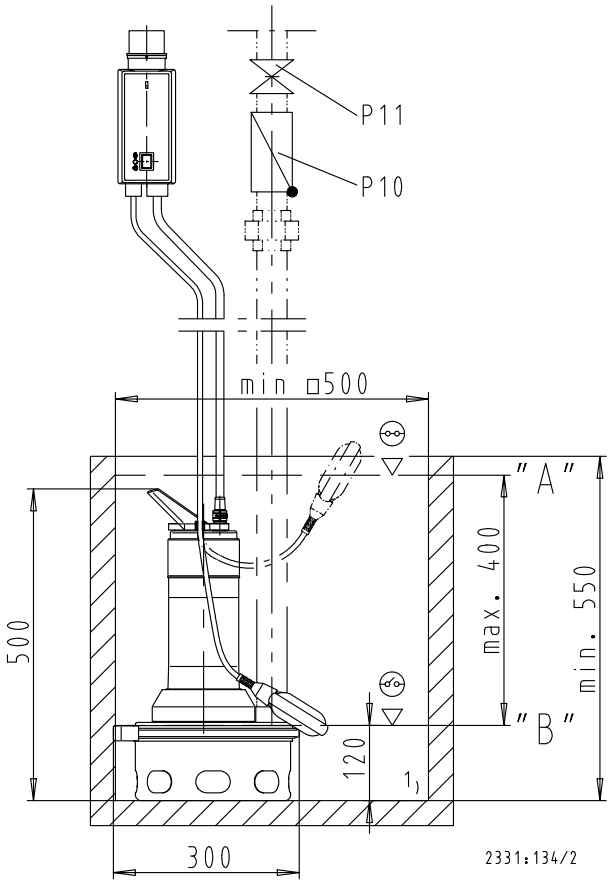


Fig. 15: Ama-Drainer 4, single pump, free passage 35 mm, with float switch, three-phase motor, without cooling jacket

1)	Residual water level
A	Start-up level
B	Stop level

Pos.	Description
P10	Swing check valve
P11	Gate valve

Ama-Drainer 5, single pump, free passage 10 mm, with float switch, three-phase motor, with cooling jacket

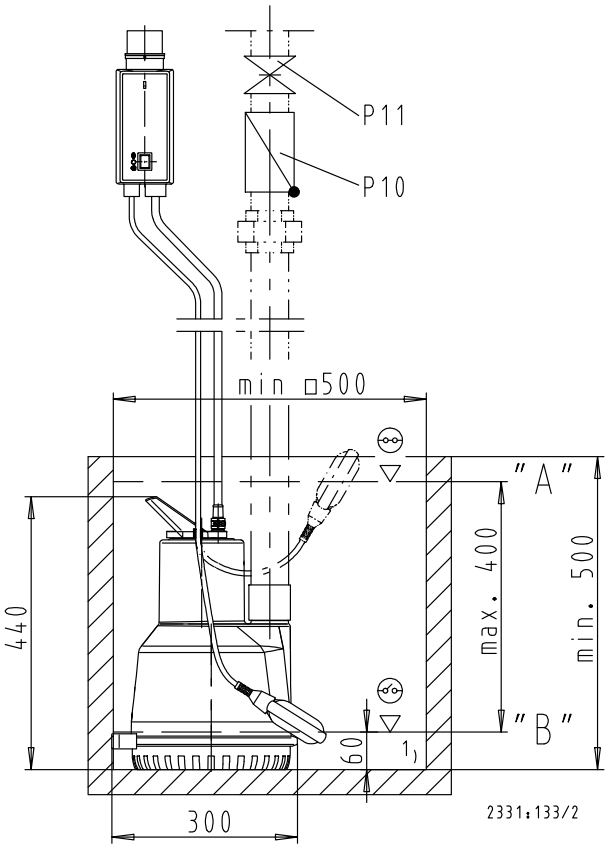


Fig. 16: Ama-Drainer 5, single pump, free passage 10 mm, with float switch, three-phase motor, with cooling jacket

1)	Residual water level
A	Start-up level
B	Stop level

Pos.	Description
P10	Swing check valve
P11	Gate valve

Ama-Drainer 5, single pump, free passage 11 mm, with float switch, three-phase motor, without cooling jacket

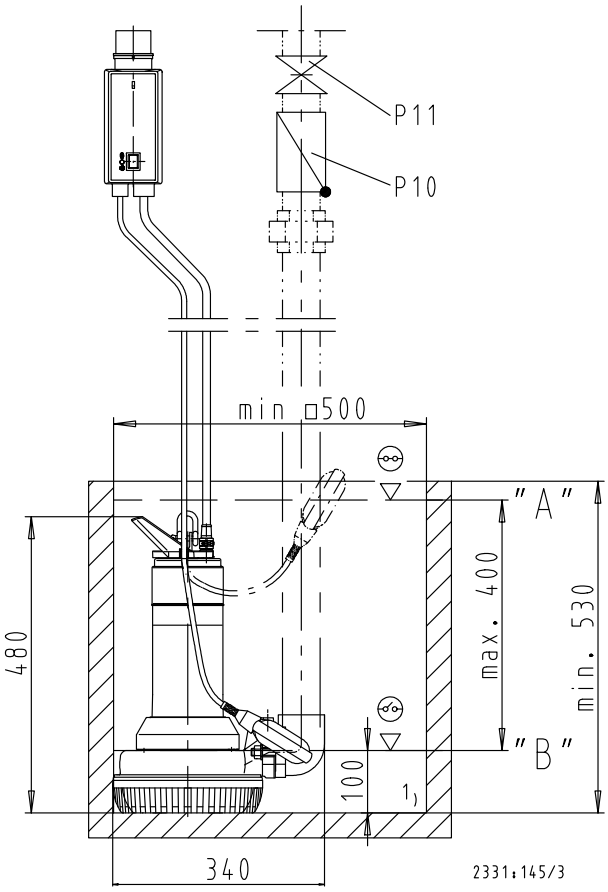


Fig. 17: Ama-Drainer 5, single pump, free passage 11 mm, with float switch, three-phase motor, without cooling jacket

1)	Residual water level
A	Start-up level
B	Stop level

Pos.	Description
P10	Swing check valve
P11	Gate valve

Ama-Drainer 4, transportable model, free passage 10 mm, without float switch, single-phase AC motor, without cooling jacket

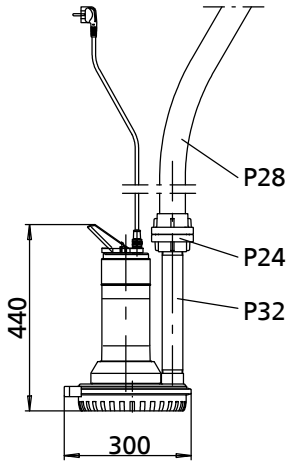


Fig. 18: Ama-Drainer 4, transportable model, free passage 10 mm, without float switch, single-phase AC motor, without cooling jacket

Pos.	Description
P24	Storz rigid coupling
P28	Plastic hose
P32	Pipe extension

Ama-Drainer 5, transportable model, free passage 10 mm, without float switch, single-phase AC motor, with cooling jacket

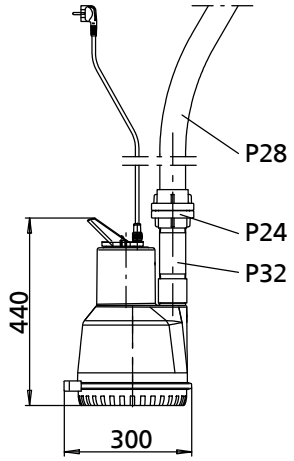


Fig. 19: Ama-Drainer 5, transportable model, free passage 10 mm, without float switch, single-phase AC motor, with cooling jacket

Pos.	Description
P24	Storz rigid coupling
P28	Plastic hose
P32	Pipe extension

Ama-Drainer 5, transportable model, free passage 11 mm, without float switch, three-phase motor, without cooling jacket

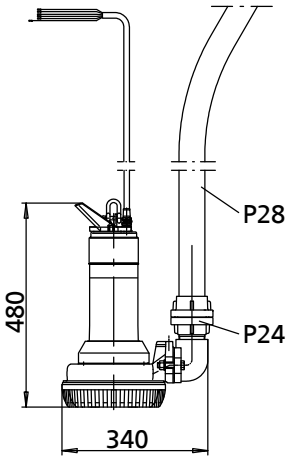


Fig. 20: Ama-Drainer 5, transportable model, free passage 11 mm, without float switch, three-phase motor, without cooling jacket

Pos.	Description
P24	Storz rigid coupling
P28	Plastic hose

Ama-Drainer 5, stationary installation with guide hoop, free passage 11 mm, without float switch, three-phase motor, without cooling jacket

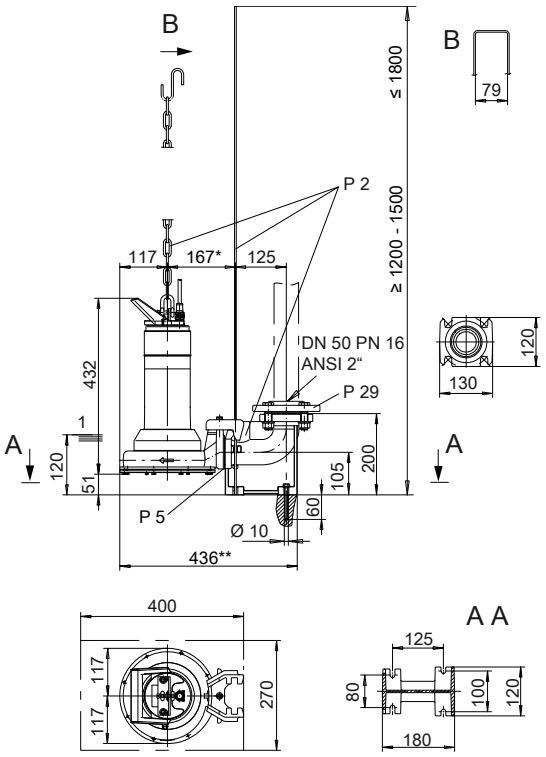


Fig. 21: Ama-Drainer 5, stationary installation with guide hoop, free passage 11 mm, without float switch, three-phase motor, without cooling jacket

*	When using flange adapter P5: 217 mm
**	When using flange adapter P5: 486 mm
1	Lowest stop level for automatic operation

Connections

Pos.	Description
P2	Guide hoop arrangement
P5[9)]	Flange adapter for stabilising the pump position during start-up
P29	Threaded flange

Ama-Drainer 5, stationary installation with guide wire, free passage 11 mm, without float switch, three-phase motor, without cooling jacket

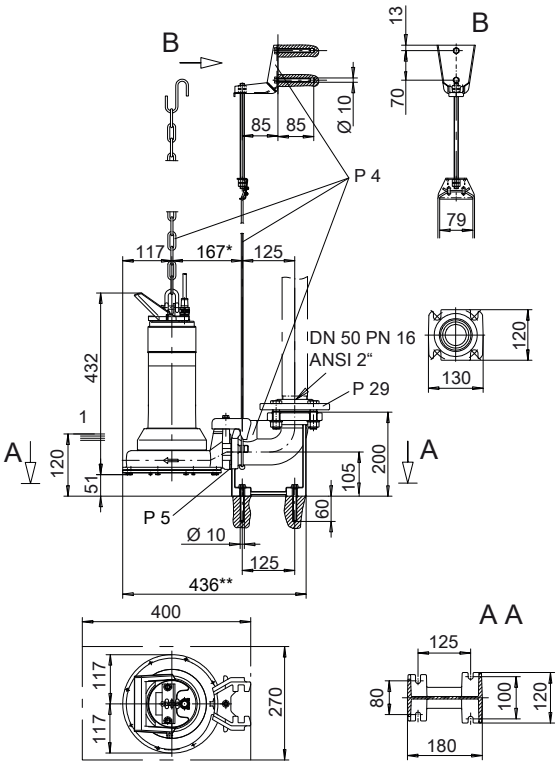


Fig. 22: Ama-Drainer 5, stationary installation with guide wire, free passage 11 mm, without float switch, three-phase motor, without cooling jacket

*	When using flange adapter P5: 217 mm
**	When using flange adapter P5: 486 mm
1	Lowest stop level for automatic operation

Connections

Pos.	Description
P4	Guide wire arrangement
P5[10)]	Flange adapter for stabilising the pump position during start-up
P29	Threaded flange

Installation example of a dual-pump station

The inlet is positioned above the highest float switch.

9 Not shown in drawing
10 Not shown in drawing

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

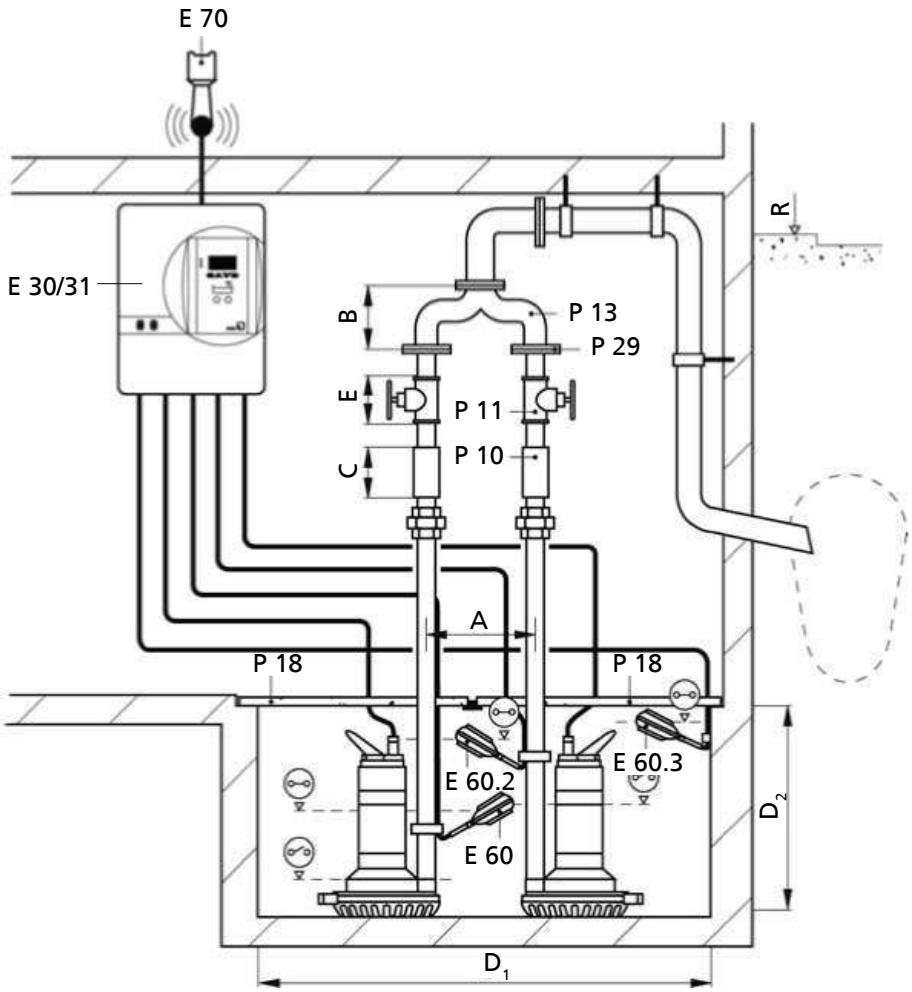


Fig. 23: Position of float switches in a dual-pump station

R	Flood level

Pos.	Description	Pos.	Description
E5	AS 5 alarm switchgear	P10	Swing check valve
E5/2	Horn	P11	Gate valve
E12 / E13	Control unit	P13	Y-pipe
E14	Float switch, normal water level	P18	Cover plate
E14/2	Float switch, high water level	P29	Threaded flange
E14/3	Alarm contactor		

Dimensions and weights

Size	A	B	C	D_1	D_2	E	[kg]
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
Ama-Drainer 4..SE/10	275	190	130	1060 x 500	500	55	16
Ama-Drainer 4..SD/35	275	190	130	1060 x 500	500	60	17
Ama-Drainer 5..SD/10 K	300	210	130	1060 x 500	500	55	17
Ama-Drainer 522/11	300	210	130	1060 x 500	500	55	24

Submersible Waste Water Pumps

Ama-Drainer 80/100

http://shop.ksb.com/catalog/k0/en/product/ES000079

Product benefits

- Ready-to-connect, easy installation and commissioning
- Reliable shaft sealing by SiC/SiC mechanical seal with good dry-running characteristics, with oil reservoir
- Maintenance-free with grease-packed bearings sealed for life
- Suitable for handling water containing sand (variant B/BH)

Further information

Prices on request

Characteristic curve....31
Dimensions....32

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	LevelControl Basic 2 (⇨ Page 1038)	Level-dependent pump control and monitoring unit with display for either 1 or 2 pumps.
	MSE / MSD (⇨ Page 1035)	Compact switchgear for level-dependent control
	Multi-functional plug, type Hyper (⇨ Page 1036)	Compact switchgear for level-dependent control

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certificates

Overview

Label	Effective in:
Type Tested and Monitored TÜVRheinland CERTIFIED www.tuv.com ID 0217007933	Europe

Fluids handled

- Solid particles with a particle size of up to 12 mm

Standard design

- Chemically neutral waste water
- Slightly contaminated waste water

Material variant B / BH (wear-resistant variant)

- Abrasive fluids
- Water containing sand

Main applications

- Drainage
- Disposal
- Drainage systems
- Lowering groundwater levels
- Maintaining groundwater levels
- Draining of pits, shafts, etc.
- Building site drainage
- Construction pit drainage
- Emergency pump in the event of flooding

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 130
	Q [l/s]	≤ 36
Head	H [m]	≤ 26
Fluid temperature	T [°C]	≤ +50 (continuous duty, standard)
		≤ +40 (continuous duty, variant B/BH)
		≤ +90 (short-time duty, ≤ 3 minutes)
Immersion depth	ET [m]	≤ 7 (standard)
		≤ 10 (variant B/BH)

Design details

Design

- Fully floodable submersible motor pump
- Close-coupled design
- Single-stage
- To EN 12050-2
- Vertical discharge nozzle
- With or without level control
- Wetted parts made of materials coated with anti-corrosive

Installation

- Vertical installation
- Wet-installed transportable model
- Wet-installed stationary model

Drive

- Surface-cooled three-phase motor
- DOL starting or star-delta starting
- Motor winding to IEC 60038
- Motor design to EN 60043 T1/IEC 34-1
- Thermal class B
- Enclosure IP68 (permanently submerged) to EN 60529 / IEC 529
- Integrated temperature switches

Shaft seal

- Pump end: 1 mechanical seal
- Drive end: 1 mechanical seal
- Liquid reservoir between the seals for cooling and lubrication

Impeller type

- Open multi-vane impeller

Bearings

- Maintenance-free
- Grease-packed rolling element bearings sealed for life

Electrical connection

Ama-Drainer 80:

- Ready to be plugged in
- Power cable and CEE plug with phase inverter
- Phase sequence indicator
- Over-current trip

Ama-Drainer 100:

- Power cable with free cable ends
- Control unit available as an accessory

Standard design:

- 10-metre power cable

Variants B / BH

- 20 m power cable

Designation

Example: Ama-Drainer B 80-40 S

Designation key

Code	Description	
Ama-Drainer	Type series	
B	Material variant	
	B	Wear-resistant variant
	BH	Wear-resistant variant with impeller made of Norihard white cast iron
	-[11)]	Standard design
80	Nominal discharge nozzle diameter	
	80	80 mm
	100	100 mm
40	Motor rating [kW x 10]	
	40	4,0 kW
	75	7,5 kW
S	Float switch	
	S	With float switch
	N	Without float switch

Materials

Overview of available materials

Part No.	Description	Standard material variant	Material variant B / BH
-	Pump casing	Grey cast iron EN-GJL-250 (EN-GJL-250)	Grey cast iron EN-GJL-250 (EN-GJL-250) with rubber insert
162	Suction cover	Steel, CK 45 N	
182	Pump foot	Polystyrene	
230	Impeller	Grey cast iron EN-GJL-250 (EN-GJL-250)	B: grey cast iron EN-GJL-250 (EN-GJL-250) BH: Norihard NH 15 3 (G-X250CrMo153)
410	Profile joint, O-ring	Nitrile butadiene rubber	
433	Mechanical seal	Tungsten carbide	
-	Stator case, motor housing	Aluminium, plastic-coated	
-	Rotor shaft	Chrome steel (1.4021)	
-	Motor power cable	Polychloroprene rubber (CR)	
81-45	Float switch (float)	Polypropylene (PP)	-
-	Oil supply	Thin-bodied paraffin	

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

11 Blank

Characteristic curve

Ama-Drainer (B/BH) 80/100; n = 2800 rpm, multi-vane impeller

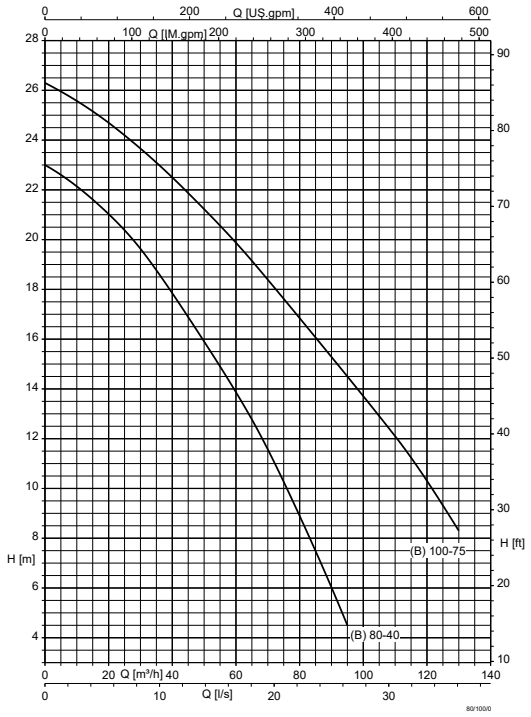


Fig. 24: Free passage: (B/BH) 80 / (B/BH) 100 = 12 mm

Dimensions

Ama-Drainer 80, with float switch, three-phase motor

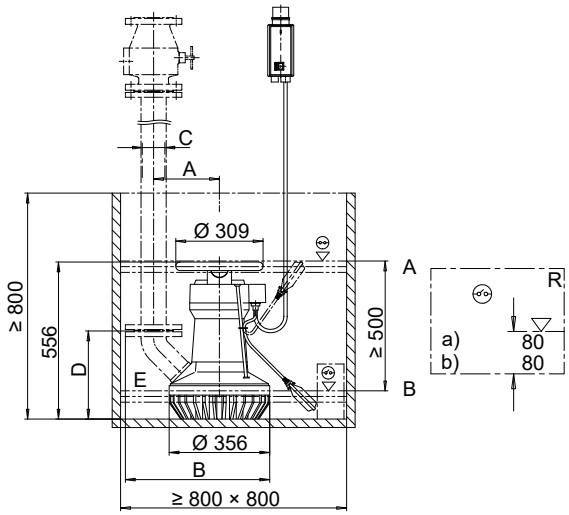


Fig. 25: Ama-Drainer 80, with float switch, three-phase motor

a)	Automatic
b)	Manual
A	Start-up level
B	Stop level
E	Vent hole
R	Residual water level

Dimensions

Connection	A	B	C	D
	[mm]	[mm]		[mm]
Rp 2 1/2	223	445	Rp 2 1/2	314
DN 80, PN 16	233	511	80	312

Ama-Drainer 100, with float switch, three-phase motor

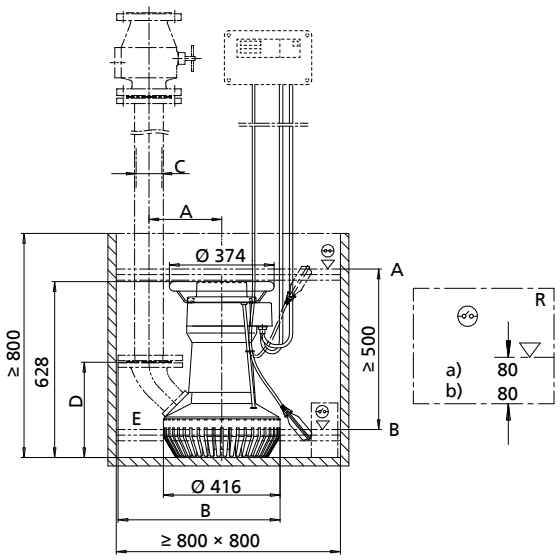


Fig. 26: Ama-Drainer 100, with float switch, three-phase motor

a)	Automatic
b)	Manual
A	Start-up level
B	Stop level
E	Vent hole
R	Residual water level

Dimensions

Connection	A	B	C	D
	[mm]	[mm]		[mm]
Rp 4	275	546	Rp 4	383
DN 100, PN 16	260	578	100	340

Waste Water Pumps / Condensate Pumps

Rotex

http://shop.ksb.com/catalog/k0/en/product/ES000012

Product benefits

- Ready-to-connect, easy installation and commissioning
- Automatic operation by level control with displacement weight or float switch
- Easy to install thanks to low weight, compact design and ready-to-connect system
- Maintenance-free thanks to grease-packed deep groove ball bearings sealed for life and product-lubricated plain bearings

Further information

Prices on request

Characteristic curve 36
Dimensions 37

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certificates

Overview

Label	Effective in:
Type Tested and Monitored TÜVRheinland CERTIFIED www.tuv.com ID 0217007933	Europe

Main applications

- Disposal
- Heating systems
- Drainage systems
- Draining of pits, shafts, etc.

Fluids handled

- Waste water
- Heating water
- Condensate
- River water, lake water and groundwater

Operating data

Operating properties

Characteristic		Value	
		Rotex 10, 20	Rotex 70
Flow rate	Q [m³/h]	≤ 24	
	Q [l/s]	≤ 6,67	
Head	H [m]	≤ 14	
Fluid temperature	T [°C]	≤ +90	≤ +70

Design details

Design

- Centrifugal pump
- Single-stage
- To EN 12050-2
- Pump foot designed as inlet strainer
- Discharge to the top, parallel to the pump shaft
- Pump and motor rigidly connected via a support column
- Ready to be plugged in
- 1.5 m power cable

Installation

- Vertical installation

Drive

- Surface-cooled three-phase motor
- Enclosure IP55
- AC motor
- IP54 enclosure

Impeller type

Rotex 10:

- Two-channel impeller
- Free passage= 13 mm

Rotex 20:

- Three-channel impeller
- Free passage= 18 mm

Rotex 70:

- Open radial impeller
- Free passage= 10 mm

Bearings

- Product-lubricated plain bearing
- Grease-packed deep groove ball bearings sealed for life

Automation

- Level control
- Pump started/ stopped automatically depending on the fluid level

Rotex 10, 20:

- Displacement weight with cable pull float switch control

Rotex 70:

- Float switch

Designation

Example: Rotex 10 / 100 D

Designation key

Code	Description	
Rotex	Type series	
10	Size	
	10	▪ Heavy-duty design Rp 1 1/4, Rp 2 ▪ Two-channel impeller ▪ Level control with displacement weight
	20	▪ Heavy-duty design Rp 2 ▪ Three-channel impeller ▪ Level control with displacement weight
	70[12)]	▪ Light-duty design Rp 1 1/4, Rp 2 ▪ Open radial impeller ▪ Level control with float switch
100	Installation depth [cm]	
	100, 170[13)]	
D	Drive	
	D	Three-phase motor
	E	Single-phase AC motor

Materials

Overview of available materials

Part No.	Description	Material	
		Rotex 10, 20	Rotex 70
107	Discharge casing	Grey cast iron	-
102	Volute casing	-	Grey cast iron
211	Pump shaft (installation depth 100 cm)	Steel	Steel
	Pump shaft (installation depth 170 cm)	Chrome steel	-
182	Pump foot	-	Grey cast iron
230	Impeller	Grey cast iron	Polyamide
350	Bearing housing	Grey cast iron	-
545.1/.2	Bearing bush	Sinter bronze, steel-PTFE / CuSn	
712.1/.2	Pipe	Steel	
723	Flange	-	Grey cast iron
502	Casing wear ring	Bronze	-

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

12 Rotex size 70 cannot be used for condensate.
13 Rotex size 70 is only available up to an installation depth of 100 cm.

Characteristic curve

Rotex 10, 20, 70; n = 2900 rpm

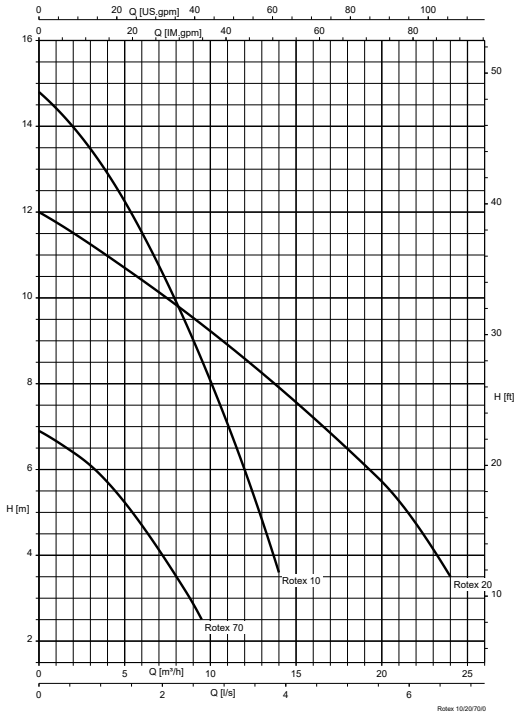


Fig. 27: Free passage: Rotex 10 = 10 mm; Rotex 20 = 13 mm; Rotex 70 = 18 mm

Dimensions

Rotex 10, 20, 70

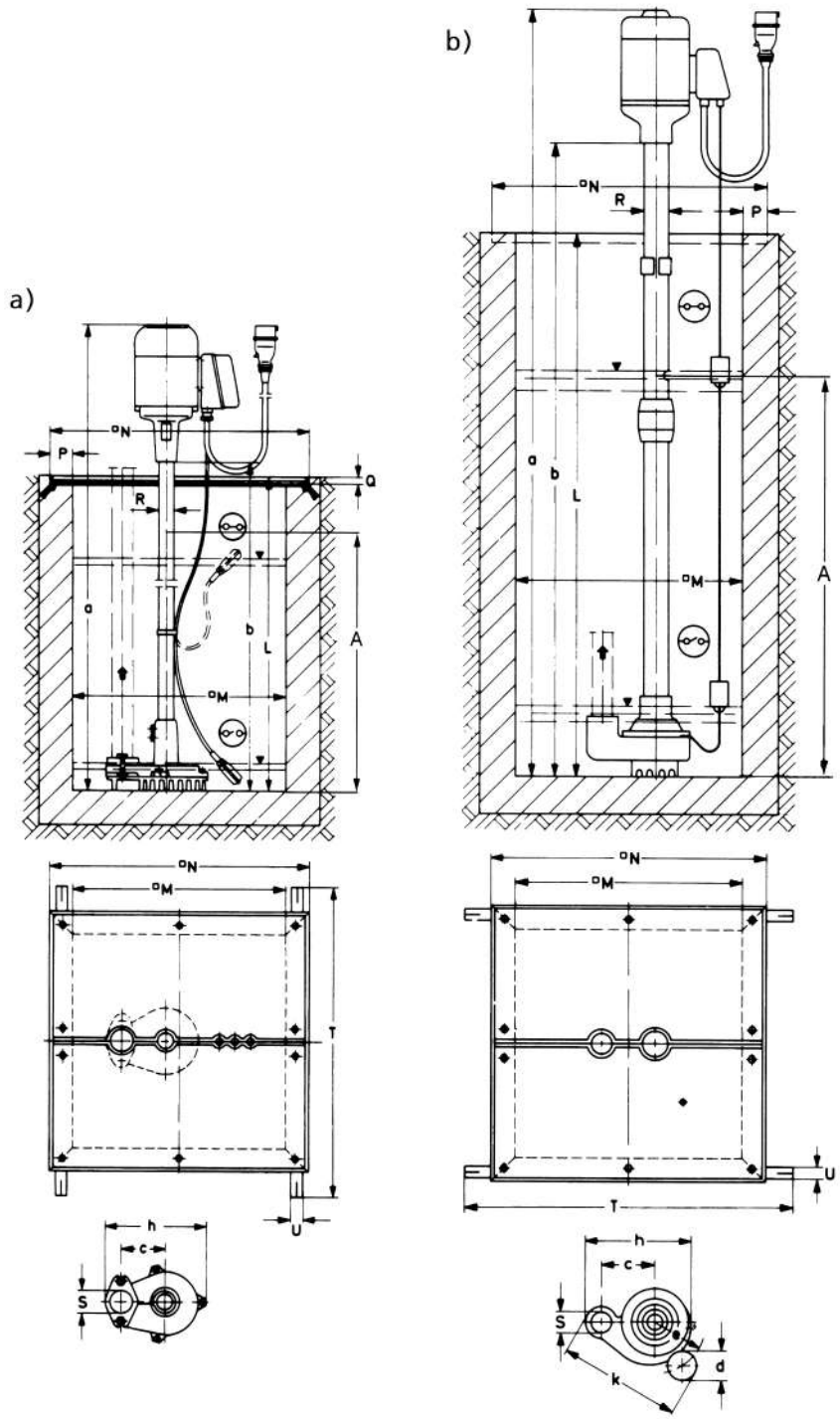


Fig. 28: Dimensions a) Rotex 70 b) Rotex 10, 20

Minimum water level (stop level)	Rotex 10, 20: 150 mm[14)] Rotex 70: 100 mm
Maximum water level (start-up level)	Rotex .../170: ≥ 1000 mm

14 If handling condensate: 400 mm

Dimensions [mm]

Rotex	ISO 7/1	a	b	c	d	e	h	k	A	L	M	N	P	Q	R	T	U
10/100	Rp 1 1/4	1363	1069	106	60	110	220	242	180	1000	500	560	30	20	60	660	20
10/170	Rp 1 1/4	2085	1791	106	60	110	220	242	1050	1700	500	560	30	20	60	660	20
20/100	Rp 2	1370	1076	117	60	110	240	270	180	1000	500	560	30	20	60	660	20
20/170	Rp 2	2092	1798	117	60	110	240	270	1050	1700	500	560	30	20	60	660	20
70	Rp 1 1/4	1342	1046	97	-	-	215	-	590	1000	500	560	30	20	33,8	660	20

Waste Water Pumps / Condensate Pumps / Heat Transfer Fluid Pumps

MK

http://shop.ksb.com/catalog/k0/en/product/ES000013

Product benefits

- Fitted with a three-channel impeller for fluids containing solids of up to 18 mm
- Rod-actuated float switch for high temperatures and viscous fluids
- Flexible with support column for variable installation depths
- Integrated suction strainer prevents clogging.
- Durable with robust deep groove ball bearings

Further information

Prices on request

Characteristic curves 45
Dimensions 46

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	MSE / MSD (⇨ Page 1035)	Compact switchgear for level-dependent control

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

MK, MKA:

- Automatic drainage of rooms at risk of flooding
- Drainage of collecting basins or pits
- Condensate return from non-pressurised tanks

MKY:

- Condensate return systems
- Heating systems
- Heat transfer systems

Fluids handled

MK, MKA:

- Waste water
- Oil
- Emulsions
- Aggressive fluids
- Condensate

MKY:

- Condensate
- Heat transfer fluids below boiling point

Operating data

Operating properties

Characteristic		Value	
		MK, MKA	MKY
Flow rate	Q [m³/h]	2 - 36	
	Q [l/s]	0,56 - 10	
Head	H [m]	≤ 19	
Fluid temperature	T [°C]	≥ -10	
		≤ +90 [15]	≤ +200 [16]

Design details

Design

- Volute casing
- Vertical installation
- Rigid connection between pump and motor
- Single-stage

Drive

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- 230/400 V
- Type of construction IM V1
- Enclosure IP55
- Motors integrated in explosion-proof pump sets are supplied in Ex eb IIB / Ex db eb IIC type of protection.

Shaft seal

MK, MKA:

- Vapour barrier

MKY:

- Gland packing

Impeller type

- Three-channel impeller

Bearings

Drive end:

- Radial ball bearing
- Greased for life

Impeller end:

- Bearing bush
- Product-lubricated
- Optional:
  - Internal lubrication by fluid handled
  - Grease lubrication
  - Lubrication by external fluid

Explosion protection

MK, MKA:

- Available
- For explosion-proof variants one of the optional lubrication types must be used for the bearing bush.

MKY:

- Not available

15 For versions with a bearing bush made of acrylonitrile butadiene rubber: up to 80 °C or temperature class T5 in acc. with ISO 80079-36 (EN 13463-1)

16 For water up to 110 °C

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Designation

MK A - B 20 - 1/ 100

Designation key

Code	Description	
MK	Type series	
A	Variant	
	-[17]	Pump without discharge pipe, without cover plate, with motor
	A	Pump with square mounting/cover plate and discharge pipe, with flange-mounted motor
	Y	Pump with round mounting/cover plate and flanged discharge pipe, lantern, gland packing and motor
B	Casing material	
		Grey cast iron
	B	Tin bronze
	C	Chrome nickel molybdenum cast steel
2	Pipe connection	
	2	Rp 2
0	Design status	
1	Power code (defines the impeller diameter)	
	1 - 6	
100	Installation depth [cm]	
	100, 190, 280	

Materials

Overview of available materials

Part No.	Description	Variant			
		MK, MKA	MK-B, MKA-B	MK-C, MKA-C	MKY
102 / 230	Casing/impeller	Grey cast iron	Tin bronze	Chrome nickel molybdenum cast steel	Grey cast iron
210 / 520	Shaft/coupling	Chrome steel	Chrome nickel molybdenum steel	Chrome nickel molybdenum steel	Chrome steel
710.01	Discharge pipe	Galvanised steel	Chrome nickel molybdenum steel	Chrome nickel molybdenum steel	Steel

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

17 Blank

Technical data

MK, MKA variants without motor

Technical data

MK, MKA	MK		MKA	
	[kg]	Mat. No.	[kg]	Mat. No.
20-1/100	34	48247599	62	48247617
20-1/190	50	48247600	82	48247618
20-1/280	66	48247601	102	48247619
20-2/100	34	48247602	62	48247620
20-2/190	50	48247603	82	48247621
20-2/280	66	48247604	102	48247622
20-3/100	35	48247605	63	48247623
20-3/190	51	48247606	83	48247624
20-3/280	67	48247607	103	48247625
20-4/100	35	48247608	63	48247626
20-4/190	51	48247609	83	48247627
20-4/280	67	48247610	103	48247628
20-5/100	34	48247611	62	48247629
20-5/190	50	48247612	72	48247630
20-5/280	66	48247613	102	48247631
20-6/100	35	48247614	63	48247632
20-6/190	51	48247615	83	48247633
20-6/280	68	48247616	104	48247634

MK-B, MKA-B variants without motor

Technical data

MK-B, MKA-B	MK-B		MKA-B	
	[kg]	Mat. No.	[kg]	Mat. No.
20-1/100	40	48247635	71	48247653
20-1/190	58	48247636	94	48247654
20-1/280	76	48247637	116	48247655
20-2/100	40	48247638	71	48247656
20-2/190	58	48247639	94	48247657
20-2/280	76	48247640	116	48247658
20-3/100	41	48247641	72	48247659
20-3/190	59	48247642	95	48247660
20-3/280	77	48247643	117	48247661
20-4/100	41	48247644	72	48247662
20-4/190	59	48247645	95	48247663
20-4/280	77	48247646	117	48247664
20-5/100	40	48247647	71	48247665
20-5/190	58	48247648	94	48247666
20-5/280	76	48247649	116	48247667
20-6/100	41	48247650	68	48247668
20-6/190	59	48247651	91	48247669
20-6/280	79	48247652	113	48247670

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

MK-C, MKA-C variants without motor

Technical data

MK-C, MKA-C	MK-C		MKA-C	
	[kg]	Mat. No.	[kg]	Mat. No.
20-1/100	37	48247671	69	48247689
20-1/190	54	48247672	90	48247690
20-1/280	71	48247673	110	48247691
20-2/100	37	48247674	69	48247692
20-2/190	54	48247675	90	48247693
20-2/280	71	48247676	110	48247694
20-3/100	37	48247677	67	48247695
20-3/190	54	48247678	89	48247696
20-3/280	72	48247679	111	48247697
20-4/100	37	48247680	67	48247698
20-4/190	54	48247681	89	48247699
20-4/280	72	48247682	111	48247700
20-5/100	37	48247683	67	48247701
20-5/190	54	48247684	88	48247702
20-5/280	71	48247685	110	48247703
20-6/100	38	48247686	68	48247704
20-6/190	55	48247687	89	48247705
20-6/280	73	48247688	111	48247706

MKY variant without motor

Technical data

MKY	[kg]	Mat. No.
20-1/100	72	48247707
20-1/190	92	48247708
20-1/280	112	48247709
20-2/100	72	48247710
20-2/190	92	48247711
20-2/280	112	48247712
20-3/100	73	48247713
20-3/190	93	48247714
20-3/280	113	48247715
20-4/100	72	48247716
20-4/190	92	48247717
20-4/280	112	48247718
20-5/100	73	48247719
20-5/190	93	48247720
20-5/280	114	48247721
20-6/100	71	48247722
20-6/190	91	48247723
20-6/280	112	48247724

Motors

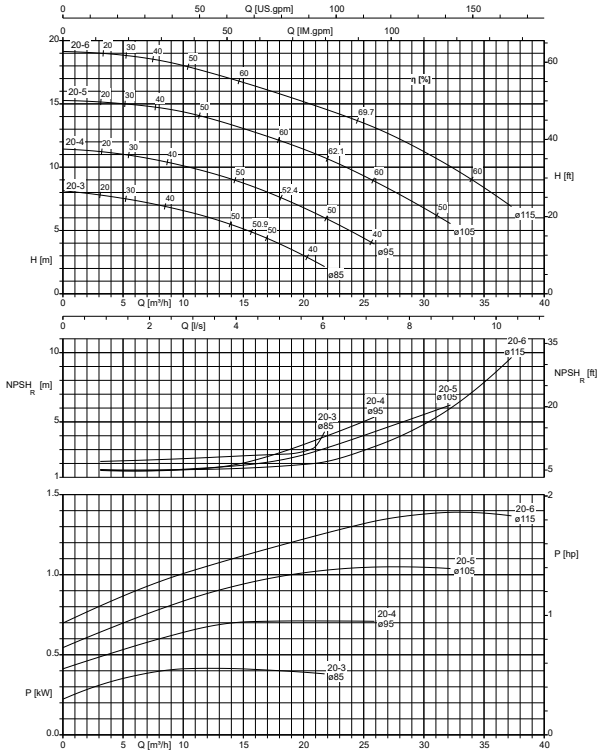
Standard design V1, 400 V, 50 Hz, enclosure IP55

Size	Make	Number of poles	Efficiency class	P_2 [kW]	I [A]	Mat. No.	[kg]
80M	KSB	4	IE1	0,55	1,5	01053394	9
80M	Siemens	4	IE1	0,55	1,5	01036172	9
80M	KSB's choice	4	IE3	0,75	1,66	01583978	15
80M	Siemens	4	IE3	0,75	1,75	01470733	14
80M	KSB's choice	2	IE3	1,10	2,14	01583976	14
80M	Siemens	2	IE3	1,10	2,25	01470731	12
90S	KSB's choice	2	IE3	1,50	2,85	01583977	18
90S	Siemens	2	IE3	1,50	3,00	01470732	15
90L	KSB's choice	2	IE3	2,20	3,99	01583981	21
90L	Siemens	2	IE3	2,20	4,20	01470770	19

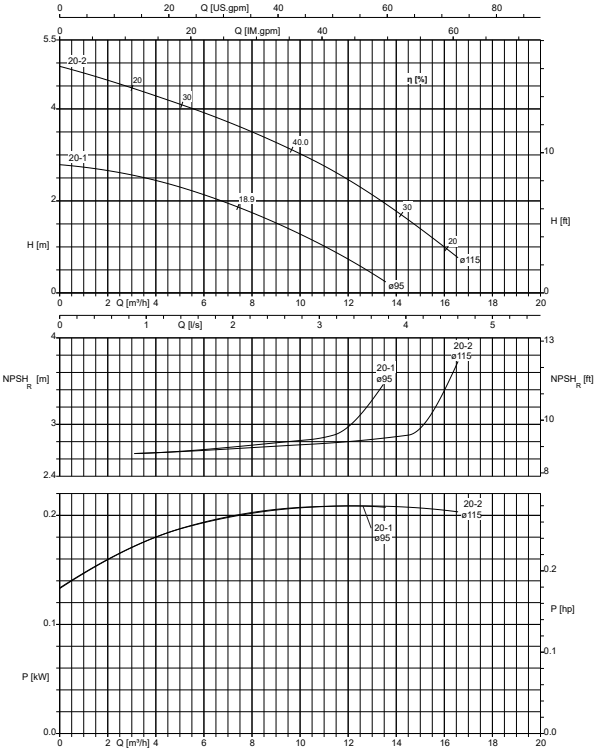
Motors for operation in potentially explosive atmospheres can also be ordered from KSB.

Characteristic curves

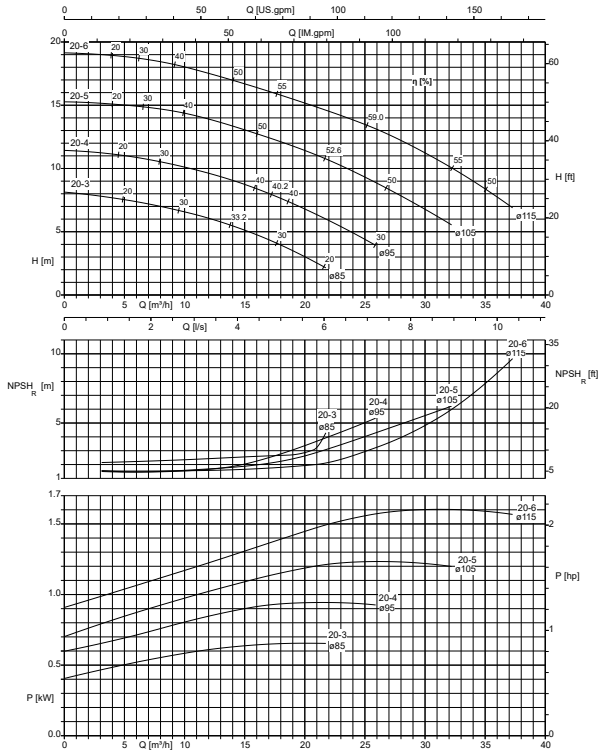
MK/MKA 20-3, 20-4, 20-5, 20-6; n = 2900 rpm



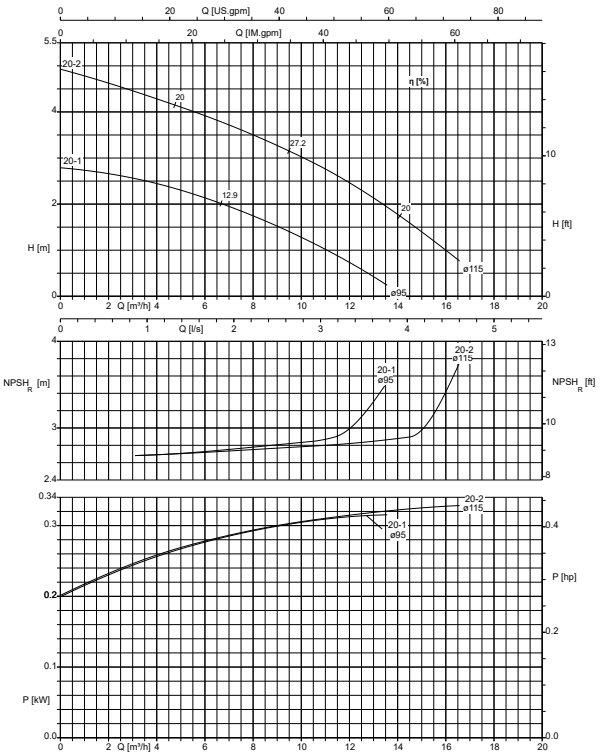
MK/MKA 20-1, 20-2; n = 1450 rpm



MKY 20-3, 20-4, 20-5, 20-6; n = 2900 rpm



MKY 20-1, 20-2; n = 1450 rpm



Dimensions

MK/MKA

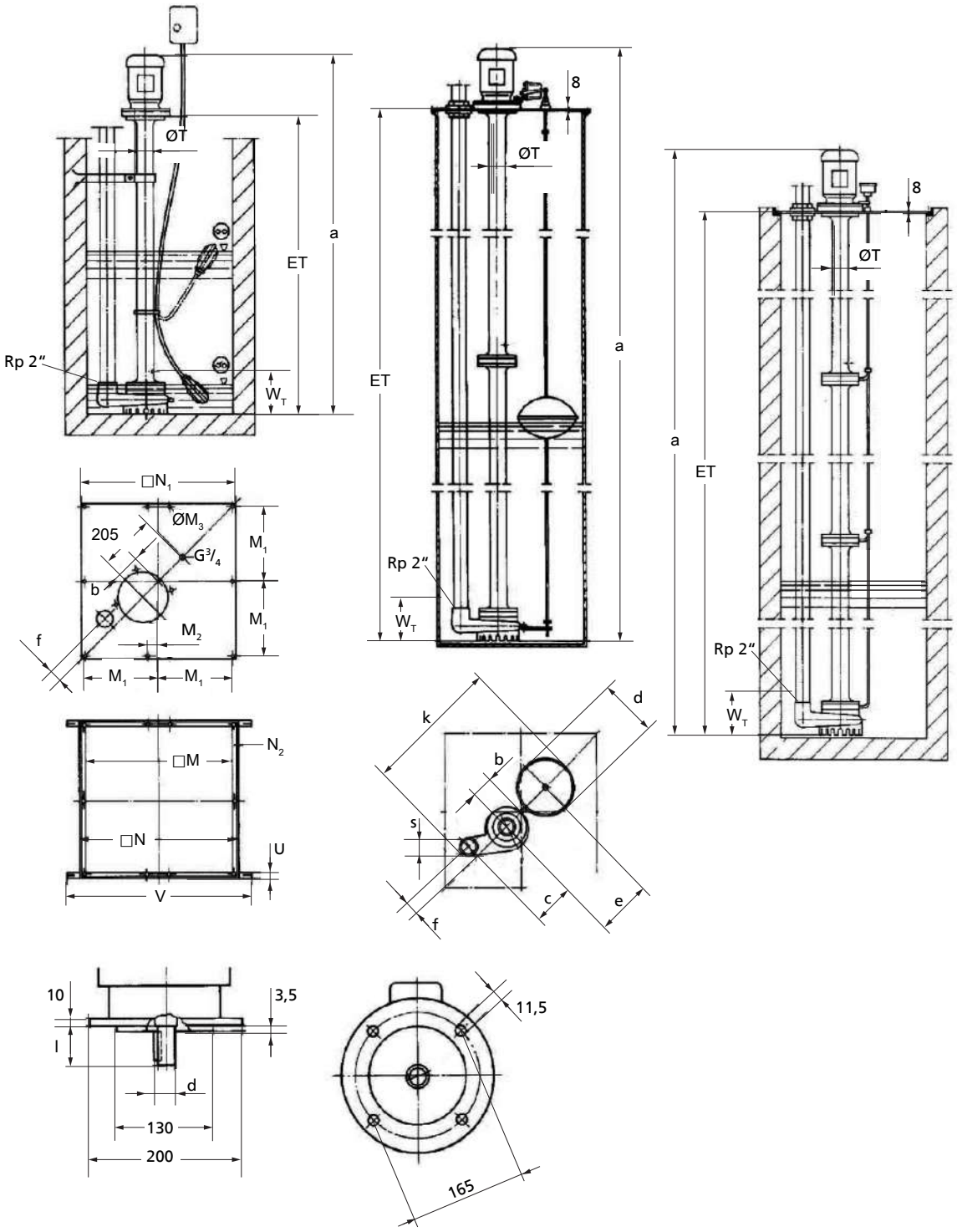


Fig. 29: Dimensions

ET	Installation depth
W_T	Minimum level of fluid handled

Dimensions [mm]

MK / MKA	ET	W_T	a	b	c	d	e	f	k	□M	M_1	M_2	ØM_3	□N	□N_1	N_2	O	S	ØT	U	V
20-/100	1004	110	1271	65	155	240	205	46	520	500	263	33	10	560	550	30×20×4	8	65	71	20	660
20-/190	1911	110	2178	65	155	240	205	46	520	500	263	33	10	560	550	30×20×4	8	65	71	20	660
20-/280	2818	110	3085	65	155	240	205	46	520	500	263	33	10	560	550	30×20×4	8	65	71	20	660

Dimensions of the shaft stub from the motor [mm]

Motor	d	l
80	19	40
90 L	24	50
90 S	24	50

MKY

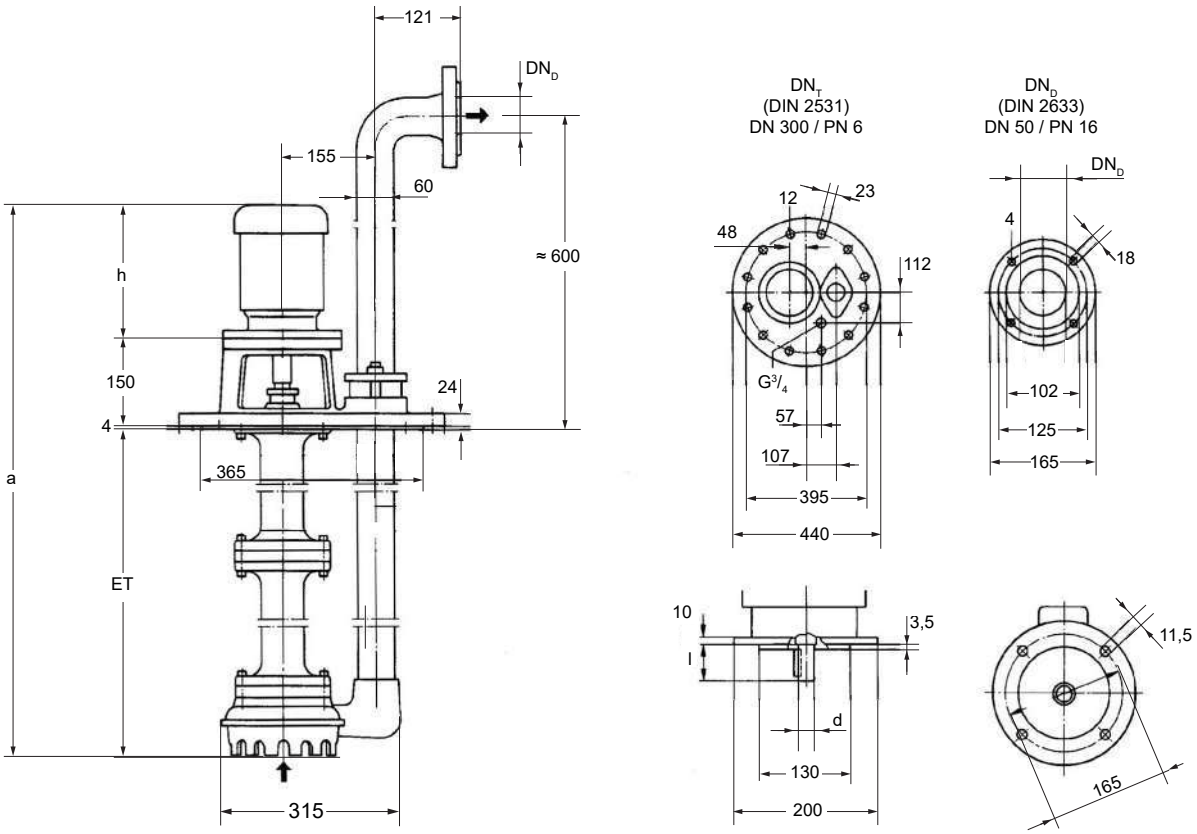


Fig. 30: Dimensions

ET	Installation depth

Dimensions [mm]

MKY	ET	a[18)]	h[18)]
20-1 - 4/100	1000	1381	227
20-1 - 4/190	1907	2288	227
20-1 - 4/280	2814	3195	227
20-5/100	1000	1397	243
20-5/190	1907	2304	243
20-5/280	2814	3211	243
20-6/100	1000	1422	268
20-6/190	1907	2399	268
20-6/280	2814	3236	268

Dimensions of the shaft stub from the motor [mm]

Motor	d	l
80	19	40
90 L	24	50
90 S	24	50

18 Dimension depends on the motor make

Submersible Motor Pumps with and without Explosion Protection

Amarex N

http://shop.ksb.com/catalog/k0/en/product/ES000507

Product benefits

- High operating reliability with optimum motor selection for duty type S1, thermal class F, explosion-proof variant in "ATEX T4, FM/CSA Ex Class I, Division 1, Groups C & D, T4"
- Long service life with shaft made of corrosion-resistant stainless steel
- Energy-saving design with optimised hydraulic system and high efficiency
- Reliable and non-clogging design with optimised cutter (S impeller)
- Stationary pump sets easy to install and remove with automatic, bolt-free connection; leakage prevented by elastic sealing elements
- Ease of service with wetted hexagon socket head cap screws made of stainless steel which are easy to undo even after years of operation
- Double safety by two bi-directional mechanical seals with oil reservoir filled with environmentally friendly oil
- Only one set of spare parts for all pump sizes thanks to modular design system

Further information

Prices on request

Characteristic curves 52
Dimensions 53

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Waste water management
- Drainage systems
- Waste water treatment plants
- Sludge disposal
- Drainage of rooms and areas at risk of flooding on municipal, commercial and industrial premises

Fluids handled

- Service water
- Waste water
- Waste water with faeces
- Waste water containing long fibres and solid substances
- Fluids containing gas
- Activated sludge
- Digested sludge
- Raw sludge

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	22
	Q [l/s]	6
Head	H [m]	≤ 49
Fluid temperature	T [°C]	≤ +40 (continuous duty)
		≤ +80 (short-time duty[19)])
Motor rating	P_2 [kW]	1,3 - 4,2

19 Short-time duty, ≤ 5 minutes / until temperature sensors trip, UL version / WL version

Design details

Design

- Fully floodable submersible motor pump
- Not self-priming
- Close-coupled design

Drive

- Three-phase asynchronous squirrel-cage motor
- Type of protection Ex db IIB (applies to explosion-proof pump sets only)

Shaft seal

- Two bi-directional mechanical seals in tandem arrangement, with liquid reservoir

Impeller type

- Various application-oriented impeller types

Bearings

Standard bearings:

- Grease-packed bearings sealed for life
- Maintenance-free

Reinforced bearings (optional):

- Size 50-172, motor version YL, motor size / no. of motor poles 002, 012, 022
- Size 50-222, motor version YL, motor size / no. of motor poles 032, 042

Pump-end bearings:

- Grease-packed bearings sealed for life

Designation

Example: Amarex N S 50-222 / 04 2 YL G-190

Designation key

Code	Description	
Amarex N	Type series	
S	Impeller type	
	S	Cutter
50-222	Hydraulic system size	
04	Motor size	
2	Number of motor poles	
	2	2 poles
YL	Motor version	
	UL	Non-explosion-proof, for fluid temperatures of up to 55 °C
	YL[20)]	Explosion-proof, for fluid temperatures of up to 40 °C
	WL	Non-explosion-proof, for fluid temperatures of up to 60 °C
G	Material variant	
	G	Pump casing: grey cast iron EN-GJL-250 Intermediate casing: grey cast iron EN-GJL-250 Impeller: grey cast iron EN-GJL-250
190	Nominal impeller diameter [mm]	

Materials

Overview of material variants for standard variants

Component		Amarex N S 50-172/... Amarex N S 50-222/...
		G
Casing		EN-GJL-250
Intermediate casing		EN-GJL-250
Impeller		EN-GJL-250
Cutter		1.2080.02 (K100)
Shaft		1.4021
Mechanical seal	Drive end	Carbon/Al_2O_3
	Pump end	SiC/SiC
Bolts/screws		A2
Elastomers		NBR

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

20 In countries stipulating explosion-proof units for handling sewage with faeces, motor version YL must be used.

Characteristic curves

Amarex N S 32-160, n = 2900 rpm

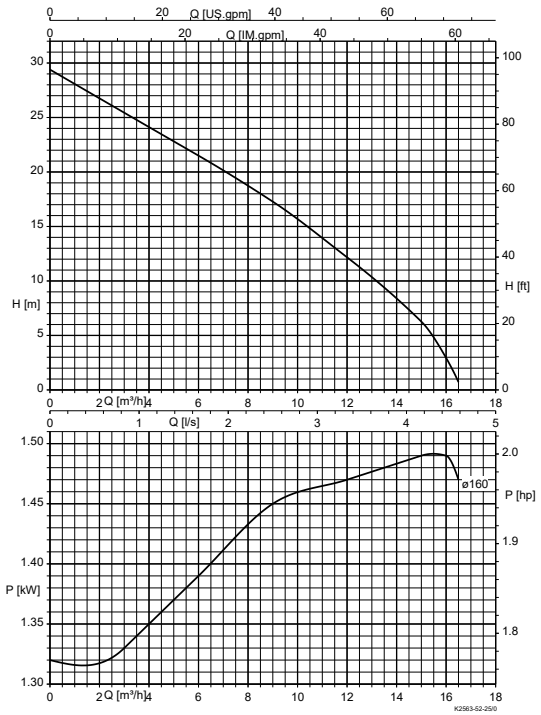


Fig. 31: Free passage = 6 mm

Amarex N S 50-222, n = 2900 rpm

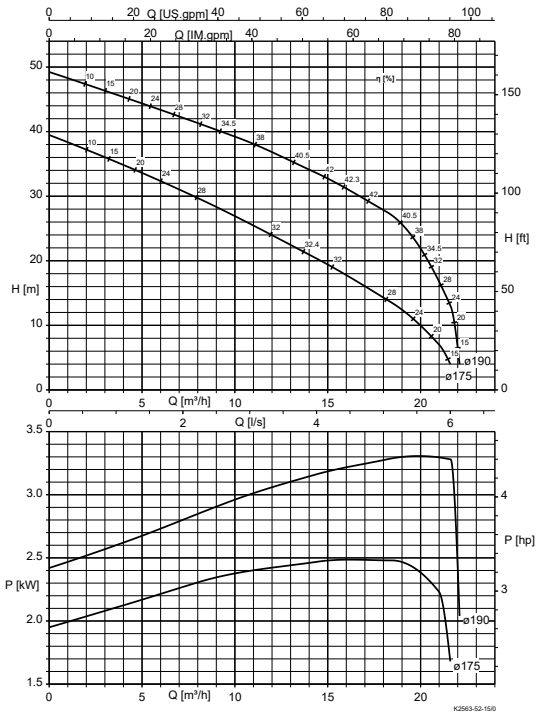


Fig. 33: Free passage = 6 mm

Amarex N S 50-172, n = 2900 rpm

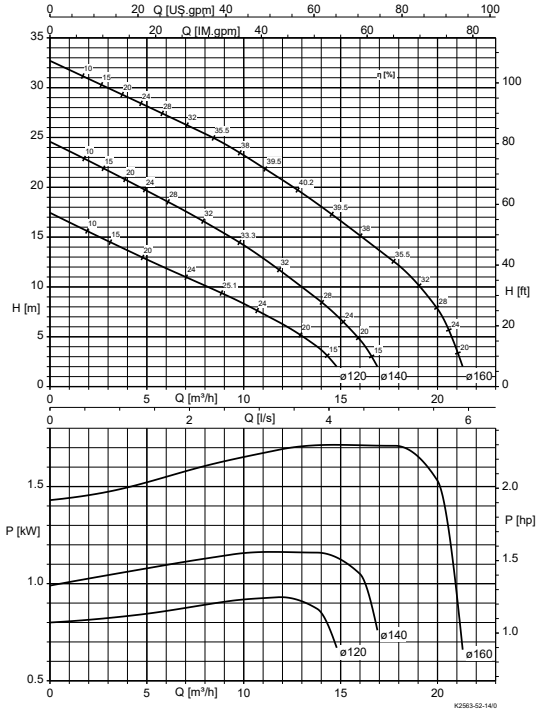


Fig. 32: Free passage = 6 mm

Dimensions

Amarex N DN 32, transportable wet-installed model

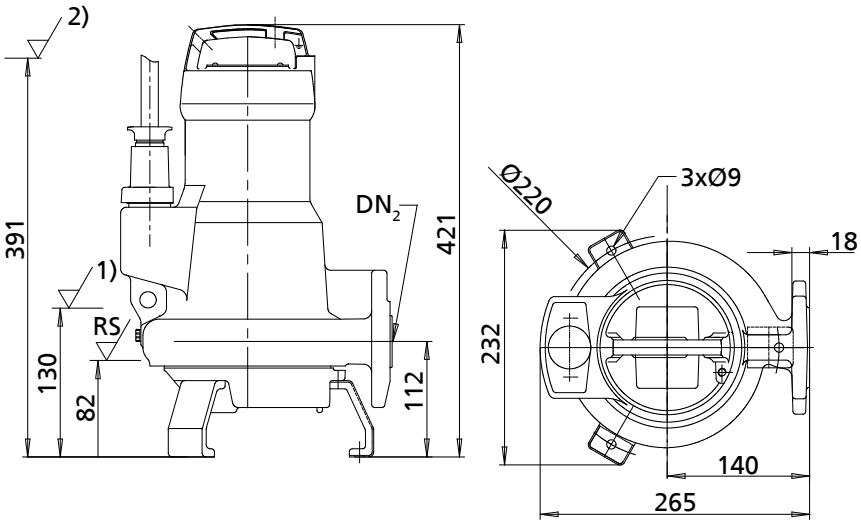
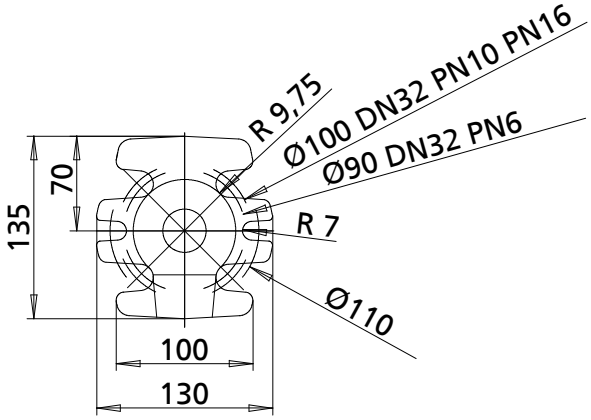


Fig. 34: Transportable model

Connection type

Pump flange DN_2

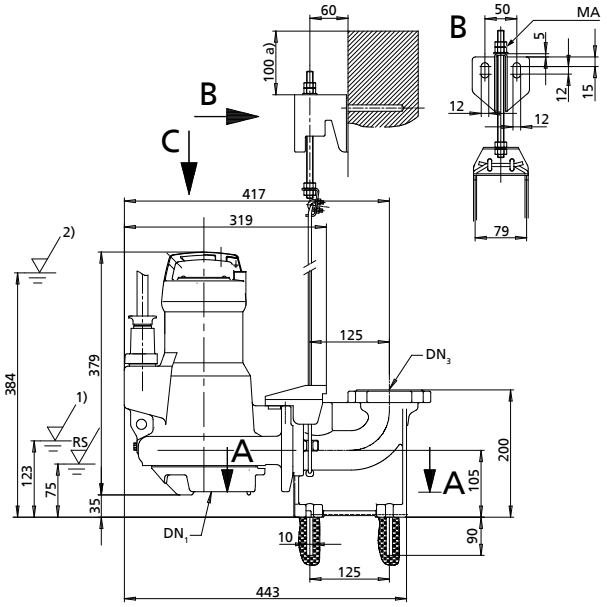
ISO 7005 DN 32 PN 6
ISO 7005 DN 32 PN 10-PN 16
DIN 2501 DN 32 PN 6
DIN 2501 DN 32 PN 10-PN 16



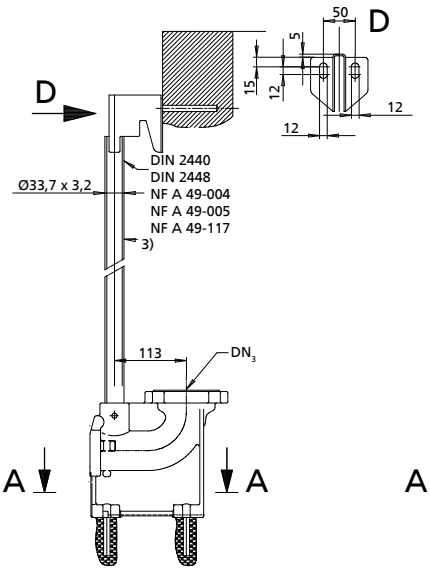
1)	Lowest stop level for automatic operation
2)	Minimum submergence for continuous operation
RS	Lowest stop level for slurp mode

Amarex N DN 32, stationary wet-installed model with guide wire, single guide rail or guide hoop arrangement, straight claw

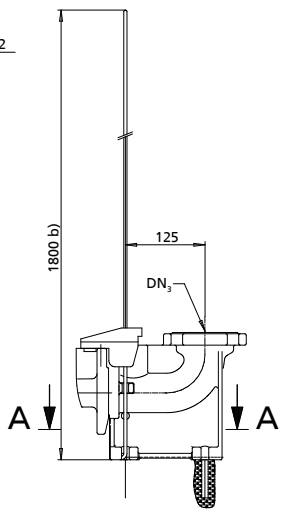
Guide wire arrangement



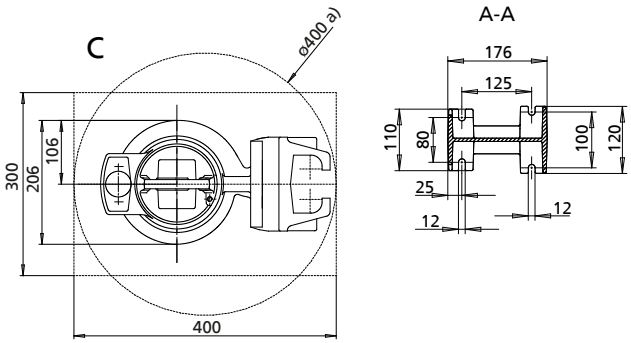
Single guide rail arrangement



Guide hoop arrangement



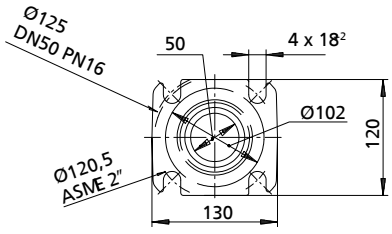
Installation in the sump



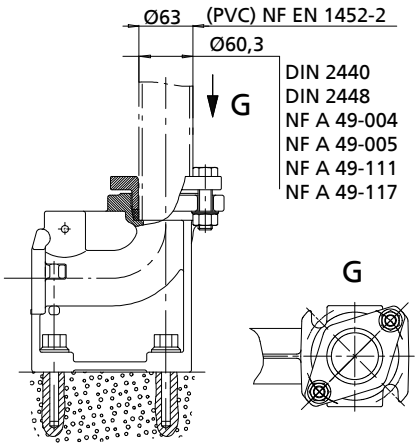
Connection type

Flanged bend DN_3

ISO 7005 PN 10 - PN 16
DIN 2501 PN 10 - PN 16
ASME 150 2 inches
ASME B16.1 Class 125



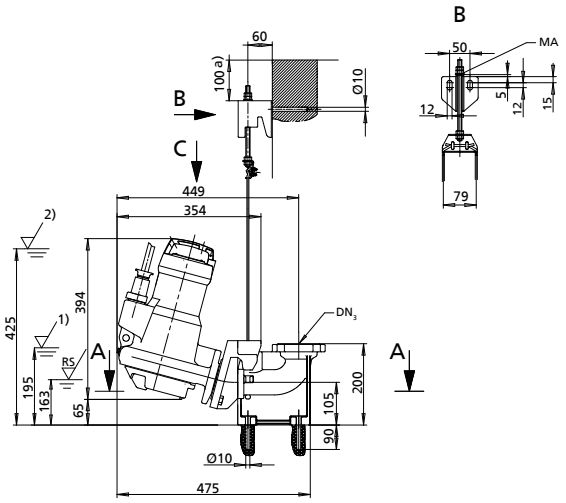
Clamped connection



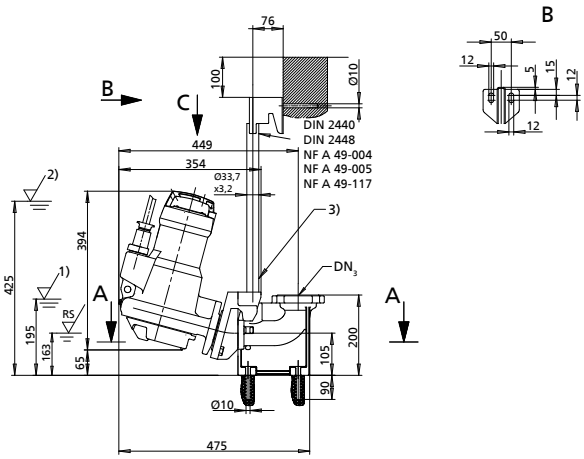
1)	Lowest stop level for automatic operation	b)	Maximum
2)	Minimum submergence for continuous operation	MA	MA = 14 Nm, P = 6000 N
3)	Not included in the scope of supply	RS	Lowest stop level for slurp mode
a)	Minimum		

Amarex N DN 32, stationary wet-installed model with guide wire, single guide rail, twin guide rail or guide hoop arrangement, inclined claw

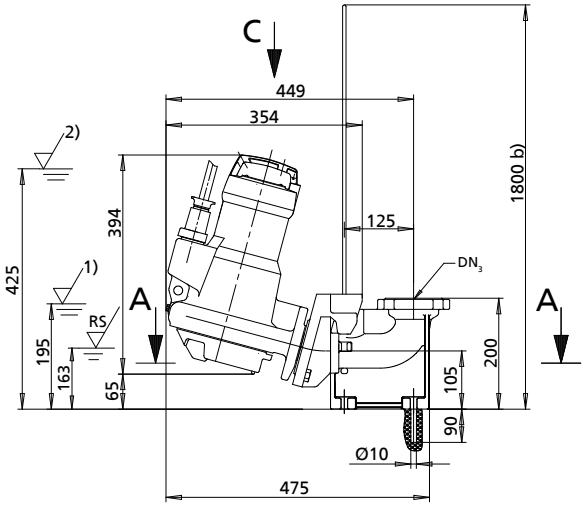
Guide wire arrangement



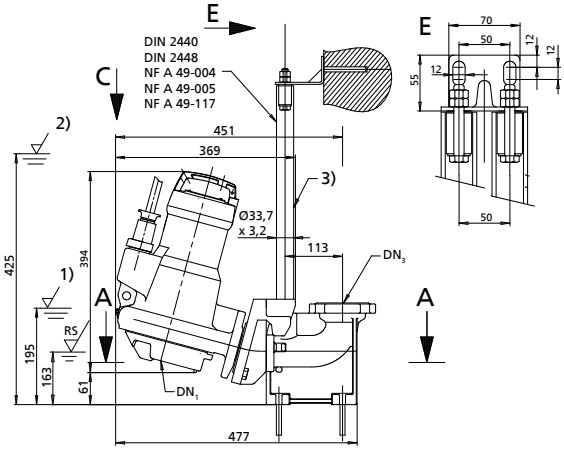
Single guide rail arrangement



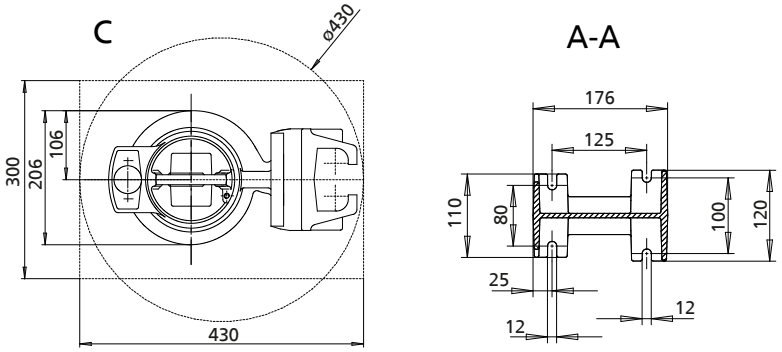
Guide hoop arrangement



Twin guide rail arrangement



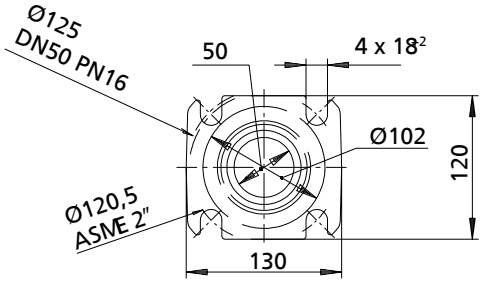
Installation in the sump



Connection type

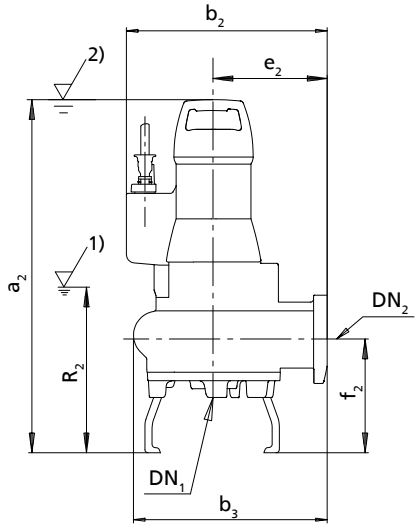
Flanged bend DN_3

ISO 7005 DN 50 PN 10 - PN 16
DIN 2501 DN 50 PN 10 - PN 16
ASME 150 2 inches
ASME B16.1 Class 125



1)	Lowest stop level for automatic operation	b)	Maximum
2)	Minimum submergence for continuous operation	MA	MA = 14 Nm, P = 6000 N
3)	Not included in the scope of supply	RS	Lowest stop level for slurp mode
a)	Minimum		

Amarex N DN 50, transportable model



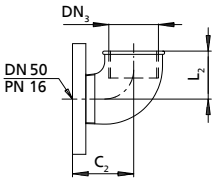
Dimensions of transportable model

1)	Lowest stop level for automatic operation
2)	Minimum submergence for continuous operation

Pump set dimensions [mm]

Size	DN_1	DN_2	a_2 [21)]	b_2	b_3	e_2	f_2 [21)]	R_2
50-172 S	-	50	547	322	293	180	152	207
50-222 S	-	50	609	336	307	180	155	203

Connection elbow with internal and external thread (P14) and threaded flange (P27)

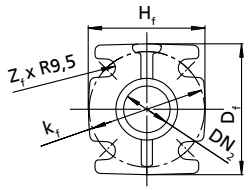


Dimensions [mm]

DN	DN_3	C_2	L_2
50	G 2″	78	58

Pump flange DN_2

DN 50
ISO 7005 PN 16
DIN 2501 PN 16



Dimensions of the pump flange in [mm]

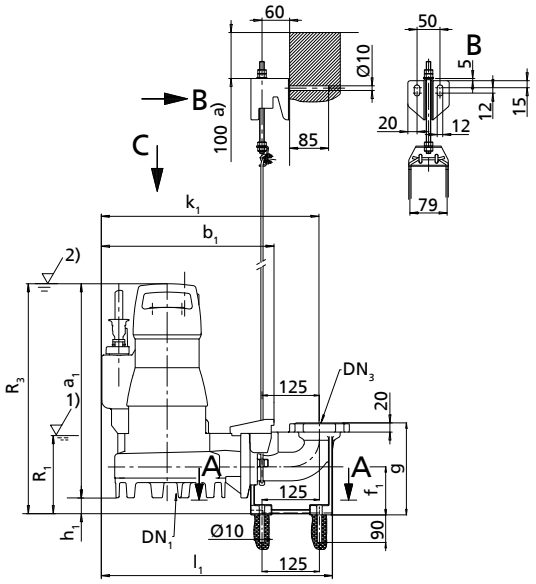
Size	Flange			
	H_f	k_f	D_f	Z_f
50-172 S	125	125	140	4
50-222 S	125	125	140	4

21 If a foot plate is fitted, a_2 + 10 mm

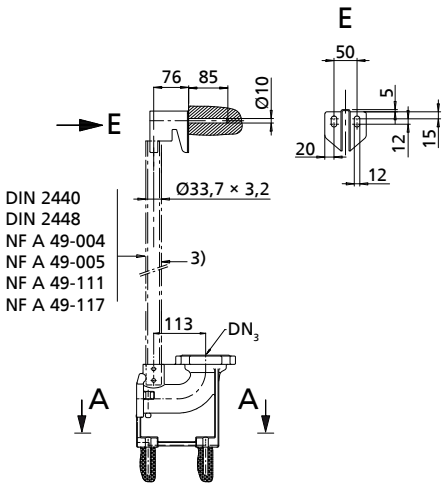
Amarex N DN 50, stationary model with guide wire, single guide rail or guide hoop arrangement, straight claw

DN 3 = DN 50: DIN ISO ASME = standard

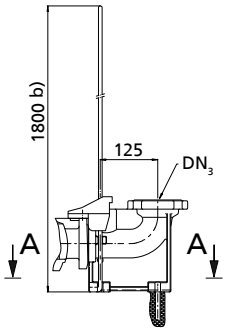
Guide wire arrangement



Single guide rail arrangement



Guide hoop arrangement

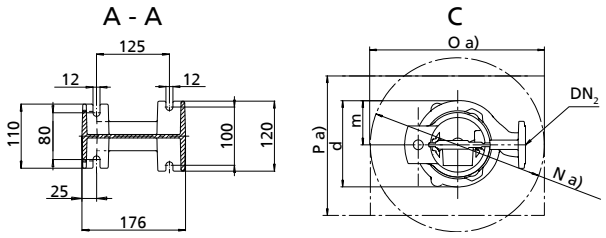


1)	Lowest stop level for automatic operation	2)	Minimum submergence for continuous operation
3)	Not included in KSB's scope of supply	a)	Minimum
b)	Maximum		

Dimensions of pump and foundation [mm]

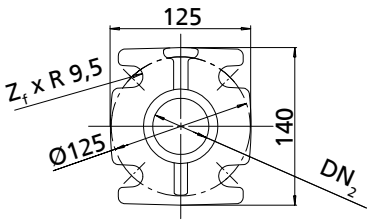
Size	Pump														Foundation			
	DN_1	DN_2	a_1	b_1	d	f_1	g	h_1	k_1	l_1	m	R_1	R_3	Z_f	DN_3	N	O	P
50-172 S	-	50	470	376	250	105	200	31	472	502	125	161	501	4	50	465	465	350
50-222 S	-	50	532	389	254	105	200	27	488	514	129	153	559	4	50	465	465	350

Installation in the sump



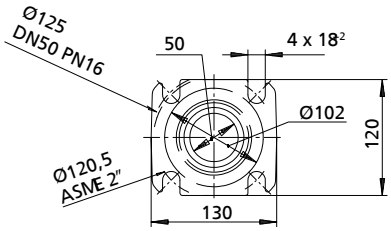
Pump flange DN_2

ISO 7005 PN 10/16
DIN 2501 PN 10/16

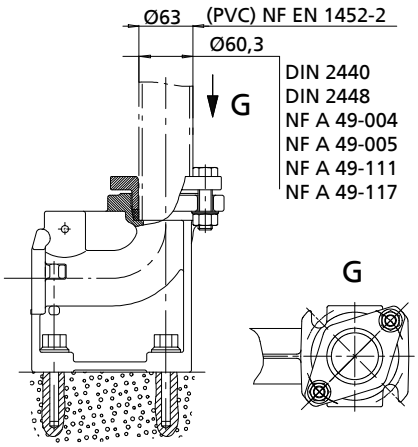


Flanged bend DN_3

ISO 7005 PN 10 - PN 16
DIN 2501 PN 10 - PN 16
ASME 2″
ASME B16.1 class 125



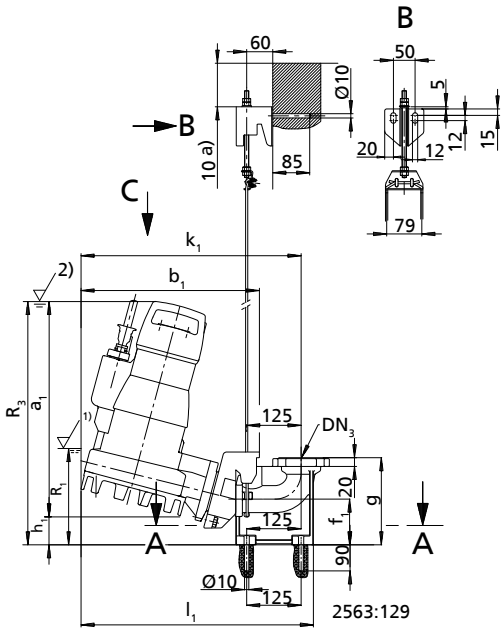
Clamped connection



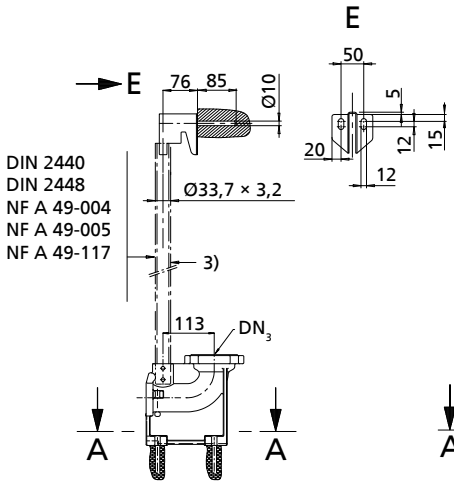
Amarex N DN 50, stationary model with guide wire, single guide rail or guide hoop arrangement, inclined claw

DN 3 = DN 50: DIN ISO ASME = standard

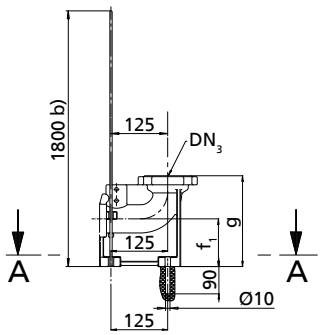
Guide wire arrangement



Single guide rail arrangement



Guide hoop arrangement

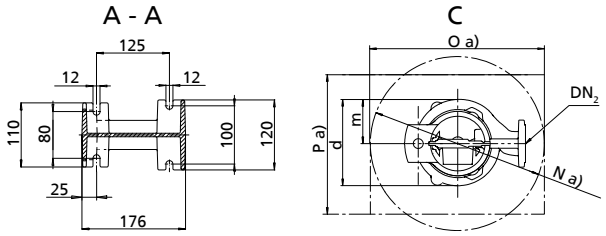


1)	Lowest stop level for automatic operation	2)	Minimum submergence for continuous operation
3)	Not included in KSB's scope of supply	a)	Minimum
b)	Maximum		

Dimensions of pump and foundation [mm]

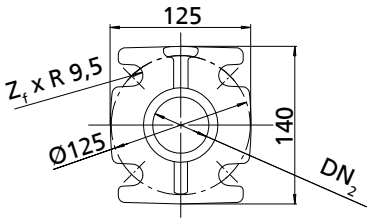
Size	Pump													Foundation			
	DN_2	a_1	b_1	d	f_1	g	h_1	k_1	l_1	m	R_1	R_3	Z_f	DN_3	N	O	P
50-172 S	50	495	421	250	105	200	58	500	526	125	220	550	4	50	480	480	350
50-222 S	50	556	416	254	105	200	54	506	532	129	230	606	4	50	480	480	350

Installation in the sump



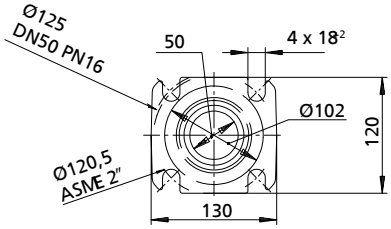
Pump flange DN_2

ISO 7005 PN10/16
DIN 2501 PN10/16

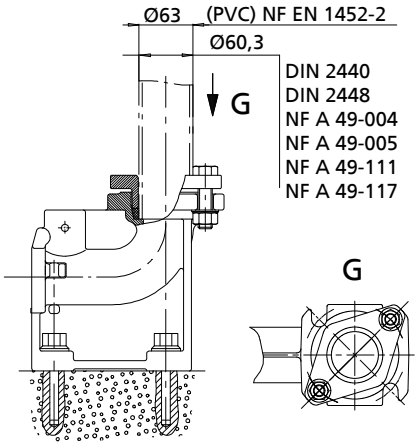


Flanged bend DN_3

ISO 7005 PN16
DIN 2501 PN16
ASME 2″
ASME B16.1 class 125



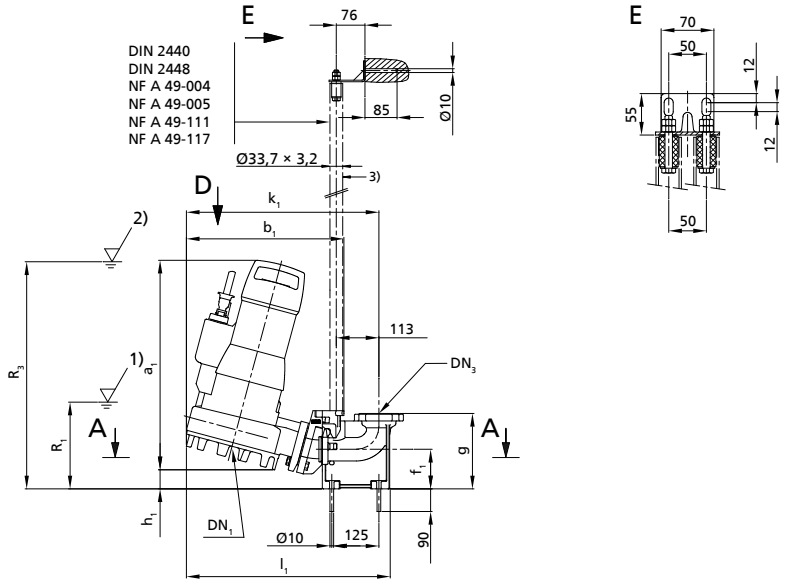
Clamped connection



Amarex N DN 50, stationary model with twin guide rail arrangement, inclined claw

DN 3 = DN 50: DIN ISO ASME = standard

Twin guide rail arrangement

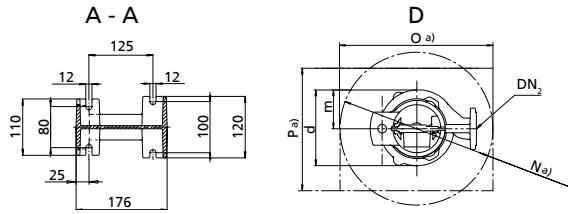


1)	Lowest stop level for automatic operation	2)	Minimum submergence for continuous operation
3)	Not included in KSB's scope of supply	a)	Minimum

Dimensions of pump and foundation [mm]

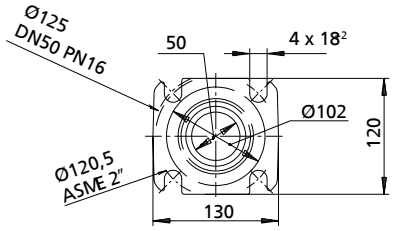
Size	Pump														Foundation			
	DN_1	DN_2	a_1	b_1	d	f_1	g	h_1	k_1	l_1	m	R_1	R_3	Z_f	DN_3	N	O	P
50-172 S	-	50	494	422	250	105	200	54	499	528	125	220	550	4	50	480	480	350
50-222 S	-	50	549	426	254	105	200	53	506	535	129	230	606	4	50	480	480	350

Installation in the sump

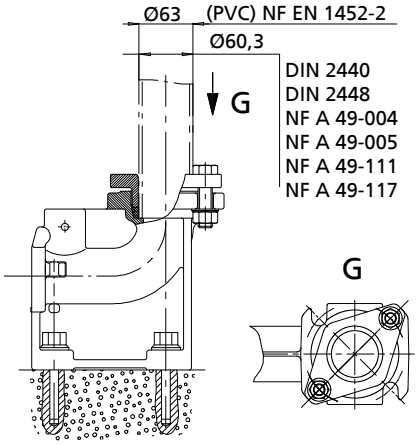


Flanged bend DN_3

ISO 7005 PN16
DIN 2501 PN16
ASME 2″
ASME B16.1 class 125



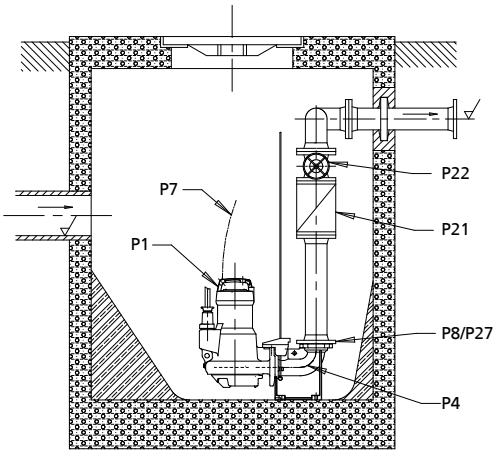
Clamped connection



Suggested installation layouts for stationary pump sets

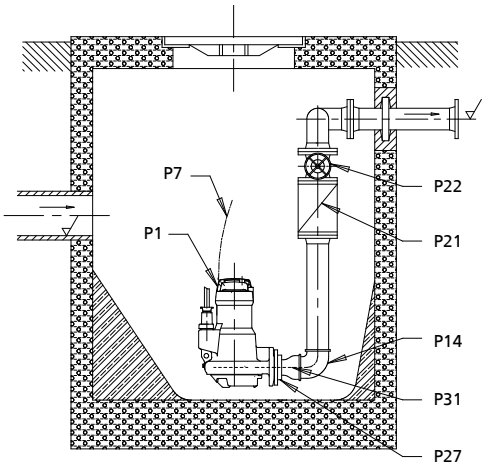
Size 32

Guide hoop arrangement
Amarex N S 32-160



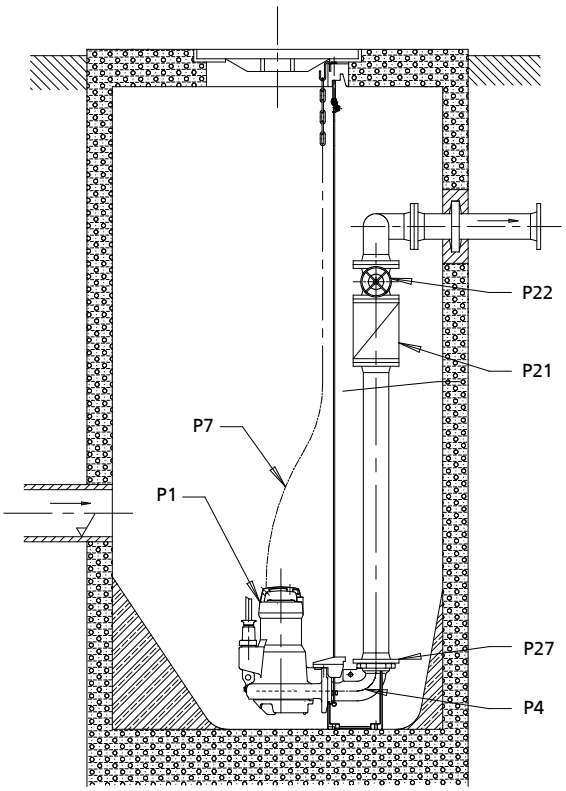
Suggestion 1
Single-pump station for 1.5 - 1.8 m installation depth
Flanged duckfoot bend

Suspended installation
Amarex N S 32-160

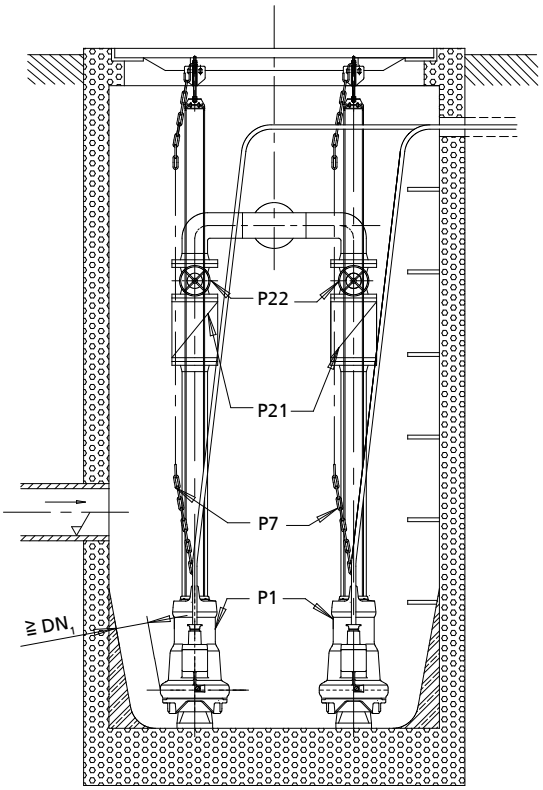


Suggestion 2
Single-pump station
Direct connection to discharge line (suspended installation)

Guide wire arrangement Amarex N S 32



Suggestion 3[22)]
Single-pump station for 4.5 m installation depth
Flanged duckfoot bend

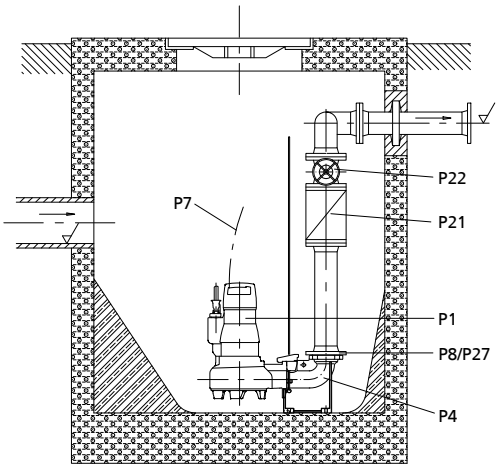


Suggestion 4[22)]
Dual-pump station for 4.5 m installation depth
Flanged duckfoot bend

22 Available with guide wire, single guide rail or twin guide rail arrangement

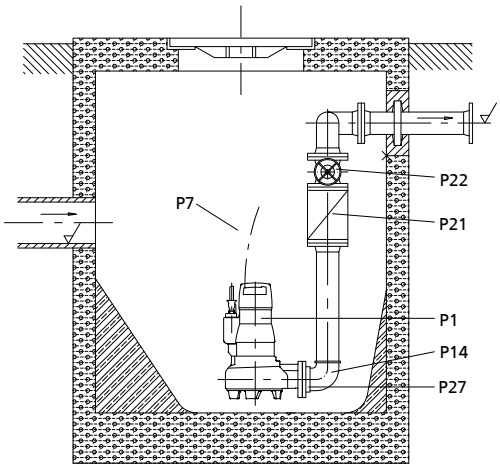
Size 50

Guide hoop arrangement
Amarex N S 50-172, S 50-222



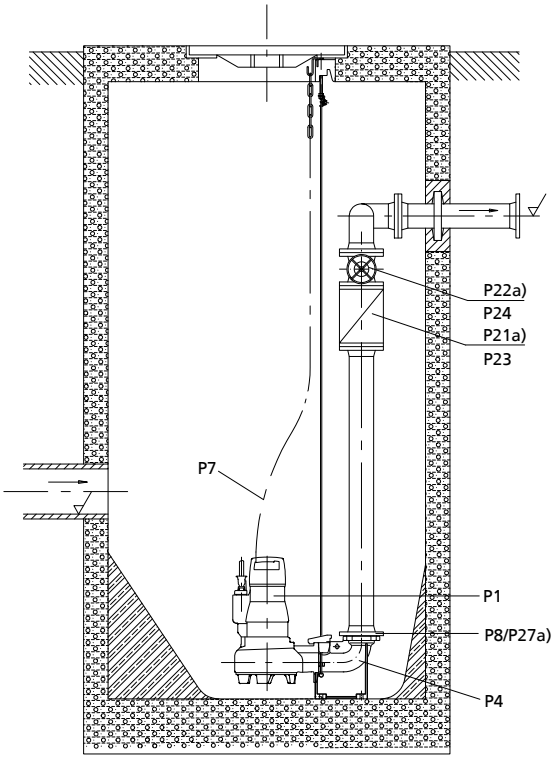
Suggestion 1
Single-pump station for 1.5 m installation depth
Flanged duckfoot bend

Suspended installation
Amarex N S 50-172, S 50-222

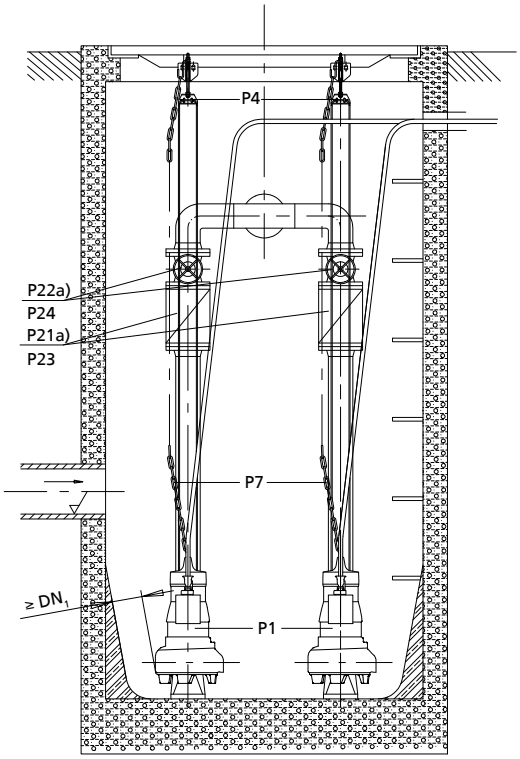


Suggested installation layout 2
Single-pump station for 1.5 m installation depth
Direct connection to discharge line (suspended installation)

Guide wire arrangement Amarex N 50



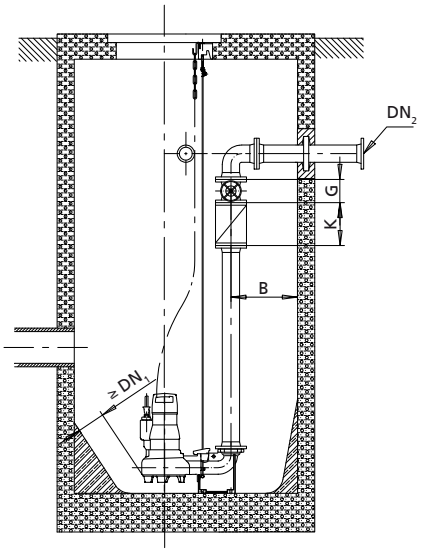
Suggestion 3
Single-pump station for 4.5 m installation depth
Flanged duckfoot bend

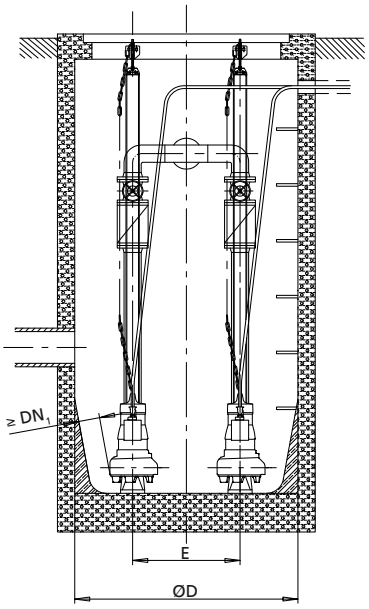


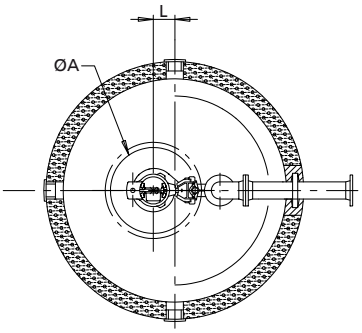
Suggestion 4
Dual-pump station for 4.5 m installation depth
Flanged duckfoot bend

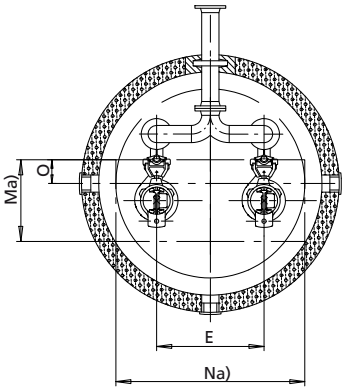
Dimensions

Guide wire arrangement
Amarex N S 32
Amarex N 50









Single-pump station for 4.5 m installation depth
Flanged duckfoot bend

Single-pump station for 4.5 m installation depth
Flanged duckfoot bend

a)	Minimum

Dimensions [mm]

Amarex N		Ø A	B	Ø D	E	G	K	L	M	N	O	DN_1	DN_2
S 32-160	1 pump	430	165	800	-	75	150	57	-	-	-	32	50
	2 pumps	-	165	800	300	75	150	57	400	600	151	32	50
S 50-172	1 pump	625	165	1000	-	75	150	42	-	-	-	50	50
	2 pumps	-	235	1000	300	75	150	-	550	700	200	50	50
S 50-222	1 pump	625	165	1000	-	75	150	42	-	-	-	50	50
	2 pumps	-	235	1000	300	75	150	-	550	700	200	50	50

Submersible Motor Pumps with and without Explosion Protection

Amarex

http://shop.ksb.com/catalog/k0/en/product/ES000979

Product benefits

- High efficiency thanks to enhanced power density (Wh/m3), overall efficiency of up to 69 %, lower total cost of ownership
- Non-clogging (no clogging by wet wipes) with patented deflection technology and D-max impeller
- Long service life with high operating reliability and durable bearings (100,000 operating hours)
- Environmentally friendly with non-toxic, food-approved oil fill for lubricating the mechanical seal (liquid reservoir)
- Flexible thanks to easy substitution of competitor pumps with a large range of adapter claws and substitution pump app

Further information

Prices on request

Selection charts 76
Dimensions 78

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Waste water transport
- Waste water management
- Drainage systems
- Waste water treatment plants
- Stormwater transport
- Recirculation
- Sludge treatment

Fluids handled

- Service water
- Waste water
- Waste water with faeces
- Waste water containing long fibres and solid substances
- Fluids containing gas
- Activated sludge
- Digested sludge
- Raw sludge

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 320
	Q [l/s]	≤ 89
Head	H [m]	≤ 42
Fluid temperature	T [°C]	≤ +40
Motor rating	P_2 [kW]	1,24- 8,4

Design details

Design

- Fully floodable submersible motor pump
- Not self-priming
- Close-coupled design

Drive

- Three-phase asynchronous squirrel-cage motor
- Type of protection Ex db IIB (applies to explosion-proof pump sets only)
- Enclosure: IP68 to EN 60529/IEC529

Shaft seal

- Two bi-directional mechanical seals in tandem arrangement, with liquid reservoir

Impeller type

- Various application-oriented impeller types

Bearings

Motor-end bearings:

- Grease-packed bearings sealed for life
- Maintenance-free

Pump-end bearings:

- Grease-packed bearings sealed for life
- Maintenance-free
- Reinforced bearings[23)]

23 Standard for impeller type D-max, optional for impeller type F-max

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Designation

Designation example

Position																																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
A	R	X		D	1	0	0	-	2	3	0	/	0	6	5	F	4	U	S	G		-	2	2	0	/	0	0	0	0	0	X	1	0	0
See name plate and data sheet																										See data sheet									

Designation key

Position	Code	Description
1-3	Pump type	
	ARX	Amarex
5	Impeller type	
	D-max	Open two-vane impeller
	F-max	Free-flow impeller
6-12	Size	
	100	Nominal discharge nozzle diameter [mm]
	230	Hydraulic system size
14-16	Motor rating P_N [kW]	
	012	1,24
	...	...
	084	8,40
17	Efficiency class[24)]	
	C	IE3
	F	None
18	Number of motor poles	
	2	2 poles
	4	4 poles
19	Motor version	
	U	Without explosion protection, standard
	Y	Explosion-proof
20	Motor construction type	
	S	Wet installation
21-22	Material variant	
	G	Standard variant grey cast iron[25)]
	G1	Standard variant grey cast iron, impeller made of duplex stainless steel
	G2	Standard variant grey cast iron, impeller made of white cast iron
	GH	Standard variant grey cast iron, impeller and discharge cover made of white cast iron
24-26	Nominal impeller diameter [mm]	
	090	90
	...	...
	220	220
28-36	00000X100	Additional code for design variant

24 IEC 60034-30 standard not binding for submersible motor pumps. Efficiencies calculated/determined according to the measurement method specified in IEC 60034-2. The marking is used for submersible motors that achieve efficiency levels similar to those of standardised motors acc. to the IEC 60034-30 standard.

25 Depending on the configuration the impeller and suction cover of versions with D-max impeller are made of nodular cast iron.

Materials

Overview of available materials

Part No.	Description		Version	Material variant			
				G	G1[26]	G2	GH
Pump set							
100	Casing			EN GJL-250			
160	Cover (motor)			EN GJL-250			
162	Suction cover		Standard	EN GJL-250			EN GJL-250[26]
			With D-flector[27]	EN GJS-600-3	-	EN GJS-600-3	EN-GJN-HB555
163	Discharge cover			EN GJL-250			EN-GJN-HB555
210	Shaft			1.4021			
230	Impeller		F-max	EN GJL-250	1.4517	EN-GJN-HB555	EN-GJN-HB555
			D-max	EN GJS-600-3	-	EN-GJN-HB555	EN-GJN-HB555
412	O-ring		Standard	Nitrile butadiene rubber (NBR70)			
			Option	Fluoroelastomer (FKM80)			
				Viton, Teflon-coated (FEP/FKM)			
433	Mechanical seal	Drive end	Standard	Carbon/Al2O3			
		Pump end	Standard	SIC/SIC/NBR			
			Option	SIC/SIC/FPM			
				SIC/SIC/KAL			
914	Hexagon socket head cap screw			A4			
Installation parts							
182	Foot			1.4301			
572	Guide wire suspension bracket			1.4571			
59-24	Wire			1.4401			
72-1	Flanged bend			EN GJL-250			
732	Claw			EN GJL-250			
885	Lifting chain / lifting rope			Lifting chain: 1.4404			
				Lifting rope: polypropylene			
892	Foot plate			1.4301			
894	Mounting bracket			1.4301			

Description of materials

Grey cast iron EN-GJL-250 (lamellar graphite cast iron)
Lamellar graphite cast iron to EN 1561 is the most widely used cast material for handling municipal sewage, waste water and sludges as well as stormwater and surface water. It is suitable for neutral fluids which are only slightly aggressive and cause little wear. The pH should be ≥ 6.5, the sand content ≤ 0.5 g/l.

Duplex stainless steel (1.4517 or technically equivalent material)

This type of carbon steel is resistant to cavitation, has excellent strength values and is used for high circumferential speeds. An excellent resistance to pitting corrosion makes ferritic-austenitic stainless carbon steel a popular choice for pumping acidic waste water with a high chloride content as well as seawater and brackish water. Thanks to its good chemical resistance, e.g. against waste water containing phosphorous and sulphuric acid, this material is used in a wide range of applications in the chemical industry and process engineering. Pumps made of duplex stainless steel have a very long service life, even when handling brines, chemical waste water (pH 1 - 12), grey water and landfill leachate.

Wear-resistant white cast iron (EN-GJN-HB555 [XCR14] or technically equivalent material)

Wear-resistant white cast iron is suitable for handling highly abrasive fluids containing sand, ash or iron ore sinter, for example. It has a Rockwell hardness of at least 54 HRC, which is higher than that of hardened chrome steel. Owing to its hardness, the chromium-molybdenum alloy cast iron features a notably higher wear resistance than EN-GJL-250 grey cast iron and other cast materials. The pH should be ≥ 6.5.

26 Only available for version with F-max impeller
27 D-flector only available for version with D-max impeller

Overview of product features / selection tables

Overview of product features, material variant G

Overview of product features, material variant G

		Motor sizes			
		2 poles			
		14C 2...23F 2	18C 2…24F 2 29C 2...40F 2	35C 2…51F 2[28)] 45C 2…73F 2	60C 2...84F 2
		4 poles			
		-	17F 4 12C 4…23F 4	21C4...35F 4 42F 4	36C 4…65F 4 45C 4…77F 4
Material variant		G			
Voltage		400 V			
Starting method		DOL	DOL	DOL DOL / star-delta	DOL / star-delta
Cooling		Cooled by surrounding fluid			
Duty type (see [2)] in outline drawing)		S1 - submerged (max. 25 m) S1 - outside the fluid, minimum water level R3 and power derating to IE3			
Frequency of starts/hour		30		30 ($P_2 \leq 7{,}5$ kW 10 ($P_2 > 7{,}5$ kW)	
Bearings					
Bearing design	D-max	-	Double-row angular contact ball bearing		
	F-max	Deep groove ball bearing			
Lubrication		Grease-packed rolling element bearings sealed for life			
Sealing element		Contacting seal on both sides (e.g. 2RS1)			
Monitoring					
Winding temperature motor version U		Temperature monitoring circuit (with automatic reset and start-up): bimetal switch directly connected with the control circuit of the motor contactor			
Winding temperature motor version Y		Limiting circuit (temperature limit for explosion protection without automatic reset): bimetal switch connected via a tripping unit with manual reset			
Power cable					
Type		Rubber-sheathed cable (H07RN8-F)			
Length	Motor version U	8 m			
	Motor version Y	10 m			
Cable entry	Motor version U	Cable gland			
	Motor version Y	Resin-sealed cable entry			
Sealing elements					
Shaft seal		Mechanical seal (bellows-type mechanical seal) (Q1Q1PGG)			
Elastomers		NBR			
Explosion protection					
Motor version U		Not explosion-proof			
Motor version Y		Ⓔx II 2G Ex db h IIB T4 Gb			
Coating		Environmentally friendly KSB top coat (two-component epoxy paint), colour RAL 5002, film thickness = 80 µm			
Maximum fluid temperature		40 °C			
Installation (⇨ Page 110)					
Stationary, with guide hoop	F-max	Installation depths 1.5 m/1.8 m/2.1 m			-
Stationary, with single guide rail		Installation depth: 6 m		-	-
Stationary, with twin guide rail		Installation depth: 6 m (available up to 12 m)			
Stationary, with guide wire		Installation depth: 4.5 m (available up to 9.5 m and 14.5 m)			
Transportable		Installation depth: 14.5 m			

28 Motors available only for DOL starting.

Overview of product features, material variants G1, G2, GH

Overview of product features, material variants G1, G2, GH

		Motor sizes			
		2 poles			
		14C 2...23F 2	18C 2…24F 2 29C 2...40F 2	35C 2…51F 2[29] 45C 2…73F 2	60C 2...84F 2
		4 poles			
		-	17F 4 12C 4…23F 4	21C 4...35F 4 42F 4	36C 4…65F 4 45C 4…77F 4
Material variant	D-max	G2, GH			
	F-max	G1, G2, GH			
Voltage		230 V / 380 V / 415 V / 500 V / 690 V			
Starting method		DOL	DOL	DOL DOL / star-delta[30]	DOL / star-delta[30]
Bearings					
Bearing design	F-max	Double-row angular contact ball bearing			
Power cable					
Type		Rubber-sheathed cable (S1BN8-F) Rubber-sheathed cable (S07RC4N8-F) (shielded) TEFZEL cable			
Length		≤ 50 m[31]			
Cable entry		Water-tight			
Monitoring					
Leakage inside the motor		Leakage sensor in the motor			
Sealing elements					
Shaft seal		Mechanical seal (bellows-type mechanical seal) Q1Q1PGG Mechanical seal with covered springs			
Material variant, shaft seal (pump end)		Q1Q1VGG Q12Q1VGG1 Q12Q1KGG1			
Elastomers		FKM FKM / Teflon			
Coating		Environmentally friendly KSB top coat (two-component epoxy paint), colour RAL 5002, film thickness = 80 µm			
Installation (⇨ Page 110)					
Stationary, with twin guide rail		Installation depth: 12 m			
Stationary, with guide wire		Installation depth: 14.5 m			

Impellers

	Free-flow impeller (impeller type F-max)	**Suitable for the following fluids:** fluids containing solids and stringy material as well as fluids with entrapped air or entrapped gas
	Open two-vane impeller (impeller type D-max)	**Suitable for the following fluids:** waste water containing wet wipes and long fibres

29 Motors available only for DOL starting.
30 690 V DOL starting only
31 10 m / 15 m / 20 m / 30 m / 40 m / 50 m available

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

The table below for your guidance is based on KSB's long-standing experience. The data are standard values and are not to be considered as generally binding recommendations. More detailed advice is available from our specialist department. The KSB materials laboratory's wealth of experience may be useful when selecting materials.

Selection aid for materials and hydraulic systems per fluid

Fluid handled[32]	Recommended material	Recommended impeller type[33]	Recommended sealing elements	Comments, further recommendations
Water, surface water				
▪ Dam water	G	F-max, D-max	NBR	Free passage > any solids contained, possibly pre-screened
▪ Lake water	G	F-max, D-max	NBR	Free passage > any solids contained, possibly pre-screened
▪ River water	G	F-max, D-max	NBR	Free passage > any solids contained, possibly pre-screened
Water, contaminated water				
▪ Mixed water, with strainer	G	F-max, D-max	NBR	-
▪ Mixed water, without strainer	G	F-max, D-max	NBR	-
▪ Slightly contaminated water	G	F-max, D-max	NBR	Free passage > any solids contained, possibly pre-screened
▪ Waste water with faeces	G	D-max, F-max	NBR	EN 12050, min. free passage of 40 mm
▪ Waste water without faeces	G	F-max, D-max	NBR	-
Municipal waste water				
▪ Biologically treated	G	F-max, D-max	NBR	-
▪ Containing air and gas	G	F-max	NBR	Up to 8 %; contact KSB for higher concentrations.
▪ Domestic waste water with faeces	G	F-max, D-max	NBR	EN 12050, min. free passage of 40 mm
▪ Domestic waste water without faeces	G	F-max, D-max	NBR	-
▪ Pumped drainage	G	F-max, D-max	NBR	-
▪ Raw waste water containing solids, long fibres and abrasive particles	G	F-max, D-max	NBR	Free passage > any solids contained, possibly pre-screened
▪ Untreated	G	F-max, D-max	NBR	ATV[34] recommends a free passage of 100 mm; min. free passage: 76 mm
Abrasive municipal waste water				
▪ Raw waste water containing solids, long fibres and abrasive particles	GH	D-max, F-max		Solids content < 5 g/l
Water, raw water				
▪ No details specified	G	F-max, D-max	NBR	-
Corrosive and abrasive industrial waste water				
▪ No details specified	G1	F-max	NBR	-
Abrasive, non-corrosive industrial waste water[35]				

32 For any fluids which are not listed in this table contact KSB.

33 The first impeller type listed should be given preference.

34 ATV = German regulatory body for waste water management

35 Severe hydroabrasive wear occurs if solids contents of approx. 0.5 g/l or higher are combined with circumferential speeds exceeding 20 m/s or part load conditions to the left of the duty point. The material variants required highly depend on the operating hours, rotational speed and flow velocity.

Fluid handled[32]	Recommended material	Recommended impeller type[33]	Recommended sealing elements	Comments, further recommendations
▪ Containing dust / ash	G2, GH	F-max, D-max	NBR	-
▪ Containing lime milk > 5 to 15 %	G2, GH	F-max, D-max	NBR	-
▪ Pigment suspensions	G2, GH	F-max, D-max	NBR	-
▪ Lime water	G2, GH	F-max, D-max	NBR	-
▪ Wash water containing solids	G2, GH	F-max, D-max	NBR	-
Non-abrasive, non-corrosive industrial waste water[36]				
▪ Industrial waste water with faeces	G	F-max, D-max	NBR	-
▪ Industrial waste water without faeces	G	F-max, D-max	NBR	-
▪ Containing aliphatic hydrocarbons	G	F-max	FKM	TEHSITE cable; for high concentrations contact KSB.
▪ Ammonium hydroxide	G	F-max	NBR	-
▪ Containing up to 5 % of ammonium hydroxide	G	F-max	NBR	-
▪ Containing aromatic hydrocarbons	G	F-max	FKM	TEHSITE cable; for high concentrations contact KSB.
▪ Containing benzene	G	F-max	FKM	TEHSITE cable; for high concentrations contact KSB.
▪ Containing 5 % of calcium hydroxide $Ca(OH)_2$	G	F-max	NBR	-
▪ Containing chlorinated hydrocarbons	G	F-max	FKM	TEHSITE cable; for high concentrations contact KSB.
▪ Containing chloroform	G	F-max	FKM	TEHSITE cable; for high concentrations contact KSB.
▪ Containing 10 % of dissolved carbonate Na_2CO_3	G	F-max	NBR	-
▪ Containing ethylene chloride	G	F-max	FEP-FKM	TEHSITE cable; for high concentrations contact KSB.
▪ Containing fibres	G	D-max, F-max	NBR	-
▪ Containing methane	G	F-max	FKM	TEHSITE cable; for high concentrations contact KSB.
▪ Containing methylene chloride	G	F-max	FEP-FKM	TEHSITE cable; for high concentrations contact KSB.
▪ Containing oil	G	F-max	FKM	TEHSITE cable; for high concentrations contact KSB.
▪ Containing paint suspension	G	F-max	NBR	Solvent-free, observe the operator's instructions.
▪ Containing petrol	G	F-max	FKM	TEHSITE cable; for high concentrations contact KSB.
▪ Containing 10 % of potassium hydroxide KOH	G	F-max	FEP-FKM	-
▪ Containing 5 % of sodium hydroxide NaOH	G	F-max	FEP-FKM	-
▪ Containing styrene	G	F-max	FEP-FKM	TEHSITE cable; for high concentrations contact KSB.
▪ Containing tetrachloroethylene	G	F-max	FKM	TEHSITE cable; for high concentrations contact KSB.
▪ Containing 25 % of urea $(NH_2)_2$-CO	G	F-max	NBR	-
Acidic water				
▪ Slightly acidic, pH >= 6	G1	F-max	FKM	pH ≥ 6 G1 variant and FPM (Viton) O-rings
Suspensions containing solids				
▪ Pulp, concentration up to 1 % bone dry	G	F-max, D-max	NBR	-

36 The hydrocarbons mentioned may occur in very high concentrations due to the difference in specific weight and their low solubility. If this is the case, contact KSB.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Fluid handled[32)]	Recommended material	Recommended impeller type[33)]	Recommended sealing elements	Comments, further recommendations
▪ Water/sand mixture up to 5 g/l	G2, GH	F-max, D-max	NBR	-
▪ Pulp, concentration up to 6 % bone dry	G	F-max, D-max	NBR	-
▪ Water/sand mixture up to 0.5 g/l	G	F-max, D-max	NBR	-
Sludges				
▪ Raw sludge	G	D-max, F-max	NBR	Pumpable up to a dry substance content of: 13 % (D-max), 8 % (F-max)
▪ Digested sludge	G	D-max, F-max	NBR	Pumpable up to a dry substance content of: 13 % (D-max), 8 % (F-max)
▪ Activated sludge	G	D-max, F-max	NBR	Pumpable up to a dry substance content of: 13 % (D-max), 8 % (F-max)

Technical data

Amarex G, free-flow impeller, n = 2900 rpm

G = material variant grey cast iron (pump casing) / grey cast iron (intermediate casing) / grey cast iron (impeller)

F = free-flow impeller

US = without explosion protection, for fluid temperatures of up to 40 °C

YS = explosion protection Ex II2G Ex db h IIB T4 Gb, for fluid temperatures of up to 40 °C

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	Material variant	Impeller diameter	P_2	P_1	I_N	I_A	$T^{37)}$	[kg]	Mat. No.
							[mm]	[kW]	[kW]	[A]	[A]	[°C]		
F050-140	23	F	2	U	S	G	100	2,35	3,04	5,25	45	40	58	39110001
F050-140	23	F	2	Y	S	G	100	2,35	3,04	5,25	45	40	59	39110002
F050-140	23	F	2	U	S	G	110	2,35	3,04	5,25	45	40	58	39110003
F050-140	23	F	2	Y	S	G	110	2,35	3,04	5,25	45	40	59	39110004
F050-140	23	F	2	U	S	G	120	2,35	3,04	5,25	45	40	58	39110005
F050-140	23	F	2	Y	S	G	120	2,35	3,04	5,25	45	40	59	39110006
F050-140	23	F	2	U	S	G	130	2,35	3,04	5,25	45	40	58	39110007
F050-140	23	F	2	Y	S	G	130	2,35	3,04	5,25	45	40	59	39110008
F050-140	23	F	2	U	S	G	140	2,35	3,04	5,25	45	40	58	39110009
F050-140	23	F	2	Y	S	G	140	2,35	3,04	5,25	45	40	59	39110010
F050-140	23	F	2	U	S	G	150	2,35	3,04	5,25	45	40	58	39110011
F050-140	23	F	2	Y	S	G	150	2,35	3,04	5,25	45	40	59	39110012
F050-140	23	F	2	U	S	G	160	2,35	3,04	5,25	45	40	58	39110013
F050-140	23	F	2	Y	S	G	160	2,35	3,04	5,25	45	40	59	39110014
F050-220	24	F	2	U	S	G	160	2,40	2,95	4,89	45	40	63	39110027
F050-220	24	F	2	Y	S	G	160	2,40	2,95	4,89	45	40	64	39110028
F050-220	40	F	2	U	S	G	160	4,00	4,86	8,17	76	40	67	39110031
F050-220	40	F	2	Y	S	G	160	4,00	4,86	8,17	76	40	68	39110032
F050-220	40	F	2	U	S	G	170	4,00	4,86	8,17	76	40	67	39110033
F050-220	40	F	2	Y	S	G	170	4,00	4,86	8,17	76	40	68	39110034
F050-220	40	F	2	U	S	G	180	4,00	4,86	8,17	76	40	67	39110045
F050-220	40	F	2	Y	S	G	180	4,00	4,86	8,17	76	40	68	39110046
F050-220	51	F	2	U	S	G	190	5,10	6,10	10,20	86	40	84	39110035
F050-220	51	F	2	Y	S	G	190	5,10	6,10	10,20	86	40	87	39110036
F050-220	51	F	2	U	S	G	170	5,10	6,10	10,20	86	40	84	39110037
F050-220	51	F	2	Y	S	G	170	5,10	6,10	10,20	86	40	87	39110038
F050-220	51	F	2	U	S	G	180	5,10	6,10	10,20	86	40	84	39110039
F050-220	51	F	2	Y	S	G	180	5,10	6,10	10,20	86	40	87	39110040
F050-220	73	F	2	U	S	G	190	7,30	8,72	14,70	125	40	89	39110041
F050-220	73	F	2	Y	S	G	190	7,30	8,72	14,70	125	40	93	39110042
F065-170	24	F	2	U	S	G	110	2,40	2,95	4,89	45	40	65	39110077
F065-170	24	F	2	Y	S	G	110	2,40	2,95	4,89	45	40	67	39110078
F065-170	24	F	2	U	S	G	120	2,40	2,95	4,89	45	40	65	39110079
F065-170	24	F	2	Y	S	G	120	2,40	2,95	4,89	45	40	67	39110080
F065-170	24	F	2	U	S	G	130	2,40	2,95	4,89	45	40	65	39110081
F065-170	24	F	2	Y	S	G	130	2,40	2,95	4,89	45	40	67	39110082
F065-170	24	F	2	U	S	G	140	2,40	2,95	4,89	45	40	65	39110083
F065-170	24	F	2	Y	S	G	140	2,40	2,95	4,89	45	40	67	39110084
F065-170	40	F	2	U	S	G	150	4,00	4,86	8,17	76	40	69	39110085
F065-170	40	F	2	Y	S	G	150	4,00	4,86	8,17	76	40	70	39110086
F065-170	40	F	2	U	S	G	160	4,00	4,86	8,17	76	40	69	39110087
F065-170	40	F	2	Y	S	G	160	4,00	4,86	8,17	76	40	70	39110088
F065-170	40	F	2	U	S	G	170	4,00	4,86	8,17	76	40	69	39110089
F065-170	40	F	2	Y	S	G	170	4,00	4,86	8,17	76	40	70	39110090

37 Fluid temperature

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	Material variant	Impeller diameter	P_2	P_1	I_N	I_A	$T^{37)}$	[kg]	Mat. No.
							[mm]	[kW]	[kW]	[A]	[A]	[°C]		
F065-170	40	F	2	U	S	G	180	4,00	4,86	8,17	76	40	68	39110097
F065-170	40	F	2	Y	S	G	180	4,00	4,86	8,17	76	40	70	39110098
F065-170	51	F	2	U	S	G	180	5,10	6,10	10,20	86	40	86	39110091
F065-170	51	F	2	Y	S	G	180	5,10	6,10	10,20	86	40	89	39110092
F065-170	73	F	2	U	S	G	190	7,30	8,72	14,70	125	40	91	39110093
F065-170	73	F	2	Y	S	G	190	7,30	8,72	14,70	125	40	96	39110094
F080-220	24	F	2	U	S	G	140	2,40	2,95	4,89	45	40	69	39110163
F080-220	24	F	2	Y	S	G	140	2,40	2,95	4,89	45	40	71	39110164
F080-220	40	F	2	U	S	G	150	4,00	4,86	8,17	76	40	73	39110165
F080-220	40	F	2	Y	S	G	150	4,00	4,86	8,17	76	40	74	39110166
F080-220	40	F	2	U	S	G	160	4,00	4,86	8,17	76	40	73	39110167
F080-220	40	F	2	Y	S	G	160	4,00	4,86	8,17	76	40	74	39110168
F080-220	40	F	2	U	S	G	170	4,00	4,86	8,17	76	40	71	39110183
F080-220	40	F	2	Y	S	G	170	4,00	4,86	8,17	76	40	74	39110184
F080-220	51	F	2	U	S	G	170	5,10	6,10	10,20	86	40	91	39110169
F080-220	51	F	2	Y	S	G	170	5,10	6,10	10,20	86	40	94	39110170
F080-220	73	F	2	U	S	G	180	7,30	8,72	14,70	125	40	96	39110171
F080-220	73	F	2	Y	S	G	180	7,30	8,72	14,70	125	40	100	39110172
F080-220	73	F	2	U	S	G	190	7,30	8,72	14,70	125	40	96	39110173
F080-220	73	F	2	Y	S	G	190	7,30	8,72	14,70	125	40	100	39110174
F080-220	84	F	2	U	S	G	200	8,40	9,85	16,80	156	40	101	39110175
F080-220	84	F	2	Y	S	G	200	8,40	9,85	16,80	156	40	105	39110176

Amarex G, free-flow impeller, n = 1450 rpm

G = material variant grey cast iron (pump casing) / grey cast iron (intermediate casing) / grey cast iron (impeller)

F = free-flow impeller

US = without explosion protection, for fluid temperatures of up to 40 °C

YS = explosion protection Ex II2G Ex db h IIB T4 Gb, for fluid temperatures of up to 40 °C

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	Material variant	Impeller diameter	P_2	P_1	I_N	I_A	$T^{38)}$	[kg]	Mat. No.
							[mm]	[kW]	[kW]	[A]	[A]	[°C]		
F065-150	17	F	4	U	S	G	150	1,67	2,13	3,71	27	40	66	39110055
F065-150	17	F	4	Y	S	G	150	1,67	2,13	3,71	27	40	67	39110056
F065-150	17	F	4	U	S	G	160	1,67	2,13	3,71	27	40	66	39110057
F065-150	17	F	4	Y	S	G	160	1,67	2,13	3,71	27	40	67	39110058
F065-150	17	F	4	U	S	G	170	1,67	2,13	3,71	27	40	66	39110059
F065-150	17	F	4	Y	S	G	170	1,67	2,13	3,71	27	40	67	39110060
F065-150	17	F	4	U	S	G	180	1,67	2,13	3,71	27	40	66	39110061
F065-150	17	F	4	Y	S	G	180	1,67	2,13	3,71	27	40	67	39110062
F065-150	17	F	4	U	S	G	190	1,67	2,13	3,71	27	40	66	39110063
F065-150	17	F	4	Y	S	G	190	1,67	2,13	3,71	27	40	67	39110064
F065-150	17	F	4	U	S	G	200	1,67	2,13	3,71	27	40	66	39110065
F065-150	17	F	4	Y	S	G	200	1,67	2,13	3,71	27	40	67	39110066
F065-230	17	F	4	U	S	G	160	1,67	2,13	3,71	27	40	67	39110107
F065-230	17	F	4	Y	S	G	160	1,67	2,13	3,71	27	40	69	39110108
F065-230	17	F	4	U	S	G	170	1,67	2,13	3,71	27	40	67	39110109
F065-230	17	F	4	Y	S	G	170	1,67	2,13	3,71	27	40	69	39110110
F065-230	17	F	4	U	S	G	180	1,67	2,13	3,71	27	40	67	39110111
F065-230	17	F	4	Y	S	G	180	1,67	2,13	3,71	27	40	69	39110112
F065-230	17	F	4	U	S	G	190	1,67	2,13	3,71	27	40	67	39110113
F065-230	17	F	4	Y	S	G	190	1,67	2,13	3,71	27	40	69	39110114
F065-230	23	F	4	U	S	G	200	2,30	2,98	5,15	38	40	69	39110115
F065-230	23	F	4	Y	S	G	200	2,30	2,98	5,15	38	40	70	39110116
F065-230	35	F	4	U	S	G	210	3,55	4,41	7,56	45	40	86	39110117
F065-230	35	F	4	Y	S	G	210	3,55	4,41	7,56	45	40	95	39110118
F080-150	17	F	4	U	S	G	140	1,67	2,13	3,71	27	40	70	39110129
F080-150	17	F	4	Y	S	G	140	1,67	2,13	3,71	27	40	71	39110130
F080-150	17	F	4	U	S	G	160	1,67	2,13	3,71	27	40	70	39110131
F080-150	17	F	4	Y	S	G	160	1,67	2,13	3,71	27	40	71	39110132
F080-180	17	F	4	U	S	G	140	1,67	2,13	3,71	27	40	70	39110143
F080-180	17	F	4	Y	S	G	140	1,67	2,13	3,71	27	40	72	39110144
F080-180	17	F	4	U	S	G	150	1,67	2,13	3,71	27	40	70	39110145
F080-180	17	F	4	Y	S	G	150	1,67	2,13	3,71	27	40	72	39110146
F080-180	17	F	4	U	S	G	160	1,67	2,13	3,71	27	40	70	39110147
F080-180	17	F	4	Y	S	G	160	1,67	2,13	3,71	27	40	72	39110148
F080-180	17	F	4	U	S	G	170	1,67	2,13	3,71	27	40	70	39110149
F080-180	17	F	4	Y	S	G	170	1,67	2,13	3,71	27	40	72	39110150
F080-180	17	F	4	U	S	G	180	1,67	2,13	3,71	27	40	70	39110151
F080-180	17	F	4	Y	S	G	180	1,67	2,13	3,71	27	40	72	39110152
F080-230	17	F	4	U	S	G	150	1,67	2,13	3,71	27	40	71	39110193
F080-230	17	F	4	Y	S	G	150	1,67	2,13	3,71	27	40	73	39110194
F080-230	17	F	4	U	S	G	160	1,67	2,13	3,71	27	40	71	39110195
F080-230	17	F	4	Y	S	G	160	1,67	2,13	3,71	27	40	73	39110196
F080-230	23	F	4	U	S	G	170	2,30	2,98	5,15	38	40	73	39110197
F080-230	23	F	4	Y	S	G	170	2,30	2,98	5,15	38	40	75	39110198
F080-230	35	F	4	U	S	G	180	3,55	4,41	7,56	45	40	91	39110199
F080-230	35	F	4	Y	S	G	180	3,55	4,41	7,56	45	40	100	39110200

38 Fluid temperature

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

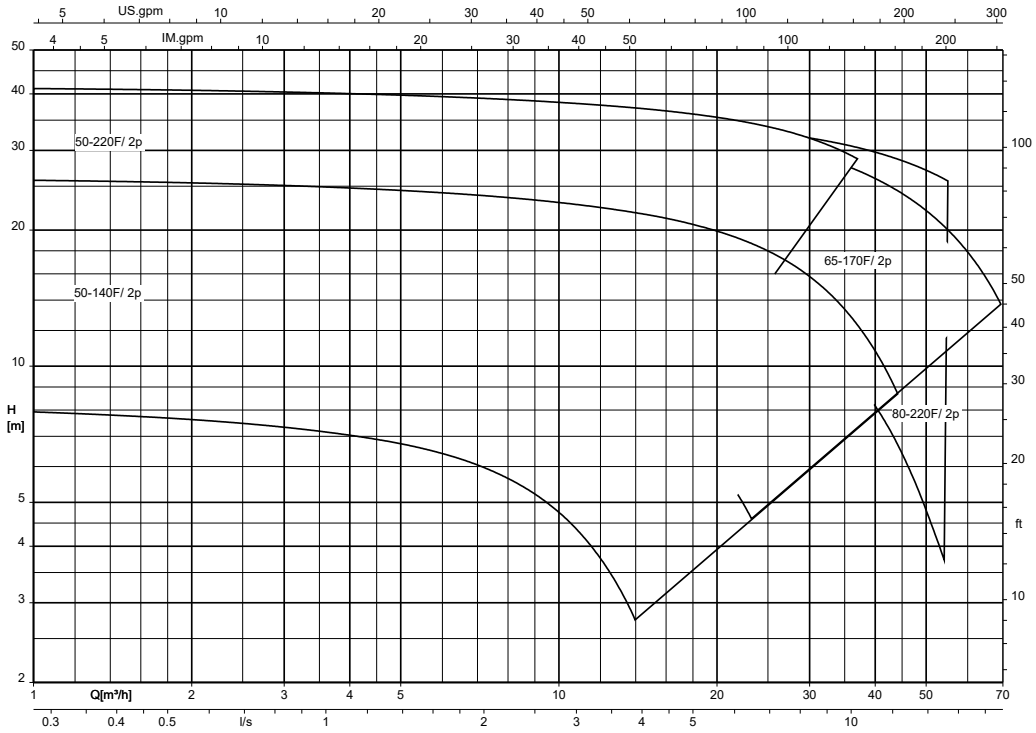
Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	Material variant	Impeller diameter [mm]	P_2 [kW]	P_1 [kW]	I_N [A]	I_A [A]	$T^{38)}$ [°C]	[kg]	Mat. No.
F080-230	35	F	4	U	S	G	190	3,55	4,41	7,56	45	40	91	39110201
F080-230	35	F	4	Y	S	G	190	3,55	4,41	7,56	45	40	100	39110202
F080-230	42	F	4	U	S	G	200	4,15	5,40	10,50	81	40	97	39110203
F080-230	42	F	4	Y	S	G	200	4,15	5,40	10,50	81	40	100	39110204
F080-230	42	F	4	U	S	G	210	4,15	5,40	10,50	81	40	97	39110205
F080-230	42	F	4	Y	S	G	210	4,15	5,40	10,50	81	40	100	39110206
F100-180	17	F	4	U	S	G	140	1,67	2,13	3,71	27	40	73	39110221
F100-180	17	F	4	Y	S	G	140	1,67	2,13	3,71	27	40	74	39110222
F100-180	17	F	4	U	S	G	160	1,67	2,13	3,71	27	40	73	39110223
F100-180	17	F	4	Y	S	G	160	1,67	2,13	3,71	27	40	74	39110224
F100-180	17	F	4	U	S	G	180	1,67	2,13	3,71	27	40	73	39110225
F100-180	17	F	4	Y	S	G	180	1,67	2,13	3,71	27	40	74	39110226
F100-180	17	F	4	U	S	G	190	1,67	2,13	3,71	27	40	73	39110227
F100-180	17	F	4	Y	S	G	190	1,67	2,13	3,71	27	40	74	39110228
F100-230	17	F	4	U	S	G	160	1,67	2,13	3,71	27	40	74	39110259
F100-230	17	F	4	Y	S	G	160	1,67	2,13	3,71	27	40	75	39110260
F100-230	23	F	4	U	S	G	170	2,30	2,98	5,15	38	40	75	39110261
F100-230	23	F	4	Y	S	G	170	2,30	2,98	5,15	38	40	77	39110262
F100-230	35	F	4	U	S	G	180	3,55	4,41	7,56	45	40	94	39110263
F100-230	35	F	4	Y	S	G	180	3,55	4,41	7,56	45	40	103	39110264
F100-230	35	F	4	U	S	G	190	3,55	4,41	7,56	45	40	94	39110265
F100-230	35	F	4	Y	S	G	190	3,55	4,41	7,56	45	40	103	39110266
F100-230	42	F	4	U	S	G	200	4,15	5,40	10,50	81	40	100	39110267
F100-230	42	F	4	Y	S	G	200	4,15	5,40	10,50	81	40	103	39110268
F100-230	42	F	4	U	S	G	210	4,15	5,40	10,50	81	40	100	39110269
F100-230	42	F	4	Y	S	G	210	4,15	5,40	10,50	81	40	103	39110270
F150-180	65	F	4	U	S	G	160	6,50	7,89	13,40	106	40	128	39110285
F150-180	65	F	4	Y	S	G	160	6,50	7,89	13,40	106	40	132	39110286
F150-180	65	F	4	U	S	G	170	6,50	7,89	13,40	106	40	128	39110287
F150-180	65	F	4	Y	S	G	170	6,50	7,89	13,40	106	40	132	39110288
F150-180	65	F	4	U	S	G	180	6,50	7,89	13,40	106	40	128	39110289
F150-180	65	F	4	Y	S	G	180	6,50	7,89	13,40	106	40	132	39110290
F150-230	65	F	4	U	S	G	170	6,50	7,89	13,40	106	40	130	39110301
F150-230	65	F	4	Y	S	G	170	6,50	7,89	13,40	106	40	134	39110302
F150-230	65	F	4	U	S	G	180	6,50	7,89	13,40	106	40	130	39110303
F150-230	65	F	4	Y	S	G	180	6,50	7,89	13,40	106	40	134	39110304
F150-230	65	F	4	U	S	G	190	6,50	7,89	13,40	106	40	130	39110305
F150-230	65	F	4	Y	S	G	190	6,50	7,89	13,40	106	40	134	39110306
F150-230	65	F	4	U	S	G	200	6,50	7,89	13,40	106	40	130	39110307
F150-230	65	F	4	Y	S	G	200	6,50	7,89	13,40	106	40	134	39110308
F150-230	65	F	4	U	S	G	210	6,50	7,89	13,40	106	40	130	39110309
F150-230	65	F	4	Y	S	G	210	6,50	7,89	13,40	106	40	134	39110310
F150-230	77	F	4	U	S	G	220	7,70	9,20	15,90	118	40	134	39110311
F150-230	77	F	4	Y	S	G	220	7,70	9,20	15,90	118	40	138	39110312

Prices on request

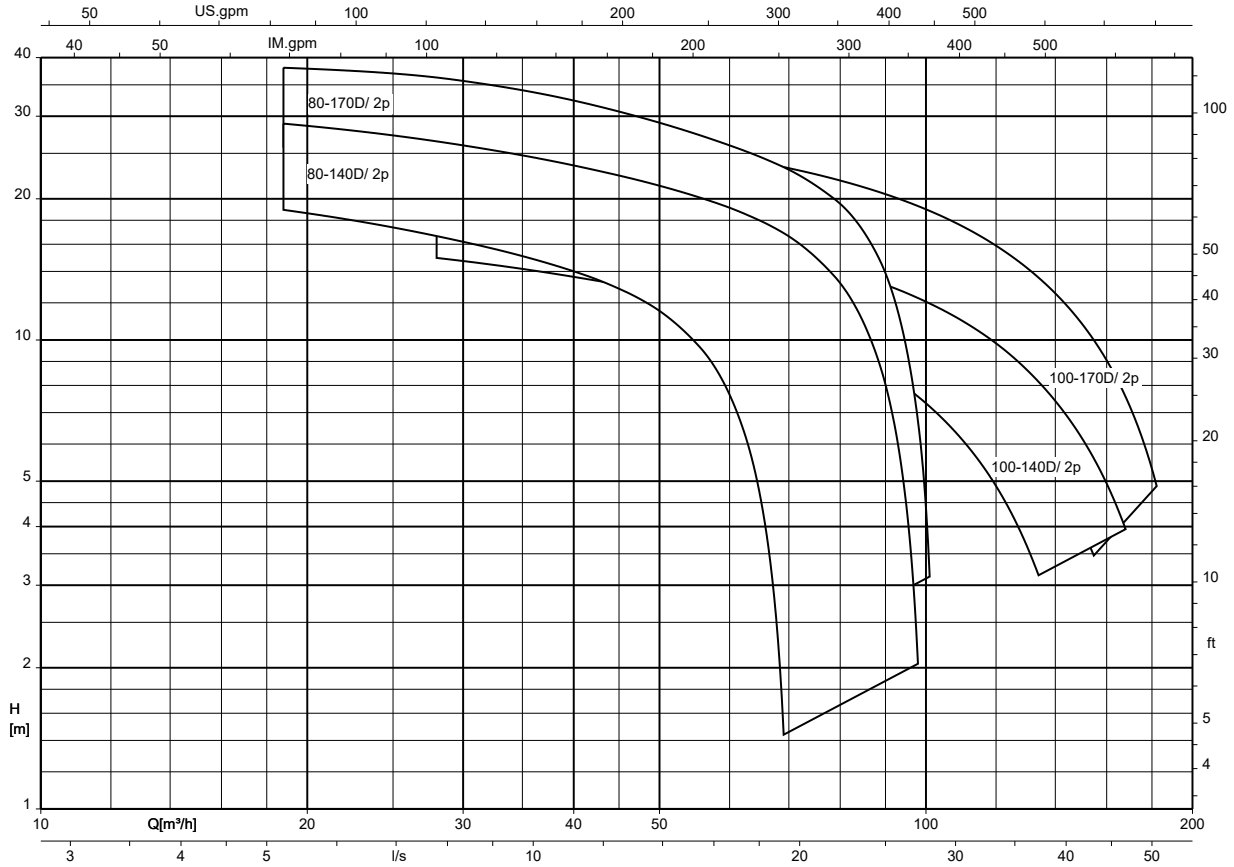
Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Selection charts

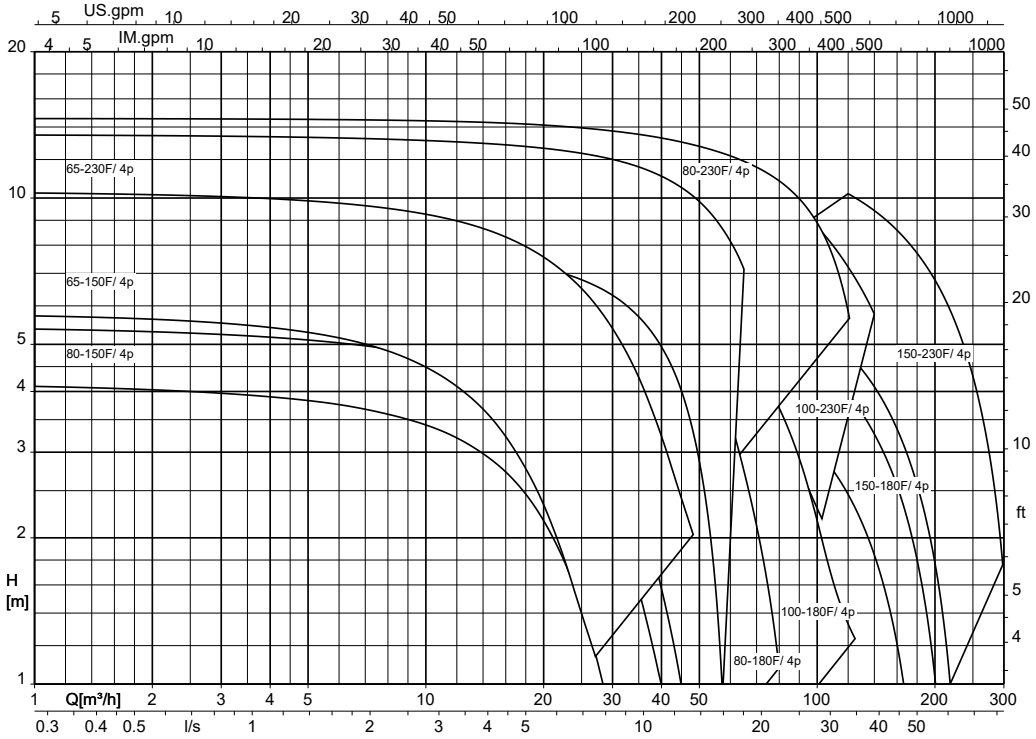
Amarex, F-max, n = 2900 rpm



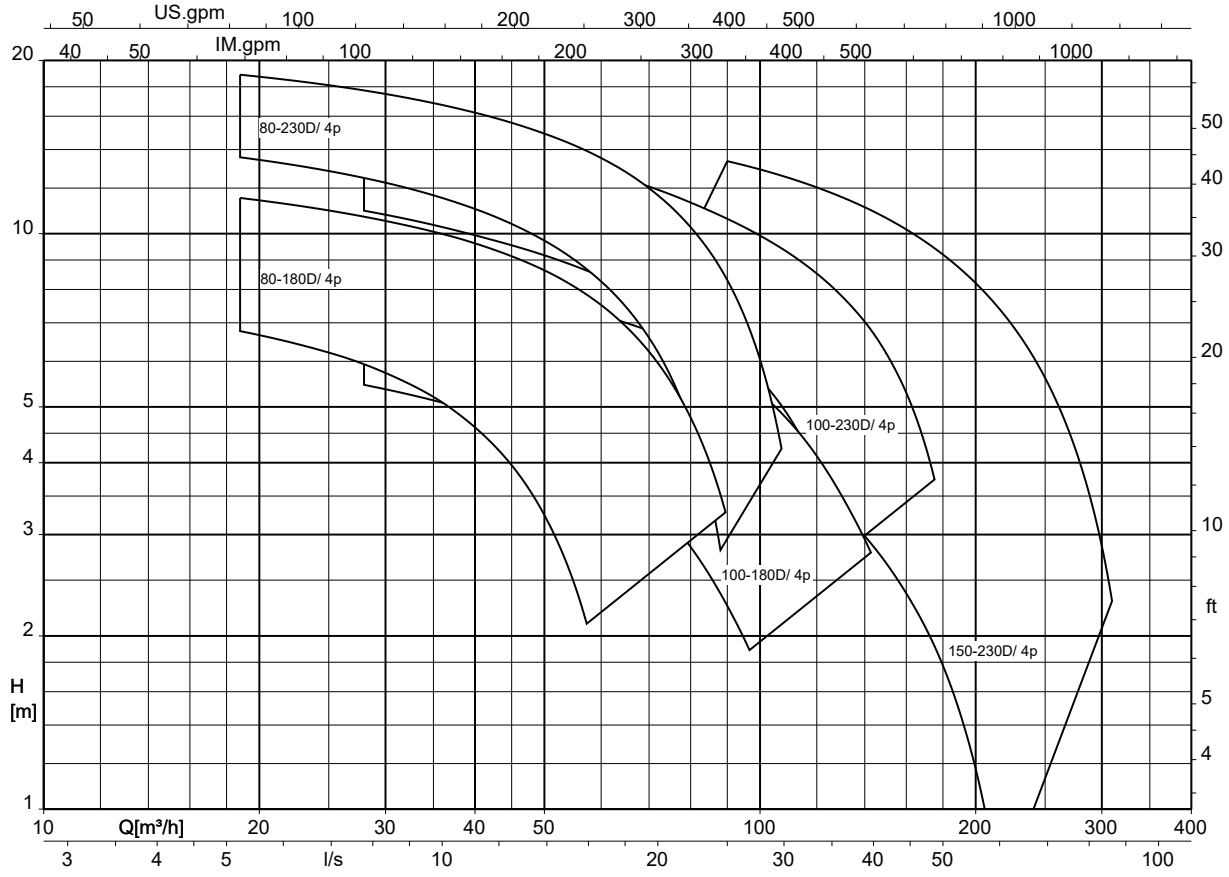
Amarex, D-max, n = 2900 rpm



Amarex, F-max, n = 1450 rpm



Amarex, D-max, n = 1450 rpm



Dimensions

Amarex DN 50/65/80/100/150, transportable version

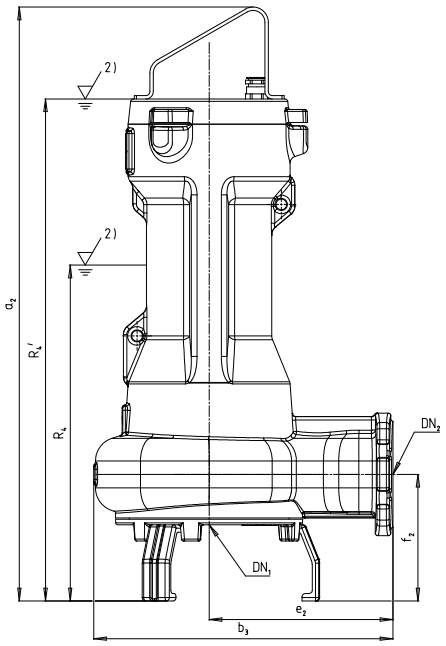


Fig. 35: Dimensions of transportable model

2)	Minimum submergence for continuous operation

Pump dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor version	DN_1	DN_2	a_2	b_3	e_2	f_2	R_4	R_4'
F050-140	014	C	2	U	S	50	50	715	279	170	163	345	-
F050-140	014	C	2	Y	S	50	50	724	279	170	163	354	-
F050-140	023	F	2	U	S	50	50	715	279	170	163	-	600
F050-140	023	F	2	Y	S	50	50	724	279	170	163	-	609
F050-220	018	C	2	U	S	50	50	753	311	180	163	378	-
F050-220	018	C	2	Y	S	50	50	762	311	180	163	387	-
F050-220	024	F	2	U	S	50	50	753	311	180	163	-	638
F050-220	024	F	2	Y	S	50	50	762	311	180	163	-	647
F050-220	029	C	2	U	S	50	50	753	311	180	163	423	-
F050-220	029	C	2	Y	S	50	50	762	311	180	163	432	-
F050-220	035	C	2	U	S	50	50	826	311	180	163	381	-
F050-220	035	C	2	Y	S	50	50	835	311	180	163	390	-
F050-220	040	F	2	U	S	50	50	753	311	180	163	-	638
F050-220	040	F	2	Y	S	50	50	762	311	180	163	-	647
F050-220	045	C	2	U	S	50	50	826	311	180	163	381	-
F050-220	045	C	2	Y	S	50	50	835	311	180	163	390	-
F050-220	051	F	2	U	S	50	50	826	311	180	163	-	691
F050-220	051	F	2	Y	S	50	50	835	311	180	163	-	700
F050-220	073	F	2	U	S	50	50	826	311	180	163	-	691
F050-220	073	F	2	Y	S	50	50	835	311	180	163	-	700
F065-150	017	F	4	U	S	65	65	784	351	210	184	-	669
F065-150	017	F	4	Y	S	65	65	793	351	210	184	-	678
F065-150	021	C	4	U	S	65	65	856	351	210	184	391	-
F065-150	021	C	4	Y	S	65	65	865	351	210	184	400	-
F065-150	035	F	4	U	S	65	65	856	351	210	184	-	721
F065-150	035	F	4	Y	S	65	65	865	351	210	184	-	730
F065-170	018	C	2	U	S	65	65	784	351	210	184	369	-
F065-170	018	C	2	Y	S	65	65	793	351	210	184	378	-

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor version	DN_1	DN_2	a_2	b_3	e_2	f_2	R_4	R_4'
F065-170	024	F	2	U	S	65	65	784	351	210	184	-	669
F065-170	024	F	2	Y	S	65	65	793	351	210	184	-	678
F065-170	029	C	2	U	S	65	65	784	351	210	184	454	-
F065-170	029	C	2	Y	S	65	65	793	351	210	184	463	-
F065-170	035	C	2	U	S	65	65	856	351	210	184	391	-
F065-170	035	C	2	Y	S	65	65	865	351	210	184	400	-
F065-170	040	F	2	U	S	65	65	784	351	210	184	-	669
F065-170	040	F	2	Y	S	65	65	793	351	210	184	-	678
F065-170	045	C	2	U	S	65	65	856	351	210	184	411	-
F065-170	045	C	2	Y	S	65	65	865	351	210	184	420	-
F065-170	051	F	2	U	S	65	65	856	351	210	184	-	721
F065-170	051	F	2	Y	S	65	65	865	351	210	184	-	730
F065-170	073	F	2	U	S	65	65	856	351	210	184	-	721
F065-170	073	F	2	Y	S	65	65	865	351	210	184	-	730
F065-230	012	C	2	U	S	65	65	784	351	210	184	369	-
F065-230	012	C	2	Y	S	65	65	793	351	210	184	378	-
F065-230	017	F	4	U	S	65	65	784	351	210	184	-	669
F065-230	017	F	4	Y	S	65	65	793	351	210	184	-	678
F065-230	021	C	4	U	S	65	65	856	351	210	184	358	-
F065-230	021	C	4	Y	S	65	65	865	351	210	184	367	-
F065-230	023	F	4	U	S	65	65	784	351	210	184	-	669
F065-230	023	F	4	Y	S	65	65	793	351	210	184	-	678
F065-230	035	F	4	U	S	65	65	856	351	210	184	-	721
F065-230	035	F	4	Y	S	65	65	865	351	210	184	-	730
F065-230	042	F	4	U	S	65	65	856	351	210	184	-	721
F065-230	042	F	4	Y	S	65	65	865	351	210	184	-	730
D080-140	018	C	2	U	S	80	80	758	373	230	176	343	-
D080-140	018	C	2	Y	S	80	80	767	373	230	176	352	-
D080-140	024	F	2	U	S	80	80	758	373	230	176	-	643
D080-140	024	F	2	Y	S	80	80	767	373	230	176	-	652
D080-140	029	C	2	U	S	80	80	758	373	230	176	428	-
D080-140	029	C	2	Y	S	80	80	767	373	230	176	437	-
D080-140	035	C	2	U	S	80	80	786	373	230	176	321	-
D080-140	035	C	2	Y	S	80	80	795	373	230	176	330	-
D080-140	040	F	2	U	S	80	80	758	373	230	176	-	643
D080-140	040	F	2	Y	S	80	80	767	373	230	176	-	652
D080-140	051	F	2	U	S	80	80	786	373	230	176	-	651
D080-140	051	F	2	Y	S	80	80	795	373	230	176	-	660
F080-150	017	F	4	U	S	80	80	798	385	230	194	-	683
F080-150	017	F	4	Y	S	80	80	807	385	230	194	-	692
F080-150	021	C	4	U	S	80	80	871	384	230	182	406	-
F080-150	021	C	4	Y	S	80	80	880	384	230	182	415	-
F080-150	035	F	4	U	S	80	80	871	384	230	182	-	736
F080-150	035	F	4	Y	S	80	80	880	384	230	182	-	745
D080-170	035	C	2	U	S	80	80	837	390	230	182	372	-
D080-170	035	C	2	Y	S	80	80	846	390	230	182	381	-
D080-170	045	C	2	U	S	80	80	837	390	230	182	392	-
D080-170	045	C	2	Y	S	80	80	846	390	230	182	401	-
D080-170	051	F	2	U	S	80	80	837	390	230	182	-	702
D080-170	051	F	2	Y	S	80	80	846	390	230	182	-	711
D080-170	060	C	2	U	S	80	80	857	390	230	182	432	-
D080-170	060	C	2	Y	S	80	80	866	390	230	182	441	-
D080-170	073	F	2	U	S	80	80	837	390	230	182	-	702
D080-170	073	F	2	Y	S	80	80	846	390	230	182	-	711
D080-170	084	F	2	U	S	80	80	857	390	230	182	-	722
D080-170	084	F	2	Y	S	80	80	866	390	230	182	-	731
D080-180	017	F	2	U	S	90	80	758	373	230	176	-	643

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor version	DN_1	DN_2	a_2	b_3	e_2	f_2	R_4	R_4'
D080-180	017	F	2	Y	S	90	80	767	373	230	176	-	652
D080-180	021	C	4	U	S	90	80	786	373	230	176	321	-
D080-180	021	C	4	Y	S	90	80	795	373	230	176	330	-
D080-180	035	F	4	U	S	90	80	786	373	230	176	-	651
D080-180	035	F	4	Y	S	90	80	795	373	230	176	-	660
F080-180	017	F	4	U	S	80	80	798	385	230	194	-	683
F080-180	017	F	4	Y	S	80	80	807	385	230	194	-	692
F080-180	021	C	4	U	S	80	80	871	384	230	182	406	-
F080-180	021	C	4	Y	S	80	80	880	384	230	182	415	-
F080-180	035	F	4	U	S	80	80	871	384	230	182	-	736
F080-180	035	F	4	Y	S	80	80	880	384	230	182	-	745
F080-220	018	C	2	U	S	80	80	798	385	230	194	383	-
F080-220	018	C	2	Y	S	80	80	807	385	230	194	392	-
F080-220	024	F	2	U	S	80	80	798	385	230	194	-	683
F080-220	024	F	2	Y	S	80	80	807	385	230	194	-	692
F080-220	029	C	2	U	S	80	80	798	385	230	194	468	-
F080-220	029	C	2	Y	S	80	80	807	385	230	194	477	-
F080-220	035	C	2	U	S	80	80	871	384	230	182	406	-
F080-220	035	C	2	Y	S	80	80	880	384	230	182	415	-
F080-220	040	F	2	U	S	80	80	798	385	230	194	-	683
F080-220	040	F	2	Y	S	80	80	807	385	230	194	-	692
F080-220	045	C	2	U	S	80	80	871	384	230	182	426	-
F080-220	045	C	2	Y	S	80	80	880	384	230	182	435	-
F080-220	051	F	2	U	S	80	80	871	384	230	182	-	736
F080-220	051	F	2	Y	S	80	80	880	384	230	182	-	745
F080-220	060	C	2	U	S	80	80	891	384	230	194	466	-
F080-220	060	C	2	Y	S	80	80	900	384	230	194	475	-
F080-220	073	F	2	U	S	80	80	871	384	230	182	-	736
F080-220	073	F	2	Y	S	80	80	880	384	230	182	-	745
F080-220	084	F	2	U	S	80	80	891	384	230	194	-	756
F080-220	084	F	2	Y	S	80	80	900	384	230	194	-	765
D080-230	021	C	4	U	S	90	80	837	390	230	182	372	-
D080-230	021	C	4	Y	S	90	80	846	390	230	182	381	-
D080-230	035	F	4	U	S	90	80	837	390	230	182	-	702
D080-230	035	F	4	Y	S	90	80	846	390	230	182	-	711
D080-230	036	C	4	U	S	90	80	857	390	230	182	372	-
D080-230	036	C	4	Y	S	90	80	866	390	230	182	381	-
D080-230	042	F	4	U	S	90	80	837	390	230	182	-	702
D080-230	042	F	4	Y	S	90	80	846	390	230	182	-	711
D080-230	065	F	4	U	S	90	80	857	390	230	182	-	722
D080-230	065	F	4	Y	S	90	80	866	390	230	182	-	731
F080-230	012	C	2	U	S	80	80	798	385	230	194	383	-
F080-230	012	C	2	Y	S	80	80	807	385	230	194	392	-
F080-230	017	F	4	U	S	80	80	798	385	230	194	-	683
F080-230	017	F	4	Y	S	80	80	807	385	230	194	-	692
F080-230	021	C	4	U	S	80	80	871	384	230	182	406	-
F080-230	021	C	4	Y	S	80	80	880	384	230	182	415	-
F080-230	023	F	4	U	S	80	80	798	385	230	194	-	683
F080-230	023	F	4	Y	S	80	80	807	385	230	194	-	692
F080-230	035	F	4	U	S	80	80	871	384	230	182	-	736
F080-230	035	F	4	Y	S	80	80	880	384	230	182	-	745
F080-230	036	C	4	U	S	80	80	891	384	230	194	406	-
F080-230	036	C	4	Y	S	80	80	900	384	230	194	415	-
F080-230	042	F	4	U	S	80	80	871	384	230	182	-	736
F080-230	042	F	4	Y	S	80	80	880	384	230	182	-	745
F080-230	045	C	4	U	S	80	80	891	384	230	194	486	-
F080-230	045	C	4	Y	S	80	80	900	384	230	194	495	-

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor version	DN_1	DN_2	a_2	b_3	e_2	f_2	R_4	R_4'
F080-230	065	F	4	U	S	80	80	891	384	230	194	-	756
F080-230	065	F	4	Y	S	80	80	900	384	230	194	-	765
F080-230	077	F	4	U	S	80	80	891	384	230	194	-	756
F080-230	077	F	4	Y	S	80	80	900	384	230	194	-	765
D100-140	029	C	2	U	S	90	100	784	431	270	193	454	-
D100-140	029	C	2	Y	S	90	100	793	431	270	193	463	-
D100-140	035	C	2	U	S	90	100	812	431	270	193	347	-
D100-140	035	C	2	Y	S	90	100	821	431	270	193	356	-
D100-140	040	F	2	U	S	90	100	784	431	270	193	-	669
D100-140	040	F	2	Y	S	90	100	793	431	270	193	-	678
D100-140	051	F	2	U	S	90	100	812	431	270	193	-	677
D100-140	051	F	2	Y	S	90	100	821	431	270	193	-	686
D100-170	035	C	2	U	S	90	100	844	440	270	186	379	-
D100-170	035	C	2	Y	S	90	100	853	440	270	186	388	-
D100-170	045	C	2	U	S	90	100	844	440	270	186	399	-
D100-170	045	C	2	Y	S	90	100	853	440	270	186	408	-
D100-170	051	F	2	U	S	90	100	844	440	270	186	-	709
D100-170	051	F	2	Y	S	90	100	853	440	270	186	-	718
D100-170	060	C	2	U	S	90	100	864	440	270	186	439	-
D100-170	060	C	2	Y	S	90	100	873	440	270	186	448	-
D100-170	073	F	2	U	S	90	100	844	440	270	186	-	709
D100-170	073	F	2	Y	S	90	100	853	440	270	186	-	718
D100-170	084	F	2	U	S	90	100	864	440	270	186	-	729
D100-170	084	F	2	Y	S	90	100	873	440	270	186	-	738
D100-180	017	F	4	U	S	110	100	784	431	270	193	-	669
D100-180	017	F	4	Y	S	110	100	793	431	270	193	-	678
D100-180	021	C	4	U	S	110	100	812	431	270	193	347	-
D100-180	021	C	4	Y	S	110	100	821	431	270	193	356	-
D100-180	035	F	4	U	S	110	100	812	431	270	193	-	677
D100-180	035	F	4	Y	S	110	100	821	431	270	193	-	686
F100-180	017	F	4	U	S	100	100	821	433	270	207	-	706
F100-180	017	F	4	Y	S	100	100	830	433	270	207	-	715
F100-180	021	C	4	U	S	100	100	894	433	270	207	429	-
F100-180	021	C	4	Y	S	100	100	903	433	270	207	438	-
F100-180	035	F	4	U	S	100	100	894	433	270	207	-	759
F100-180	035	F	4	Y	S	100	100	903	433	270	207	-	768
D100-230	021	C	4	U	S	110	100	844	440	270	186	379	-
D100-230	021	C	4	Y	S	110	100	853	440	270	186	388	-
D100-230	035	F	4	U	S	110	100	844	440	270	186	-	709
D100-230	035	F	4	Y	S	110	100	853	440	270	186	-	718
D100-230	036	C	4	U	S	110	100	864	440	270	186	379	-
D100-230	036	C	4	Y	S	110	100	873	440	270	186	388	-
D100-230	042	F	4	U	S	110	100	844	440	270	186	-	709
D100-230	042	F	4	Y	S	110	100	853	440	270	186	-	718
D100-230	065	F	4	U	S	110	100	864	440	270	186	-	729
D100-230	065	F	4	Y	S	110	100	873	440	270	186	-	738
F100-230	012	C	2	U	S	100	100	821	433	270	207	406	-
F100-230	012	C	2	Y	S	100	100	830	433	270	207	415	-
F100-230	017	F	4	U	S	100	100	821	433	270	207	-	706
F100-230	017	F	4	Y	S	100	100	830	433	270	207	-	715
F100-230	021	C	4	U	S	100	100	894	433	270	207	429	-
F100-230	021	C	4	Y	S	100	100	903	433	270	207	438	-
F100-230	023	F	4	U	S	100	100	821	433	270	207	-	706
F100-230	023	F	4	Y	S	100	100	830	433	270	207	-	715
F100-230	035	F	4	U	S	100	100	894	433	270	207	-	759
F100-230	035	F	4	Y	S	100	100	903	433	270	207	-	768
F100-230	036	C	4	U	S	100	100	914	433	270	207	429	-

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor version	DN_1	DN_2	a_2	b_3	e_2	f_2	R_4	R_4'
F100-230	036	C	4	Y	S	100	100	923	433	270	207	438	-
F100-230	042	F	4	U	S	100	100	894	433	270	207	-	759
F100-230	042	F	4	Y	S	100	100	903	433	270	207	-	768
F100-230	045	C	4	U	S	100	100	914	433	270	207	509	-
F100-230	045	C	4	Y	S	100	100	923	433	270	207	518	-
F100-230	065	F	4	U	S	100	100	914	433	270	207	-	779
F100-230	065	F	4	Y	S	100	100	923	433	270	207	-	788
F100-230	077	F	4	U	S	100	100	914	433	270	207	-	779
F100-230	077	F	4	Y	S	100	100	923	433	270	207	-	788
F150-180	036	C	4	U	S	150	150	926	512	320	217	441	-
F150-180	036	C	4	Y	S	150	150	935	512	320	217	450	-
F150-180	065	F	4	U	S	150	150	926	512	320	217	-	791
F150-180	065	F	4	Y	S	150	150	935	512	320	217	-	800
D150-230	036	C	4	U	S	150	150	926	512	320	217	441	-
D150-230	036	C	4	Y	S	150	150	935	512	320	217	450	-
D150-230	045	C	4	U	S	150	150	926	512	320	217	521	-
D150-230	045	C	4	Y	S	150	150	935	512	320	217	530	-
D150-230	065	F	4	U	S	150	150	926	512	320	217	-	791
D150-230	065	F	4	Y	S	150	150	935	512	320	217	-	800
D150-230	077	F	4	U	S	150	150	926	512	320	217	-	791
D150-230	077	F	4	Y	S	150	150	935	512	320	217	-	800
F150-230	036	C	4	U	S	150	150	926	512	320	217	441	-
F150-230	036	C	4	Y	S	150	150	935	512	320	217	450	-
F150-230	045	C	4	U	S	150	150	926	512	320	217	521	-
F150-230	045	C	4	Y	S	150	150	935	512	320	217	530	-
F150-230	065	F	4	U	S	150	150	926	512	320	217	-	791
F150-230	065	F	4	Y	S	150	150	935	512	320	217	-	800
F150-230	077	F	4	U	S	150	150	926	512	320	217	-	791
F150-230	077	F	4	Y	S	150	150	935	512	320	217	-	800

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Amarex DN 50, stationary installation, guide wire arrangement, single guide rail arrangement, guide hoop arrangement

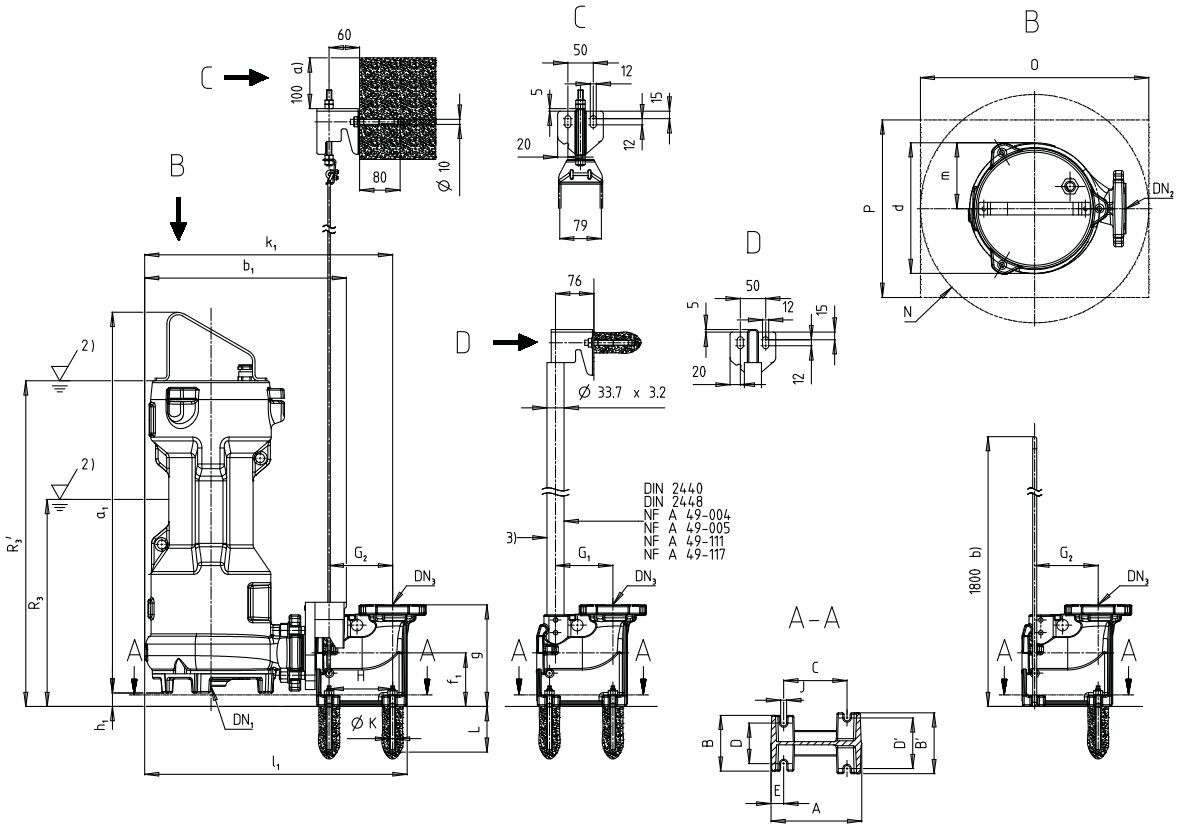


Fig. 36: Dimensions for stationary installation, guide wire arrangement, single guide rail arrangement, guide hoop arrangement

2)	Minimum submergence for continuous operation
3)	Not included in KSB's scope of supply

Pump set dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
F050-140	014	C	2	U	S	42	50	631	368	216	150	106	201	99	27	150	457	125	486	109	4	288	-
F050-140	014	C	2	Y	S	42	50	640	368	216	150	106	201	99	27	150	457	125	486	109	4	297	-
F050-140	023	F	2	U	S	42	50	631	368	216	150	106	201	99	27	150	457	125	486	109	4	-	543
F050-140	023	F	2	Y	S	42	50	640	368	216	150	106	201	99	27	150	457	125	486	109	4	-	552
F050-220	018	C	2	U	S	42	50	669	398	258	150	106	201	99	27	150	489	125	518	130	4	321	-
F050-220	018	C	2	Y	S	42	50	678	398	258	150	106	201	99	27	150	489	125	518	130	4	330	-
F050-220	024	F	2	U	S	42	50	669	398	258	150	106	201	99	27	150	489	125	518	130	4	-	581
F050-220	024	F	2	Y	S	42	50	678	398	258	150	106	201	99	27	150	489	125	518	130	4	-	590
F050-220	029	C	2	U	S	42	50	669	398	258	150	106	201	99	27	150	489	125	518	130	4	366	-
F050-220	029	C	2	Y	S	42	50	678	398	258	150	106	201	99	27	150	489	125	518	130	4	375	-
F050-220	035	C	2	U	S	42	50	742	398	258	150	106	201	99	27	150	489	125	518	130	4	324	-
F050-220	035	C	2	Y	S	42	50	751	398	258	150	106	201	99	27	150	489	125	518	130	4	333	-
F050-220	040	F	2	U	S	42	50	669	398	258	150	106	201	99	27	150	489	125	518	130	4	-	590
F050-220	040	F	2	Y	S	42	50	678	398	258	150	106	201	99	27	150	489	125	518	130	4	-	590
F050-220	045	C	2	U	S	42	50	742	398	258	150	106	201	99	27	150	489	125	518	130	4	324	-
F050-220	045	C	2	Y	S	42	50	751	398	258	150	106	201	99	27	150	489	125	518	130	4	333	-
F050-220	051	F	2	U	S	42	50	742	398	258	150	106	201	99	27	150	489	125	518	130	4	-	634

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
F050-220	051	F	2	Y	S	42	50	751	398	258	150	106	201	99	27	150	489	125	518	130	4	-	643
F050-220	073	F	2	U	S	42	50	742	398	258	150	106	201	99	27	150	489	125	518	130	4	-	643
F050-220	073	F	2	Y	S	42	50	751	398	258	150	106	201	99	27	150	489	125	518	130	4	-	570

Foundation dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_3	A	B	B'	C	D	D'	E	G_1	G_2	H	J	ØK	L	N min.	O min.	P min.
F050-140	014	C	2	U	S	50	179	110	120	125	80	100	25	113	125	125	12	10	90	465	465	350
F050-140	014	C	2	Y	S	50	179	110	120	125	80	100	25	113	125	125	12	10	90	465	465	350
F050-140	023	F	2	U	S	50	179	110	120	125	80	100	25	113	125	125	12	10	90	465	465	350
F050-140	023	F	2	Y	S	50	179	110	120	125	80	100	25	113	125	125	12	10	90	465	465	350
F050-220	018	C	2	U	S	50	179	110	120	125	80	100	25	113	125	125	12	10	90	465	465	350
F050-220	018	C	2	Y	S	50	179	110	120	125	80	100	25	113	125	125	12	10	90	465	465	350
F050-220	024	F	2	U	S	50	179	110	120	125	80	100	25	113	125	125	12	10	90	465	465	350
F050-220	024	F	2	Y	S	50	179	110	120	125	80	100	25	113	125	125	12	10	90	465	465	350
F050-220	029	C	2	U	S	50	179	110	120	125	80	100	25	113	125	125	12	10	90	465	465	350
F050-220	029	C	2	Y	S	50	179	110	120	125	80	100	25	113	125	125	12	10	90	465	465	350
F050-220	035	C	2	U	S	50	179	110	120	125	80	100	25	-	125	125	12	10	90	465	465	350
F050-220	035	C	2	Y	S	50	179	110	120	125	80	100	25	-	125	125	12	10	90	465	465	350
F050-220	040	F	2	U	S	50	179	110	120	125	80	100	25	113	125	125	12	10	90	465	465	350
F050-220	040	F	2	Y	S	50	179	110	120	125	80	100	25	113	125	125	12	10	90	465	465	350
F050-220	045	C	2	U	S	50	179	110	120	125	80	100	25	-	125	125	12	10	90	465	465	350
F050-220	045	C	2	Y	S	50	179	110	120	125	80	100	25	-	125	125	12	10	90	465	465	350
F050-220	051	F	2	U	S	50	179	110	120	125	80	100	25	-	125	125	12	10	90	465	465	350
F050-220	051	F	2	Y	S	50	179	110	120	125	80	100	25	-	125	125	12	10	90	465	465	350
F050-220	073	F	2	U	S	50	179	110	120	125	80	100	25	-	125	125	12	10	90	465	465	350
F050-220	073	F	2	Y	S	50	179	110	120	125	80	100	25	-	125	125	12	10	90	465	465	350

Amarex DN 50, stationary installation, twin guide rail arrangement

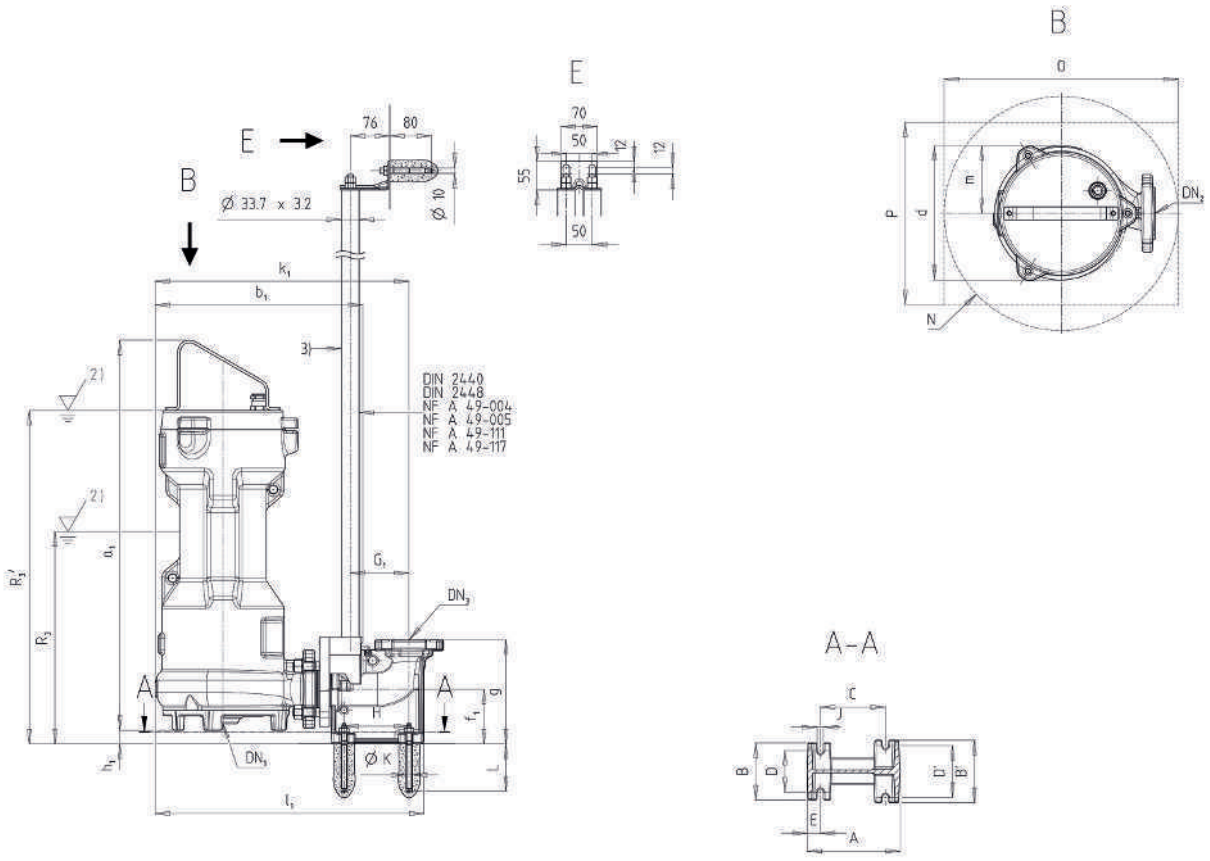


Fig. 37: Amarex 50, stationary installation, twin guide rail arrangement

2)	Minimum submergence for continuous operation
3)	Not included in KSB's scope of supply

Pump set dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
F050-140	014	C	2	U	S	42	50	631	368	216	150	106	201	99	27	150	457	125	486	109	4	288	-
F050-140	014	C	2	Y	S	42	50	640	368	216	150	106	201	99	27	150	457	125	486	109	4	297	-
F050-140	023	F	2	U	S	42	50	631	368	216	150	106	201	99	27	150	457	125	486	109	4	-	543
F050-140	023	F	2	Y	S	42	50	640	368	216	150	106	201	99	27	150	457	125	486	109	4	-	552
F050-220	018	C	2	U	S	42	50	669	400	258	150	106	201	99	27	150	489	125	518	130	4	321	-
F050-220	018	C	2	Y	S	42	50	678	400	258	150	106	201	99	27	150	489	125	518	130	4	330	-
F050-220	024	F	2	U	S	42	50	669	400	258	150	106	201	99	27	150	489	125	518	130	4	-	581
F050-220	024	F	2	Y	S	42	50	678	400	258	150	106	201	99	27	150	489	125	518	130	4	-	590
F050-220	029	C	2	U	S	42	50	669	400	258	150	106	201	99	27	150	489	125	518	130	4	366	-
F050-220	029	C	2	Y	S	42	50	678	400	258	150	106	201	99	27	150	489	125	518	130	4	375	-
F050-220	035	C	2	U	S	42	50	742	400	258	150	106	201	99	27	150	489	125	518	130	4	324	-
F050-220	035	C	2	Y	S	42	50	751	400	258	150	106	201	99	27	150	489	125	518	130	4	333	-
F050-220	040	F	2	U	S	42	50	669	400	258	150	106	201	99	27	150	489	125	518	130	4	-	590
F050-220	040	F	2	Y	S	42	50	678	400	258	150	106	201	99	27	150	489	125	518	130	4	-	590
F050-220	045	C	2	U	S	42	50	742	400	258	150	106	201	99	27	150	489	125	518	130	4	324	-
F050-220	045	C	2	Y	S	42	50	751	400	258	150	106	201	99	27	150	489	125	518	130	4	333	-
F050-220	051	F	2	U	S	42	50	742	400	258	150	106	201	99	27	150	489	125	518	130	4	-	634

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
F050-220	051	F	2	Y	S	42	50	751	400	258	150	106	201	99	27	150	489	125	518	130	4	-	643
F050-220	073	F	2	U	S	42	50	742	400	258	150	106	201	99	27	150	489	125	518	130	4	-	643
F050-220	073	F	2	Y	S	42	50	751	400	258	150	106	201	99	27	150	489	125	518	130	4	-	570

Foundation dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_3	A	B	B'	C	D	D'	E	G_1	G_2	H	J	ØK	L	N min.	O min.	P min.
F050-140	014	C	2	U	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-140	014	C	2	Y	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-140	023	F	2	U	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-140	023	F	2	Y	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	018	C	2	U	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	018	C	2	Y	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	024	F	2	U	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	024	F	2	Y	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	029	C	2	U	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	029	C	2	Y	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	035	C	2	U	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	035	C	2	Y	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	040	F	2	U	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	040	F	2	Y	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	045	C	2	U	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	045	C	2	Y	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	051	F	2	U	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	051	F	2	Y	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	073	F	2	U	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350
F050-220	073	F	2	Y	S	50	179	110	120	125	80	100	25	113	-	125	12	10	90	465	465	350

Amarex DN 65, stationary installation, guide wire arrangement, single guide rail arrangement, guide hoop arrangement

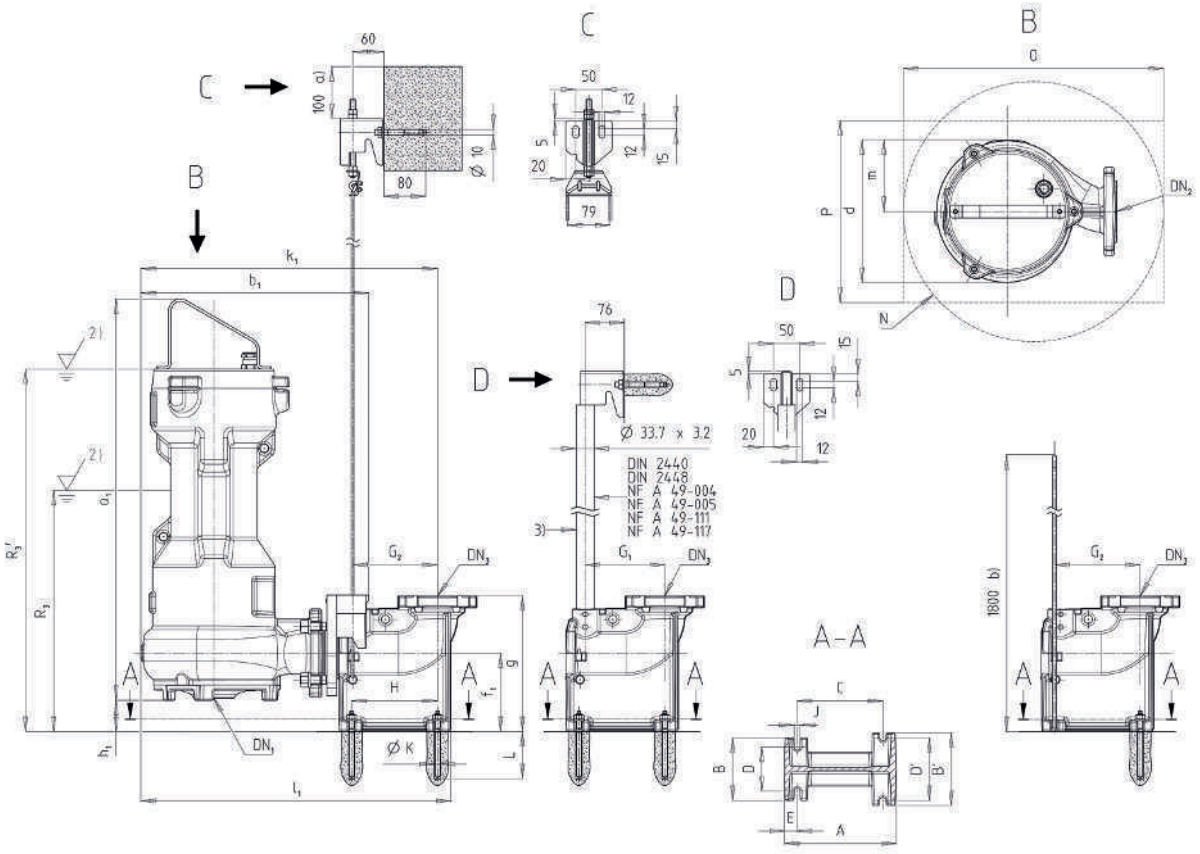


Fig. 38: Amarex 65, stationary installation, guide wire arrangement, single guide rail arrangement, guide hoop arrangement

2)	Minimum submergence for continuous operation
3)	Not included in KSB's scope of supply

Pump set dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
F065-150	017	F	4	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	-	636
F065-150	017	F	4	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	-	645
F065-150	021	C	4	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	358	-
F065-150	021	C	4	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	367	-
F065-150	035	F	4	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	-	688
F065-150	035	F	4	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	-	697
F065-170	018	C	2	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	336	-
F065-170	018	C	2	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	345	-
F065-170	024	F	2	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	-	636
F065-170	024	F	2	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	-	645
F065-170	029	C	2	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	421	-
F065-170	029	C	2	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	430	-
F065-170	035	C	2	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	358	-
F065-170	035	C	2	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	367	-
F065-170	040	F	2	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	-	636
F065-170	040	F	2	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	-	645

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
F065-170	045	C	2	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	378	-
F065-170	045	C	2	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	387	-
F065-170	051	F	2	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	-	688
F065-170	051	F	2	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	-	697
F065-170	073	F	2	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	-	688
F065-170	073	F	2	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	-	697
F065-230	012	C	2	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	336	-
F065-230	012	C	2	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	345	-
F065-230	017	F	4	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	-	636
F065-230	017	F	4	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	-	645
F065-230	021	C	4	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	358	-
F065-230	021	C	4	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	367	-
F065-230	023	F	4	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	-	636
F065-230	023	F	4	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	-	645
F065-230	035	F	4	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	-	688
F065-230	035	F	4	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	-	697
F065-230	042	F	4	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	-	688
F065-230	042	F	4	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	-	697

Foundation dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_3	A	B	B'	C	D	D'	E	G_1	G_2	H	J	ØK	L	N min.	O min.	P min.
F065-150	017	F	4	U	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-150	017	F	4	Y	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-150	021	C	4	U	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-150	021	C	4	Y	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-150	035	F	4	U	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-150	035	F	4	Y	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-170	018	C	2	U	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-170	018	C	2	Y	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-170	024	F	2	U	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-170	024	F	2	Y	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-170	029	C	2	U	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-170	029	C	2	Y	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-170	035	C	2	U	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-170	035	C	2	Y	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-170	040	F	2	U	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-170	040	F	2	Y	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-170	045	C	2	U	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-170	045	C	2	Y	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-170	051	F	2	U	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-170	051	F	2	Y	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-170	073	F	2	U	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-170	073	F	2	Y	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-230	012	C	2	U	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_3	A	B	B'	C	D	D'	E	G_1	G_2	H	J	ØK	L	N min.	O min.	P min.
F065-230	012	C	2	Y	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-230	017	F	4	U	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-230	017	F	4	Y	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-230	021	C	4	U	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-230	021	C	4	Y	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-230	023	F	4	U	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-230	023	F	4	Y	S	65	216	120	140	165	85	120	25	153	165	165	12	10	90	550	550	400
F065-230	035	F	4	U	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-230	035	F	4	Y	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-230	042	F	4	U	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400
F065-230	042	F	4	Y	S	65	216	120	140	165	85	120	25	-	165	165	12	10	90	550	550	400

Amarex DN 65, stationary installation, twin guide rail arrangement

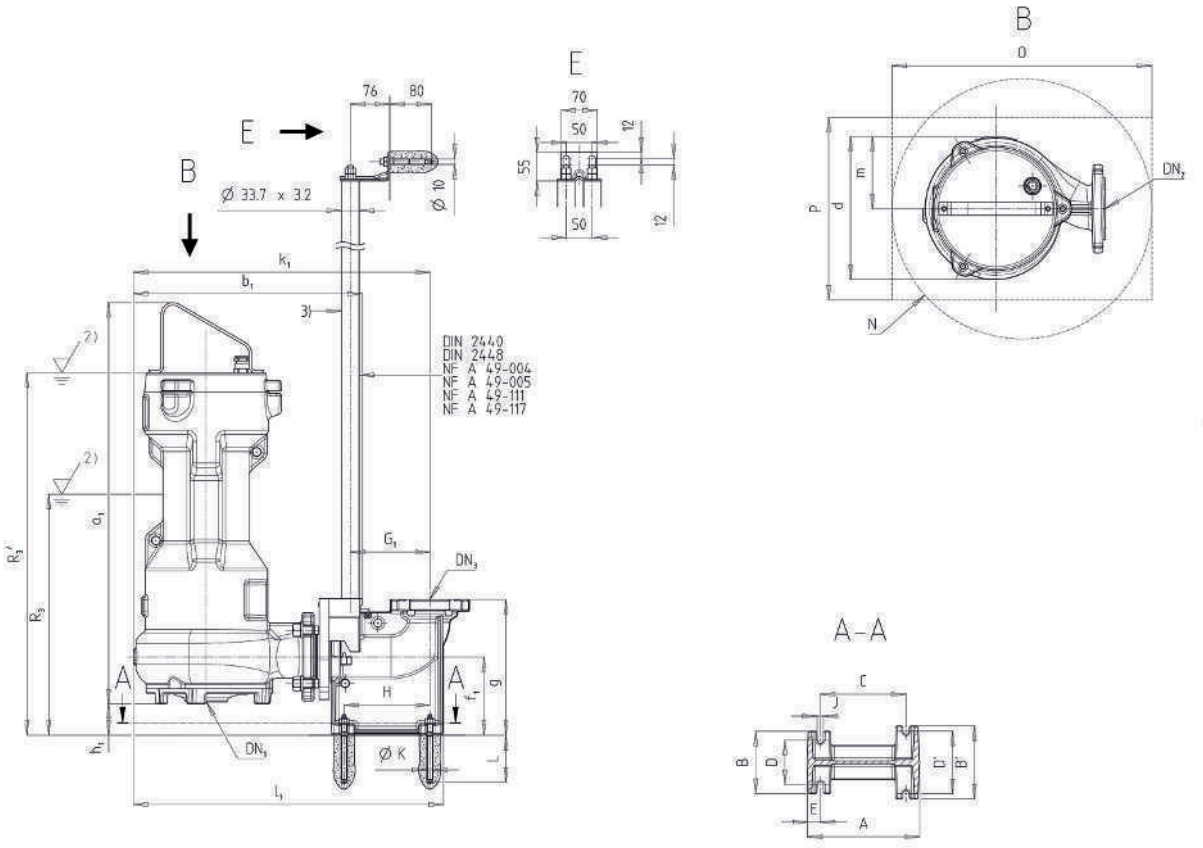


Fig. 39: Amarex 65, stationary installation, twin guide rail arrangement

2)	Minimum submergence for continuous operation
3)	Not included in KSB's scope of supply

Pump set dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
F065-150	017	F	4	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	-	636
F065-150	017	F	4	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	-	645
F065-150	021	F	4	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	358	-
F065-150	021	F	4	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	367	-
F065-150	035	F	4	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	-	688
F065-150	035	F	4	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	-	697
F065-170	018	F	2	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	336	-
F065-170	018	F	2	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	345	-
F065-170	024	F	2	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	-	636
F065-170	024	F	2	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	-	645
F065-170	029	F	2	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	421	-
F065-170	029	F	2	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	430	-
F065-170	035	F	2	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	358	-
F065-170	035	F	2	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	367	-
F065-170	040	F	2	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	-	636
F065-170	040	F	2	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	-	645
F065-170	045	F	2	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	378	-
F065-170	045	F	2	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	387	-

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
F065-170	051	F	2	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	-	688
F065-170	051	F	2	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	-	697
F065-170	073	F	2	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	-	688
F065-170	073	F	2	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	-	697
F065-230	012	F	2	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	336	-
F065-230	012	F	2	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	345	-
F065-230	017	F	4	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	-	636
F065-230	017	F	4	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	-	645
F065-230	021	F	4	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	358	-
F065-230	021	F	4	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	367	-
F065-230	023	F	4	U	S	65	65	691	440	274	170	151	261	118	60	170	569	145	595	138	4	-	636
F065-230	023	F	4	Y	S	65	65	700	440	274	170	151	261	118	60	170	569	145	595	138	4	-	645
F065-230	035	F	4	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	-	688
F065-230	035	F	4	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	-	697
F065-230	042	F	4	U	S	65	65	763	440	274	170	151	261	118	60	170	569	145	595	138	4	-	688
F065-230	042	F	4	Y	S	65	65	772	440	274	170	151	261	118	60	170	569	145	595	138	4	-	697

Foundation dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_3	A	B	B'	C	D	D'	E	G_1	G_2	H	J	ØK	L	N min.	O min.	P min.
F065-150	017	F	4	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-150	017	F	4	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-150	021	F	4	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-150	021	F	4	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-150	035	F	4	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-150	035	F	4	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	018	F	2	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	018	F	2	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	024	F	2	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	024	F	2	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	029	F	2	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	029	F	2	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	035	F	2	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	035	F	2	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	040	F	2	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	040	F	2	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	045	F	2	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	045	F	2	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	051	F	2	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	051	F	2	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	073	F	2	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-170	073	F	2	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-230	012	F	2	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-230	012	F	2	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-230	017	F	4	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_3	A	B	B'	C	D	D'	E	G_1	G_2	H	J	ØK	L	N min.	O min.	P min.
F065-230	017	F	4	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-230	021	F	4	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-230	021	F	4	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-230	023	F	4	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-230	023	F	4	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-230	035	F	4	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-230	035	F	4	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-230	042	F	4	U	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400
F065-230	042	F	4	Y	S	65	216	120	140	165	85	120	25	153	-	165	12	10	90	550	550	400

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Amarex DN 80, stationary installation, guide wire arrangement, twin guide rail arrangement

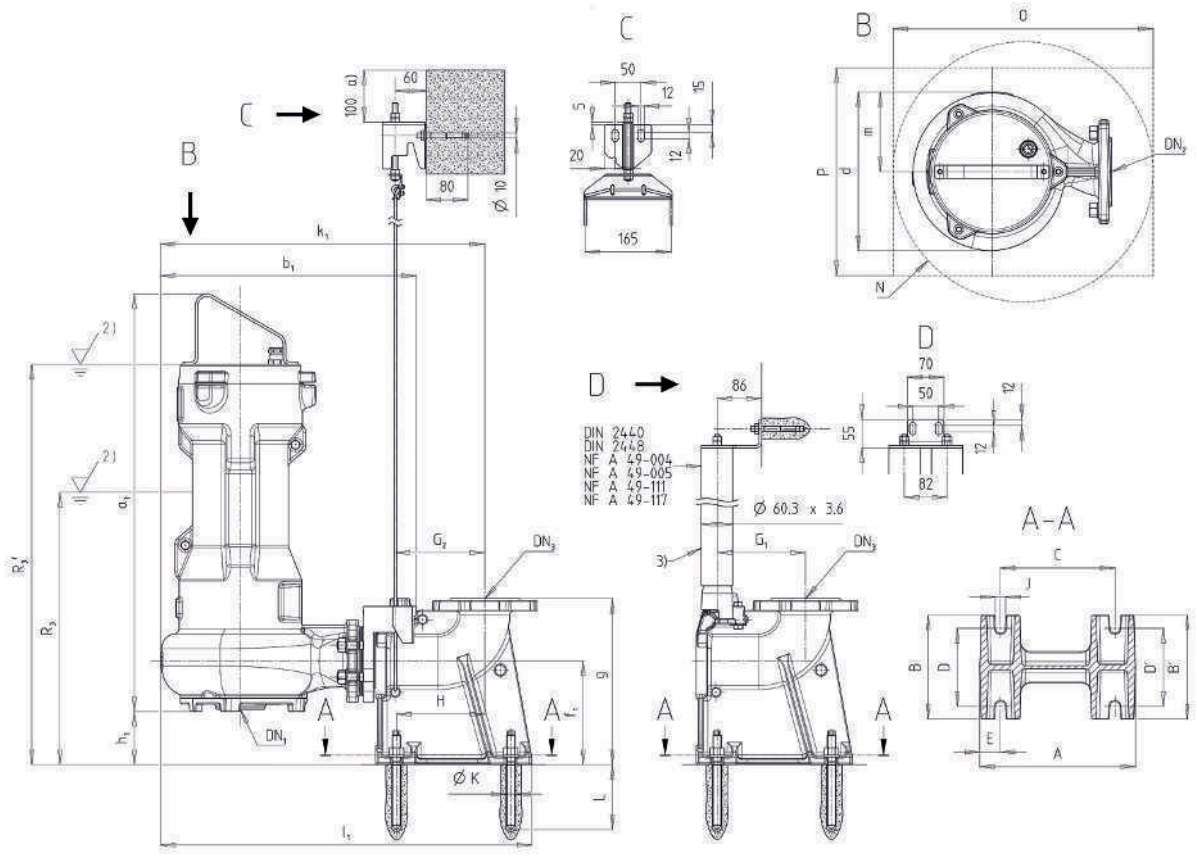


Fig. 40: Amarex 80, stationary installation, guide wire arrangement, twin guide rail arrangement

2)	Minimum submergence for continuous operation
3)	Not included in KSB's scope of supply

Pump set dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
D080-140	018	C	2	U	S	80	80	670	480	282	160	200	320	132	112	200	611	160	701	154	4	367	-
D080-140	018	C	2	Y	S	80	80	679	480	282	160	200	320	132	112	200	611	160	701	154	4	376	-
D080-140	024	F	2	U	S	80	80	670	480	282	160	200	320	132	112	200	611	160	701	154	4	-	667
D080-140	024	F	2	Y	S	80	80	679	480	282	160	200	320	132	112	200	611	160	701	154	4	-	676
D080-140	029	C	2	U	S	80	80	670	480	282	160	200	320	132	112	200	611	160	701	154	4	452	-
D080-140	029	C	2	Y	S	80	80	679	480	282	160	200	320	132	112	200	611	160	701	154	4	461	-
D080-140	035	C	2	U	S	80	80	698	480	282	160	200	320	132	112	200	611	160	701	154	4	345	-
D080-140	035	C	2	Y	S	80	80	707	480	282	160	200	320	132	112	200	611	160	701	154	4	354	-
D080-140	040	F	2	U	S	80	80	670	480	282	160	200	320	132	112	200	611	160	701	154	4	-	667
D080-140	040	F	2	Y	S	80	80	679	480	282	160	200	320	132	112	200	611	160	701	154	4	-	676
D080-140	051	F	2	U	S	80	80	698	480	282	160	200	320	132	112	200	611	160	701	154	4	-	675
D080-140	051	F	2	Y	S	80	80	707	480	282	160	200	320	132	112	200	611	160	701	154	4	-	684
F080-150	017	F	4	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	-	689
F080-150	017	F	4	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	-	698
F080-150	021	C	4	U	S	80	80	774	491	305	160	200	320	132	103	200	622	160	712	154	4	432	-
F080-150	021	C	4	Y	S	80	80	783	491	305	160	200	320	132	103	200	622	160	712	154	4	441	-
F080-150	035	F	4	U	S	80	80	774	491	305	160	200	320	132	103	200	622	160	712	154	4	-	762
F080-150	035	F	4	Y	S	80	80	783	491	305	160	200	320	132	103	200	622	160	712	154	4	-	771

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
D080-170	035	C	2	U	S	80	80	743	497	311	160	200	320	132	112	200	628	160	718	166	4	390	-
D080-170	035	C	2	Y	S	80	80	752	497	311	160	200	320	132	112	200	628	160	718	166	4	399	-
D080-170	045	C	2	U	S	80	80	743	497	311	160	200	320	132	112	200	628	160	718	166	4	410	-
D080-170	045	C	2	Y	S	80	80	752	497	311	160	200	320	132	112	200	628	160	718	166	4	419	-
D080-170	051	F	2	U	S	80	80	743	497	311	160	200	320	132	112	200	628	160	718	166	4	-	720
D080-170	051	F	2	Y	S	80	80	752	497	311	160	200	320	132	112	200	628	160	718	166	4	-	729
D080-170	060	C	2	U	S	80	80	763	497	311	160	200	320	132	112	200	628	160	718	166	4	450	-
D080-170	060	C	2	Y	S	80	80	772	497	311	160	200	320	132	112	200	628	160	718	166	4	459	-
D080-170	073	F	2	U	S	80	80	743	497	311	160	200	320	132	112	200	628	160	718	166	4	-	720
D080-170	073	F	2	Y	S	80	80	752	497	311	160	200	320	132	112	200	628	160	718	166	4	-	729
D080-170	084	F	2	U	S	80	80	763	497	311	160	200	320	132	112	200	628	160	718	166	4	-	740
D080-170	084	F	2	Y	S	80	80	772	497	311	160	200	320	132	112	200	628	160	718	166	4	-	749
D080-180	017	F	2	U	S	90	80	670	480	282	160	200	320	132	112	200	611	160	701	154	4	-	667
D080-180	017	F	2	Y	S	90	80	679	480	282	160	200	320	132	112	200	611	160	701	154	4	-	676
F080-180	017	F	4	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	-	689
F080-180	017	F	4	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	-	698
D080-180	021	C	4	U	S	90	80	698	480	282	160	200	320	132	112	200	611	160	701	154	4	345	-
D080-180	021	C	4	Y	S	90	80	707	480	282	160	200	320	132	112	200	611	160	701	154	4	354	-
F080-180	021	C	4	U	S	80	80	774	491	305	160	200	320	132	103	200	622	160	712	154	4	432	-
F080-180	021	C	4	Y	S	80	80	783	491	305	160	200	320	132	103	200	622	160	712	154	4	441	-
D080-180	035	F	4	U	S	90	80	698	480	282	160	200	320	132	112	200	611	160	701	154	4	-	675
D080-180	035	F	4	Y	S	90	80	707	480	282	160	200	320	132	112	200	611	160	701	154	4	-	684
F080-180	035	F	4	U	S	80	80	774	491	305	160	200	320	132	103	200	622	160	712	154	4	-	762
F080-180	035	F	4	Y	S	80	80	783	491	305	160	200	320	132	103	200	622	160	712	154	4	-	771
F080-220	018	C	2	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	389	-
F080-220	018	C	2	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	398	-
F080-220	024	F	2	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	-	689
F080-220	024	F	2	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	-	698
F080-220	029	C	2	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	474	-
F080-220	029	C	2	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	483	-
F080-220	035	C	2	U	S	80	80	774	491	305	160	200	320	132	103	200	622	160	712	154	4	432	-
F080-220	035	C	2	Y	S	80	80	783	491	305	160	200	320	132	103	200	622	160	712	154	4	441	-
F080-220	040	F	2	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	-	689
F080-220	040	F	2	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	-	698
F080-220	045	C	2	U	S	80	80	774	491	305	160	200	320	132	103	200	622	160	712	154	4	452	-
F080-220	045	C	2	Y	S	80	80	783	491	305	160	200	320	132	103	200	622	160	712	154	4	461	-
F080-220	051	F	2	U	S	80	80	774	491	305	160	200	320	132	103	200	622	160	712	154	4	-	762
F080-220	051	F	2	Y	S	80	80	783	491	305	160	200	320	132	103	200	622	160	712	154	4	-	771
F080-220	060	C	2	U	S	80	80	794	491	305	160	200	320	132	103	200	622	160	712	154	4	492	-
F080-220	060	C	2	Y	S	80	80	803	491	305	160	200	320	132	103	200	622	160	712	154	4	501	-
F080-220	073	F	2	U	S	80	80	774	491	305	160	200	320	132	103	200	622	160	712	154	4	-	762
F080-220	073	F	2	Y	S	80	80	783	491	305	160	200	320	132	103	200	622	160	712	154	4	-	771
F080-220	084	F	2	U	S	80	80	794	491	305	160	200	320	132	103	200	622	160	712	154	4	-	782
F080-220	084	F	2	Y	S	80	80	803	491	305	160	200	320	132	103	200	622	160	712	154	4	-	791
F080-230	012	C	2	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	389	-
F080-230	012	C	2	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	398	-
F080-230	017	F	4	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	-	689
F080-230	017	F	4	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	-	698
D080-230	021	C	4	U	S	90	80	743	497	311	160	200	320	132	112	200	628	160	718	166	4	390	-
D080-230	021	C	4	Y	S	90	80	752	497	311	160	200	320	132	112	200	628	160	718	166	4	399	-
F080-230	021	C	4	U	S	80	80	774	491	305	160	200	320	132	103	200	622	160	712	154	4	432	-
F080-230	021	C	4	Y	S	80	80	783	491	305	160	200	320	132	103	200	622	160	712	154	4	441	-

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
F080-230	023	F	4	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	-	689
F080-230	023	F	4	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	-	698
D080-230	035	F	4	U	S	90	80	743	497	311	160	200	320	132	112	200	628	160	718	166	4	-	720
D080-230	035	F	4	Y	S	90	80	752	497	311	160	200	320	132	112	200	628	160	718	166	4	-	729
F080-230	035	F	4	U	S	80	80	774	491	305	160	200	320	132	103	200	622	160	712	154	4	-	762
F080-230	035	F	4	Y	S	80	80	783	491	305	160	200	320	132	103	200	622	160	712	154	4	-	771
D080-230	036	C	4	U	S	90	80	763	497	311	160	200	320	132	112	200	628	160	718	166	4	390	-
D080-230	036	C	4	Y	S	90	80	772	497	311	160	200	320	132	112	200	628	160	718	166	4	399	-
F080-230	036	C	4	U	S	80	80	794	491	305	160	200	320	132	103	200	622	160	712	154	4	432	-
F080-230	036	C	4	Y	S	80	80	803	491	305	160	200	320	132	103	200	622	160	712	154	4	441	-
D080-230	042	F	4	U	S	90	80	743	497	311	160	200	320	132	112	200	628	160	718	166	4	-	720
D080-230	042	F	4	Y	S	90	80	752	497	311	160	200	320	132	112	200	628	160	718	166	4	-	729
F080-230	042	F	4	U	S	80	80	774	491	305	160	200	320	132	103	200	622	160	712	154	4	-	762
F080-230	042	F	4	Y	S	80	80	783	491	305	160	200	320	132	103	200	622	160	712	154	4	-	771
F080-230	045	C	4	U	S	80	80	794	491	305	160	200	320	132	103	200	622	160	712	154	4	512	-
F080-230	045	C	4	Y	S	80	80	803	491	305	160	200	320	132	103	200	622	160	712	154	4	521	-
D080-230	065	F	4	U	S	90	80	763	497	311	160	200	320	132	112	200	628	160	718	166	4	-	740
D080-230	065	F	4	Y	S	90	80	772	497	311	160	200	320	132	112	200	628	160	718	166	4	-	749
F080-230	065	F	4	U	S	80	80	794	491	305	160	200	320	132	103	200	622	160	712	154	4	-	782
F080-230	065	F	4	Y	S	80	80	803	491	305	160	200	320	132	103	200	622	160	712	154	4	-	791
F080-230	077	F	4	U	S	80	80	794	491	305	160	200	320	132	103	200	622	160	712	154	4	-	782
F080-230	077	F	4	Y	S	80	80	803	491	305	160	200	320	132	103	200	622	160	712	154	4	-	791

Foundation dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_3	A	B	B'	C	D	D'	E	G_1	G_2	H	J	ØK	L	N min.	O min.	P min.
D080-140	018	C	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-140	018	C	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-140	024	F	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-140	024	F	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-140	029	C	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-140	029	C	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-140	035	C	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-140	035	C	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-140	040	F	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-140	040	F	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-140	051	F	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-140	051	F	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-150	017	F	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-150	017	F	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-150	021	C	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-150	021	C	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-150	035	F	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-150	035	F	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-170	035	C	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_3	A	B	B'	C	D	D'	E	G_1	G_2	H	J	ØK	L	N min.	O min.	P min.
D080-170	035	C	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-170	045	C	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-170	045	C	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-170	051	F	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-170	051	F	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-170	060	C	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-170	060	C	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-170	073	F	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-170	073	F	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-170	084	F	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-170	084	F	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-180	017	F	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-180	017	F	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-180	017	F	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-180	017	F	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-180	021	C	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-180	021	C	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-180	021	C	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-180	021	C	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-180	035	F	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-180	035	F	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-180	035	F	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-180	035	F	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	018	C	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	018	C	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	024	F	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	024	F	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	029	C	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	029	C	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	035	C	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	035	C	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	040	F	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	040	F	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	045	C	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	045	C	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	051	F	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	051	F	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	060	C	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	060	C	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	073	F	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	073	F	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	084	F	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-220	084	F	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	012	C	2	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	012	C	2	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	017	F	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	017	F	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-230	021	C	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-230	021	C	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	021	C	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	021	C	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	023	F	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_3	A	B	B'	C	D	D'	E	G_1	G_2	H	J	ØK	L	N min.	O min.	P min.
F080-230	023	F	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-230	035	F	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-230	035	F	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	035	F	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	035	F	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-230	036	C	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-230	036	C	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	036	C	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	036	C	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-230	042	F	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-230	042	F	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	042	F	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	042	F	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	045	C	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	045	C	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-230	065	F	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
D080-230	065	F	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	065	F	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	065	F	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	077	F	4	U	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400
F080-230	077	F	4	Y	S	80	300	200	200	220	150	150	40	170	173	170	20	18	125	580	580	400

Amarex DN 80, stationary installation, single guide rail arrangement

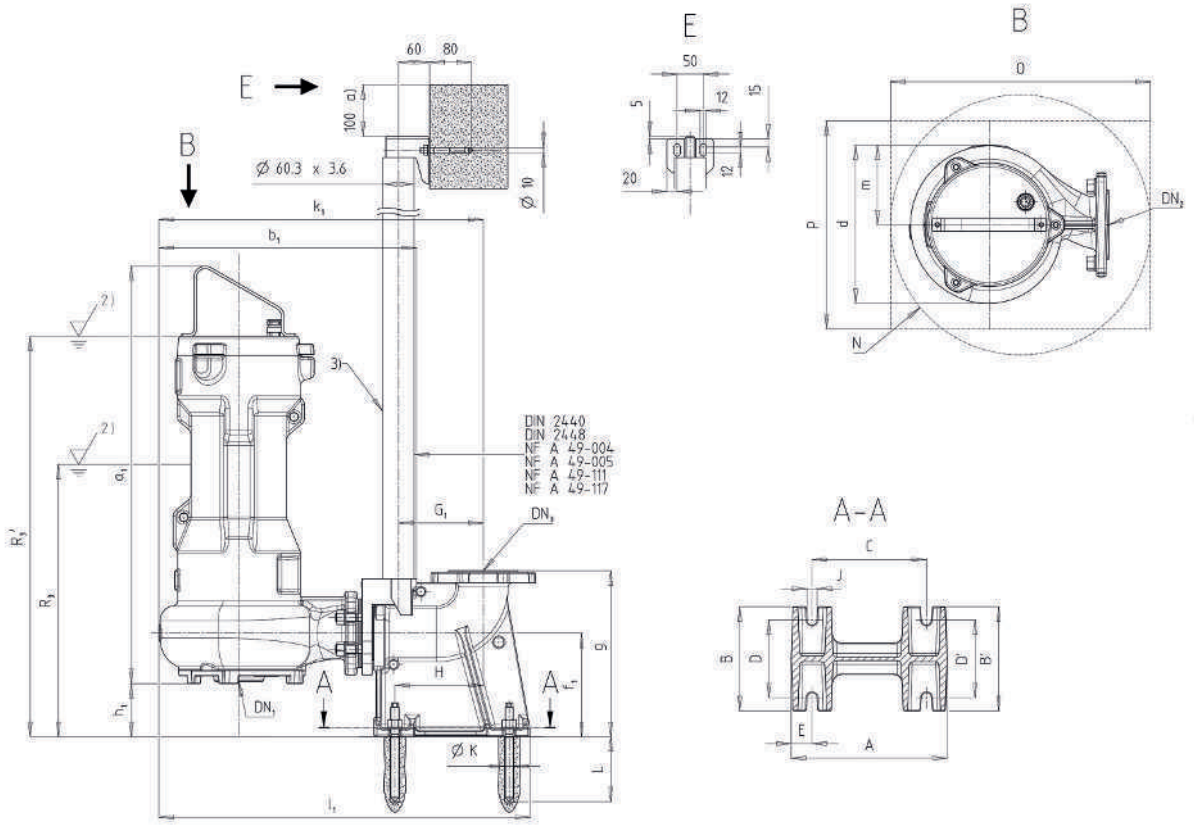


Fig. 41: Amarex 80, stationary installation, single guide rail arrangement

2)	Minimum submergence for continuous operation
3)	Not included in KSB's scope of supply

Pump set dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
D080-140	018	C	2	U	S	80	80	670	480	282	160	200	320	132	112	200	611	160	701	154	4	367	-
D080-140	018	C	2	Y	S	80	80	679	480	282	160	200	320	132	112	200	611	160	701	154	4	376	-
D080-140	024	F	2	U	S	80	80	670	480	282	160	200	320	132	112	200	611	160	701	154	4	-	667
D080-140	024	F	2	Y	S	80	80	679	480	282	160	200	320	132	112	200	611	160	701	154	4	-	676
D080-140	029	C	2	U	S	80	80	670	480	282	160	200	320	132	112	200	611	160	701	154	4	452	-
D080-140	029	C	2	Y	S	80	80	679	480	282	160	200	320	132	112	200	611	160	701	154	4	461	-
D080-140	040	F	2	U	S	80	80	670	480	282	160	200	320	132	112	200	611	160	701	154	4	-	667
D080-140	040	F	2	Y	S	80	80	679	480	282	160	200	320	132	112	200	611	160	701	154	4	-	676
F080-150	017	F	4	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	-	689
F080-150	017	F	4	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	-	698
D080-180	017	F	2	U	S	90	80	670	480	282	160	200	320	132	112	200	611	160	701	154	4	-	667
D080-180	017	F	2	Y	S	90	80	679	480	282	160	200	320	132	112	200	611	160	701	154	4	-	676
F080-180	017	F	4	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	-	689
F080-180	017	F	4	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	-	698
F080-220	018	C	2	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	389	-
F080-220	018	C	2	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	398	-
F080-220	024	F	2	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	-	689
F080-220	024	F	2	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	-	698

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
F080-220	029	C	2	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	474	-
F080-220	029	C	2	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	483	-
F080-220	040	F	2	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	-	689
F080-220	040	F	2	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	-	698
F080-230	012	C	2	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	389	-
F080-230	012	C	2	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	398	-
F080-230	017	F	4	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	-	689
F080-230	017	F	4	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	-	698
F080-230	023	F	4	U	S	80	80	701	492	305	160	200	320	132	103	200	623	160	713	154	4	-	689
F080-230	023	F	4	Y	S	80	80	710	492	305	160	200	320	132	103	200	623	160	713	154	4	-	698

Foundation dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_3	A	B	B'	C	D	D'	E	G_1	G_2	H	J	ØK	L	N min.	O min.	P min.
D080-140	018	C	2	U	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
D080-140	018	C	2	Y	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
D080-140	024	F	2	U	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
D080-140	024	F	2	Y	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
D080-140	029	C	2	U	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
D080-140	029	C	2	Y	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
D080-140	040	F	2	U	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
D080-140	040	F	2	Y	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-150	017	F	4	U	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-150	017	F	4	Y	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
D080-180	017	F	2	U	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
D080-180	017	F	2	Y	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-180	017	F	4	U	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-180	017	F	4	Y	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-220	018	C	2	U	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-220	018	C	2	Y	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-220	024	F	2	U	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-220	024	F	2	Y	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-220	029	C	2	U	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-220	029	C	2	Y	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-220	040	F	2	U	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-220	040	F	2	Y	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-230	012	C	2	U	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-230	012	C	2	Y	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-230	017	F	4	U	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-230	017	F	4	Y	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-230	023	F	4	U	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400
F080-230	023	F	4	Y	S	80	300	200	200	220	150	150	40	163	-	170	20	18	125	580	580	400

Amarex DN 100, stationary installation, guide wire arrangement, twin guide rail arrangement

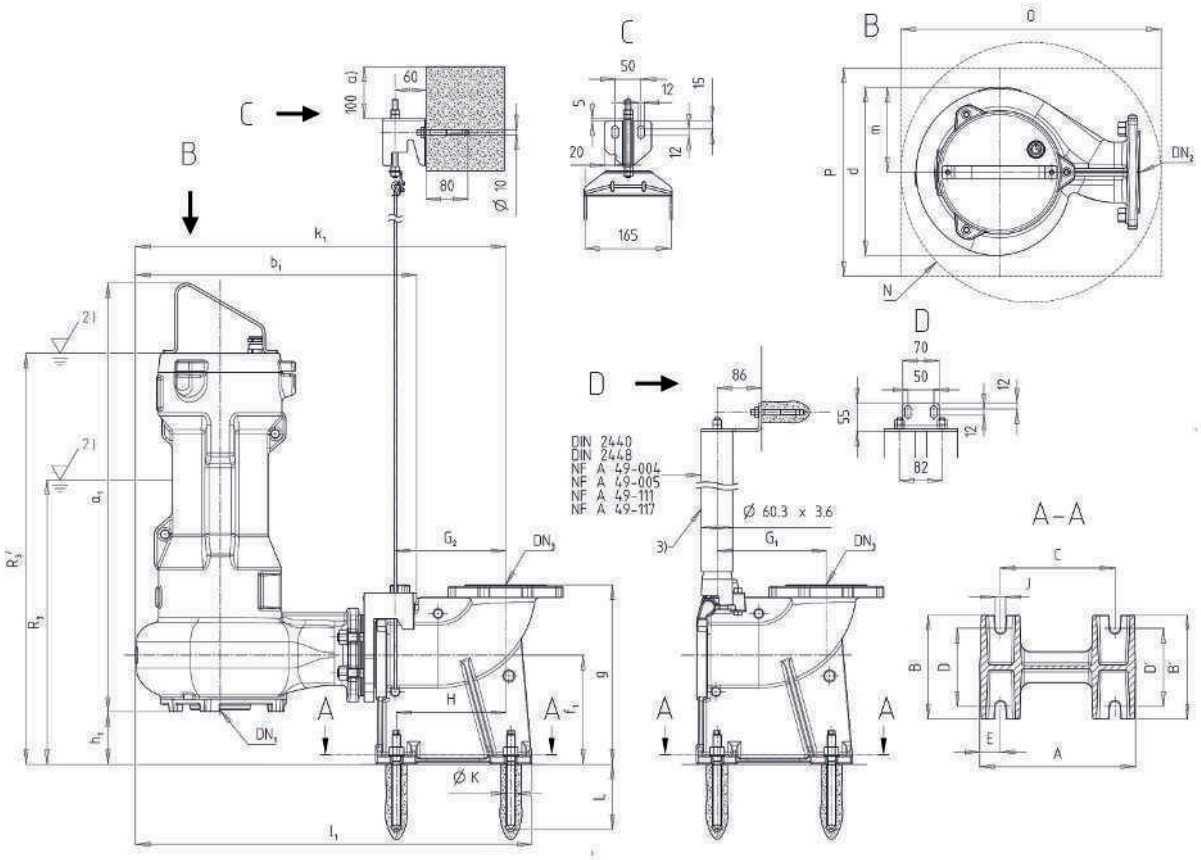


Fig. 42: Amarex 100, stationary installation, guide wire arrangement, twin guide rail arrangement

2)	Minimum submergence for continuous operation
3)	Not included in KSB's scope of supply

Pump set dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
D100-140	029	C	2	U	S	90	100	689	538	324	180	210	345	156	112	220	708	180	758	185	4	471	-
D100-140	029	C	2	Y	S	90	100	698	538	324	180	210	345	156	112	220	708	180	758	185	4	480	-
D100-140	035	C	2	U	S	90	100	717	538	324	180	210	345	156	112	220	708	180	758	185	4	364	-
D100-140	035	C	2	Y	S	90	100	726	538	324	180	210	345	156	112	220	708	180	758	185	4	373	-
D100-140	040	F	2	U	S	90	100	689	538	324	180	210	345	156	112	220	708	180	758	185	4	-	686
D100-140	040	F	2	Y	S	90	100	698	538	324	180	210	345	156	112	220	708	180	758	185	4	-	695
D100-140	051	F	2	U	S	90	100	717	538	324	180	210	345	156	112	220	708	180	758	185	4	-	694
D100-140	051	F	2	Y	S	90	100	726	538	324	180	210	345	156	112	220	708	180	758	185	4	-	703
D100-170	035	C	2	U	S	90	100	756	547	336	180	210	345	156	112	220	717	180	767	189	4	403	-
D100-170	035	C	2	Y	S	90	100	765	547	336	180	210	345	156	112	220	717	180	767	189	4	412	-
D100-170	045	C	2	U	S	90	100	756	547	336	180	210	345	156	112	220	717	180	767	189	4	423	-
D100-170	045	C	2	Y	S	90	100	765	547	336	180	210	345	156	112	220	717	180	767	189	4	432	-
D100-170	051	F	2	U	S	90	100	756	547	336	180	210	345	156	112	220	717	180	767	189	4	-	733
D100-170	051	F	2	Y	S	90	100	765	547	336	180	210	345	156	112	220	717	180	767	189	4	-	742
D100-170	060	C	2	U	S	90	100	776	547	336	180	210	345	156	112	220	717	180	767	189	4	463	-
D100-170	060	C	2	Y	S	90	100	785	547	336	180	210	345	156	112	220	717	180	767	189	4	472	-
D100-170	073	F	2	U	S	90	100	756	547	336	180	210	345	156	112	220	717	180	767	189	4	-	733
D100-170	073	F	2	Y	S	90	100	765	547	336	180	210	345	156	112	220	717	180	767	189	4	-	742

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
D100-170	084	F	2	U	S	90	100	776	547	336	180	210	345	156	112	220	717	180	767	189	4	-	753
D100-170	084	F	2	Y	S	90	100	785	547	336	180	210	345	156	112	220	717	180	767	189	4	-	762
D100-180	017	F	4	U	S	110	100	689	538	324	180	210	345	156	112	220	708	180	758	185	4	-	686
D100-180	017	F	4	Y	S	110	100	698	538	324	180	210	345	156	112	220	708	180	758	185	4	-	695
F100-180	017	F	4	U	S	100	100	724	540	323	180	210	345	156	100	220	710	180	760	163	4	-	709
F100-180	017	F	4	Y	S	100	100	733	540	323	180	210	345	156	100	220	710	180	760	163	4	-	718
D100-180	021	C	4	U	S	110	100	717	538	324	180	210	345	156	112	220	708	180	758	185	4	364	-
D100-180	021	C	4	Y	S	110	100	726	538	324	180	210	345	156	112	220	708	180	758	185	4	373	-
F100-180	021	C	4	U	S	100	100	797	540	323	180	210	345	156	100	220	710	180	760	163	4	432	-
F100-180	021	C	4	Y	S	100	100	806	540	323	180	210	345	156	100	220	710	180	760	163	4	441	-
D100-180	035	F	4	U	S	110	100	717	538	324	180	210	345	156	112	220	708	180	758	185	4	-	694
D100-180	035	F	4	Y	S	110	100	726	538	324	180	210	345	156	112	220	708	180	758	185	4	-	703
F100-180	035	F	4	U	S	100	100	797	540	323	180	210	345	156	100	220	710	180	760	163	4	-	762
F100-180	035	F	4	Y	S	100	100	806	540	323	180	210	345	156	100	220	710	180	760	163	4	-	771
F100-230	012	C	2	U	S	100	100	724	540	323	180	210	345	156	100	220	710	180	760	163	4	409	-
F100-230	012	C	2	Y	S	100	100	733	540	323	180	210	345	156	100	220	710	180	760	163	4	418	-
F100-230	017	F	4	U	S	100	100	724	540	323	180	210	345	156	100	220	710	180	760	163	4	-	709
F100-230	017	F	4	Y	S	100	100	733	540	323	180	210	345	156	100	220	710	180	760	163	4	-	718
D100-230	021	C	4	U	S	110	100	756	547	336	180	210	345	156	112	220	717	180	767	189	4	403	-
D100-230	021	C	4	Y	S	110	100	765	547	336	180	210	345	156	112	220	717	180	767	189	4	412	-
F100-230	021	C	4	U	S	100	100	797	540	323	180	210	345	156	100	220	710	180	760	163	4	432	-
F100-230	021	C	4	Y	S	100	100	806	540	323	180	210	345	156	100	220	710	180	760	163	4	441	-
F100-230	023	F	4	U	S	100	100	724	540	323	180	210	345	156	100	220	710	180	760	163	4	-	709
F100-230	023	F	4	Y	S	100	100	733	540	323	180	210	345	156	100	220	710	180	760	163	4	-	718
D100-230	035	F	4	U	S	110	100	756	547	336	180	210	345	156	112	220	717	180	767	189	4	-	733
D100-230	035	F	4	Y	S	110	100	765	547	336	180	210	345	156	112	220	717	180	767	189	4	-	742
F100-230	035	F	4	U	S	100	100	797	540	323	180	210	345	156	100	220	710	180	760	163	4	-	762
F100-230	035	F	4	Y	S	100	100	806	540	323	180	210	345	156	100	220	710	180	760	163	4	-	771
D100-230	036	C	4	U	S	110	100	776	547	336	180	210	345	156	112	220	717	180	767	189	4	403	-
D100-230	036	C	4	Y	S	110	100	785	547	336	180	210	345	156	112	220	717	180	767	189	4	412	-
F100-230	036	C	4	U	S	100	100	817	540	323	180	210	345	156	100	220	710	180	760	163	4	432	-
F100-230	036	C	4	Y	S	100	100	826	540	323	180	210	345	156	100	220	710	180	760	163	4	441	-
D100-230	042	F	4	U	S	110	100	756	547	336	180	210	345	156	112	220	717	180	767	189	4	-	733
D100-230	042	F	4	Y	S	110	100	765	547	336	180	210	345	156	112	220	717	180	767	189	4	-	742
F100-230	042	F	4	U	S	100	100	797	540	323	180	210	345	156	100	220	710	180	760	163	4	-	762
F100-230	042	F	4	Y	S	100	100	806	540	323	180	210	345	156	100	220	710	180	760	163	4	-	771
F100-230	045	C	4	U	S	100	100	817	540	323	180	210	345	156	100	220	710	180	760	163	4	512	-
F100-230	045	C	4	Y	S	100	100	826	540	323	180	210	345	156	100	220	710	180	760	163	4	521	-
D100-230	065	F	4	U	S	110	100	776	547	336	180	210	345	156	112	220	717	180	767	189	4	-	753
D100-230	065	F	4	Y	S	110	100	785	547	336	180	210	345	156	112	220	717	180	767	189	4	-	762
F100-230	065	F	4	U	S	100	100	817	540	323	180	210	345	156	100	220	710	180	760	163	4	-	782
F100-230	065	F	4	Y	S	100	100	826	540	323	180	210	345	156	100	220	710	180	760	163	4	-	791
F100-230	077	F	4	U	S	100	100	817	540	323	180	210	345	156	100	220	710	180	760	163	4	-	782
F100-230	077	F	4	Y	S	100	100	826	540	323	180	210	345	156	100	220	710	180	760	163	4	-	791

Foundation dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_3	A	B	B'	C	D	D'	E	G_1	G_2	H	J	ØK	L	N min.	O min.	P min.
D100-140	029	C	2	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-140	029	C	2	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-140	035	C	2	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-140	035	C	2	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-140	040	F	2	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-140	040	F	2	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-140	051	F	2	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-140	051	F	2	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-170	035	C	2	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-170	035	C	2	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-170	045	C	2	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-170	045	C	2	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-170	051	F	2	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-170	051	F	2	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-170	060	C	2	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-170	060	C	2	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-170	073	F	2	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-170	073	F	2	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-170	084	F	2	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-170	084	F	2	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-180	017	F	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-180	017	F	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-180	017	F	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-180	017	F	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-180	021	C	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-180	021	C	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-180	021	C	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-180	021	C	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-180	035	F	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-180	035	F	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-180	035	F	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-180	035	F	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	012	C	2	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	012	C	2	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	017	F	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	017	F	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-230	021	C	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-230	021	C	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	021	C	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	021	C	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	023	F	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	023	F	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-230	035	F	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-230	035	F	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	035	F	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	035	F	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-230	036	C	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-230	036	C	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	036	C	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	036	C	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-230	042	F	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_3	A	B	B'	C	D	D'	E	G_1	G_2	H	J	ØK	L	N min.	O min.	P min.
D100-230	042	F	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	042	F	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	042	F	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	045	C	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	045	C	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-230	065	F	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
D100-230	065	F	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	065	F	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	065	F	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	077	F	4	U	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420
F100-230	077	F	4	Y	S	100	300	200	200	220	150	150	40	210	213	210	20	18	125	650	650	420

Amarex DN 100, stationary installation, single guide rail arrangement

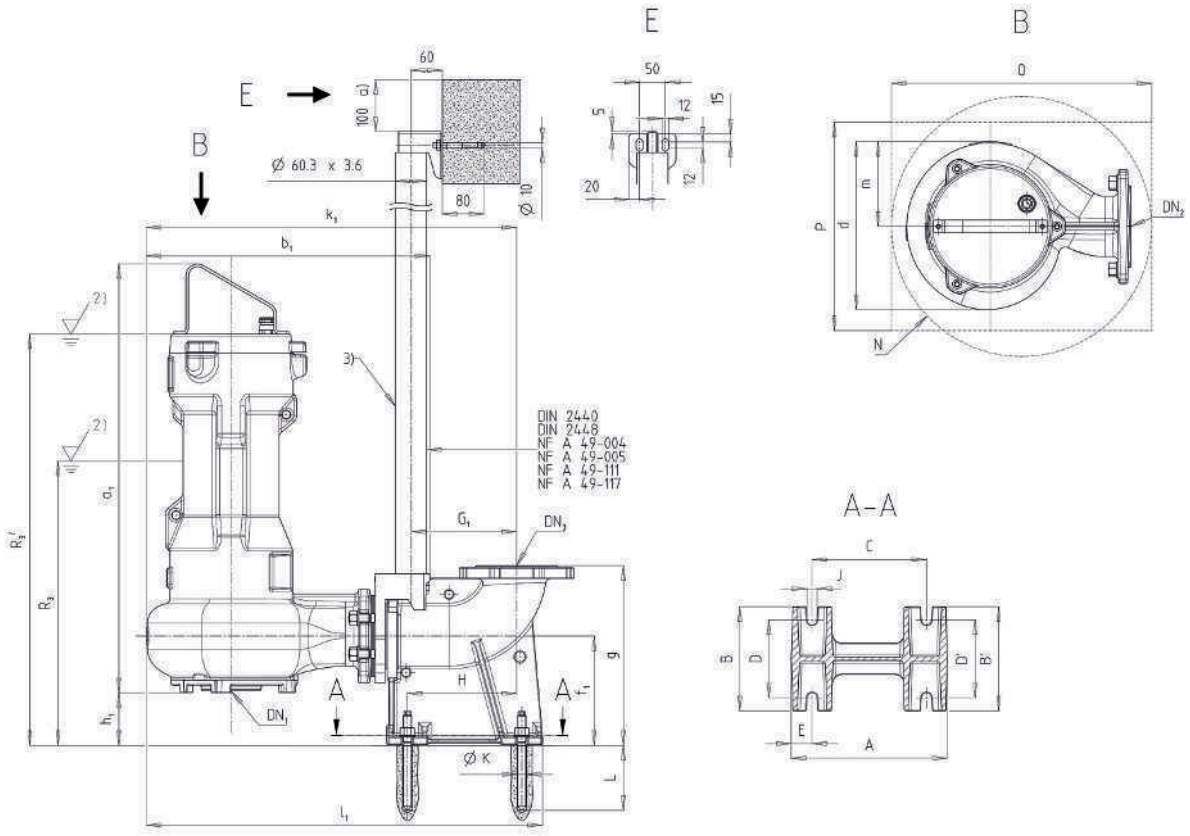


Fig. 43: Amarex 100, stationary installation, single guide rail arrangement

2)	Minimum submergence for continuous operation
3)	Not included in KSB's scope of supply

Pump set dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
D100-140	029	C	2	U	S	90	100	689	538	324	180	210	345	156	112	220	708	180	758	185	4	471	-
D100-140	029	C	2	Y	S	90	100	698	538	324	180	210	345	156	112	220	708	180	758	185	4	480	-
D100-140	040	F	2	U	S	90	100	689	538	324	180	210	345	156	112	220	708	180	758	185	4	-	686
D100-140	040	F	2	Y	S	90	100	698	538	324	180	210	345	156	112	220	708	180	758	185	4	-	695
D100-180	017	F	4	U	S	110	100	689	538	324	180	210	345	156	112	220	708	180	758	185	4	-	686
D100-180	017	F	4	Y	S	110	100	698	538	324	180	210	345	156	112	220	708	180	758	185	4	-	695
F100-180	017	F	4	U	S	100	100	724	540	323	180	210	345	156	100	220	710	180	760	163	4	-	709
F100-180	017	F	4	Y	S	100	100	733	540	323	180	210	345	156	100	220	710	180	760	163	4	-	718
F100-230	012	C	2	U	S	100	100	724	540	323	180	210	345	156	100	220	710	180	760	163	4	409	-
F100-230	012	C	2	Y	S	100	100	733	540	323	180	210	345	156	100	220	710	180	760	163	4	418	-
F100-230	017	F	4	U	S	100	100	724	540	323	180	210	345	156	100	220	710	180	760	163	4	-	709
F100-230	017	F	4	Y	S	100	100	733	540	323	180	210	345	156	100	220	710	180	760	163	4	-	718
F100-230	023	F	4	U	S	100	100	724	540	323	180	210	345	156	100	220	710	180	760	163	4	-	709
F100-230	023	F	4	Y	S	100	100	733	540	323	180	210	345	156	100	220	710	180	760	163	4	-	718

Foundation dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_3	A	B	B'	C	D	D'	E	G_1	G_2	H	J	ØK	L	N min.	O min.	P min.
D100-140	029	C	2	U	S	100	300	200	200	220	150	150	40	203	-	210	20	18	125	650	650	420
D100-140	029	C	2	Y	S	100	300	200	200	220	150	150	40	203	-	210	20	18	125	650	650	420
D100-140	040	F	2	U	S	100	300	200	200	220	150	150	40	203	-	210	20	18	125	650	650	420
D100-140	040	F	2	Y	S	100	300	200	200	220	150	150	40	203	-	210	20	18	125	650	650	420
D100-180	017	F	4	U	S	100	300	200	200	220	150	150	40	203	-	210	20	18	125	650	650	420
D100-180	017	F	4	Y	S	100	300	200	200	220	150	150	40	203	-	210	20	18	125	650	650	420
F100-180	017	F	4	U	S	100	300	200	200	220	150	150	40	203	-	210	20	18	125	650	650	420
F100-180	017	F	4	Y	S	100	300	200	200	220	150	150	40	203	-	210	20	18	125	650	650	420
F100-230	012	C	2	U	S	100	300	200	200	220	150	150	40	203	-	210	20	18	125	650	650	420
F100-230	012	C	2	Y	S	100	300	200	200	220	150	150	40	203	-	210	20	18	125	650	650	420
F100-230	017	F	4	U	S	100	300	200	200	220	150	150	40	203	-	210	20	18	125	650	650	420
F100-230	017	F	4	Y	S	100	300	200	200	220	150	150	40	203	-	210	20	18	125	650	650	420
F100-230	023	F	4	U	S	100	300	200	200	220	150	150	40	203	-	210	20	18	125	650	650	420
F100-230	023	F	4	Y	S	100	300	200	200	220	150	150	40	203	-	210	20	18	125	650	650	420

Amarex DN 150, stationary installation, guide wire arrangement, twin guide rail arrangement

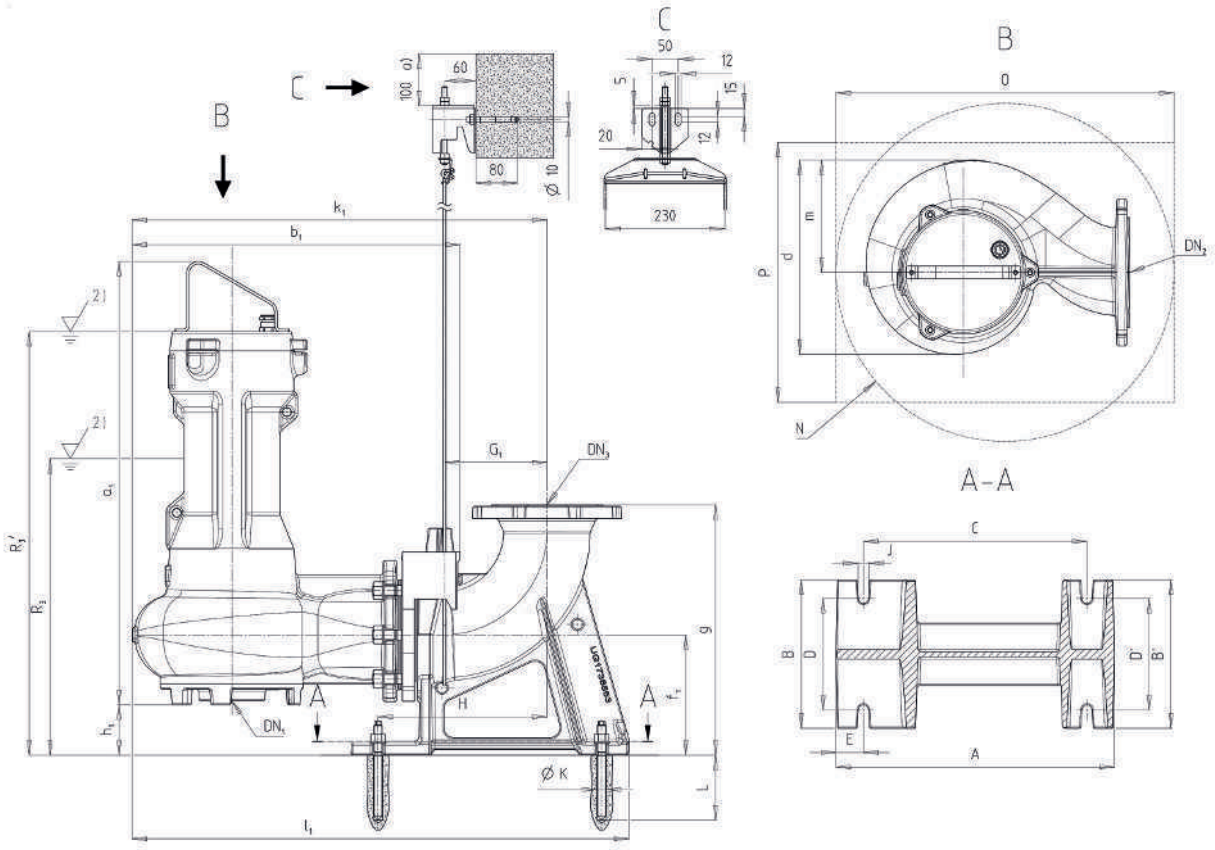


Fig. 44: Amarex 150, stationary installation, guide wire arrangement

2)	Minimum submergence for continuous operation
3)	Not included in KSB's scope of supply

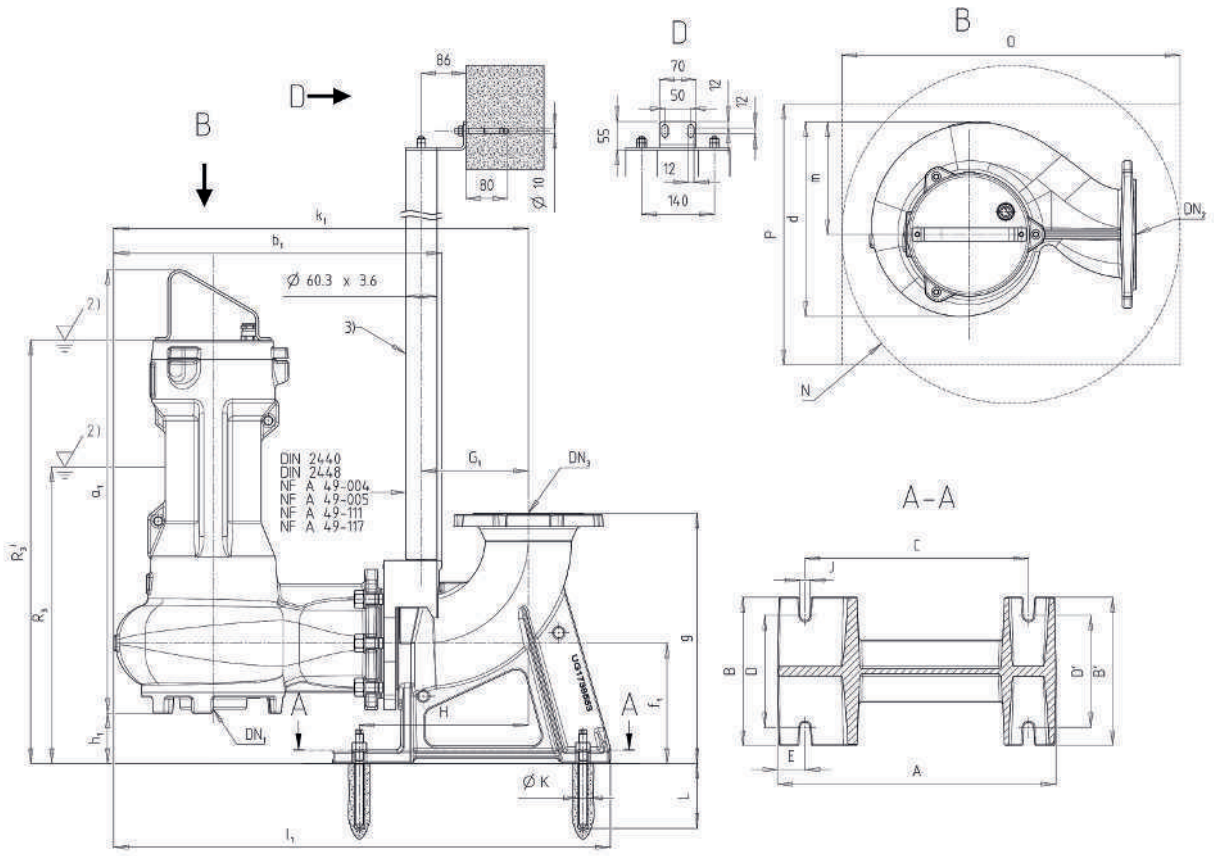


Fig. 45: Amarex 150, stationary installation, twin guide rail arrangement

2)	Minimum submergence for continuous operation
3)	Not included in KSB's scope of supply

Pump set dimensions [mm]

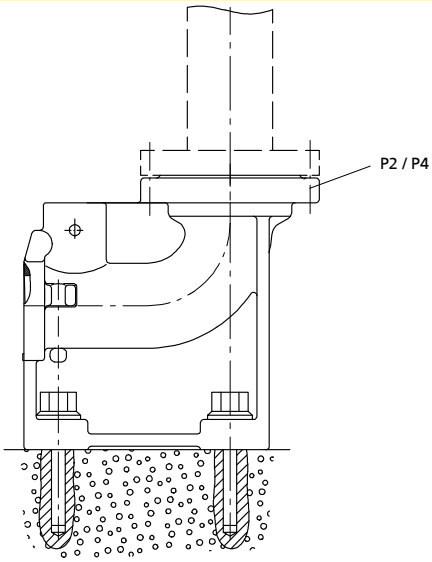
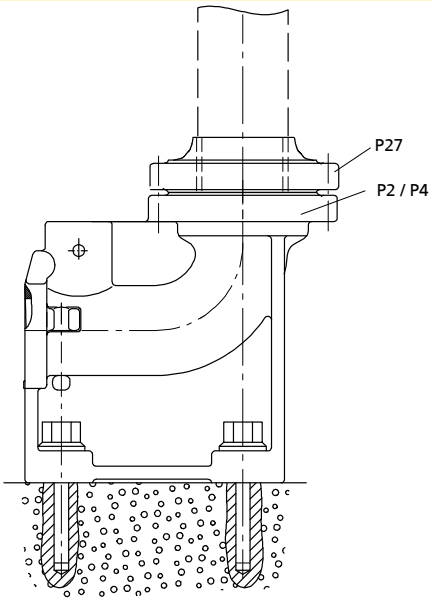
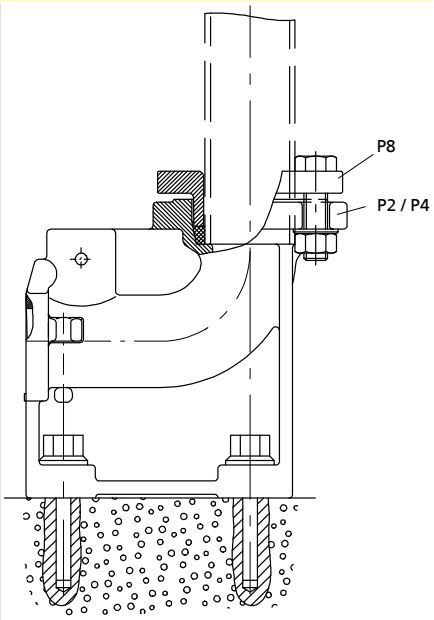
Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_1	DN_2	a_1	b_1	d	D_f	f_1	g	g_f	h_1	H_f	k_1	k_f	l_1	m	Z_f	R3	R3'
F150-180	036	C	4	U	S	110	150	844	630	374	271	232	481	211	97	285	796	240	953	216	6	456	-
F150-180	036	C	4	Y	S	110	150	853	630	374	271	232	481	211	97	285	796	240	953	216	6	465	-
F150-180	065	F	4	U	S	110	150	844	630	374	271	232	481	211	97	285	796	240	953	216	6	-	806
F150-180	065	F	4	Y	S	110	150	853	630	374	271	232	481	211	97	285	796	240	953	216	6	-	815
D150-230	036	C	4	U	S	135	150	846	630	374	271	232	481	211	95	285	796	240	953	216	6	456	-
D150-230	036	C	4	Y	S	135	150	855	630	374	271	232	481	211	95	285	796	240	953	216	6	465	-
F150-230	036	C	4	U	S	110	150	844	630	374	271	232	481	211	97	285	796	240	953	216	6	456	-
F150-230	036	C	4	Y	S	110	150	853	630	374	271	232	481	211	97	285	796	240	953	216	6	465	-
D150-230	045	C	4	U	S	135	150	846	630	374	271	232	481	211	95	285	796	240	953	216	6	536	-
D150-230	045	C	4	Y	S	135	150	855	630	374	271	232	481	211	95	285	796	240	953	216	6	545	-
F150-230	045	C	4	U	S	110	150	844	630	374	271	232	481	211	97	285	796	240	953	216	6	536	-
F150-230	045	C	4	Y	S	110	150	853	630	374	271	232	481	211	97	285	796	240	953	216	6	545	-
D150-230	065	F	4	U	S	135	150	846	630	374	271	232	481	211	95	285	796	240	953	216	6	-	806
D150-230	065	F	4	Y	S	135	150	855	630	374	271	232	481	211	95	285	796	240	953	216	6	-	815
F150-230	065	F	4	U	S	110	150	844	630	374	271	232	481	211	97	285	796	240	953	216	6	-	806
F150-230	065	F	4	Y	S	110	150	853	630	374	271	232	481	211	97	285	796	240	953	216	6	-	815
D150-230	077	F	4	U	S	135	150	846	630	374	271	232	481	211	95	285	796	240	953	216	6	-	806
D150-230	077	F	4	Y	S	135	150	855	630	374	271	232	481	211	95	285	796	240	953	216	6	-	815
F150-230	077	F	4	U	S	110	150	844	630	374	271	232	481	211	97	285	796	240	953	216	6	-	806
F150-230	077	F	4	Y	S	110	150	853	630	374	271	232	481	211	97	285	796	240	953	216	6	-	815

Foundation dimensions [mm]

Amarex	Motor rating	Efficiency class	Number of poles	Motor version	Motor construction type	DN_3	A	B	B'	C	D	D'	E	G_1	G_2	H	J	ØK	L	N min.	O min.	P min.
F150-180	036	C	4	U	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
F150-180	036	C	4	Y	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
F150-180	065	F	4	U	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
F150-180	065	F	4	Y	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
D150-230	036	C	4	U	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
D150-230	036	C	4	Y	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
F150-230	036	C	4	U	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
F150-230	036	C	4	Y	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
D150-230	045	C	4	U	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
D150-230	045	C	4	Y	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
F150-230	045	C	4	U	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
F150-230	045	C	4	Y	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
D150-230	065	F	4	U	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
D150-230	065	F	4	Y	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
F150-230	065	F	4	U	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
F150-230	065	F	4	Y	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
D150-230	077	F	4	U	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
D150-230	077	F	4	Y	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
F150-230	077	F	4	U	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500
F150-230	077	F	4	Y	S	150	535	285	285	430	215	215	53	206	-	325	20	18	125	730	730	500

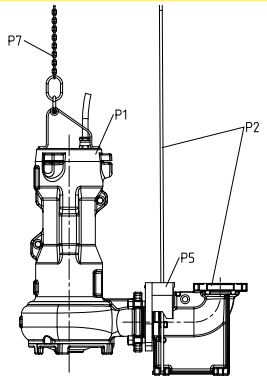
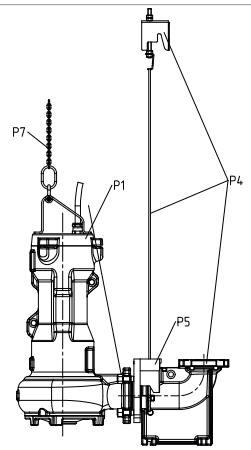
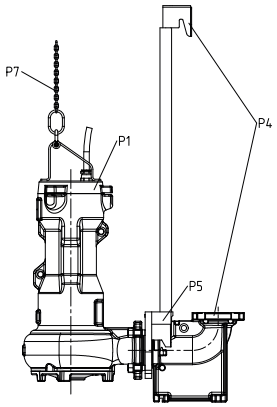
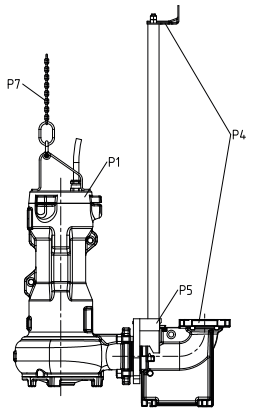
Connections

Discharge line connections at the duckfoot bend

Flanged connection (DN 50/DN 65)	Threaded connection in the flange (DN 50/DN 65)	Clamped connection (DN 50/DN 65)
		
	For standard pipes to DIN 2440 / DIN 2441 ▪ With outside diameter of 60.3 mm, steel for DN 50 ▪ With outside diameter of 63 mm, PVC (ISO 3606) for DN 50 ▪ With threaded flange DN 50 - G 2″ ▪ With outside diameter of 76.1 mm, steel for DN 65 ▪ With outside diameter of 75 mm, PVC (ISO 3606) for DN 65 ▪ With threaded flange DN 65 - G 2 $^1/_2$″	For standard pipes to DIN 2440 / DIN 2441 / DIN 2448 ▪ With outside diameter of 60.3 mm, steel for DN 50 ▪ With outside diameter of 63 mm, PVC (ISO 3606) for DN 50 ▪ With outside diameter of 76.1 mm, steel for DN 65 ▪ With outside diameter of 75 mm, PVC (ISO 3606) for DN 65

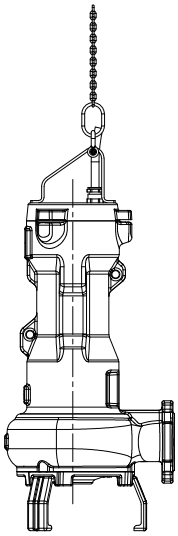
Installation types

Installation type S, stationary wet installation

Installation type	Description	Comment
	**Guide hoop arrangement** P1: pump P2: installation parts for guide hoop arrangement, installation depth = 1.5 m / 1.8 m / 2.1 m P5: claw P7: chain and shackle	Only available for specific sizes, see selection configurator.
	**Guide wire arrangement** P1: pump P4: installation parts for guide hoop arrangement, installation depth = 4.5 m / 9.5 m / 14.5 m P5: claw P7: chain and shackle	
	**Single guide rail arrangement** P1: pump P4: installation parts for single guide rail arrangement P5: claw P7: chain and shackle	Only available for specific sizes, see selection configurator.
	**Twin guide rail arrangement** P1: pump P4: installation parts for twin guide rail arrangement P5: claw and adapter P7: chain and shackle	Only available for specific sizes, see selection configurator.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

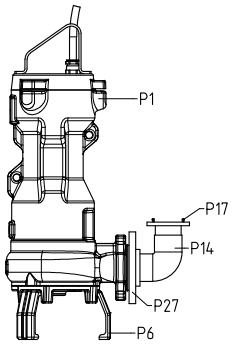
Installation type P, transportable wet-installed model

Installation type	Description
	P1: pump P6: pump foot P7: chain and shackle

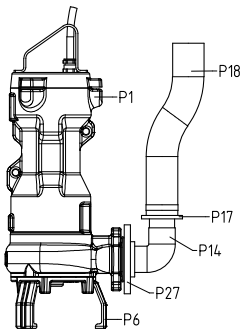
Installation information

Suggested installation layouts for transportable pump sets

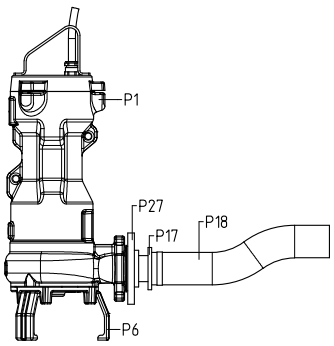
Size 50



Suggested installation layout 1
Vertical hose connection with elbow (P14) and Storz rigid coupling (P17) (quick connection)

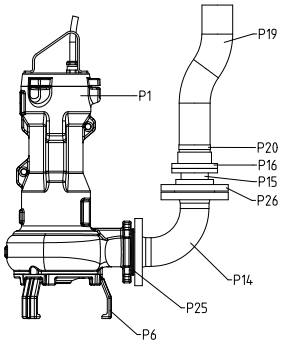


Suggested installation layout 2
Vertical hose connection with plastic hose (P18)

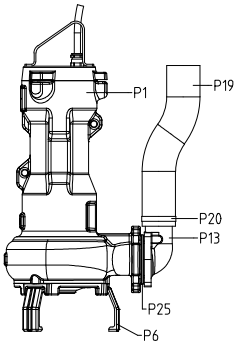


Suggested installation layout 3
Horizontal hose connection (quick connection) with plastic hose (P18)

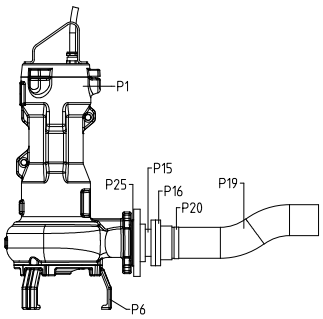
Sizes 65, 80, 100



Suggested installation layout 1
Vertical hose connection (quick connection) with plastic hose (P19) and hose clip (P20)



Suggested installation layout 2
Vertical hose connection with plastic hose (P19), hose clip (P20) and connection elbow (P13)



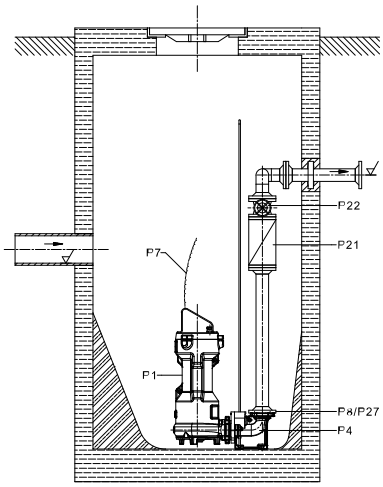
Suggested installation layout 3
Horizontal hose connection (quick connection) with plastic hose (P19), hose clip (P20), Storz hose coupling (P16), Storz rigid coupling (P15)

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Suggested installation layouts for stationary pump sets

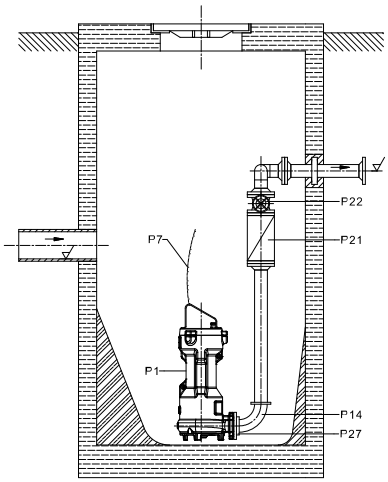
Sizes 50, 65, 80, 100

Guide hoop arrangement
Amarex S 50-172/F 50-170, S 50-222/F 50-220, F 65-170/65-220



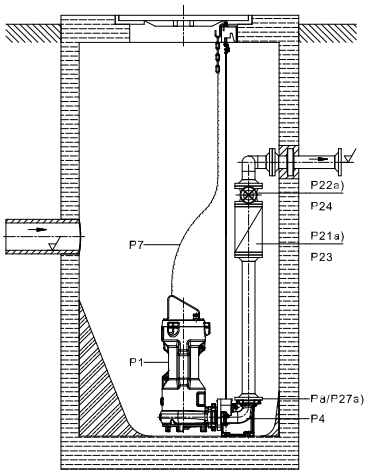
Suggested installation layout 1
Single-pump station
Flanged duckfoot bend

Suspended installation
Amarex S 50-172/F 50-170, S 50-222/F 50-220



Suggested installation layout 2
Single-pump station for 1.5 m installation depth
Direct connection to discharge line (suspended installation)

Guide wire, single guide rail or twin guide rail arrangement
Amarex 50, 65, 80, 100



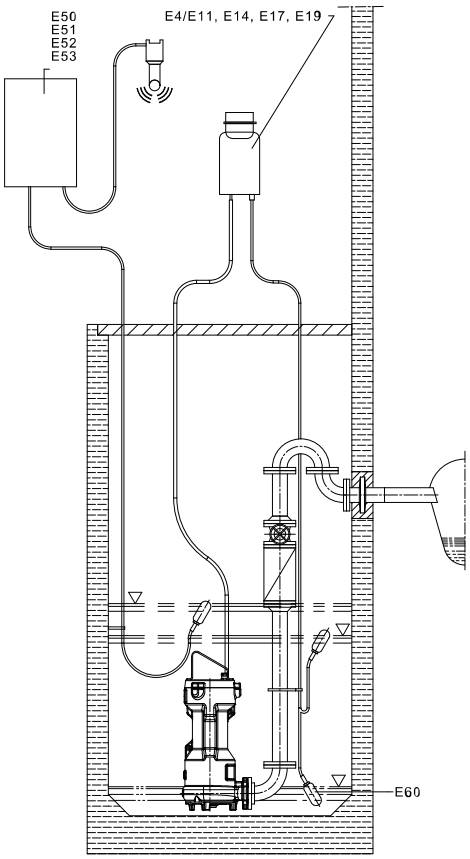
Suggested installation layout 3
Either with guide wire, single guide rail or twin guide rail arrangement
Single-pump station for 4.5 m installation depth
Flanged duckfoot bend

a)	DN 50 only

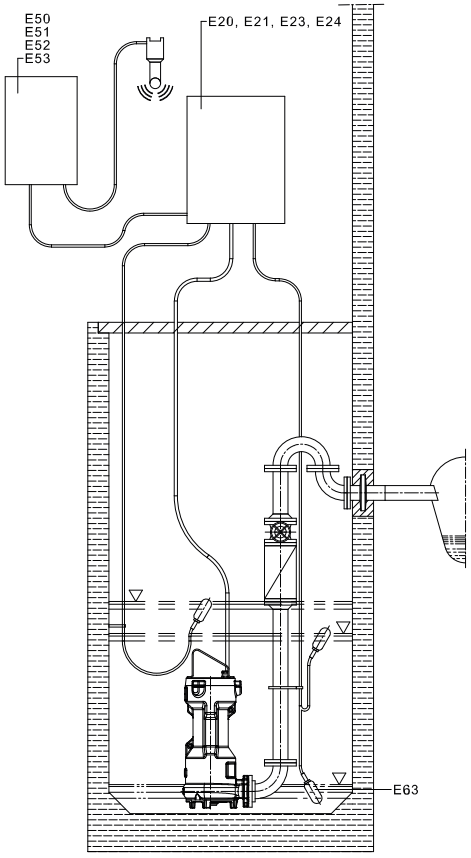
Suggested electrical installation layouts

Amarex is available in explosion-proof and non-explosionproof design.

CEE motor protection switch (up to 4.0 kW)



Suggested installation layout 1
without explosion protection



Suggested installation layout 2
with explosion protection

Submersible Motor Pumps with and without Explosion Protection

Amarex KRT

http://shop.ksb.com/catalog/k0/en/product/ES000092

Product benefits

- Absolutely water-tight resin-sealed cable entries prevent any water from entering the motor – even in the event of a damaged cable.
- Reliable operation ensured by leakage sensors signalling any ingress of moisture into the motor
- Reliable operation ensured by sensors monitoring the motor temperature and preventing overheating
- Non-clogging low-maintenance design with large free passages reduces clogging risk and, consequently, maintenance work.
- High-efficiency motors and variable hydraulic systems for optimum hydraulic efficiency and energy efficiency

Material variants C1 and C2:

- Long service life due to corrosion-resistant wetted parts made of stainless steel

Further information

Prices on request

Selection charts 119

Further information

	Amacontrol III (⇨ Page 1075)	Protection module for water products / waste water products
	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	LevelControl Basic 2 (⇨ Page 1038)	Level-dependent pump control and monitoring unit with display for either 1 or 2 pumps.
	MSE / MSD (⇨ Page 1035)	Compact switchgear for level-dependent control

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Waste water management
- Service water supply systems
- Disposal
- Waste water treatment plants
- Sludge disposal

Fluids handled

- Waste water with faeces
- Activated sludge
- Digested sludge
- Raw sludge
- Gas-containing liquids
- Industrial waste water

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 10080
	Q [l/s]	≤ 2800
Head	H [m]	≤ 120
Fluid temperature	T [°C]	≤ +60
Motor rating	P_2 [kW]	0,8 - 850

Design details

Design

- Fully floodable submersible motor pump
- Not self-priming
- Close-coupled design

Drive

- Three-phase asynchronous squirrel-cage motor
- Type of protection Ex db IIB (applies to explosion-proof pump sets only)
- Enclosure: IP68 to EN 60529/IEC529

Shaft seal

Depending on the motor design:

- Two bi-directional mechanical seals in tandem arrangement with liquid reservoir, with leakage chamber on some models
- Double cartridge seal with leakage chamber

Impeller type

- Various application-oriented impeller types

Bearings

- Various application-oriented bearings

Standard bearings:

- Grease-packed bearings sealed for life
- Maintenance-free

Reinforced bearings:

Drive end:

- Grease-packed bearings sealed for life
- Maintenance-free

Pump-end:

- Grease-lubricated bearings
- Can be re-lubricated

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Designation

Example: Amarex KRT K 150-503/155 4 UN G-D IE3

Designation key

Code	Description	
Amarex KRT	Type series	
K	Impeller type	
	S/S-max	Impeller with cutter
	F/F-max	Free-flow impeller
	E/E-max	Closed single-channel impeller
	D	Open diagonal single-vane impeller
	K/K-max	Closed multi-channel impeller
150	Nominal discharge nozzle diameter [mm]	
503	Maximum nominal impeller diameter [mm]	
155	Motor size	
4	Number of motor poles	
UN	Motor version	
	UN/UE	Without explosion protection, for fluid temperatures of up to 40 °C[39]
	UF	Without explosion protection, for fluid temperatures of up to 40 °C, ambient temperature up to 55 °C
	WN/WE	Without explosion protection, for fluid temperatures of up to 60 °C[39]
	XN/XE	Explosion protection Ⓔx II2G Ex db h IIB T3 Gb, for fluid temperatures of up to 40 °C[39]
	XF	Explosion protection Ⓔx II2G Ex db h IIB T3 Gb, for fluid temperatures of up to 40 °C, ambient temperature up to 55 °C
	YN/YE	Explosion protection Ⓔx II 2G Ex db h IIB T4 Gb, for fluid temperatures of up to 40 °C[39]
	ZN/ZE	Explosion protection Ⓔx II 2G Ex db h IIB T3 Gb, for fluid temperatures of up to 60 °C[39]
G	Material variant (⇨ Page 118)	
	G	Standard variant, grey cast iron
	G1	Like G, impeller made of duplex stainless steel
	G2	Like G, impeller made of white cast iron
	GH	Like G, impeller and discharge cover made of white cast iron
	H	Wetted parts made of white cast iron
	C1	Wetted parts made of duplex stainless steel, mechanical seal with elastomer bellows, bolts/screws made of A4
	C2	Wetted parts made of duplex stainless steel, mechanical seal with covered spring, bolts/screws made of 1.4462
D	Installation type	
	D	Stationary dry installation, vertical (S1 duty)
	H	Stationary dry installation, horizontal (S1 duty)
	K	Stationary wet installation (S1 duty with motor outside the fluid possible) with guide wire arrangement or guide rail arrangement
	S	Stationary wet installation (S1 duty with submerged motor) with guide wire arrangement or guide rail arrangement
	P	Transportable wet-installed model (S1 duty with submerged motor)
IE3	Motor efficiency classification[40]	
	[41]	No efficiency classification
	IE3	Premium Efficiency

39 Maximum fluid temperature and ambient temperature

40 IEC 60034-30 standard not binding for submersible motor pumps. Efficiencies calculated/determined according to the measurement method specified in IEC 60034-2. The marking is used for submersible motors that achieve efficiency levels similar to those of standardised motors acc. to the IEC 60034-30 standard.

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Materials

Overview of available materials

Part No.	Description	Material variant						
		G	G1	G2	GH	H	C1	C2
Pump set								
101	Pump casing	EN-GJL-250				EN-GJN-HB555	1.4517	
135	Wear plate[42]	EN-GJL-250		-				
163	Discharge cover	EN-GJL-250			EN-GJN-HB555		1.4517	
210	Shaft	1.4021					1.4021/1.4462/C45+N	
230	Impeller[43]	EN-GJL-250	1.4517	EN-GJN-HB555			1.4517	
350	Bearing housing	EN-GJL-250					1.4517/EN-GJL-250	
412	O-ring	Nitrile butadiene rubber (NBR)						Viton (FKM)
433.01 / 433	Mechanical seal (drive end) Double mechanical seal (drive end)	Carbon/SiC						
433.02 / 433	Mechanical seal (pump end) Double mechanical seal (pump end)	SiC/SiC						
502	Casing wear ring[44]	EN-GJL-250			VG 434			
66-2	Cooling jacket	1.4571			-			
811	Motor housing	EN-GJL-250					1.4517	
824	Power cable							
900	Bolts/screws	A4[45]						1.4462
Installation parts								
572	Guide wire suspension bracket	1.4571 up to DN 200; EN-GJL-250 from size K200-502						1.4571
59-24	Guide wire	1.4401						1.4401/ Tefzel
72-1	Flanged bend	EN-GJL-250				EN-GJN-HB555	1.4517	
732	Claw	EN-GJL-250 or EN-GJS-400-15/EN-GJS-500-7					1.4517	
885	Lifting chain / lifting rope	Lifting chain: 1.4404 lifting rope: polyamide / polypropylene					Lifting rope: polypropylene	
892	Foot plate / feet	1.0038 + Z					1.4571	1.4517/ 1.4462
894	Bracket	1.4571 up to DN 200; 1.0038 + Z from size K200-502						1.4571

Description of materials

Grey cast iron EN-GJL-250 (lamellar graphite cast iron)
Lamellar graphite cast iron to EN 1561 is the most widely used cast material for handling municipal sewage, waste water and sludges as well as stormwater and surface water. It is suitable for neutral fluids which are only slightly aggressive and cause little wear. The pH should be ≥ 6.5, the sand content ≤ 0.5 g/l.

Duplex stainless steel (1.4517 or technically equivalent material)

This type of carbon steel is resistant to cavitation, has excellent strength values and is used for high circumferential speeds. An excellent resistance to pitting corrosion makes ferritic-austenitic stainless carbon steel a popular choice for pumping acidic waste water with a high chloride content as well as seawater and brackish water. Thanks to its good chemical resistance, e.g. against waste water containing phosphorous and sulphuric acid, this material is used in a wide range of applications in the chemical industry and process engineering. Pumps made of duplex stainless steel have a very long service life, even when handling brines, chemical waste water (pH 1 - 12), grey water and landfill leachate.

Wear-resistant white cast iron (EN-GJN-HB555 [XCR14] or technically equivalent material)

Wear-resistant white cast iron is suitable for handling highly abrasive fluids containing sand, ash or iron ore sinter, for example. It has a Rockwell hardness of at least 54 HRC, which is higher than that of hardened chrome steel. Owing to its hardness, the chromium-molybdenum alloy cast iron features a notably higher wear resistance than EN-GJL-250 grey cast iron and other cast materials. The pH should be ≥ 6.5.

Prices on request

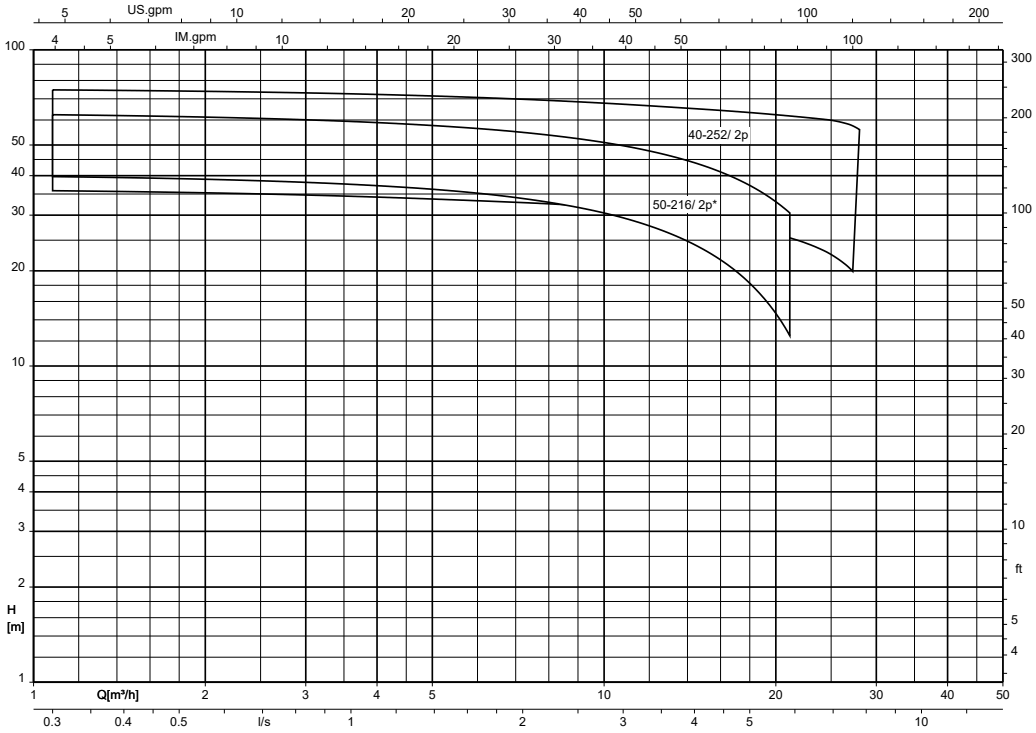
Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

42 For D impeller
43 D impeller: EN-GJL-250, with hardened edges
44 For E impeller and K impeller
45 Corresponds to 1.4571

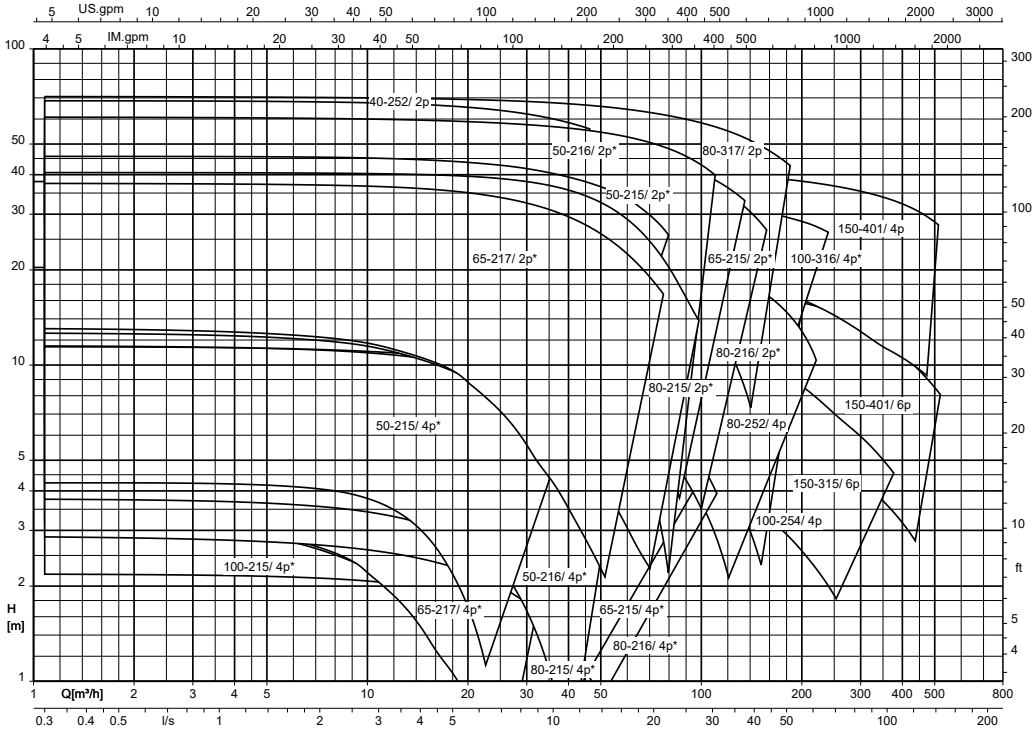
Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Selection charts

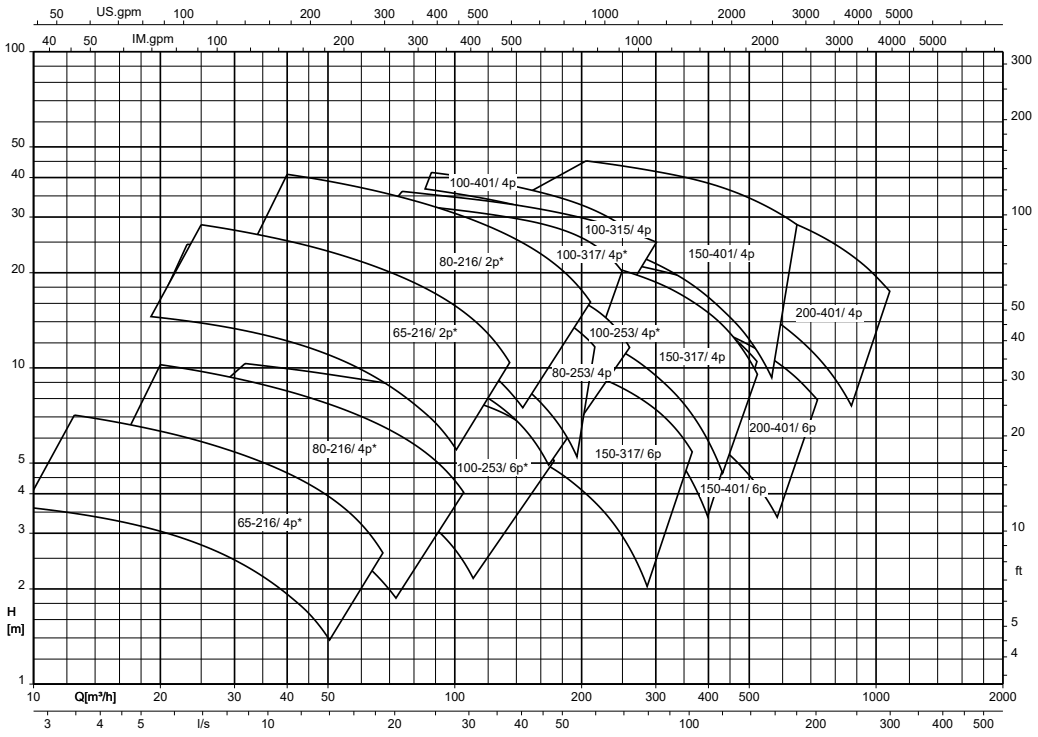
Amarex KRT S + *S-max, n = 2900 rpm



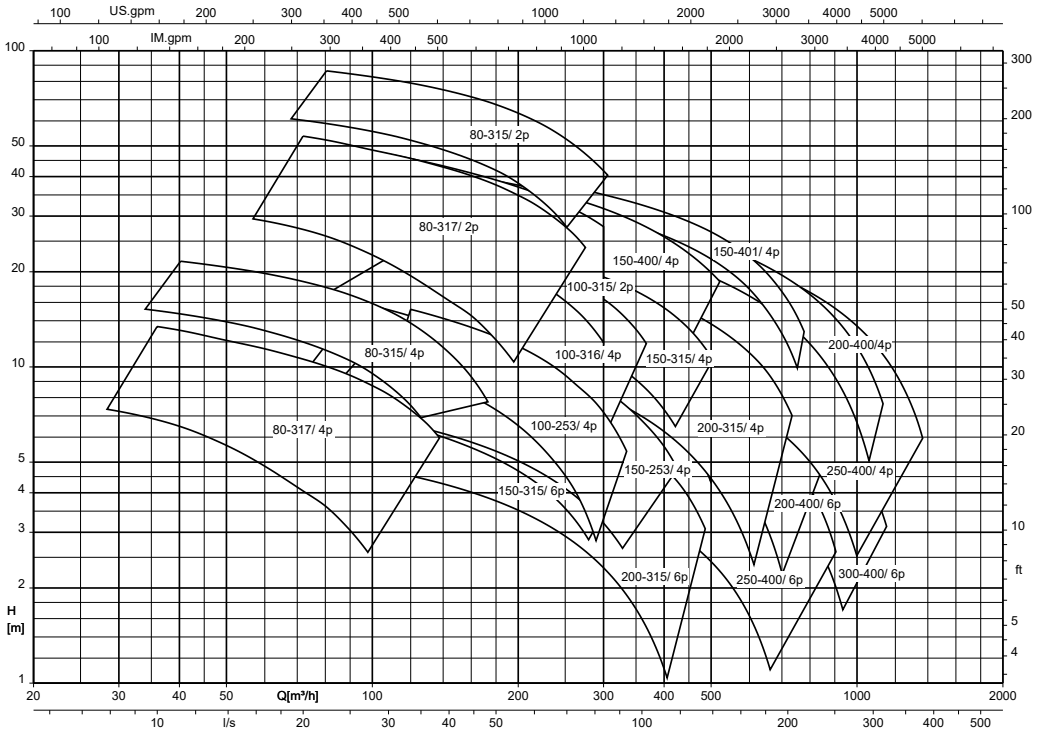
Amarex KRT F + *F-max, n = 2900/1450 rpm



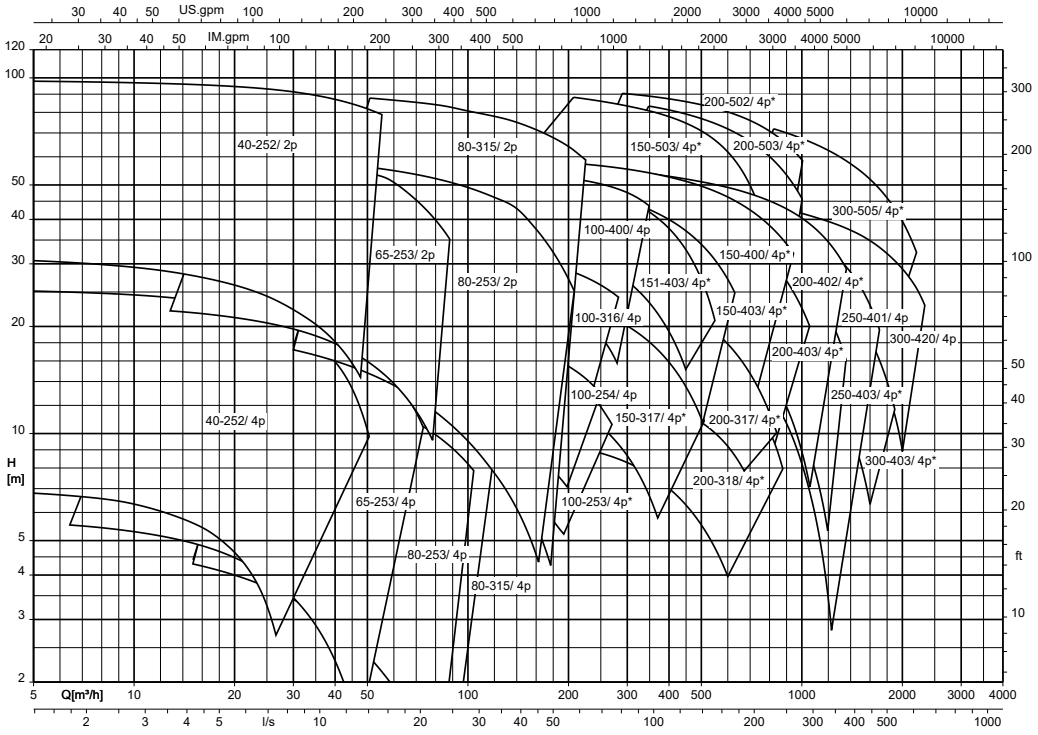
Amarex KRT E + *E-max, n = 2900/1450/960 rpm



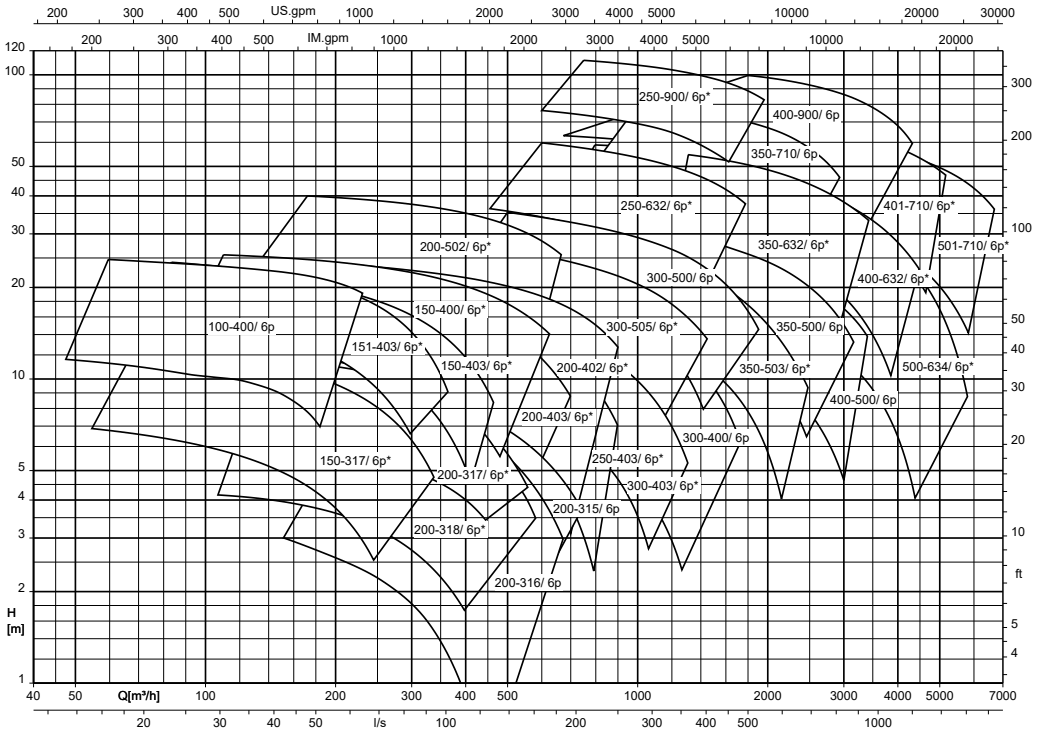
Amarex KRT D, n = 2900/1450/960 rpm



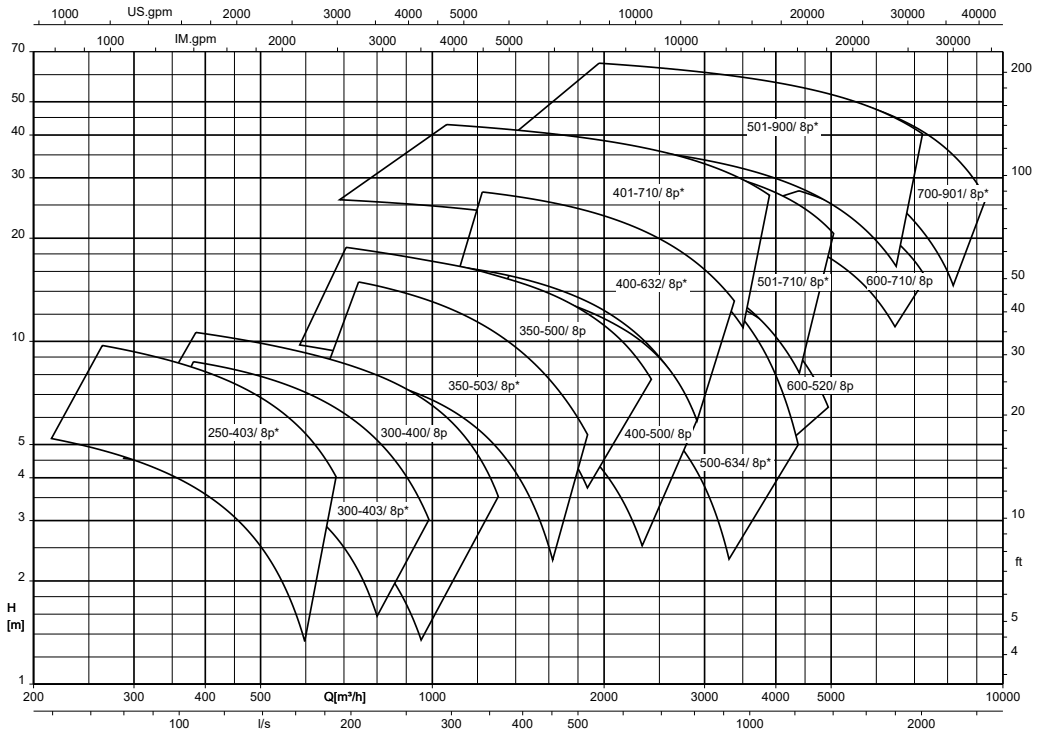
Amarex KRT K + *K-max, n = 2900/1450 rpm



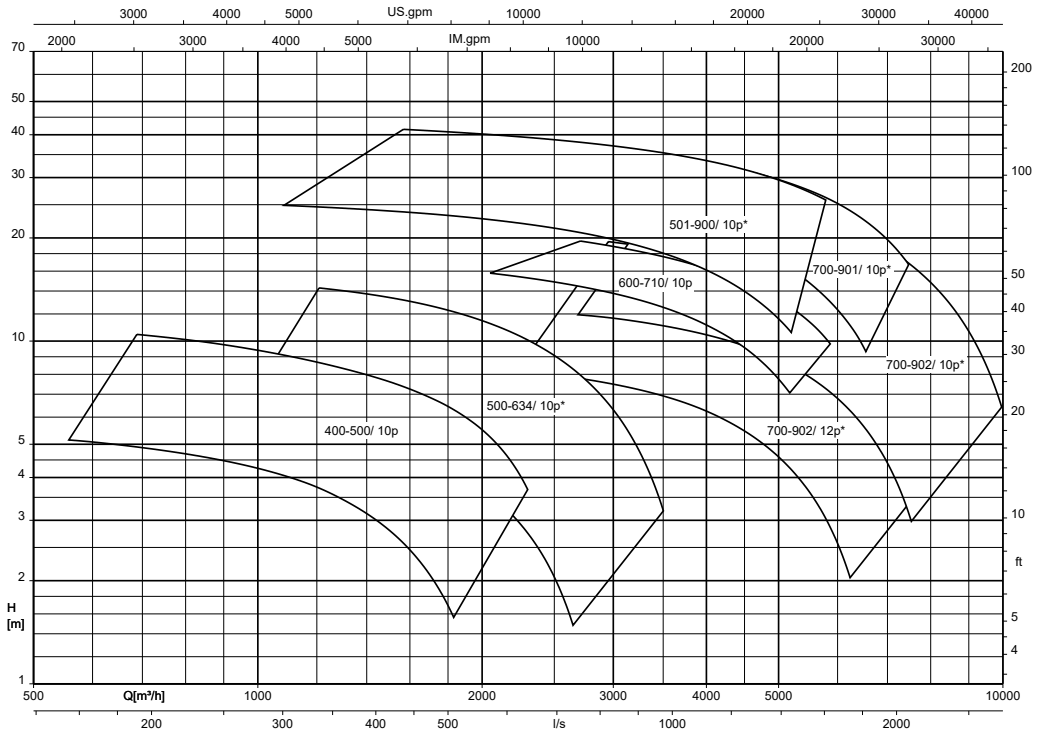
Amarex KRT K + *K-max, n = 960 rpm



Amarex KRT K + *K-max, n = 725 rpm



Amarex KRT K + *K-max, n = 580/480 rpm



Submersible Motor Pumps with and without Explosion Protection

CK 1000 Pump Station

http://shop.ksb.com/catalog/k0/en/product/ES000266

Product benefits

- Low weight pump station, ready to connect, minimal installation work
- Installation depths of up to 2500 mm, with anti-lift protection
- Variable pipe connections
- Either pneumatic level control (without compressor) or bubbler control using LevelControl Basic 2 control unit

Further information

Prices on request

Characteristic curves 126
Dimensions and connections..... 128

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	LevelControl Basic 2 (⇨ Page 1038)	Level-dependent pump control and monitoring unit with display for either 1 or 2 pumps.

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Fluids handled

- Waste water with/without faeces
- Waste water
- Rainwater (not containing abrasive substances)

When pumping faeces observe the applicable explosion protection regulations.

Main applications

- Waste water disposal
- Drainage of buildings, drainage of premises
- Redevelopment of premises
- Pumped drainage

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 40,3
	Q [l/s]	≤ 11,2
Head	H [m]	≤ 37,2
Fluid temperature	T [°C]	≤ +40
Motor rating	P_N [kW]	≤ 4,0

Design details

Design

- Ready-to-connect single-pump station or dual-pump station
- 1 or 2 submersible motor pumps
- Compact design
- Package pump station designed to DIN 1986-100 and EN 752 / EN 476
- Polyethylene collecting tank
- Piping
- Clamped connection for connecting a discharge line made of high-density polyethylene (PE-HD)
- Integrated ball check valve with connection for flushing option and ball valve

Installation

- Underfloor (buried) installation

Impeller type

- Free-flow impeller

Designation

Example: Pump Station CK-E AF 50-1.1 DP.ex

Designation key

Code	Description	
CK	Package pump station with plastic collecting tank	
E	Station type	
	E	Single-pump station
	D	Dual-pump station
AF	Pump type series	
	AF	Amarex with free-flow impeller
	PF	Ama-Porter with free-flow impeller
50	Pump size / discharge outlet	
	50	DN 50
	65	DN 65
-1	Impeller code	
.1	Product generation	
D	DOL starting	
P	Level measurement / sensor system	
	P	Pneumatic measurement
	L	Bubbler control
.ex	.ex	Explosion-proof
	-[46)]	Non-explosion-proof

Example: Level Control Basic 2 BC1 400 DPNO 040 control unit

Designation key

Code	Description	
LevelControl	Type series	
BC	Type	
	BC	Basic Compact (plastic housing)
	BS	Basic control cabinet (sheet steel housing)
1	Number of pumps	
	1	Single-pump station
	2	Dual-pump station
400	Voltage, number of wires	
	400	400 V, 4-wire connection / 5-wire connection
D	Starting method	
	D	DOL starting
P	Sensors	
	P	Pneumatic level measurement 3 m
	L	Bubbler control 2 m
N	ATEX	
	N	Without ATEX functions
	E	With ATEX functions
O	Installation variants	
	O	Standard
040	Nominal current	
	040	4,0 A
	063	6,3 A
	100	10 A

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Materials

Overview of available materials

Part No.	Description	Material
591	Collecting tank	Polyethylene
72-1	Flanged bend	Grey cast iron JL 1040
723	Flange	Cast steel C 50
710	Discharge pipe, connecting pipe	Stainless steel 1.4401
71-9	Adapters, fittings	Malleable cast iron, high-quality hot-dip galvanised
743	Ball valve	CuZn gal. Ni, high-quality nickel-plated

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Characteristic curves

CK 1000 Pump Station with Amarex F50-140, n = 2900 rpm

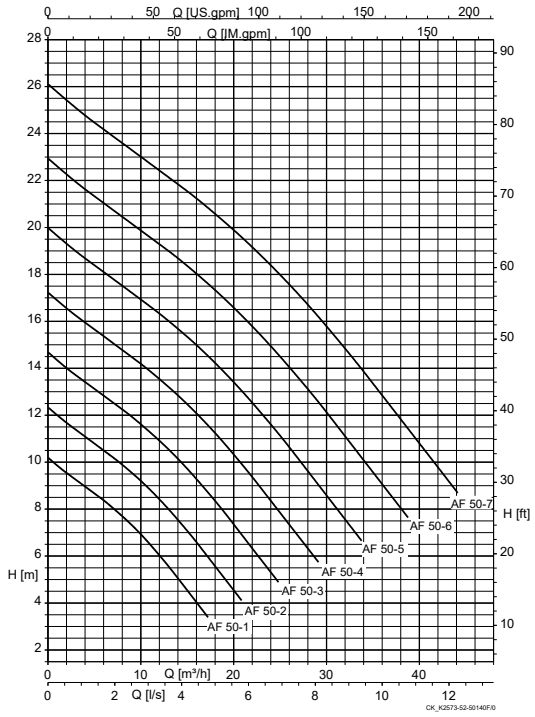

Fig. 46: Free passage = 40 mm:
AF 50-1 = Amarex F50-140/...-100
AF 50-2 = Amarex F50-140/...-110
AF 50-3 = Amarex F50-140/...-120
AF 50-4 = Amarex F50-140/...-130
AF 50-5 = Amarex F50-140/...-140
AF 50-6 = Amarex F50-140/...-150
AF 50-7 = Amarex F50-140/...-160

CK 1000 Pump Station with Amarex F50-220, n = 2900 rpm

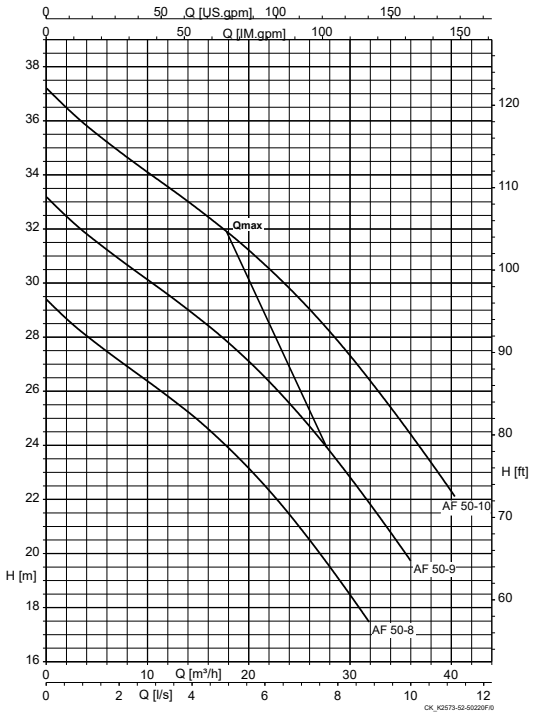

Fig. 47: Free passage = 40 mm:
AF 50-6 = Amarex F50-220/...-160
AF 50-7 = Amarex F50-220/...-170
AF 50-8 = Amarex F50-220/...-180

CK 1000 Pump Station with Ama-Porter 5.., n = 2900 rpm

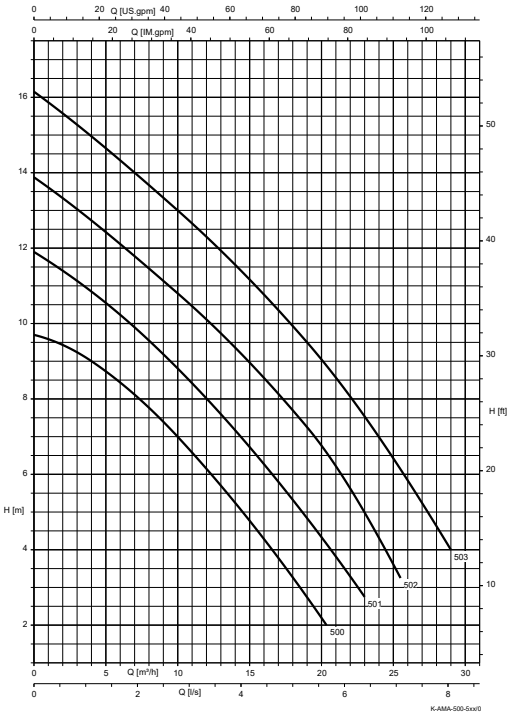

Fig. 48: Free passage:
PF 500/501 = Ama-Porter 500/501: 45 mm
PF 502 = Ama-Porter 502: 43 mm
PF 503 = Ama-Porter 503: 41 mm

CK 1000 Pump Station with Ama-Porter 6.., n = 2900 rpm

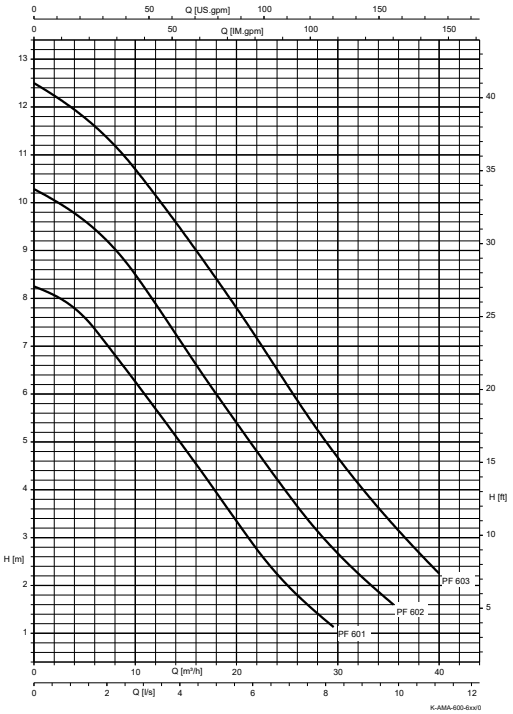

Fig. 49: Free passage:
PF 601 = Ama-Porter 601: 60 mm
PF 602 = Ama-Porter 602: 58 mm
PF 603 = Ama-Porter 603: 56 mm

Dimensions and connections

Tank dimensions

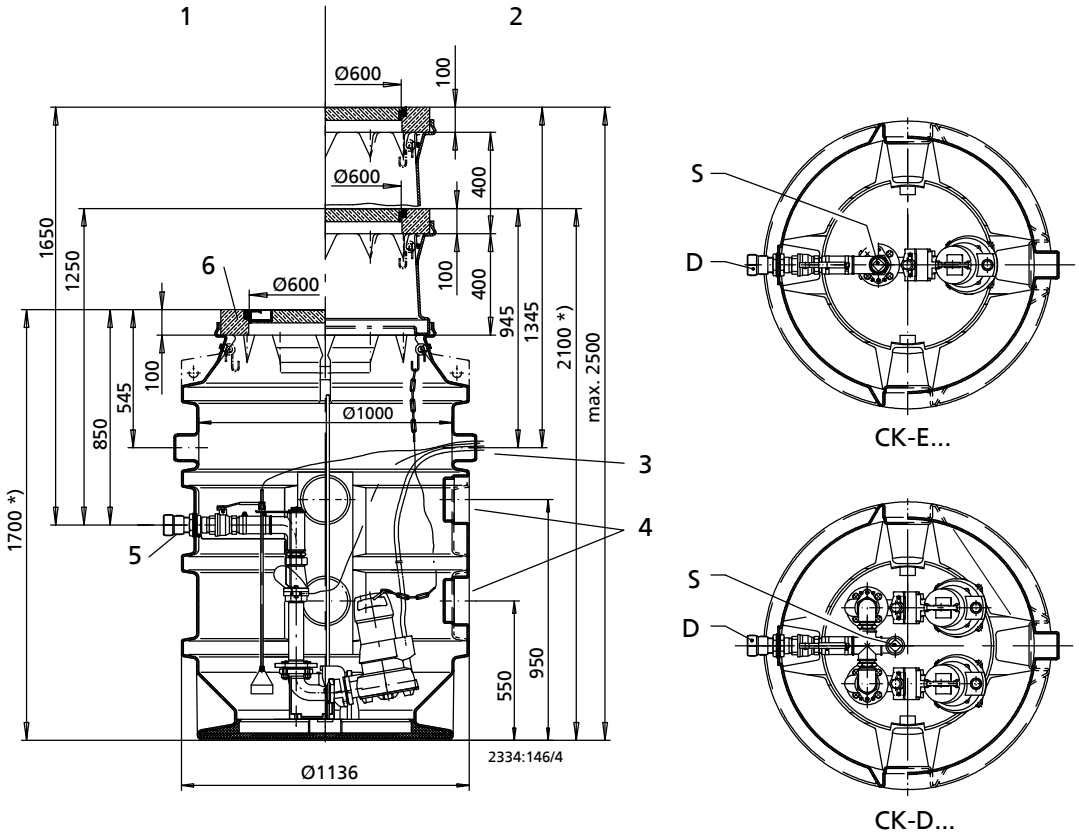

Fig. 50: Tank dimensions

1	Standard design
2	Design with tank extension
3	Two (opposite) DN 100 nozzles for venting and cable entry, suitable for sewer pipe
4	Six DN 150 inlet sockets for PVC sewer pipe
5	Clamped discharge line connection
6	Class A 15 cover
D	Clamped discharge line connection
S	Flushing connection and vacuum breaker
*)	Three height compensation rings to DIN 4034 - AR 625 x 100 can be used in addition.

Connections for the off-the-shelf range and configurable range (single-pump station and dual-pump station)

Piping	Flushing connection S	Discharge line connection D
Off-the-shelf range		
DN 50 CK-E/-D	Rp 2	PE-HD 63
DN 65 CK-E/-D	Rp 2	PE-HD 75
Configurable range		
DN 50 CK-E/-D	Rp 2	PE-HD 63
DN 50 CK-E/-D	Rp 2	PE-HD 75
DN 50 CK-E/-D	Rp 2	PE-HD 90
DN 65 CK-E/-D	Rp 2	PE-HD 75
DN 65 CK-E/-D	Rp 2	PE-HD 90

Submersible Motor Pumps without Explosion Protection

Ama-Porter

http://shop.ksb.com/catalog/k0/en/product/ES000082

Product benefits

- High operating reliability due to dry, pressure-tight and encapsulated squirrel-cage motor, thermal class F
- Long service life with shaft made of corrosion-resistant stainless steel
- Ease of service with wetted bolts made of stainless steel which are easy to undo even after years of operation
- Trouble-free operation: clogging by coarse particles is prevented by large free passage (free-flow impeller) or by cutter with high mechanical resistance for waste water
- Stationary pump sets easy to install and remove with automatic, bolt-free connection; leakage prevented by elastic sealing elements

Further information

Prices on request

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Dimensions 133

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	LevelControl Basic 2 (⇨ Page 1038)	Level-dependent pump control and monitoring unit with display for either 1 or 2 pumps.
	MSE / MSD (⇨ Page 1035)	Compact switchgear for level-dependent control
	Multi-functional plug, type Hyper (⇨ Page 1036)	Compact switchgear for level-dependent control

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Drainage systems
- Water extraction
- Draining of pits, shafts, etc.

Fluids handled

- Waste water
- Waste water containing long fibres and solid substances
- Gas-containing liquids

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 40
	Q [l/s]	≤ 11
Head	H [m]	≤ 16
Fluid temperature	T [°C]	≤ +40 (continuous duty)
		≤ +70 (short-time duty ≤ 5 minutes)

Design details

Design

- Fully floodable submersible motor pump
- Close-coupled design
- Single-stage

Installation

- Vertical installation
- Wet-installed stationary model
- Wet-installed transportable model

Drive

- Single-phase AC motor, 50 Hz, 230 V, with integrated temperature switch
- Three-phase asynchronous motor, 50 Hz, 400 V, DOL starting
- Enclosure IP68 (permanently submerged) to EN 60529 / IEC 529
- Thermal class F

Shaft seal

Drive end:

- Shaft seal ring

Pump-end:

- 1 bi-directional mechanical seal with liquid reservoir

Impeller type

- Various application-oriented impeller types

Bearings

- Grease-packed bearings sealed for life

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Designation

Example: Ama-Porter SB 545 SE

Designation key

Code	Description	
Ama-Porter	Type series	
S	Impeller type	
	-[47)]	Free-flow impeller
	S	Impeller with cutter
B	Start capacitor	
	[47)]	Without start capacitor
	B	With start capacitor
5	Size	
	5..	DN 50
	6..	DN 65
01	Impeller size	
SE	Motor design	
	SE	Single-phase AC motor with float switch
	NE	Single-phase AC motor without float switch
	ND	Three-phase asynchronous motor without float switch

Materials

Overview of available materials

Component	Ama-Porter 5.. / 6..	Ama-Porter S 545
Casing	JL 1030	
Impeller	JL 1030	JL 1040
Cutter	-	1.2080 (K100)
Shaft	1.4021	
Shaft seal, drive end	Shaft seal ring	
Shaft seal, pump end	Mechanical seal SiC / AL_2O_3	Mechanical seal SiC / SiC
Bolts and nuts	A2	
Joint rings	Nitrile	
Float switch	Polypropylene	

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

47 Blank

Characteristic curves

Ama-Porter 5 _ _, n = 2900 rpm

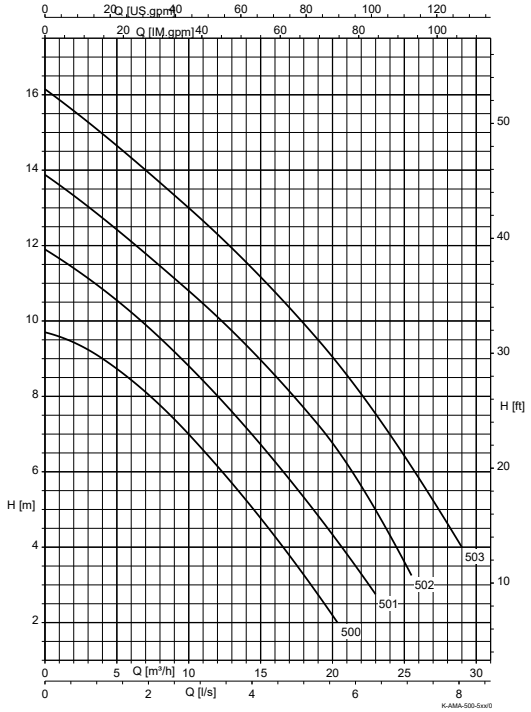


Fig. 51: Free passage: 500/501 = 45 mm, 502 = 43 mm, 503 = 41 mm

Ama-Porter 6 _ _, n = 2900 rpm

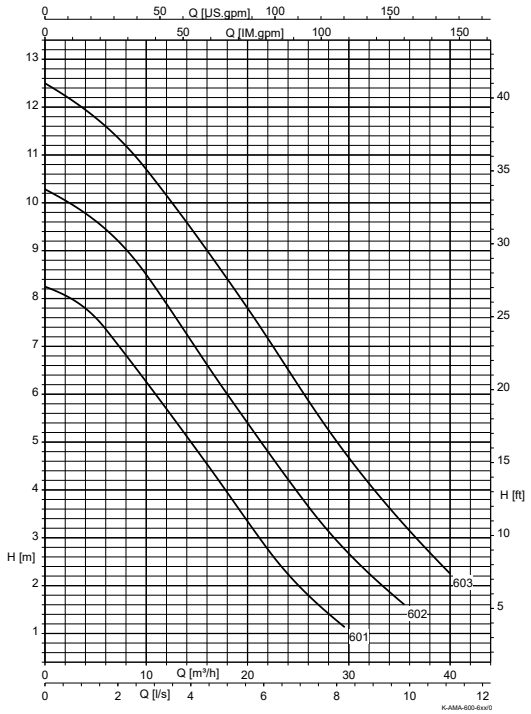


Fig. 52: Free passage: 601 = 60 mm, 602 = 58 mm, 603 = 56 mm

Ama-Porter S 545, n = 2900 rpm

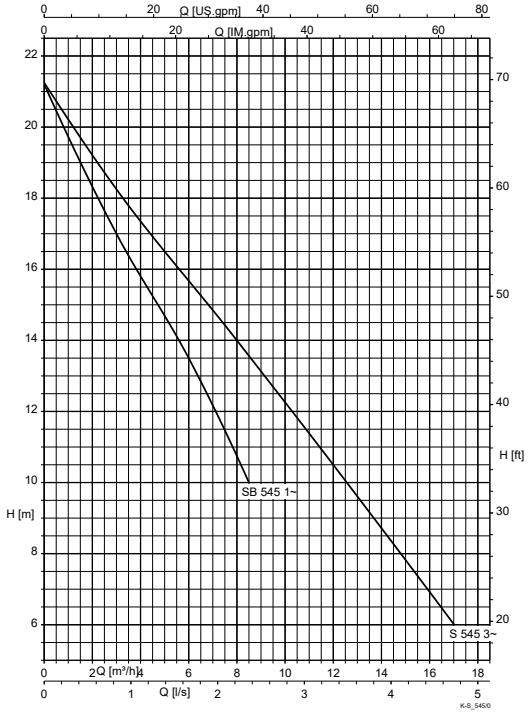
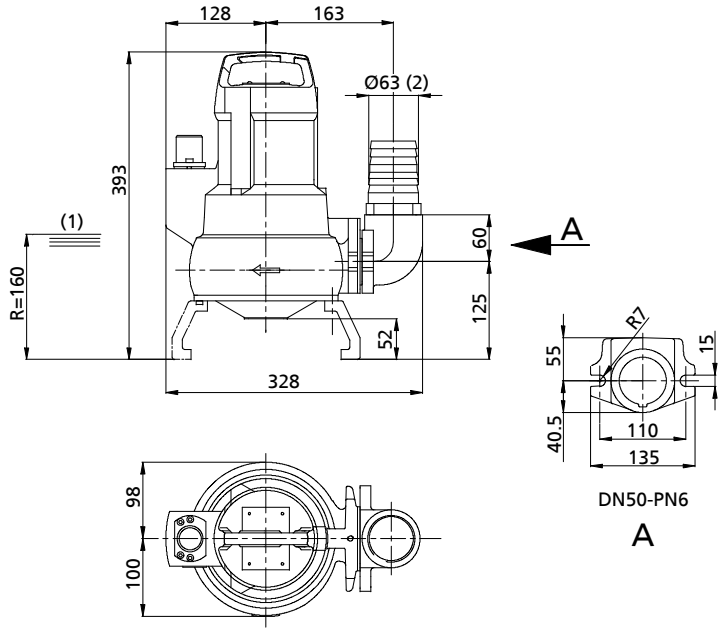


Fig. 53: Free passage: 7 mm

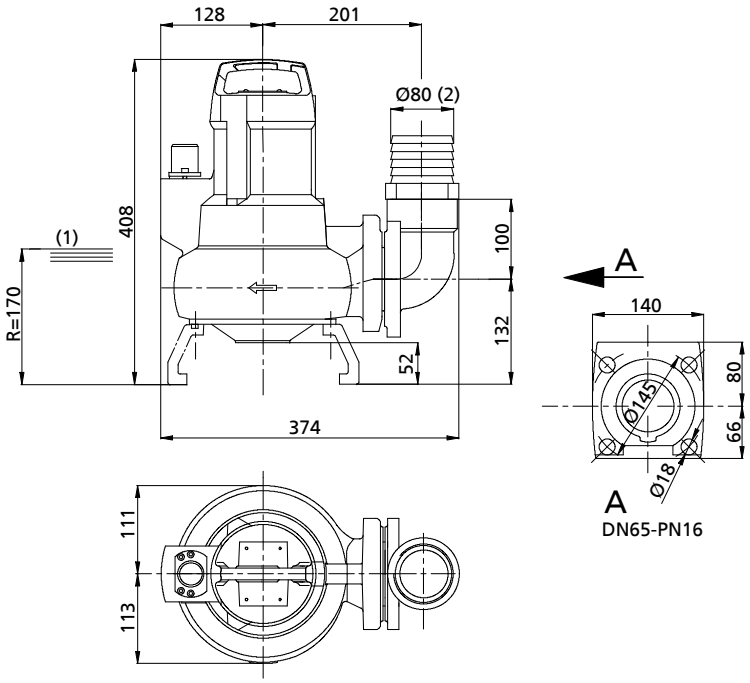
Dimensions

Ama-Porter 5 _ _, F impeller, transportable wet-installed model



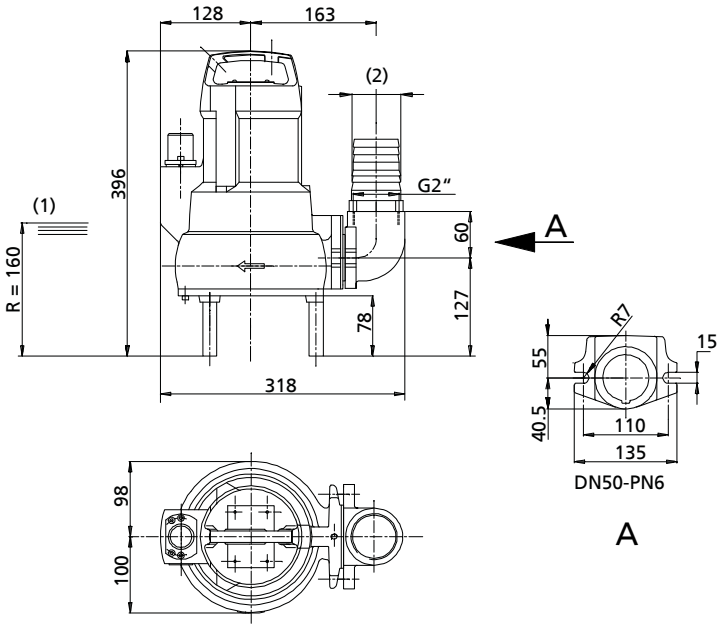
(1)	Lowest switch-off point	(2)	Hose inner diameter: 63 mm

Ama-Porter 6 _ _, F impeller, transportable wet-installed model



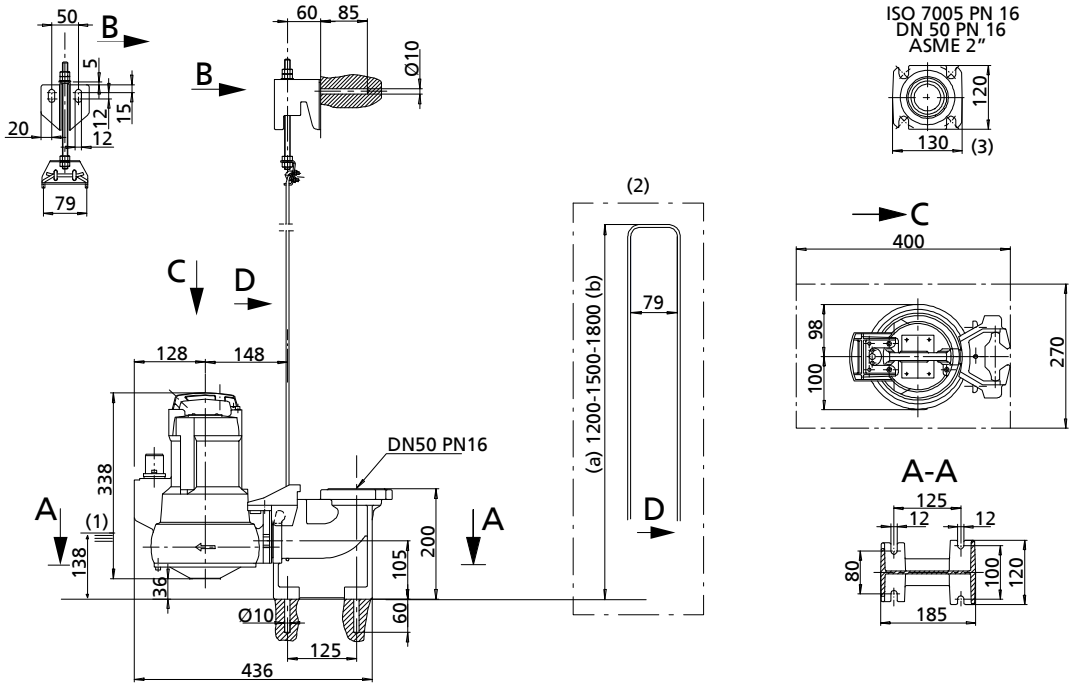
(1)	Lowest switch-off point	(2)	Hose inner diameter: 80 mm

Ama-Porter S 545, S impeller, transportable wet-installed model



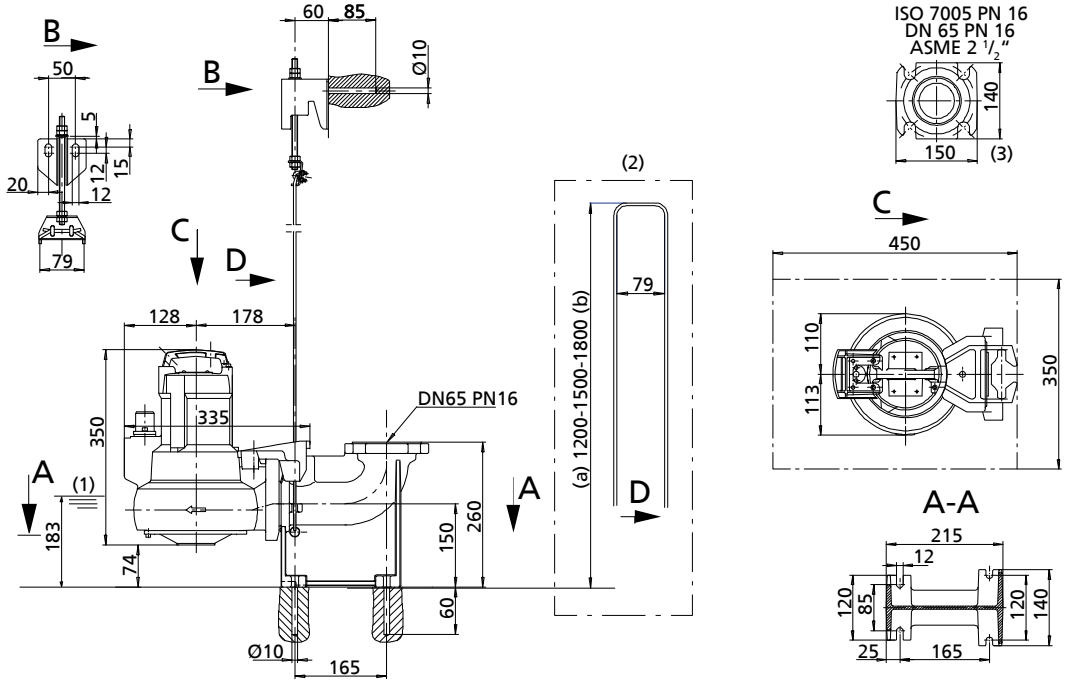
(1)	Lowest switch-off point	(2)	Hose inner diameter: 63 mm

Ama-Porter 5 _ _, F impeller, stationary wet-installed model with guide wire/guide hoop, duckfoot bend DN 50/50



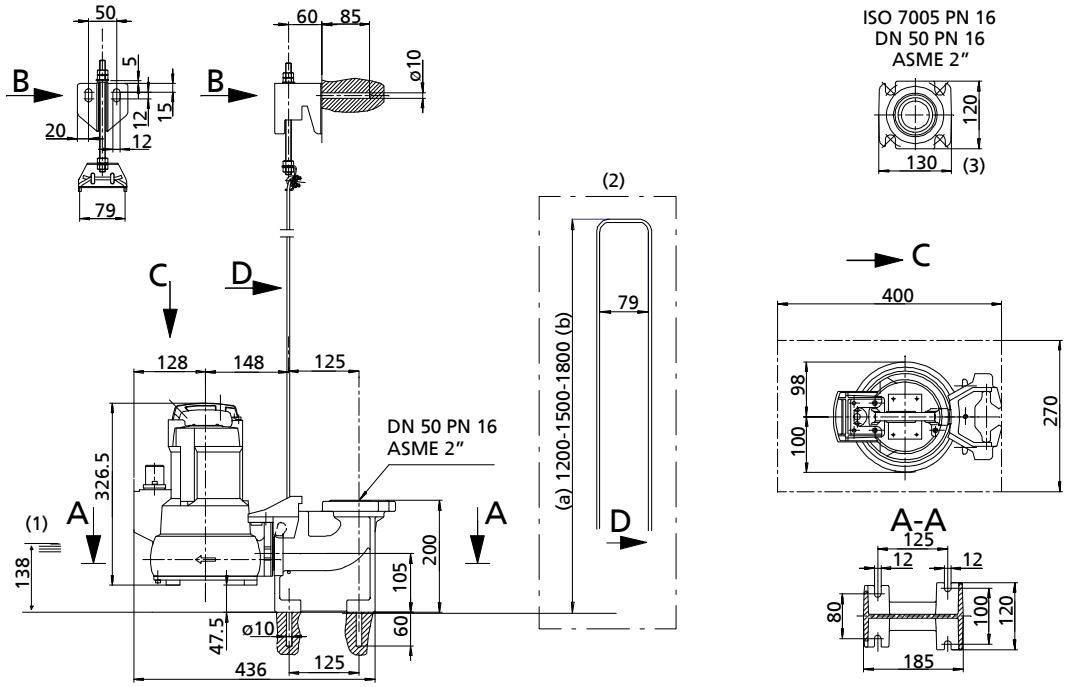
(1)	Lowest switch-off point	(a)	Minimum
(2)	Guide hoop	(b)	Maximum
(3)	Flange of duckfoot bend		

Ama-Porter 6 _ _, F impeller, stationary wet-installed model with guide wire/guide hoop, duckfoot bend DN 65/65



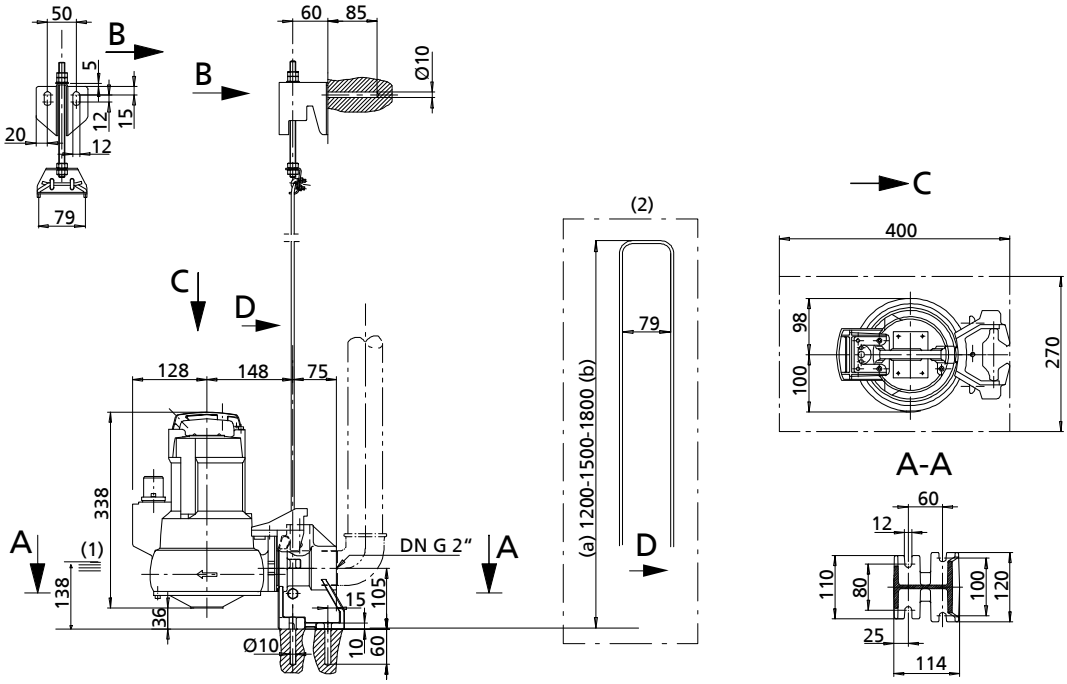
(1)	Lowest switch-off point	(a)	Minimum
(2)	Guide hoop	(b)	Maximum
(3)	Flange of duckfoot bend		

Ama-Porter S 545, S impeller, stationary wet-installed model with guide wire/guide hoop, duckfoot bend DN 50/50



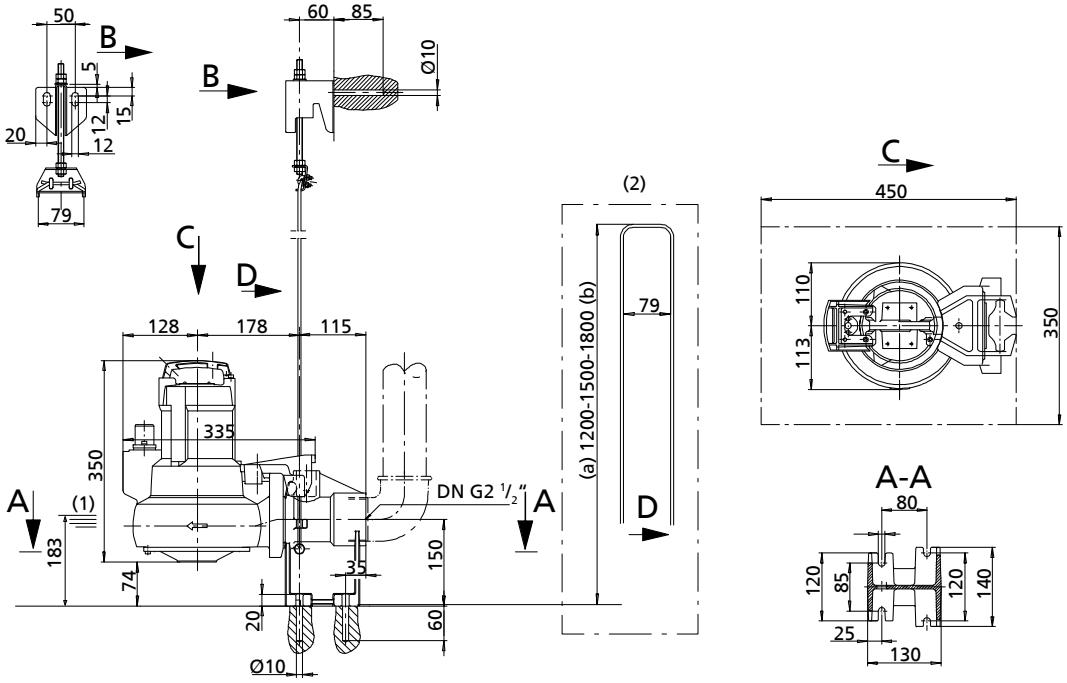
(1)	Lowest switch-off point	(a)	Minimum
(2)	Guide hoop	(b)	Maximum
(3)	Flange of duckfoot bend		

Ama-Porter 5 _ _, F impeller, stationary wet-installed model with guide wire/guide hoop, straight pump foot G 2"



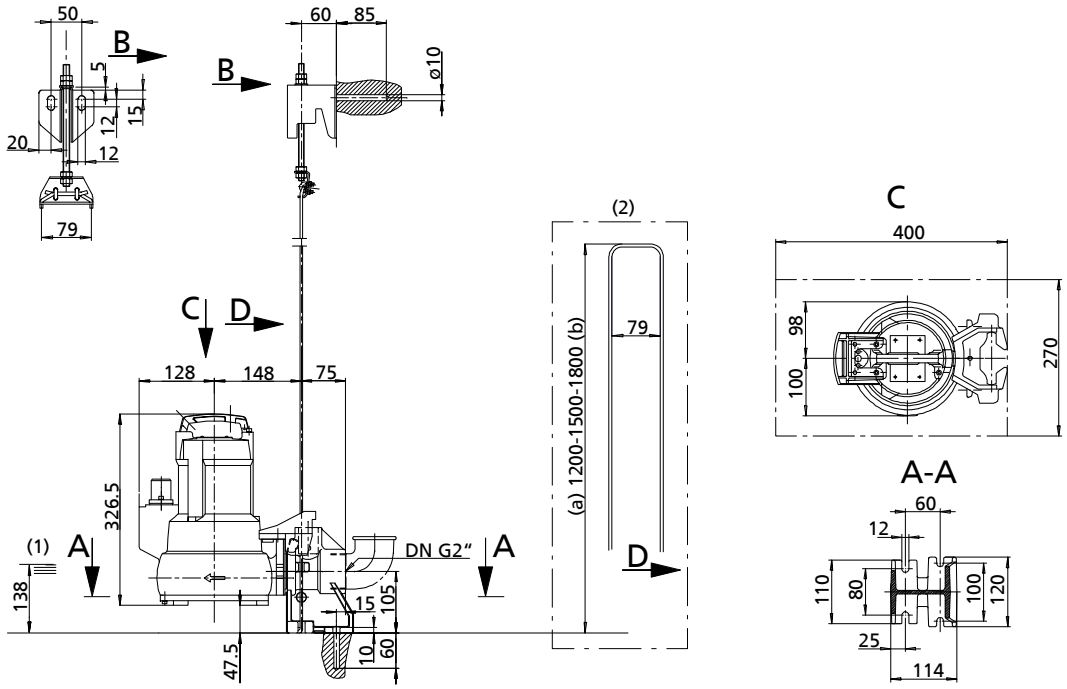
(1)	Lowest switch-off point	(a)	Minimum
(2)	Guide hoop	(b)	Maximum

Ama-Porter 6 _ _, F impeller, stationary wet-installed model with guide wire/guide hoop, straight pump foot G 2½"



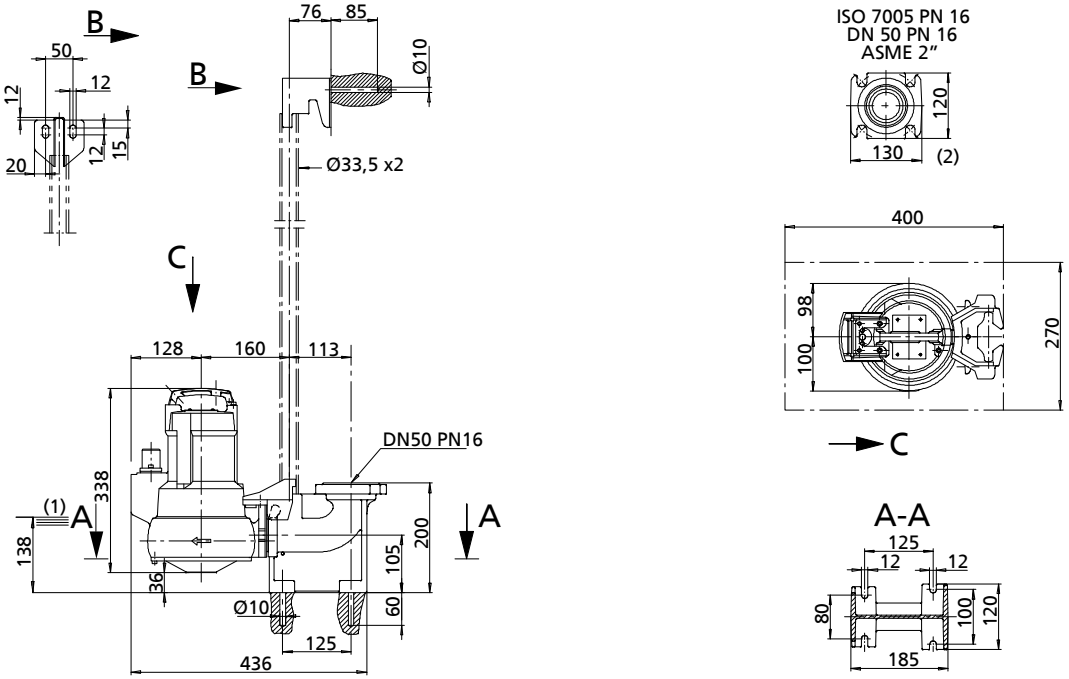
(1)	Lowest switch-off point	(a)	Minimum
(2)	Guide hoop	(b)	Maximum

Ama-Porter S 545, S impeller, stationary wet-installed model with guide wire/guide hoop, straight pump foot G 2"



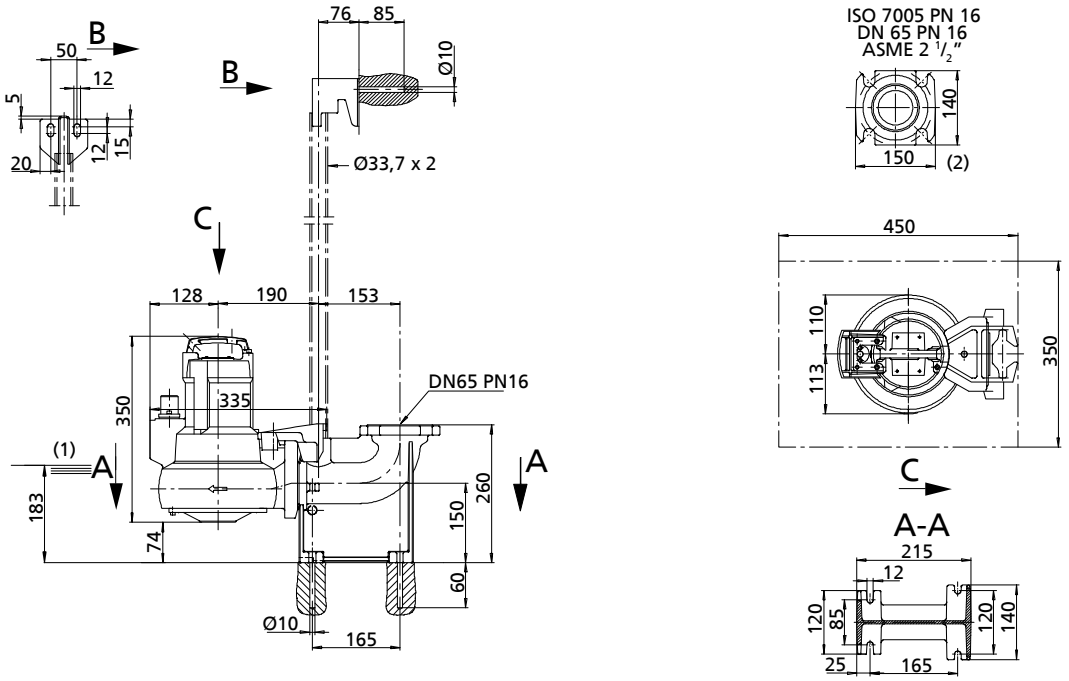
(1)	Lowest switch-off point	(a)	Minimum
(2)	Guide hoop	(b)	Maximum

Ama-Porter 5 _ _, F impeller, stationary wet-installed model with single guide rail, duckfoot bend DN 50/50



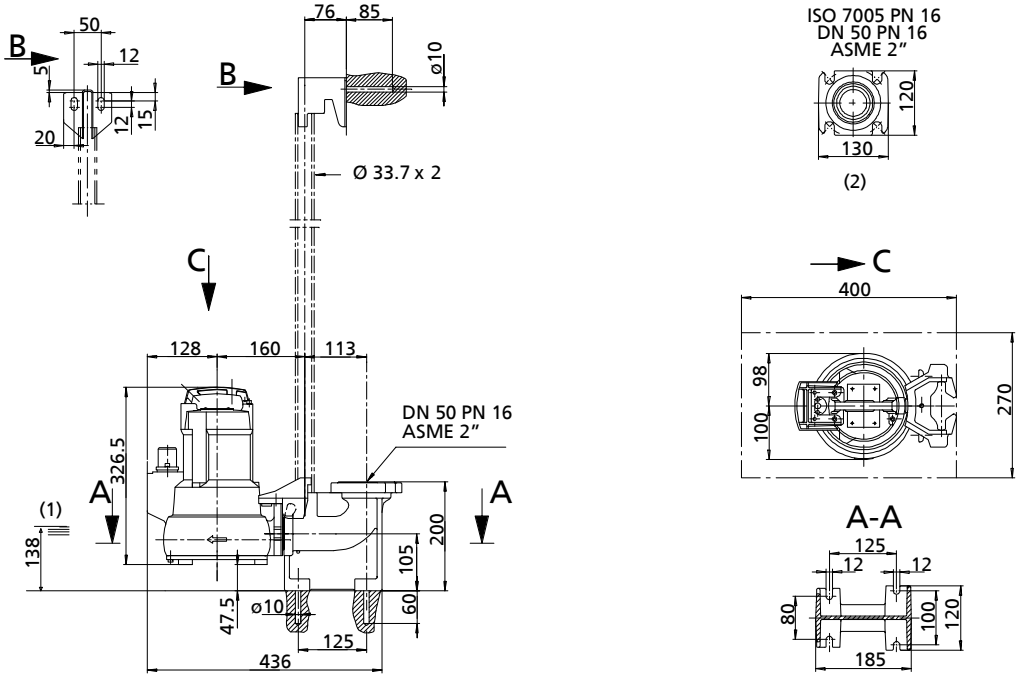
(1)	Lowest switch-off point	(2)	Flange of duckfoot bend

Ama-Porter 6 _ _, F impeller, stationary wet-installed model with single guide rail, duckfoot bend DN 65/65



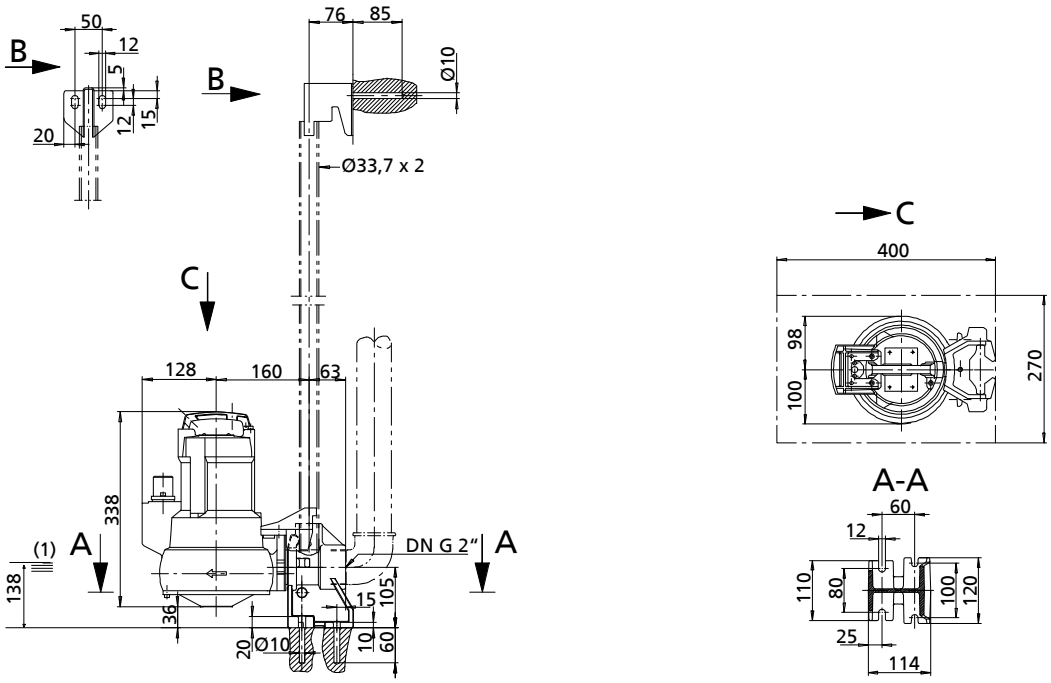
(1)	Lowest switch-off point	(2)	Flange of duckfoot bend

Ama-Porter S 545, S impeller, stationary wet-installed model with single guide rail, duckfoot bend DN 50/50



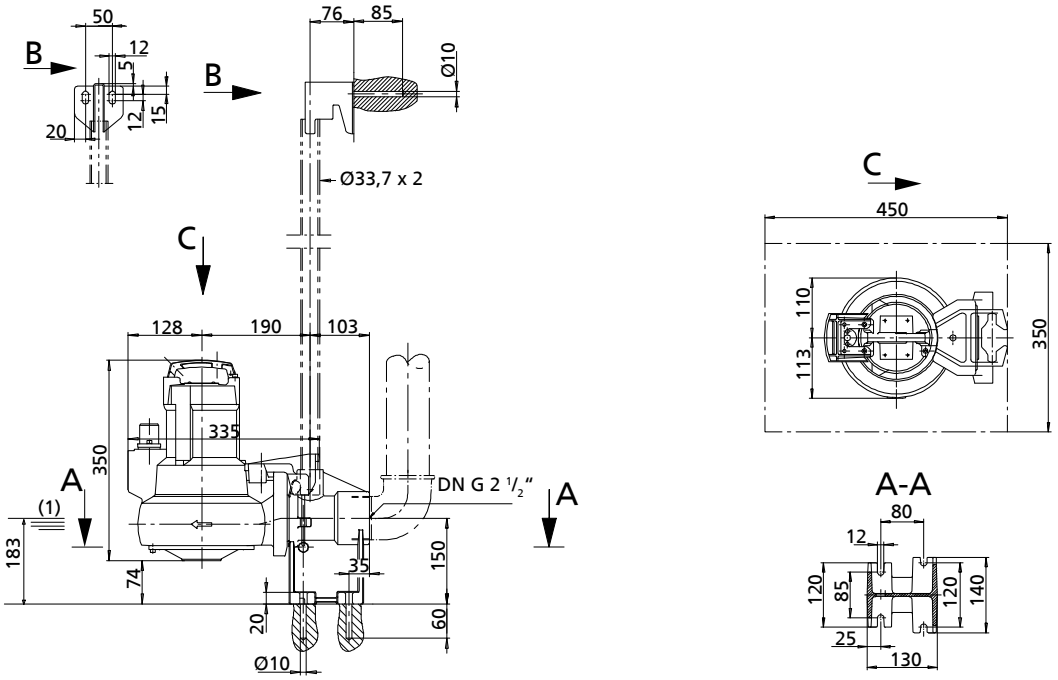
(1)	Lowest switch-off point	(2)	Flange of duckfoot bend

Ama-Porter 5 _ _, F impeller, stationary wet-installed model with single guide rail, straight pump foot G 2"



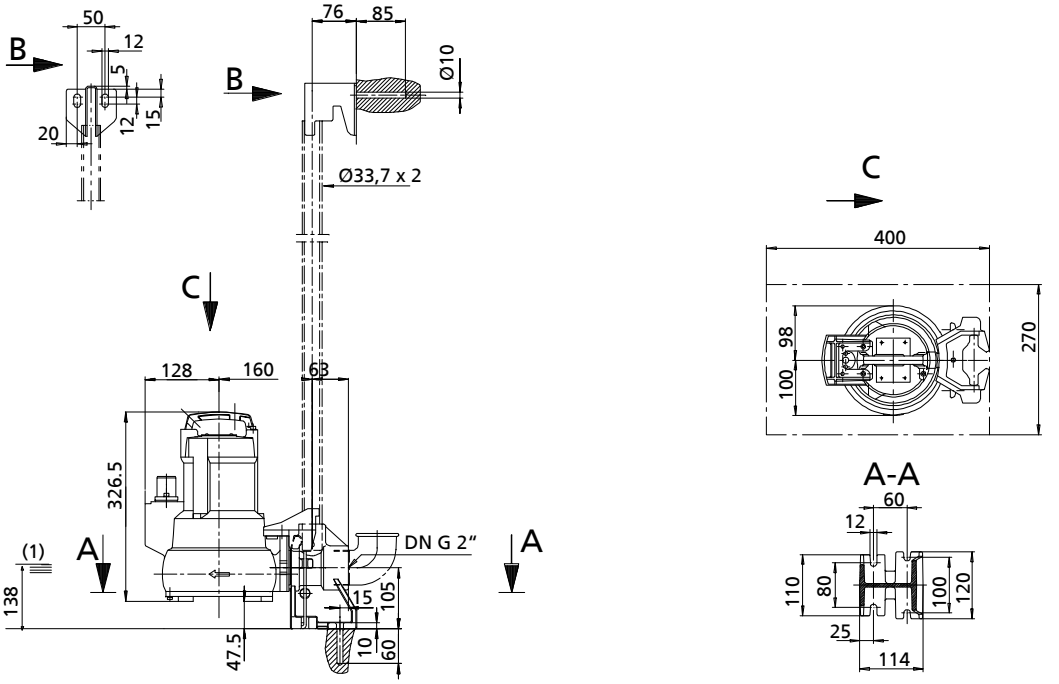
(1)	Lowest switch-off point

Ama-Porter 6 _ _, F impeller, stationary wet-installed model with single guide rail, straight pump foot G 2 ½"



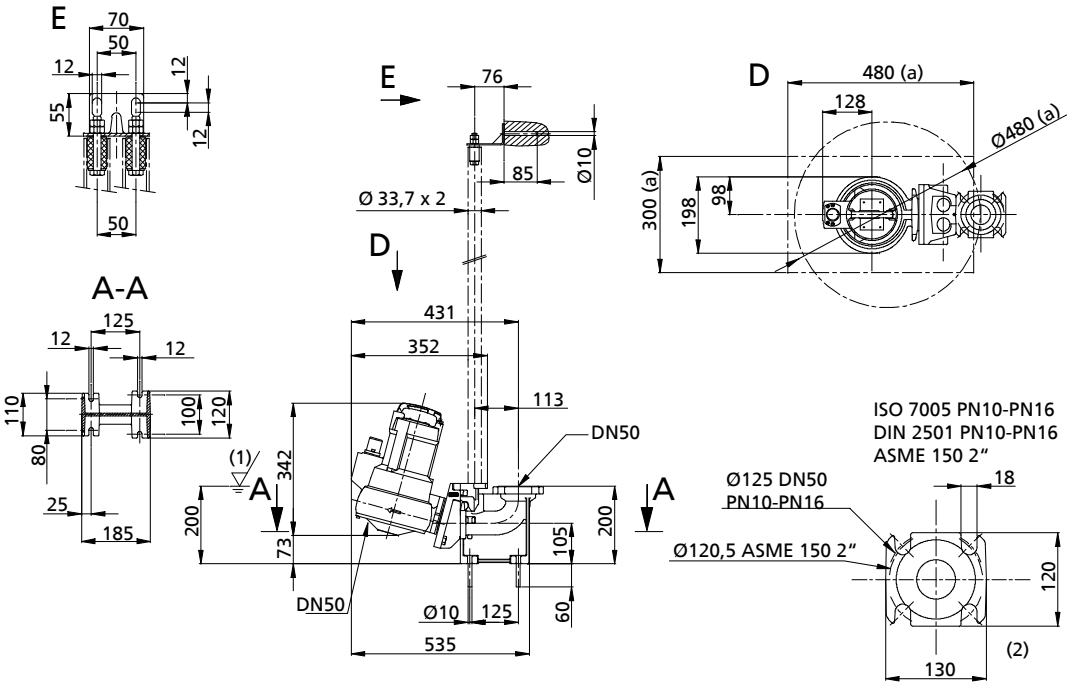
(1)	Lowest switch-off point

Ama-Porter S 545, S impeller, stationary wet-installed model with single guide rail, straight pump foot G 2"



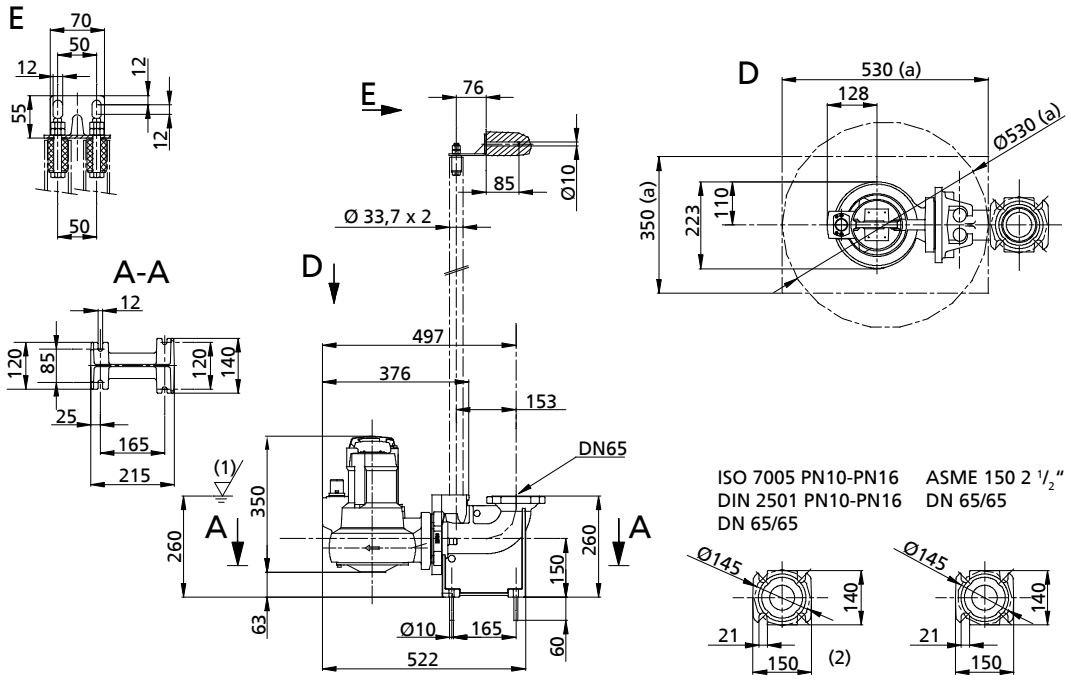
(1)	Lowest switch-off point

Ama-Porter 5 _ _, F impeller, stationary wet-installed model with twin guide rails, duckfoot bend DN 50/50



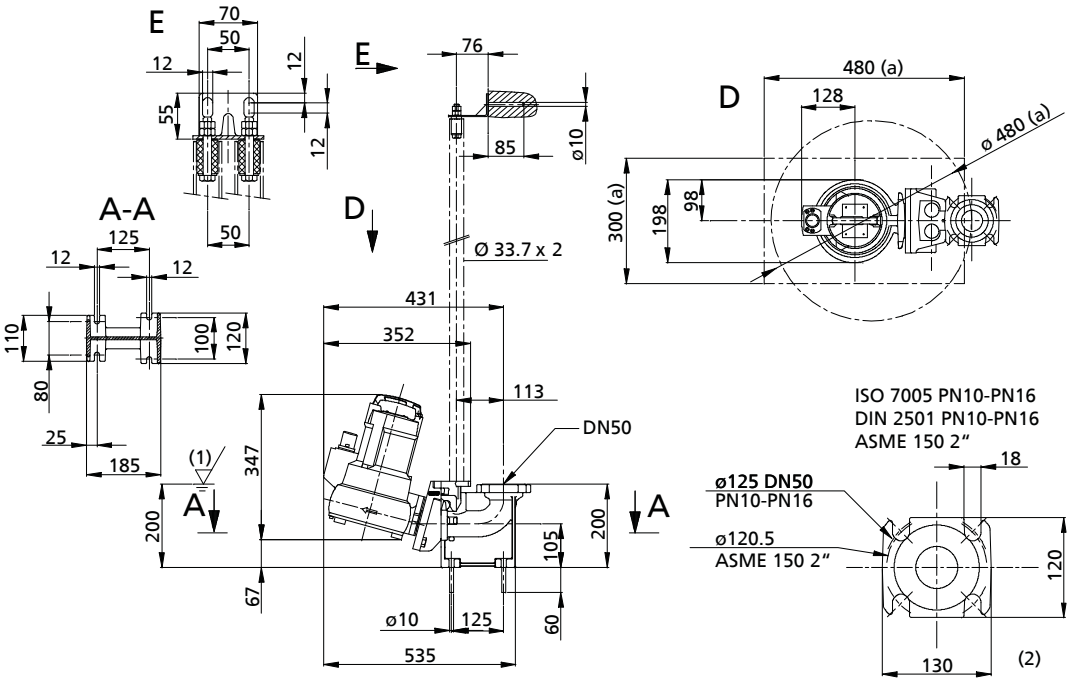
(1)	Lowest switch-off point	(a)	Minimum
(2)	Flange of duckfoot bend		

Ama-Porter 6 _ _, F impeller, stationary wet-installed model with twin guide rails, duckfoot bend DN 65/65



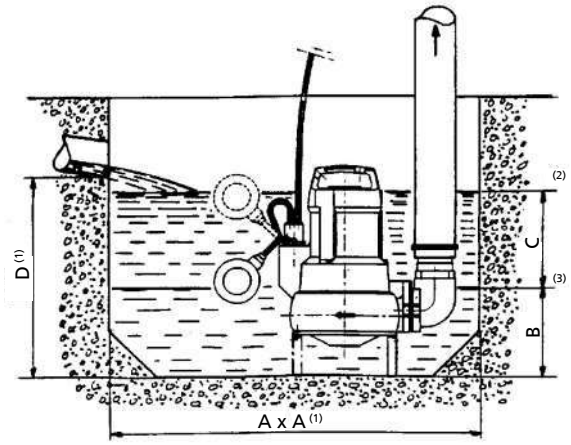
(1)	Lowest switch-off point	(a)	Minimum
(2)	Flange of duckfoot bend		

Ama-Porter S 545, S impeller, stationary wet-installed model with twin guide rails, duckfoot bend DN 50/50



(1)	Lowest switch-off point	(a)	Minimum
(2)	Flange of duckfoot bend		

Sump – Ama-Porter 5 _ _/6 _ _, F impeller / Ama-Porter S 545, S impeller



(1)	Minimum
(2)	ON
(3)	OFF

Size	A	B	C	D
Ama-Porter 5 _ _	600 x 600	160	190	450
Ama-Porter 6 _ _	600 x 600	170	190	480
Ama-Porter S 545	600 x 600	160	190	450

Submersible Motor Pumps without Explosion Protection

Ama-Porter CK Pump Station

http://shop.ksb.com/catalog/k0/en/product/ES000498

Product benefits

- Low weight pump station, ready to connect, minimal installation work
- Installation depths of up to 2500 mm, with anti-lift protection
- Variable pipe connections

Further information

Prices on request

Characteristic curves 146
Dimensions 147

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	LevelControl Basic 2 (⇨ Page 1038)	Level-dependent pump control and monitoring unit with display for either 1 or 2 pumps.
	MSE / MSD (⇨ Page 1035)	Compact switchgear for level-dependent control

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Fluids handled

- Waste water without faeces
- Waste water
- Rainwater (not containing abrasive substances)

Main applications

- Waste water disposal
- Drainage of buildings, drainage of premises
- Redevelopment of premises
- Pumped drainage

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 40
	Q [l/s]	≤ 11
Head	H [m]	≤ 16
Fluid temperature	T [°C]	≤ +40
Motor rating	P_N [kW]	≤ 1,5

Design details

Design

- Ready-to-connect single-pump station or dual-pump station
- 1 or 2 submersible motor pumps
- Compact design
- Package pump station designed to DIN 1986-100 and EN 752 / EN 476
- Polyethylene collecting tank
- Piping
- Clamped connection for connecting a discharge line made of high-density polyethylene (PE-HD)
- Integrated ball check valve with connection for flushing option and ball valve

Installation

- Underfloor (buried) installation

Impeller type

- Free-flow impeller

Designation

Example: Pump Station CK E PF 50-1 E

Designation key

Code	Description	
CK	Package pump station with plastic collecting tank	
E	E	Single-pump station
	D	Dual-pump station
PF	Pump with free-flow impeller	
50	Pump size	
	50	Ama-Porter 5__
	65	Ama-Porter 6__
-1	Impeller code	
E	Motor design	
	E	Single-phase AC motor
	D	Three-phase motor

Materials

Overview of available materials

Part No.	Description	Material
591	Collecting tank	Polyethylene
72-1	Flanged bend	Grey cast iron JL 1040
723	Flange	Cast steel C 50
710	Discharge pipe, connecting pipe	Stainless steel 1.4401
71-9	Adapters, fittings	Malleable cast iron, high-quality hot-dip galvanised
743	Ball valve	CuZn gal. Ni, high-quality nickel-plated

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Technical data

Ama-Porter CK Pump Station 5 _ _: combination with control units / switchgear

Non-explosion-proof pumps, 1~230 V and 3~400 V

Pump Ama-Porter	P_1 [kW]	P_N [kW]	I_N [A]	Single-pump station		Dual-pump station	
				Collecting tank piping DN 50	Control unit	Collecting tank piping DN 50	Control unit LevelControl Basic 2
Ama-Porter 5.. NE, non-explosion-proof, 1~230 V							
500 NE	1,00	0,55	5,00	CK-E	MSE 60.1	CK-D	BC2 230 DFNO 100
501 NE	1,25	0,75	6,00	CK-E	MSE 80.1	CK-D	BC2 230 DFNO 100
502 NE	1,80	1,10	8,20	CK-E	MSE 100.1	CK-D	BC2 230 DFNO 100
503 NE	1,80	1,10	8,20	CK-E	MSE 100.1	CK-D	BC2 230 DFNO 100
Ama-Porter 5.. ND, non-explosion-proof, 3~400 V							
500 ND	0,90	0,55	2,30	CK-E	MSD 40.1	CK-D	BC2 400 DFNO 040
501 ND	1,10	0,75	2,80	CK-E	MSD 40.1	CK-D	BC2 400 DFNO 040
502 ND	1,50	1,10	3,00	CK-E	MSD 40.1	CK-D	BC2 400 DFNO 040
503 ND	2,05	1,50	3,50	CK-E	MSD 60.1	CK-D	BC2 400 DFNO 063

Ama-Porter CK Pump Station 6 _ _: combination with control units / switchgear

Non-explosion-proof pumps, 1~230 V and 3~400 V

Pump Ama-Porter	P_1 [kW]	P_N [kW]	I_N [A]	Single-pump station		Dual-pump station	
				Collecting tank piping DN 65	Control unit	Collecting tank piping DN 65	Control unit LevelControl Basic 2
Ama-Porter 6.. NE, non-explosion-proof, 1~230 V							
601 NE	1,25	0,75	6,00	CK-E	MSE 80.1	CK-D	BC2 230 DFNO 100
602 NE	1,80	1,10	8,20	CK-E	MSE 100.1	CK-D	BC2 230 DFNO 100
603 NE	1,80	1,10	8,20	CK-E	MSE 100.1	CK-D	BC2 230 DFNO 100
Ama-Porter 6.. ND, non-explosion-proof, 3~400 V							
601 ND	1,10	0,75	2,80	CK-E	MSD 40.1	CK-D	BC2 400 DFNO 040
602 ND	1,50	1,10	3,00	CK-E	MSD 40.1	CK-D	BC2 400 DFNO 040
603 ND	2,05	1,50	3,50	CK-E	MSD 60.1	CK-D	BC2 400 DFNO 063

Characteristic curves

Ama-Porter CK Pump Station PF 50-1/2/3/4; n = 2900 rpm

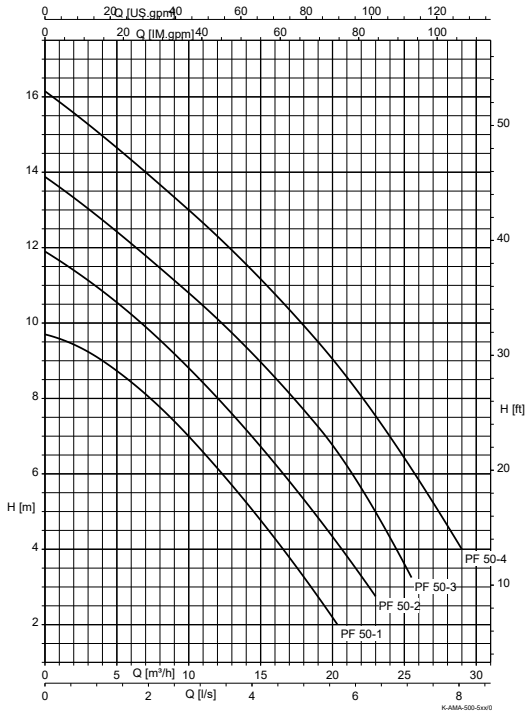


Fig. 54: Free passage:
PF 50-1 = Ama-Porter F 500 = 45 mm
PF 50-2 = Ama-Porter F 501 = 45 mm
PF 50-3 = Ama-Porter F 502 = 43 mm
PF 50-4 = Ama-Porter F 503 = 41 mm

Ama-Porter CK Pump Station PF 65-1/2/3; n = 2900 rpm

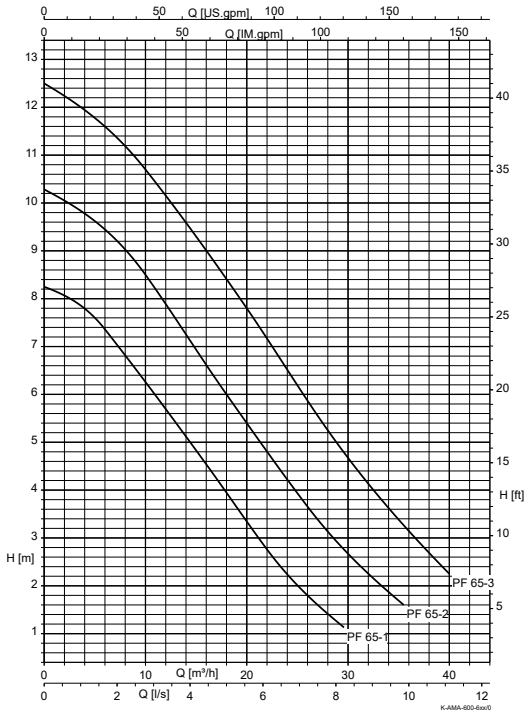


Fig. 55: Free passage:
PF 65-1 = Ama-Porter F 601 = 60 mm
PF 65-2 = Ama-Porter F 602 = 58 mm
PF 65-3 = Ama-Porter F 603 = 56 mm

Dimensions

Tank dimensions

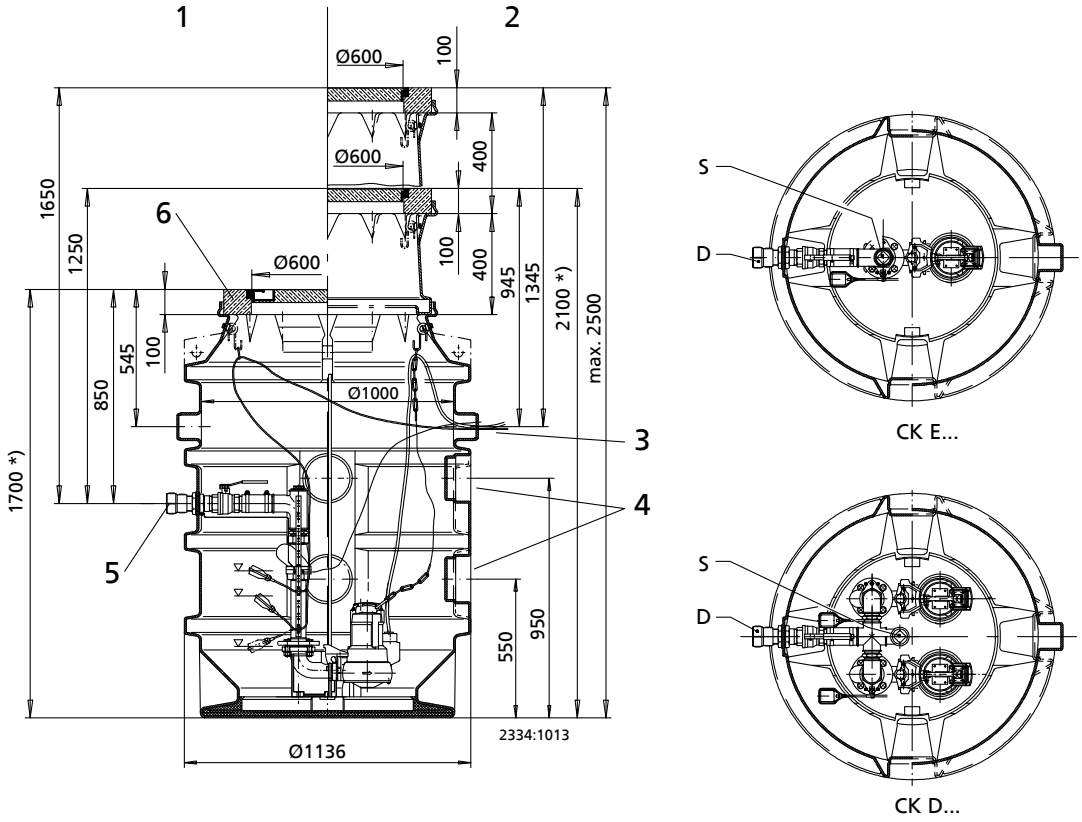


Fig. 56: Tank dimensions

1	Standard	2	With tank extension
3	Two (opposite) DN 100 nozzles for venting and cable entry, for sewer pipe	4	Six DN 150 inlet sockets for PVC sewer pipe
5	Discharge line connection	6	Class A 15 cover
S	Flushing connection and vacuum breaker	D	Discharge line connection
*)	Three height compensation rings to DIN 4034 - AR 625x100 can be used in addition		

D = Discharge line connection incl. clamped connection

Piping	Flushing connection S	Discharge line connection D
DN 50 CK-E	Rp 2	PE-HD 63
DN 50 CK-D	Rp 2	PE-HD 63
DN 65 CK-E	Rp 2	PE-HD 75
DN 65 CK-D	Rp 2	PE-HD 75

Dry-installed Volute Casing Pumps

KWP

http://shop.ksb.com/catalog/k0/en/product/ES000018

Product benefits

- Easy to service thanks to back pull-out design
- Safe design: all pressure-retaining components cast with extra corrosion/wear allowance.
- Standard pump with suction-side wear plate in wear-resistant diagonal gap design
- High levels of efficiency with channel-type impeller; impeller with front vanes and diagonal gap; back vanes reduce axial thrust
- Dry shaft: no special materials required
- Bearing assembly in reinforced, adjustable design
- Mechanical seal fitted in conical shaft seal chamber for optimum circulation around the mechanical seal, venting and drainage of the shaft seal chamber

Further information

Prices on request

Selection charts 151

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Paper industry / pulp industry
- Sugar industry
- Food industry / beverage industry
- Fossil-fuelled power stations
- Chemical industry
- Petrochemical industry
- Flue gas desulphurisation
- Coal upgrading plants
- Industrial waste water treatment systems
- Seawater desalination/reverse osmosis

Fluids handled

- Contaminated fluids
- Fluids containing solids
- Pre-treated waste water
- Industrial and municipal waste water
- All types of slurries without stringy material

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 15000 [48]
Head	H [m]	≤ 100 [48]
Operating temperature	T [°C]	≥ -40 [48]
		≤ +140 [48]
Operating pressure	p [bar]	≤ 10 [48]

Design details

Design

- Volute casing with integrally cast pump feet
- Radially split volute casing
- Back pull-out design
- Single-stage
- Single-suction

48 Higher values on request

Installation types

- Horizontal installation

Drive

- Electric motor connected to the pump via a coupling or belt drive

Shaft seal

- Gland packing
- Single mechanical seal / double mechanical seal
- Shaft equipped with replaceable shaft protecting sleeve in the shaft seal area

Impeller type

- Various application-oriented impeller types

Bearings

- Oil-lubricated rolling element bearings
- Back pull-out design with axially adjustable pump rotor to adjust the clearance between impeller and wear plate

Automation

Automation options:

- PumpDrive
- PumpMeter

Connections

DN 40 - DN 150:

- Suction flange with tapped blind hole 1.25 × d, mating dimensions to DIN 2501, PN10/16
- Discharge flange with through-holes to EN 1092-2, PN10/16

DN 200 - DN 350:

- Suction flange with tapped blind hole 1.25 × d, mating dimensions to DIN 2501, PN10
- Discharge flange with through-holes to EN 1092-2, PN10

From DN 400 plus 350-350-500:

- Suction flange with through-holes to EN 1092-2, PN10
- Discharge flange with through-holes to EN 1092-2, PN10

From DN 600:

- Suction flange with through-holes to EN 1092-2, PN10
- Discharge flange with tapped through-holes, DIN 2501, PN10

Designation

Designation example

Position																														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
K	W	P	F	1	2	5	-	1	0	0	-	0	2	5	0		G	N	N	G	1	0	P	4	X	3	N	H		5	5	4
See name plate and data sheet																							See data sheet									

Designation key

Position	Code	Description	
1-3	Pump type		
	KWP	KWP	
4	Impeller		
	F	Free-flow impeller	
	K	Channel impeller	
	O	Open impeller	
5-17	Size, e.g.		
	125	Nominal suction nozzle diameter [mm]	
	100	Nominal discharge nozzle diameter [mm]	
	0250	Nominal impeller diameter [mm]	
18	Pump casing material		
	D	NORIDUR	1.4593
	G	Grey cast iron	GJL-250
	H	NORIHARD NH 15 3	-
	K	Nodular cast iron / CeramikPolySiC	GJS-400-18-LT / -
19	Impeller material		
	D	NORIDUR	1.4593
	H	NORIHARD NH 15 3	-
	K	CeramikPolySiC	-
	M	NORICROM	1.4475
	N	ERN	-
	U	NORIDUR DAS	1.4593
20	Wear plate material / wear ring material		
	D	NORIDUR	1.4593
	H	NORIHARD NH 15 3	-
	K[49)]	CeramikPolySiC	-

49 K defines a suction cover in GJS-400-18-LT/ CeramikPolySiC for pumps without a separate wear plate

Position	Code	Description	
20	M	NORICROM	1.4475
	N	ERN	-
	U	NORIDUR DAS	1.4593
21	Discharge cover material		
	D	NORIDUR	1.4593
	G	Grey cast iron	GJL-250
	H	NORIHARD NH 15 3	-
	K	CeramikPolySiC	-
	M	NORICROM	1.4475
22-23	Design version		
	10	10	
	11	11	
24-25	Shaft seal operating mode		
	A	Single mechanical seal in A-type cover	
	CA	Single cartridge mechanical seal	
	CBA	Double cartridge seal with barrier fluid	
	DR	Double mechanical seal in cylindrical cover, with barrier fluid	
	P3	Gland packing (arrangement I = 2/1/2) for barrier fluid	
	P6	Gland packing (arrangement II = 1/1/3) for barrier fluid	
	P4	Gland packing (arrangement IIa = -/1/3) for flushing liquid	
	TA	Double mechanical seal in A-type cover, unpressurised	
	TS	Double mechanical seal in A-type cover, with barrier fluid	
26	Design		
	-[50]	Standard	
	X	Non-standard (BT3D, BT3)	
27-29	Installation type		
	0	Pump only (Fig. 0 bare-shaft pump)	
	3N	Pump, motor, baseplate, non-spacer-type coupling (Fig. 3E)	
	3NH	Pump, motor, baseplate, spacer-type coupling (Fig. 3E)	
	BH	Close-coupled, horizontal	
	BV	Close-coupled, vertical	
30-32	Motor rating P_N [kW]		
	055	55	
	132	132	
33	Number of motor poles		

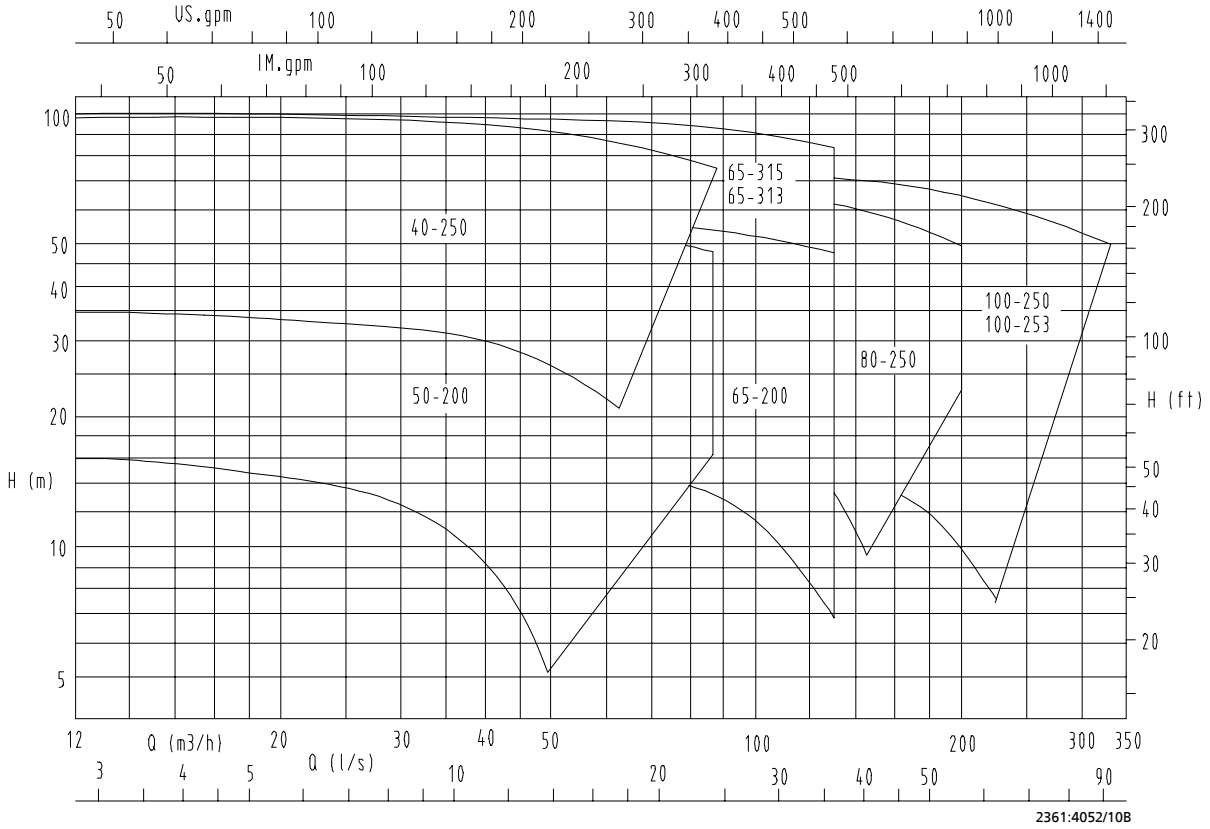
Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

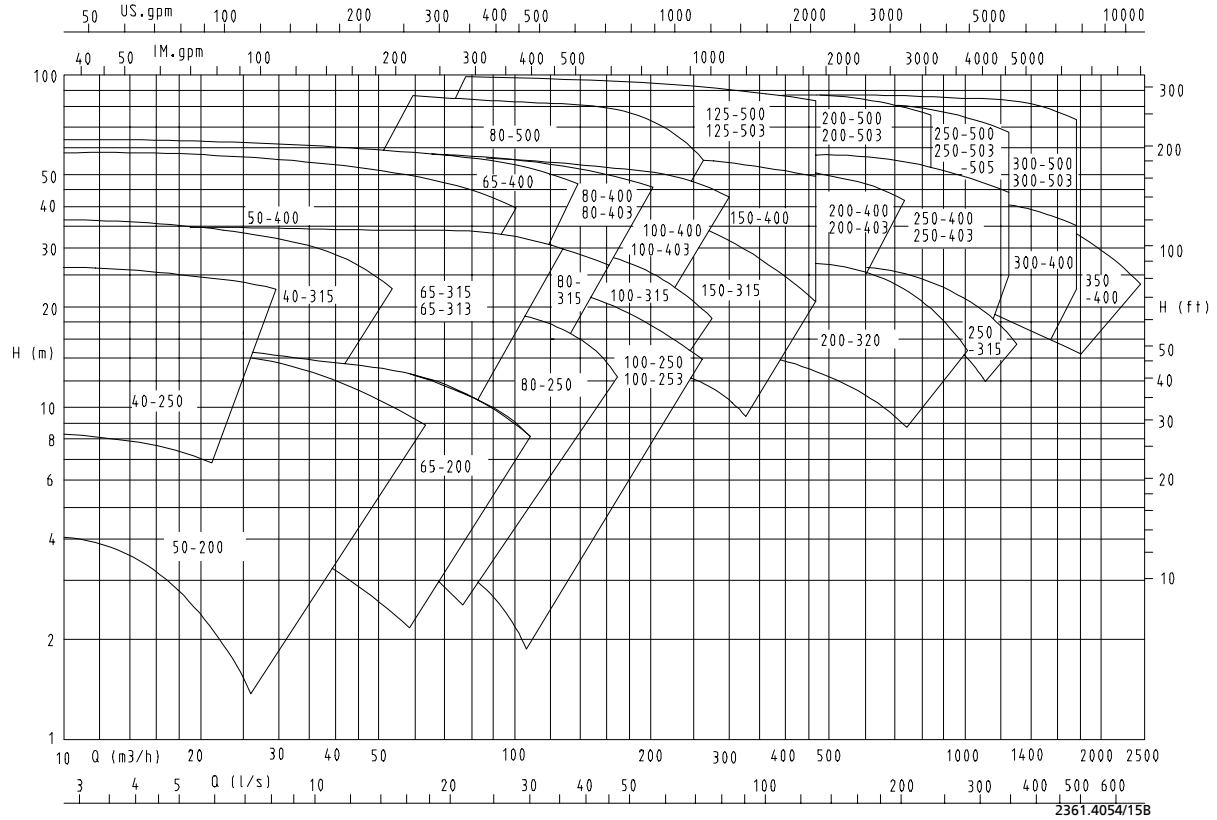
50 Blank

Selection charts

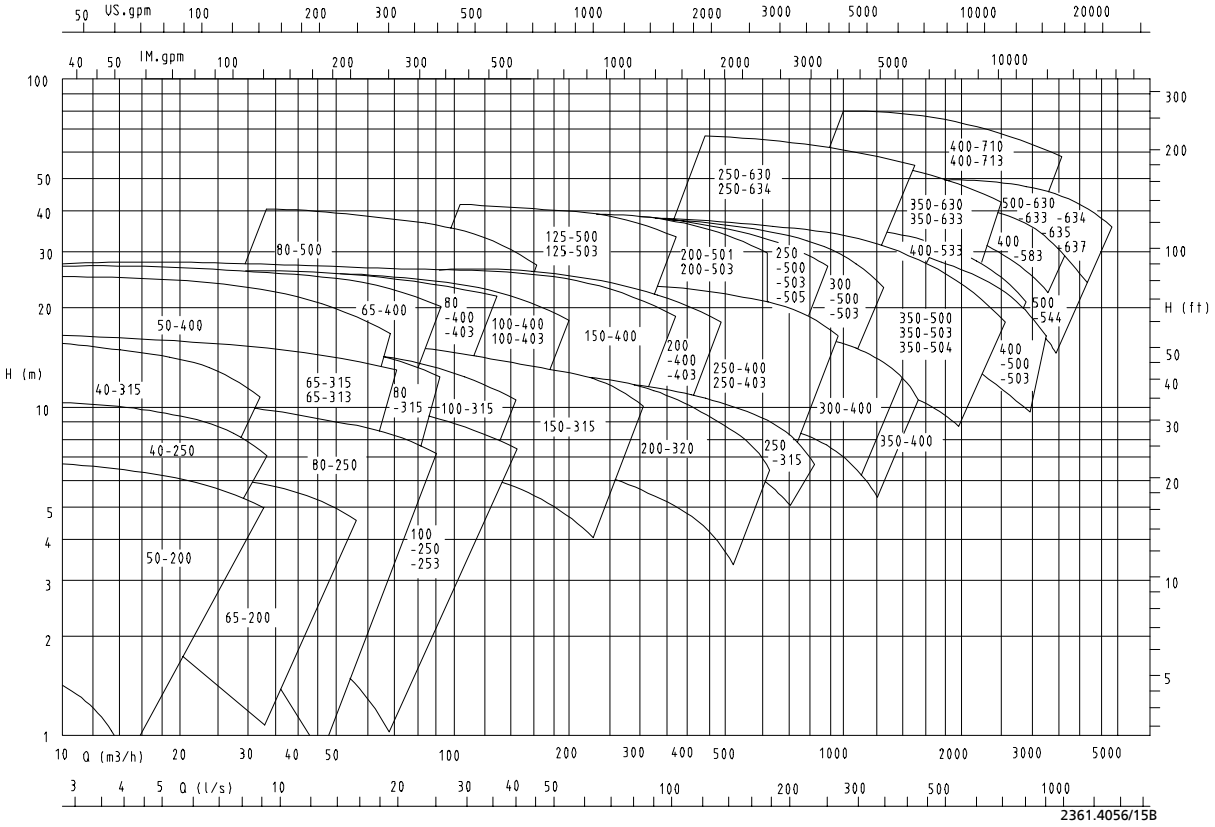
KWP K, n = 2900 rpm



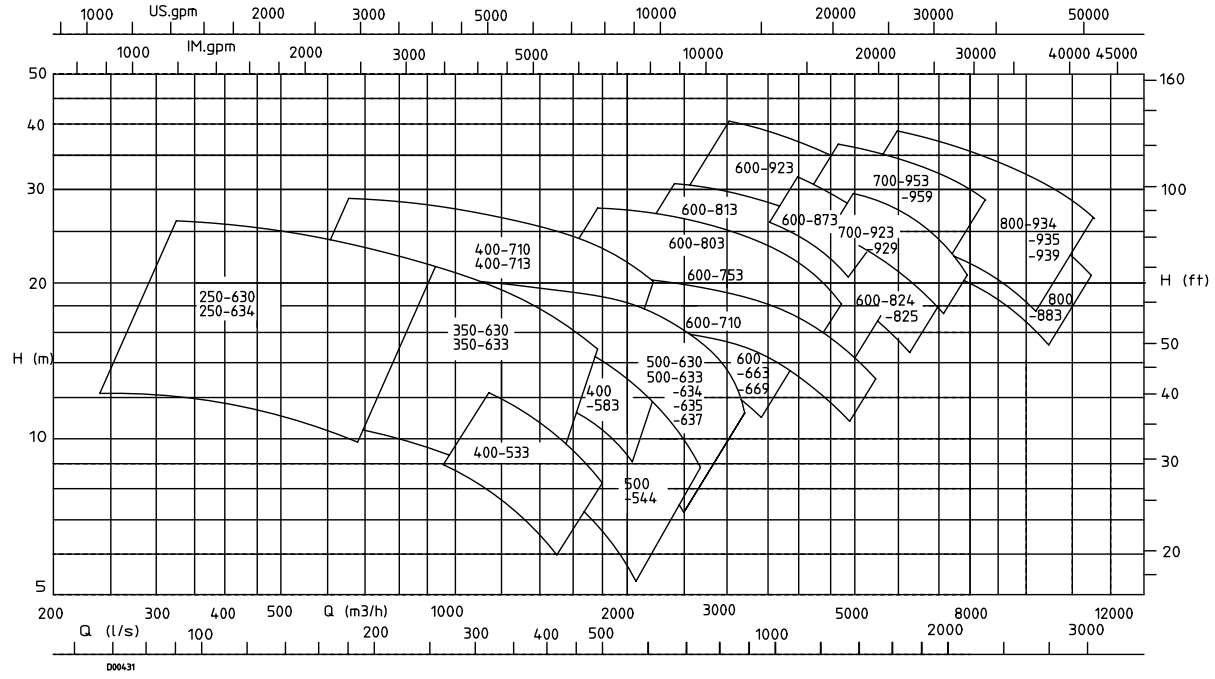
KWP K, n = 1450 rpm



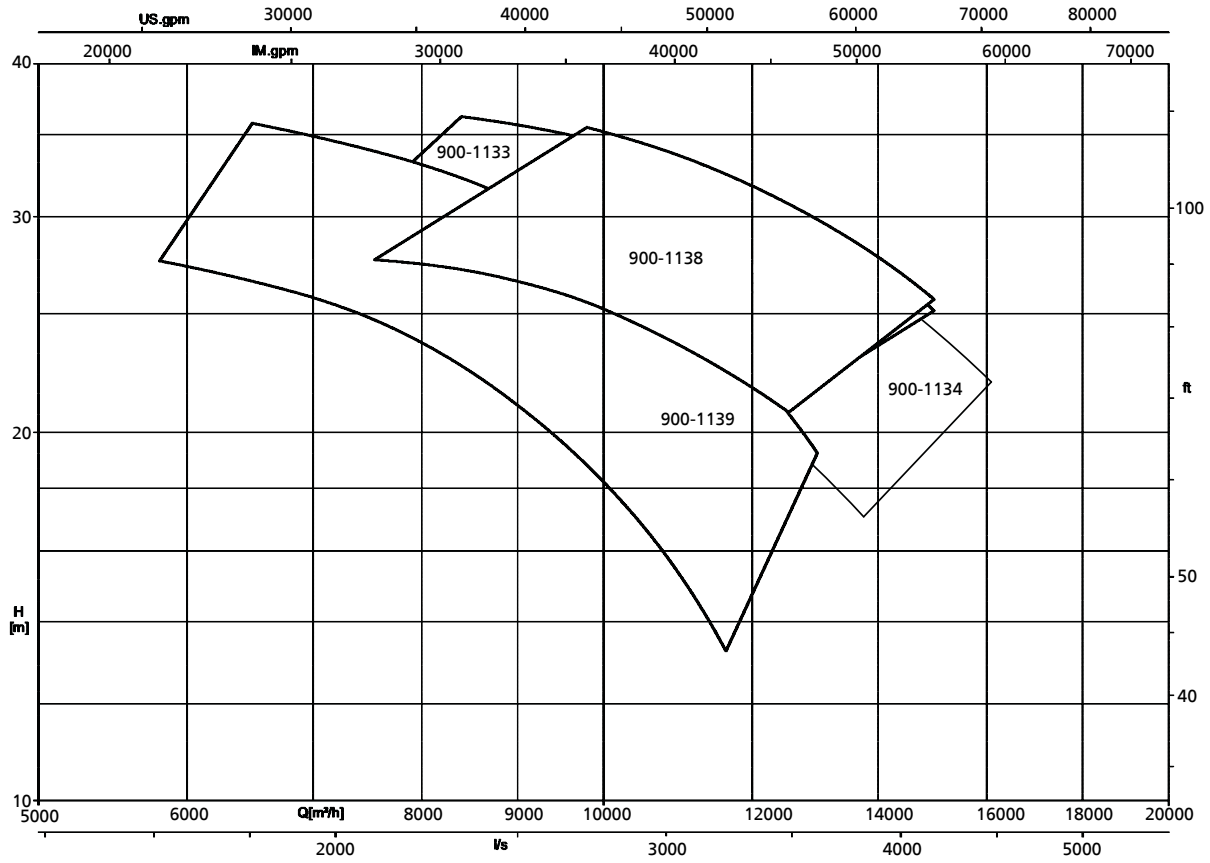
KWP K, n = 960 rpm



KWP K, n = 580 rpm



KWP K, n = 480 rpm



Dry-installed Volute Casing Pumps

Sewabloc

http://shop.ksb.com/catalog/k0/en/product/ES000069

Product benefits

- Variable hydraulic system: the right impeller with optimum efficiency for every fluid. High operating reliability due to wide free passages.
- Double mechanical seal in tandem arrangement with fluid reservoir makes for high operating reliability.
- Low maintenance thanks to grease-packed rolling element bearings
- Standardised components are interchangeable within the Sewatec/Sewabloc and Amarex KRT series, so spare parts inventories can be optimised and costs reduced.

Further information

Prices on request

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	LevelControl Basic 2 (⇨ Page 1038)	Level-dependent pump control and monitoring unit with display for either 1 or 2 pumps.
	MSE / MSD (⇨ Page 1035)	Compact switchgear for level-dependent control
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[51)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

51 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Description / design

Close-coupled volute casing pump for horizontal or vertical installation, with various next-generation impeller types, discharge flange to DIN and ANSI standards. Explosion-proof version available.

Main applications

- Waste water transport
- Waste water disposal
- Waste water management
- Transport of contaminated surface water
- Sludge processing

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Dry-installed Volute Casing Pumps

Sewatec

http://shop.ksb.com/catalog/k0/en/product/ES000068

Product benefits

- Variable hydraulic system: the right impeller with optimum efficiency for every fluid. High operating reliability due to wide free passages.
- Double mechanical seal in tandem arrangement with fluid reservoir makes for high operating reliability.
- Low maintenance thanks to grease-packed rolling element bearings
- Standardised components are interchangeable within the Sewatec/Sewabloc and Amarex KRT series, so spare parts inventories can be optimised and costs reduced.

Further information

Prices on request

Further information

	Amacontrol III (⇨ Page 1075)	Protection module for water products / waste water products
	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	LevelControl Basic 2 (⇨ Page 1038)	Level-dependent pump control and monitoring unit with display for either 1 or 2 pumps.
	MSE / MSD (⇨ Page 1035)	Compact switchgear for level-dependent control
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[52)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

52 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

Volute casing pump for horizontal or vertical installation, with various next-generation impeller types, discharge flange to DIN and ANSI standards. Explosion-proof version available.

Main applications

- Waste water transport
- Waste water disposal
- Waste water management
- Transport of contaminated surface water
- Sludge processing

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Automatic Waste Water Lifting Units

Ama-Drainer-Box Mini

http://shop.ksb.com/catalog/k0/en/product/ES000862

Product benefits

- Impact-resistant plastic collecting tank
- Ready-to-connect, easy installation and commissioning
- Integrated swing check valve
- Shower connection as standard

Further information

Prices on request

Characteristic curve.....160
Dimensions and connections.....161

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certificates

Overview

Label	Effective in:
PLUS X AWARD ausgezeichnet als: BESTES PRODUKT DES JAHRES 2012 / PLUS X AWARD ausgezeichnet für: Design Funktionalität	All countries
TÜVRheinland CERTIFIED Type Tested and Monitored www.tuv.com ID 0217007933	Europe

Fluids handled

Standard design

- Chemically neutral waste water
- Slightly contaminated waste water (up to 50 °C max.)
- Wash water (up to 90 °C max. for short periods t ≤ 3 minutes)

Variant C for aggressive fluids

- Swimming pool water
- Brackish water
- Seawater
- Water containing salt
- Aggressive fluids
- Condensate from heat recovery applications

Ama-Drainer-Box Mini is not suitable for sewage from urinals and toilets. Use a mini-Compacta sewage lifting unit for this purpose.

Main applications

Single-pump units, Above-floor box Mini

- Automatic disposal of waste water from washbasins, showers, washing machines, dishwashers, etc.

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 10
	Q [l/s]	≤ 2,8
Head	H [m]	≤ 6,5
Fluid temperature	T [°C]	≤ +50 [53)]

Design details

Design

- Tank made of impact-resistant plastic
- Odour-proof cover with activated carbon filter and integrated overflow protection
- Submersible motor pump which starts and stops automatically, with float switch
- Integrated swing check valve
- To EN 12050-2

Installation

- Stationary above-floor installation
- Stationary wall mounting

Drive

- AC motor
- Integrated temperature switches
- Power cable incl. shockproof plug

Impeller type

- Open multi-vane impeller
- Free passage= 10 mm

Connections

- Inlet DN 32 / DN 40 / DN 50
- Discharge-side connection DN 40
- Shower connection DN 50
- Venting via DN 40 spigot and socket connection

53 Up to a maximum of 3 minutes for waste water from the hot water cycle of washing machines and dishwashers for non-industrial use

Designation

Example: Ama-Drainer-Box Mini C

Designation key

Code	Description	
Ama-Drainer-Box	Type series	
Mini	Small lifting unit	
C	Material variant	
	C	Variant for aggressive fluids
	-[54]	Standard design

Materials

Overview of available materials

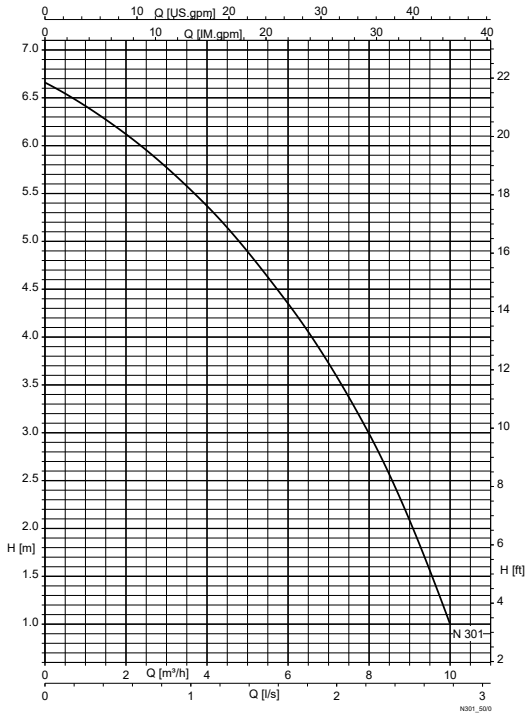
Part No.	Component	Ama-Drainer-Box Mini
591	Collecting tank	ABS
655	Pump	See Ama-Drainer N 301 (C) type series booklet.

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Characteristic curve

Ama-Drainer-Box Mini; n = 2800 rpm



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Dimensions and connections

Above-floor box single-pump unit

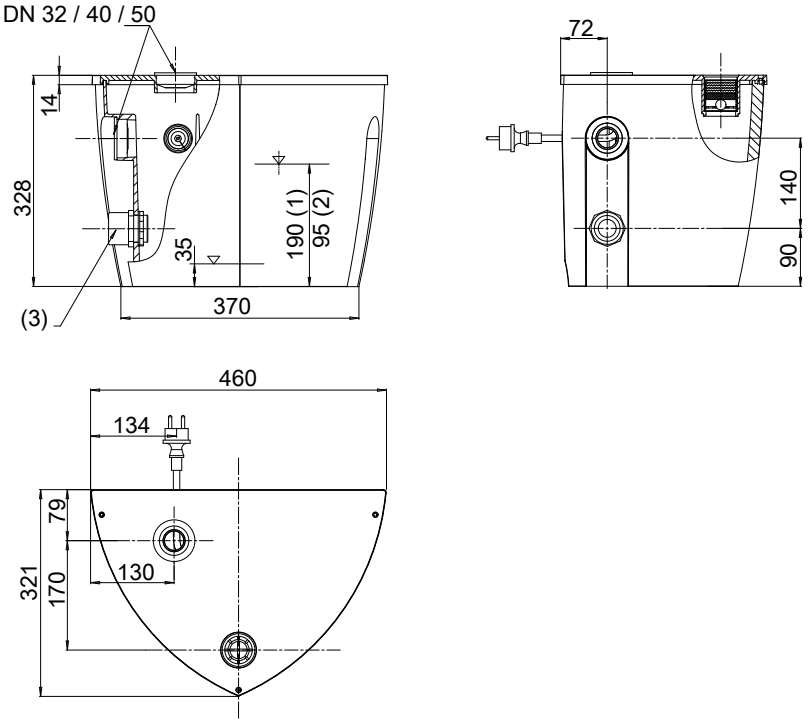


Fig. 57: Ama-Drainer-Box Mini connections and dimensions

(1)	Switching point for standard design	(3)	Connection to a shower
(2)	Switching point for connection to a shower		

Ama-Drainer-Box Mini connections

Above-floor box	Description
Inlet	Pipe DN 50 (rubber socket) or DN 40/DN 32, optionally on right/left/above Washing machine connection, horizontal/vertical (Y-drain pipe) Shower connection, DN 50 fitting, outside diameter 50 mm, optionally on right/ left
Discharge side	Pipe DN 40 (rubber socket), optionally on right/ left
Venting	Carbon filter insert with overflow protection Recommendation: Lead vent line out of roof, maximum outside pipe diameter 40 mm

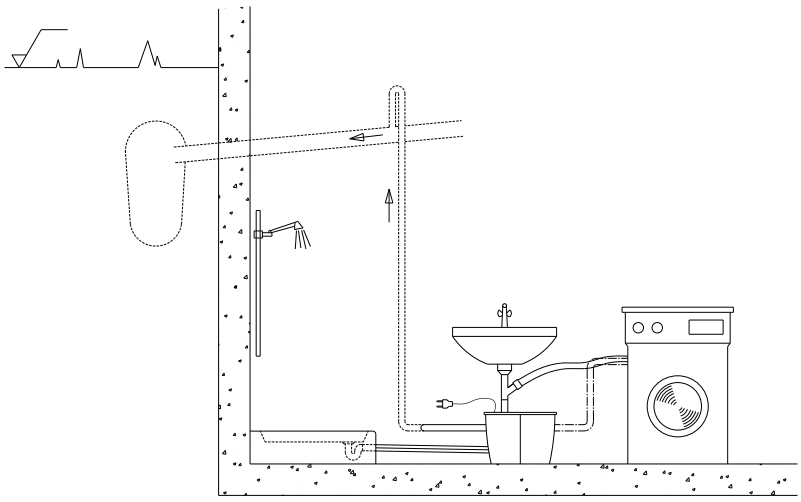


Fig. 58: Connection example (For water levels above the flood level, we recommend installing a gate valve on the discharge side.)

Automatic Waste Water Lifting Units

Ama-Drainer-Box

http://shop.ksb.com/catalog/k0/en/product/ES000262

Product benefits

Reliable single-pump unit / dual-pump unit for underfloor installation / above-floor installation for all pumps of the Ama-Drainer type series

Underfloor box U:

- Floor drain with siphon trap integrated in the cover plate
- Level-adjustable and rotatable extension
- Integrated swing check valve
- Broad range of submersible motor pumps
- Single-pump unit or dual-pump unit
- Graded-diameter nozzles offset by 180° for connecting inlet and vent lines
- Sealing collar for connecting a moisture barrier (optional)
- Puddle flange to protect against penetrating groundwater (optional)

Above-floor box B:

- Odour-proof cover (for Box 1 B incl. taper lock ring for tool-free fitting and removal)
- Integrated swing check valve
- Broad range of submersible motor pumps
- Single-pump unit or dual-pump unit
- Graded-diameter nozzles offset by 180° for connecting inlet and vent lines
- The discharge line can be connected either on the left- or right-hand side, as well as vertically (Box 1 B).

Further information

Prices on request

Characteristic curves 165
Dimensions and connections 168

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	LevelControl Basic 2 (⇨ Page 1038)	Level-dependent pump control and monitoring unit with display for either 1 or 2 pumps.

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certificates

Overview

Label	Effective in:
Type Tested and Monitored TÜVRheinland CERTIFIED www.tuv.com ID 0217007933	Europe

Fluids handled

Ama-Drainer A /10 /11 – Standard design for waste water:

- Slightly contaminated water
- Solid particles with a particle size of up to 10 or 11 mm

Ama-Drainer A /35 – Standard design for waste water:

- Waste water containing long fibres and stringy material
- Solid particles with a particle size of up to 35 mm

Ama-Drainer C – Variant for aggressive waste water:

- Condensate from heat recovery applications
- Lab waste water containing low concentrations of foreign substances (pH 5 to 12)
- Cleaning agents, disinfecting agents, aggressive dishwashing agents and laundry agents (DIN 1986-3)
- Solid particles with a particle size of up to 35 mm

Ama-Drainer R – Variant for waste water containing oil or oil emulsions:

- Oil-water emulsions in car repair shops and at petrol stations
- Solid particles with a particle size of up to 10 or 11 mm

Ama-Drainer-Box is **not** suitable for sewage from urinals and toilets. Use a mini-Compacta sewage lifting unit for this purpose.

Main applications

- Automatic drainage of buildings and premises below the flood level

Single-pump lifting units:

- Automatic disposal of domestic waste water from washing machines, washbasins, sinks, showers or bathtubs
- Disposal of highly contaminated, fibre-containing water from industrial applications, e.g. laundries, common washing facilities, washing machines and dish washers (also hot water cycle)
- Overflow protection for rainwater harvesting systems or inlet tanks of fire-fighting systems

Dual-pump lifting units:

- Design units requiring uninterrupted waste water drainage as dual-pump units (Z), as stipulated in EN 12 050-2.
- Automatic drainage of rooms, garage driveways and cellars (frost-free) with a leakage risk
- Overflow protection for rainwater harvesting systems or inlet tanks of fire-fighting systems

Operating data

Operating properties

Characteristic		Value	
		Single-pump station	Dual-pump station
Flow rate	Q [m³/h]	≤ 35	≤ 46

Characteristic		Value	
		Single-pump station	Dual-pump station
Flow rate	Q [l/s]	≤ 9,7	≤ 12,8
Head	H [m]	≤ 21	≤ 24
Fluid temperature	T [°C]	≤ +40 (continuous duty)	
		≤ +90 (short-time duty, ≤ 3 minutes)	
Total tank volume	V [l]	≤ 100	≤ 200

Design details

Design

- Single-pump unit or dual-pump unit
- 1 or 2 submersible motor pumps
- Fill level measurement via float switch
- Nominal tank volume 100 l or 200 l
- Collecting tank made of impact-resistant plastic
- Piping
- Integrated swing check valve
- To EN 12050-2

Underfloor box:

- Level-adjusting extension, cover plate with floor drain and siphon trap

Above-floor box:

- Closed by odour-proof cover and locking ring

Installation

Underfloor box:

- Installation in substructures or foundations

Above-floor box:

- Mounting on the floor

Drive

- AC motor
- Three-phase motor
- Integrated temperature switches

Impeller type

- Open multi-vane impeller, free passage 10/11 mm
- Free-flow impeller, free passage 35 mm

Connections

Single-pump lifting units:

- Inlet side DN 50 / DN 70 / DN 100
- Discharge outlet DN 50 / G 2

Dual-pump lifting units:

- Inlet side DN 50 / DN 70 / DN 100 / DN 150
- Discharge outlet DN 50 / G 2

Designation

Example: Ama-Drainer-Box Z2 U 301

Designation key

Code	Description	
Ama-Drainer-Box	Type series	
Z	Design	
	-[55]	Single-pump station
	Z	Dual-pump station
2	Tank volume	
	1	100 l
	2	200 l
U	Installation type	
	B	Above-floor installation
	U	Underfloor installation
301	Pump code number	
	301	Ama-Drainer N 301

Materials

Overview of available materials

Part No.	Description	Ama-Drainer-Box	
		Underfloor	Above-floor
591	Collecting tank	Polyethylene (PE)	Polyethylene (PE)
13-21	Extension	Polyethylene (PE)	-
185	Cover	Polyurethane (PUR)	-
160	Cover	-	Polyethylene (PE)
68-3	Floor drain	Polyamide (PA)	-
655	Pump	See type series booklets for Ama-Drainer N, 4../5..	

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

55 Blank

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Characteristic curves

Ama-Drainer N 301, 302, 303; n = 2800 rpm, multi-vane impeller

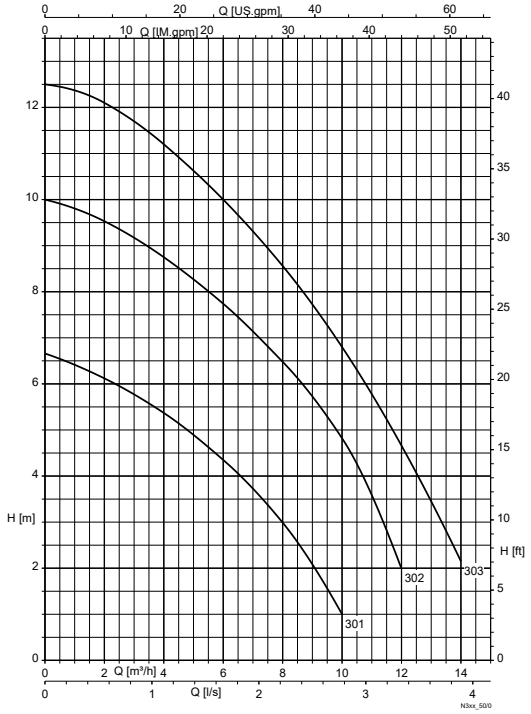


Fig. 59: Free passage: 301/302/303 = 10 mm

Ama-Drainer N 358; n = 2800 rpm, F impeller

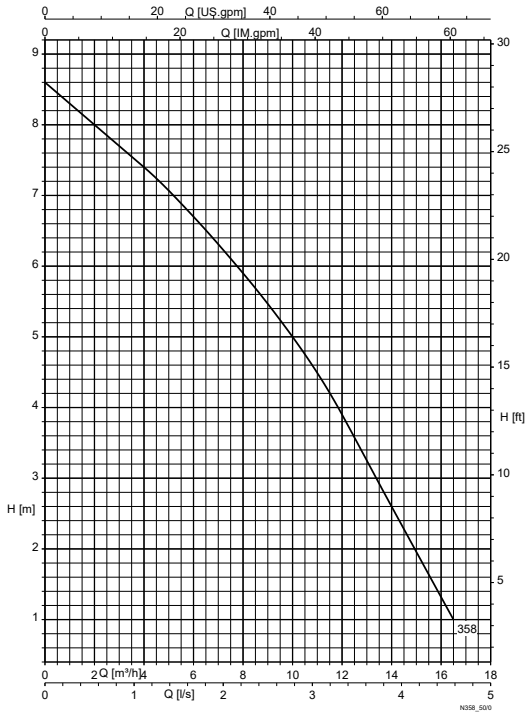


Fig. 60: Free passage: 358 = 35 mm

Ama-Drainer 4 / 5, n = 2800 rpm, multi-vane impeller

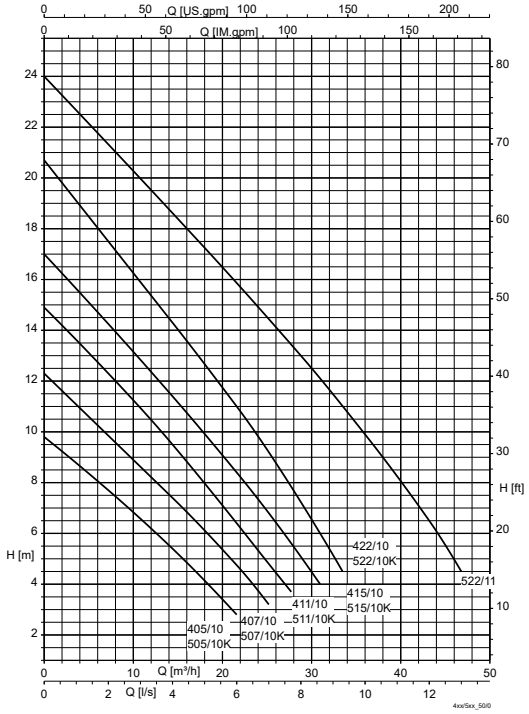


Fig. 61: Free passage: 405 - 515 = 10 mm, 522 = 11 mm

Performance tolerance to ISO 2548 Class C (water under standard conditions)

The characteristic curves shown are those of the respective pumps. Hydraulic losses caused by the discharge-side piping, both inside and outside of the Ama-Drainer-Box lifting unit, must be taken into account during product selection.

Ama-Drainer 4, n = 2800 rpm, F impeller

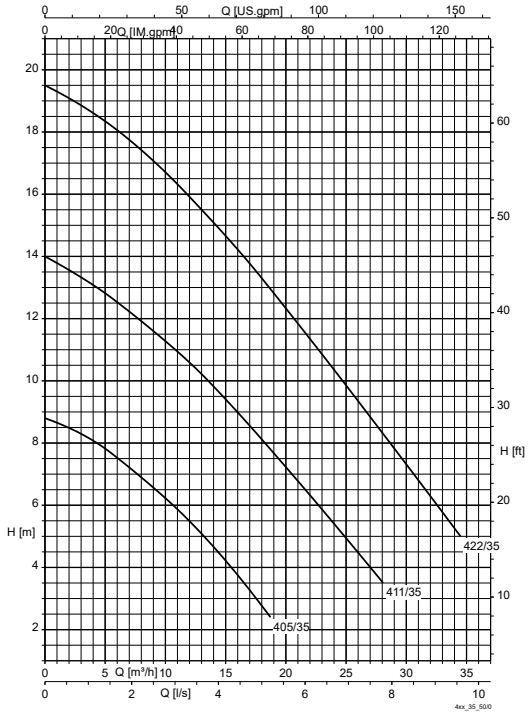


Fig. 62: Free passage: 405/411/422 = 35 mm

Performance tolerance to ISO 2548 Class C (water under standard conditions)

The characteristic curves shown are those of the respective pumps. Hydraulic losses caused by the discharge-side piping, both inside and outside of the Ama-Drainer-Box lifting unit, must be taken into account during product selection.

Scope of supply

The off-the-shelf range contains the complete waste water lifting unit as one material number. In the configurable range, the waste water lifting unit is composed of individually selected components. Waste water lifting units from both the off-the-shelf range and the configurable range are supplied in several parts for assembly on site. Ama-Drainer-Box waste water lifting units meet the requirements of EN 12050-2.

Underfloor box 1 U – single-pump unit

- Collecting tank made of impact-resistant plastic, 100 litres, for installation in substructures or foundations. Cover with level-adjusting extension, cover plate with floor drain and siphon trap.

Supplied in three parts:

- Collecting tank with extension, cover plate Class K3
- Submersible waste water pump that starts and stops automatically, with 5 m or 10 m power cable (depending on pump size), shockproof plug or CEE plug[56)]
- Connection set with full set of installation parts, swing check valve[57)]

Underfloor box Z2 U – dual-pump unit

- Collecting tank made of impact-resistant plastic, 200 litres, for installation in substructures and foundations. Cover with level-adjusting extension, cover plate with floor drain and siphon trap.

Supplied in four parts:

- Collecting tank with extension, cover plate Class K3
- Two submersible waste water pumps with 10 m power cable, shockproof plug or free cable end (for models with three-phase motor).
- Connection set with full set of installation parts, swing check valve[58)], two float switches, with 10 m cable
- LevelControl Basic 2 control unit for dual-pump units with automatic pump changeover function, peak-load operation function, stand-by function

Above-floor box 1 B – single-pump unit

- Collecting tank made of impact-resistant plastic, 100 litres, for floor mounting; closed with odour-proof cover and locking ring

Supplied in three parts:

- Collecting tank with cover, locking ring
- Submersible waste water pump that starts and stops automatically, with 5 m or 10 m power cable (depending on pump size), shockproof plug or CEE plug[59)]
- Connection set with full set of installation parts, swing check valve[60)]

Above-floor box Z2 U – dual-pump unit

- Collecting tank made of impact-resistant plastic, 200 litres, for floor mounting; closed with odour-proof, screw-on cover

Supplied in four parts:

- Collecting tank with cover, locking ring
- Two submersible waste water pumps with 10 m power cable, shockproof plug or free cable end (for models with three-phase motor).
- Connection set with full set of installation parts, swing check valve[61)], two float switches, with 10 m cable
- LevelControl Basic 2 control unit for dual-pump units with automatic pump changeover function, peak-load operation function, stand-by function

56 For models with three-phase motor
57 Ama-Drainer N 301, N 302 and N 303 with integrated swing check valve
58 Ama-Drainer N 301, N 302 and N 303 with integrated swing check valve
59 For models with three-phase motor
60 Ama-Drainer N 301, N 302 and N 303 with integrated swing check valve
61 Ama-Drainer N 301, N 302 and N 303 with integrated swing check valve

Dimensions and connections

Underfloor box single-pump unit 1 U

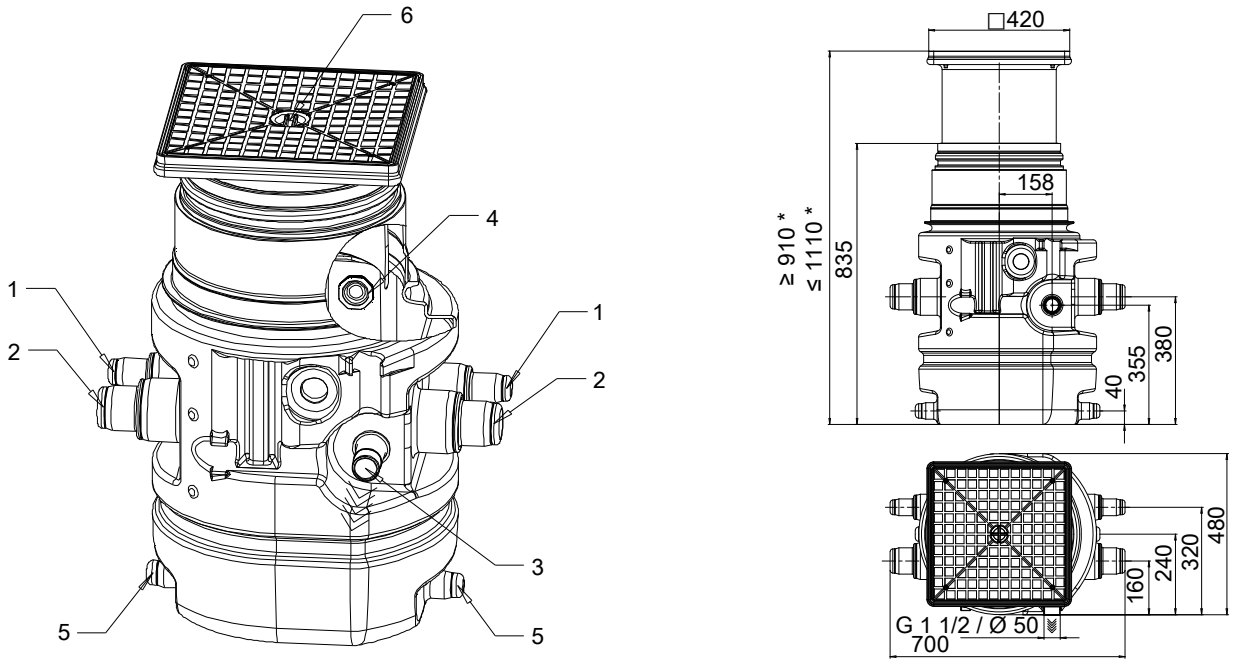


Fig. 63: Ama-Drainer-Box 1 U connections and dimensions

Ama-Drainer-Box 1 U connections

1	Inlet connection nozzles horizontal 2 × DN 50/70 graded, opposite each other, outside diameter 50/78 mm
2	Inlet connection nozzles horizontal 2 × DN 70/100 graded, opposite each other, outside diameter 78/110 mm
1 / 2	Vent, connection nozzle DN 50/70/100
1 / 2	Cable entry connection nozzle DN 50/70/100 or venting
3	Discharge outlet horizontal DN 40, threaded connection G 1 1/2 / smooth pipe end (glued nozzle), outside diameter 50 mm
4	PG 36 cable gland for a conduit, inside diameter 24 mm (for single-phase AC current only)
5	Emergency drainage horizontal 2 × DN 40, opposite each other, outside diameter 49 mm
6	Floor drain DN 50
*	Installation depth

Above-floor box single-pump unit 1 B

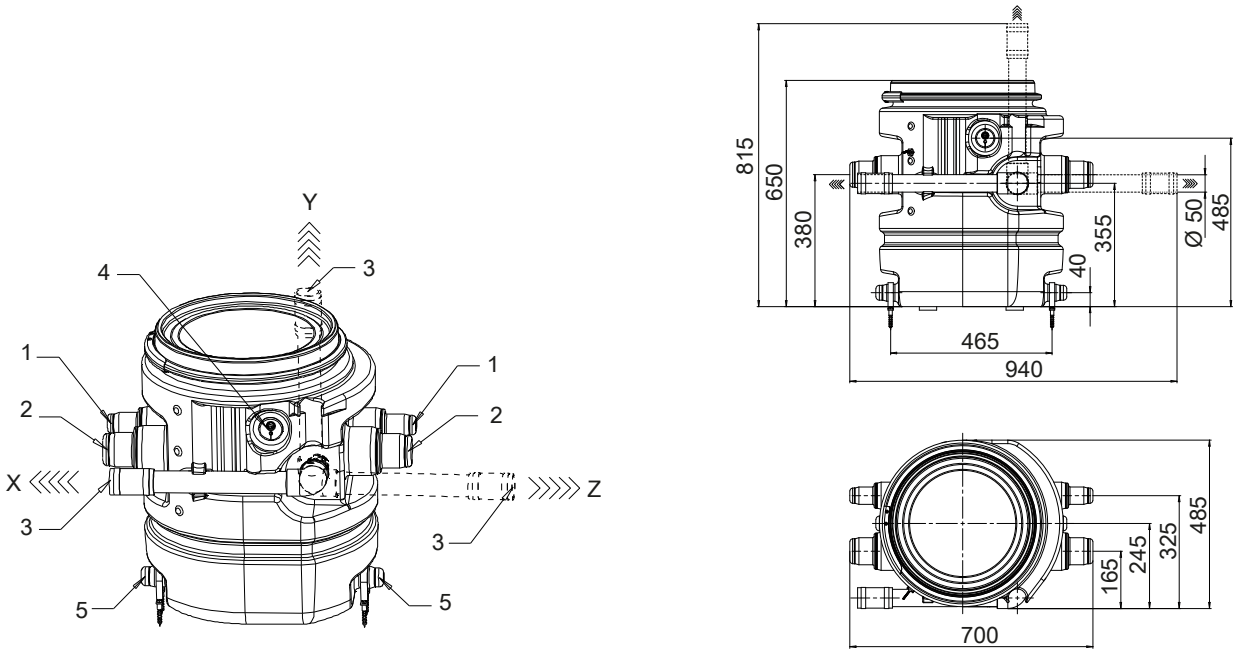


Fig. 64: Ama-Drainer-Box 1 B connections and dimensions

Ama-Drainer-Box 1 B connections

1	Inlet connection nozzles horizontal 2 × DN 50/70 graded, opposite each other, outside diameter 50/78 mm
2	Inlet connection nozzles horizontal 2 × DN 70/100 graded, opposite each other, outside diameter 78/110 mm
1 / 2	Vent, free connection nozzle DN 50/70/100
3 X	Discharge outlet horizontal on the right, DN 40, flexible hose connection, inside hose diameter 50 mm
3 Y	Discharge outlet vertical, DN 40, flexible hose connection, inside hose diameter 50 mm
3 Z	Discharge outlet horizontal on the left, DN 40, flexible hose connection, inside hose diameter 50 mm
4	Cable entry, cable grommet A/B/C, depending on the cable diameter
5	Emergency drainage horizontal 2 × DN 40, opposite each other, outside diameter 49 mm

Underfloor box dual-pump unit Z2 U

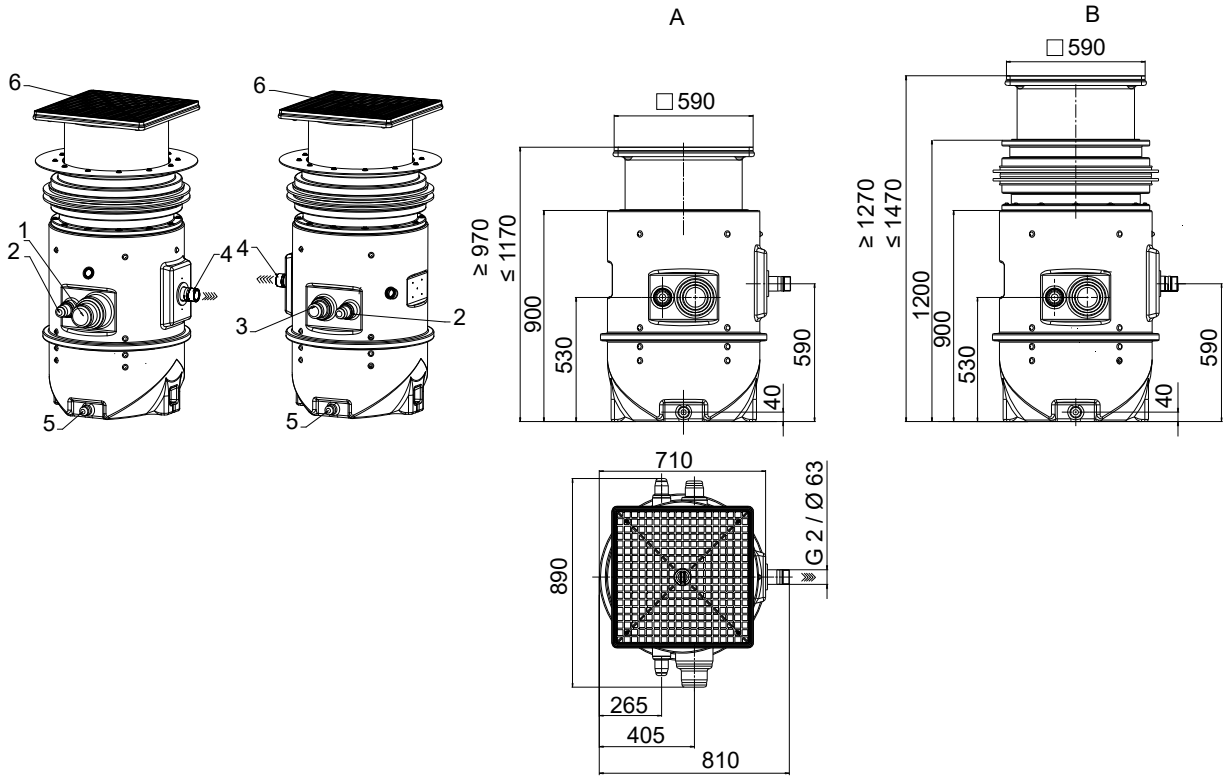


Fig. 65: Ama-Drainer-Box Z2 U connections and dimensions

Ama-Drainer-Box Z2 U connections

A	Standard design
B	With level-adjusting piece
1	Inlet connection nozzle horizontal 1 × DN 100/150 graded, outside diameter 110/159 mm
2	Inlet connection nozzles horizontal 2 × DN 50/70 graded, opposite each other, outside diameter 58/78 mm
3	Inlet connection nozzle horizontal 1 × DN 70/100 graded, outside diameter 78/110 mm
1 / 2 / 3	Vent, free connection nozzle DN 50/70/100/150
1 / 2 / 3	Cable entry, free connection nozzle DN 50/70/100/150
4	Discharge outlet horizontal DN 50, threaded connection G 2 / smooth pipe end (glued nozzle), outside diameter 63 mm
5	Emergency drainage horizontal 2 × DN 40, opposite each other, outside diameter 49 mm
6	Floor drain DN 50
*	Installation depth

Above-floor box dual-pump unit Z2 B

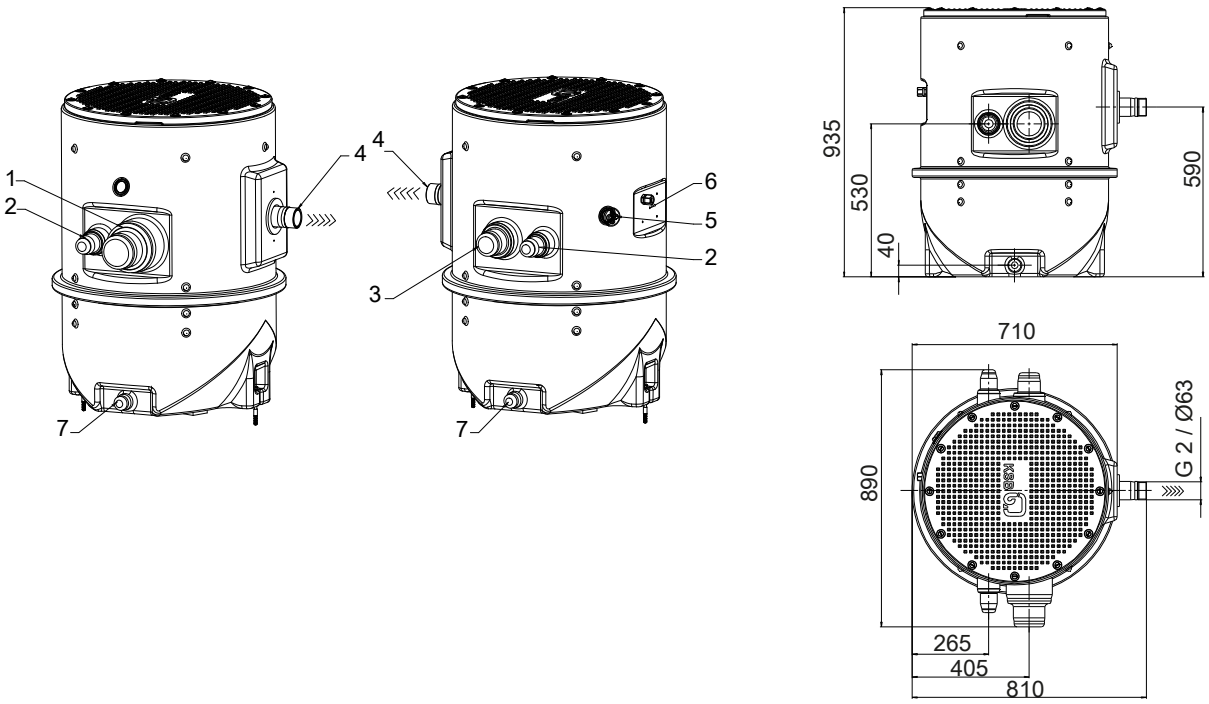


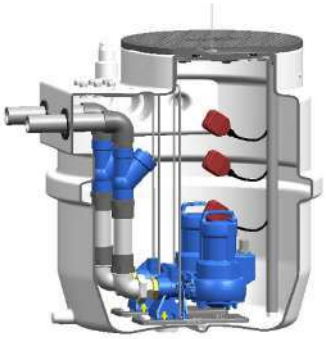
Fig. 66: Ama-Drainer-Box Z2 B connections and dimensions

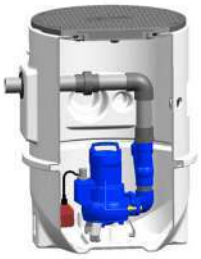
Ama-Drainer-Box Z2 B connections

1	Inlet connection nozzle horizontal 1 × DN 100/150 graded, outside diameter 110/159 mm
2	Inlet connection nozzles horizontal 2 × DN 50/70 graded, opposite each other, outside diameter 58/78 mm
3	Inlet connection nozzle horizontal 1 × DN 70/100 graded, outside diameter 78/110 mm
1 / 2 / 3	Vent, connection nozzle DN 50/ 70/100/150
4	Discharge outlet horizontal DN 50 with flexible hose connection, inside hose diameter 63 mm
5	Cable entry, cable grommets for two motor power cables
6	Connector panel for cable glands, float switches 5 × M20 (drill diameter 20 mm)
7	Emergency drainage horizontal 2 × DN 40, opposite each other, outside diameter 49 mm

Automatic Waste Water Lifting Units

Evamatic-Box N





http://shop.ksb.com/catalog/k0/en/product/ES000430

Product benefits

- Control unit enables automatic pump operation
- Easy installation, above-floor or underfloor
- Pump can easily be lifted out of and lowered into the tank through the large access opening (tank cover).
- Numerous connection options provide a high degree of flexibility.
- Easy access to float switches fastened to a removable rod, patented system (Evamatic-Box N 500 l)
- Non-clogging hydraulic system due to free-flow impeller/cutter

Further information

Prices on request

Dimensions 175

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	LevelControl Basic 2 (⇨ Page 1038)	Level-dependent pump control and monitoring unit with display for either 1 or 2 pumps.

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Waste water disposal
- Automatic drainage of buildings and premises below the flood level
- Drainage systems
- Rainwater harvesting

The pump is not approved for use in countries stipulating explosion-proof units for handling waste water containing faeces.

Fluids handled

- Waste water with faeces
- Solid particles with a particle size of 45 to 60 mm
- Slightly contaminated water
- Waste water

Design details

Design

- Tank made of impact-resistant plastic for above-floor installation/ underfloor installation
- Single-pump unit or dual-pump unit
- Tank volume 200 or 500 litres
- To EN 12050-1
- Closed with odour-proof cover[62)]
- Lift check valve integrated in the supplied piping

Installation

Evamatic-Box N 200 l:

- Stationary dry installation
- Wet-installed stationary model
- Transportable model for dry installation
- Wet-installed transportable model

Evamatic-Box N 500 l:

- Stationary dry installation
- Wet-installed stationary model

Drive

- See Ama-Porter

Shaft seal

- See Ama-Porter

Impeller type

- See Ama-Porter

Bearings

- See Ama-Porter

Automation

- KSB recommends the use of a LevelControl Basic 2 control unit. (Electrical accessories optionally available.)

Connections

- Inlet side DN 50/DN 70/DN 100/DN 150 for cutting open
- Discharge outlet DN 50/DN 65 for cutting open if supplied as an assembly kit
- Drain DN 40 for cutting open

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 40
	Q [l/s]	≤ 11
Head	H [m]	≤ 21
Fluid temperature	T [°C]	≤ +40 (continuous duty)
		≤ +70 (short-time duty, ≤ 5 minutes)

62 The tanks are absolutely odour-proof. They have been successfully leak-tested at a test pressure of 0.5 bar (in accordance with DIN EN 12050-1).

Designation

Example: Evamatic-Box N 2 501 E P

Designation key

Code	Description	
Evamatic-Box N	Type series	
2	Number of pumps	
	1	1 pump
	2	2 pumps
501	Pump type	
	5_ _	Ama-Porter[63]
	6_ _	
E	Motor version	
	E	Single-phase AC motor
	D	Three-phase motor
[64]	Start capacitor	
	[64]	Without start capacitor
	B	With start capacitor
P	Installation type	
	P	Transportable, mounted on three feet
	S	Stationary, mounted on flanged bend

Materials

- Single-piece water-proof tank made of polyethylene
- Pipe made of PVC

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

63 The Ama-Porter pump is not included in the scope of supply.
64 Blank

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Dimensions

Evamatic-Box N 200 l

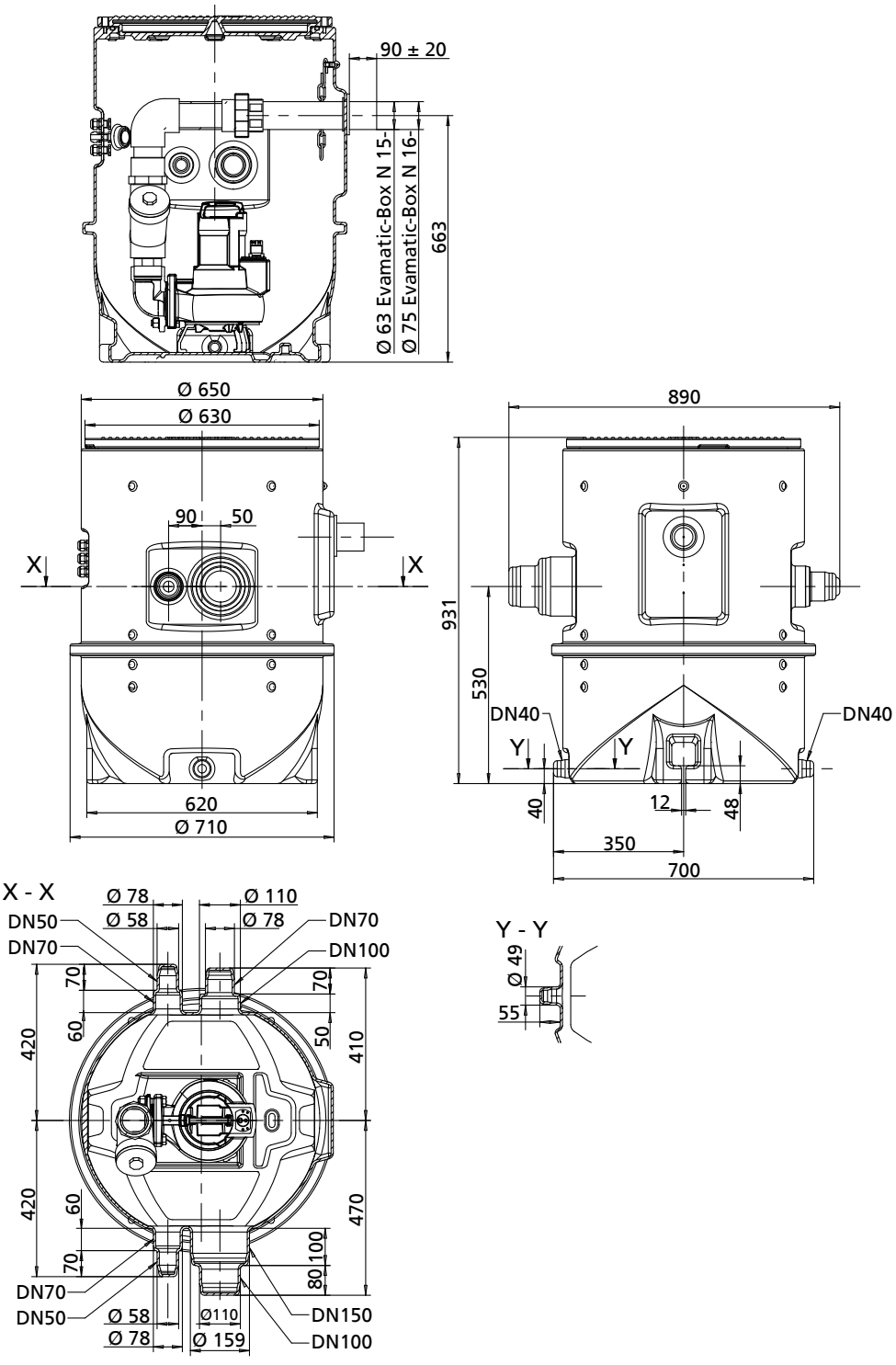


Fig. 67: Outline drawing Evamatic-Box N 200 l, transportable version

Evamatic-Box N 500 l

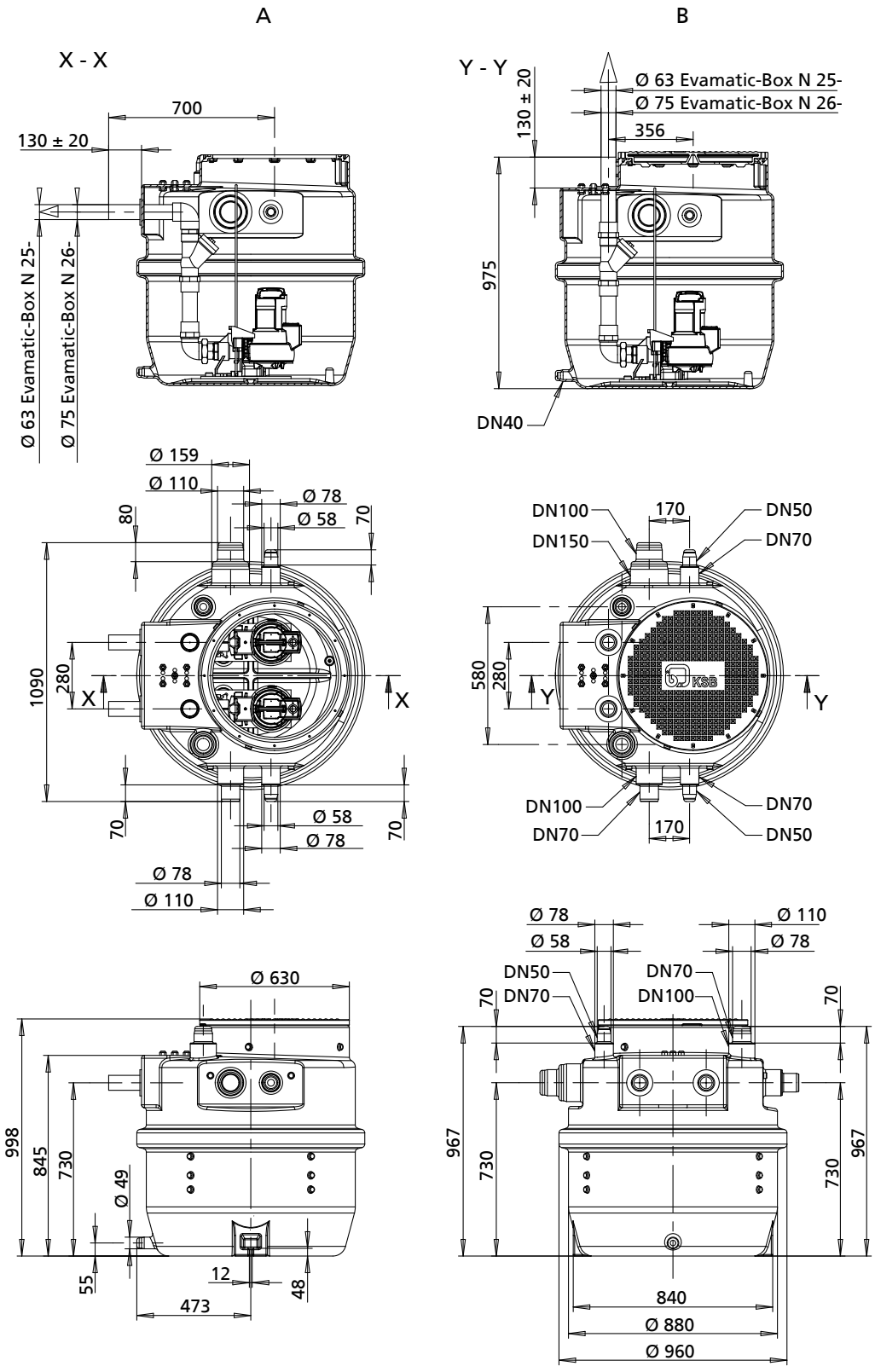


Fig. 68: Outline drawing Evamatic-Box N 500 l, stationary installation

A	Discharge line outlet, horizontal	B	Discharge line outlet, vertical

Scope of supply

Depending on the model, the following items are included in the scope of supply:

Evamatic-Box N 200 l with transportable pump version (supplied as assembly kit)

- 200-litre tank, access cover with screws and sealing element
- Complete discharge line with ball check valve and sealing element
- Ama-Porter submersible motor pump with single-phase motor and float switch **is not included in the scope of supply**. For further details about the Ama-Porter pump, see the section on Ama-Porter.
- Lifting chain made of stainless steel 1.4401
- Cable entry for power cable
- Hook made of stainless steel 1.4571

Evamatic-Box N 500 l with horizontal or vertical discharge outlet and stationary pump versions (supplied as assembly kit)

- 500-litre tank, access cover with screws and sealing element
- Two complete feet with cast iron baseplates, pump claws, guide hoops and bolts/screws
- Two complete discharge lines with ball check valve and sealing element (the discharge line supplied is suitable for horizontal or vertical discharge)
- Two Ama-Porter submersible motor pumps with single-phase or three-phase motors **are not included in the scope of supply**. For further details about the Ama-Porter pump, see the section on Ama-Porter.
- Two lifting chains made of stainless steel 1.4401
- Five PG cable glands for routing the two power cables of the pumps and the three float switch cables through the tank wall
- Three float switches fastened to a removable rod for installation in the tank. The arrangement of the float switches is predefined in the factory.
- One hook made of stainless steel 1.4571 (per pump)

Accessories

Further required accessories can be purchased from our distributors.

- Level-adjusting piece, height: 300 mm
- Gate valves DN 50 and 65 made of cast iron or PVC
- Cable connectors for connecting the electric cables inside the tank
- Control unit for Evamatic-Box N 500 l
- Alarm float switch for Evamatic-Box N 200 l (for connection to an alarm switchgear)
- Alarm switchgear for Evamatic-Box N 200 l
- Noise reduction pads
- Adapters (increasing adapters or reducing adapters)

Floodable Sewage Lifting Units

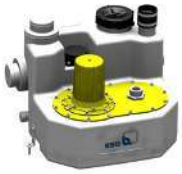
mini-Compacta

U60

U100

UZ150

US40


US100

UZS150

http://shop.ksb.com/catalog/k0/en/product/ES000261

Product benefits

- Safe and reliable operation ensured by control system (LevelControl Basic 1 / LevelControl Basic 2)
- Various positioning options and diameters make it easy to adapt the unit to the most complicated of site conditions.
- Collecting tank with optimum volume/footprint ratio for effective space utilisation
- Integrated, ergonomically designed grips for safe handling during transport and installation
- Ready-to-connect, easy installation and commissioning
- Vibration-damping design and installation for low-noise operation

Further information

Prices on request

Characteristic curves 181
Dimensions and connections..... 182

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	LevelControl Basic 2 (⇨ Page 1038)	Level-dependent pump control and monitoring unit with display for either 1 or 2 pumps.

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certificates

Overview

Label	Effective in:
TÜVRheinland CERTIFIED Type Tested and Monitored www.tuv.com ID 0217007934	Europe

Fluids handled

Material variant A (standard variant)

- Waste water with faeces
- Waste water without faeces
- Waste water

Material variant C (for aggressive fluids)

- Aggressive fluids

Main applications

- Disposal of waste water occurring below the flood level
- Waste water management

Single-pump unit US (40 litres)/ U (60 litres)/ U (100 litres):

- Unit for single-family house

Dual-pump unit UZ (150 litres):

- Unit for uninterrupted waste water drainage

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 36
	Q [l/s]	≤ 10
Head	H [m]	≤ 25
Fluid temperature	T [°C]	≤ +40 (continuous duty)
		≤ +65 (short-time duty ≤ 5 minutes)

Duty types

Permissible duty type

Operation	Type
Intermittent periodic duty	S3 50 % to VDE

Design details

Design

- Floodable sewage lifting unit[65)] to EN 12050-1
- Gas-tight and water-tight plastic collecting tank, pump unit, sensors and control unit
- Ready-to-connect sewage lifting unit

Drive

- Surface-cooled
- AC motor / three-phase asynchronous motor
- Thermal overload protection
- To VDE 0530, Part 1/IEC 34-1
- Enclosure IP68 (permanently submerged) to EN 60529 / IEC 529
- Thermal class F
- Electrical voltage 400 V (three-phase asynchronous motor) / 230 V (AC motor)
- Frequency 50 Hz
- DOL starting

Impeller type

- Free-flow impeller
- Cutter

Bearings

- Grease-packed, maintenance-free rolling element bearings

Shaft seal

mini-Compacta US (40 litres) / U (60 litres) / U (100 litres) / UZ (150 litres):

- Impeller end, 1 shaft seal ring
- Drive end , 1 shaft seal ring
- A grease fill is provided between the impeller-end and drive-end shaft seals.

mini-Compacta US (100 litres) / UZS (150 litres) / variant C:

- Impeller end, 1 mechanical seal
- Drive end , 1 shaft seal ring
- An oil reservoir, which is supplied filled with ecologically acceptable white oil, is fitted between the impeller-end and drive-end shaft seals.

65 Maximum flooding height: 2 metres, maximum flooding period: 7 days (does not apply to control unit). The lifting unit must be cleaned and serviced after it has been flooded.

Designation

Example: mini-Compacta UZ 1.150 D/C

Designation key

Code	Description	
mini-Compacta	Type series	
UZ	Design	
	U	Single-pump lifting unit with free-flow impeller
	US	Single-pump lifting unit with cutter
	UZ	Dual-pump lifting unit with free-flow impeller
	UZS	Dual-pump lifting unit with cutter
X	Special design	
1	Hydraulics code	
	1, 2	
150	Total volume of collecting tank [litres]	
	40, 60, 100, 150	
D	Motor	
	D	Three-phase asynchronous motor
	E	Single-phase AC motor
C	Material variant	
	C	Variant for aggressive fluids
	-[66)]	Standard design

Materials

Overview of available materials

Part No.	Description	Material variant A						Material variant C		
		U		UZ	US		UZS	U		UZ
		60	100	150	40	100	150	60	100	150
591	Collecting tank	Polyethylene								
591/102	Pump casing	Polyethylene			Grey cast iron			Polyethylene		
230	Impeller	PBT-GF				Grey cast iron		PBT-GF		
500	Cutter	-			Norihard			-		
210	Motor shaft	Stainless steel (1.4021)						Stainless steel (1.4462)		
161	Casing cover	Grey cast iron						Stainless steel (1.4408)		
742	Swing check valve	Grey cast iron			PVC		-	Stainless steel (1.4408)		
81-45	Float switch (float)	Polypropylene								
-	Screws, bolts and nuts	Stainless steel (A4)								

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

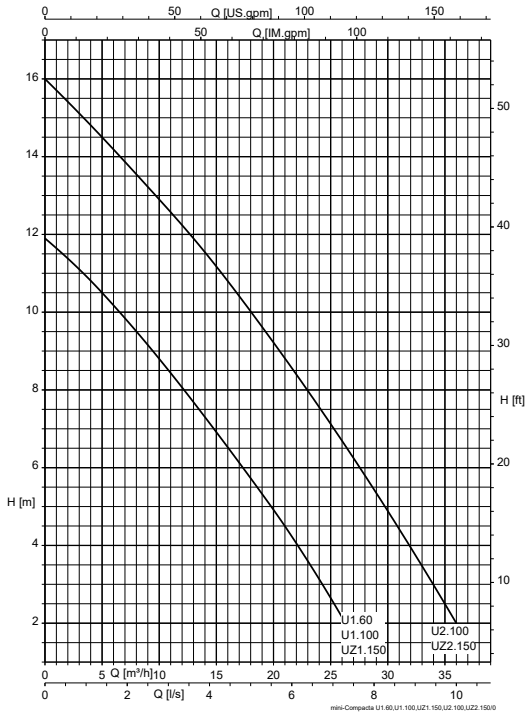
66 Blank

Characteristic curves

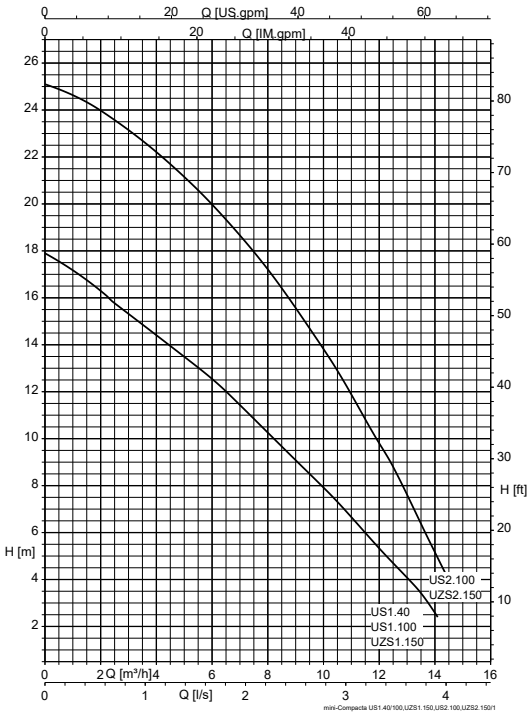
Note

A lifting unit can be selected on the basis of the selection charts for sewage quantities led to the lifting unit from the usual sanitary installations of a building. For lifting units with larger capacities please refer to type series booklet Compacta (reference No. 2317.55).

mini-Compacta U1/UZ1, U2/UZ2; n = 2900 rpm



mini-Compacta US1/UZS1, US2/UZS2; n = 2900 rpm



Dimensions and connections

mini-Compacta US (40 litres)

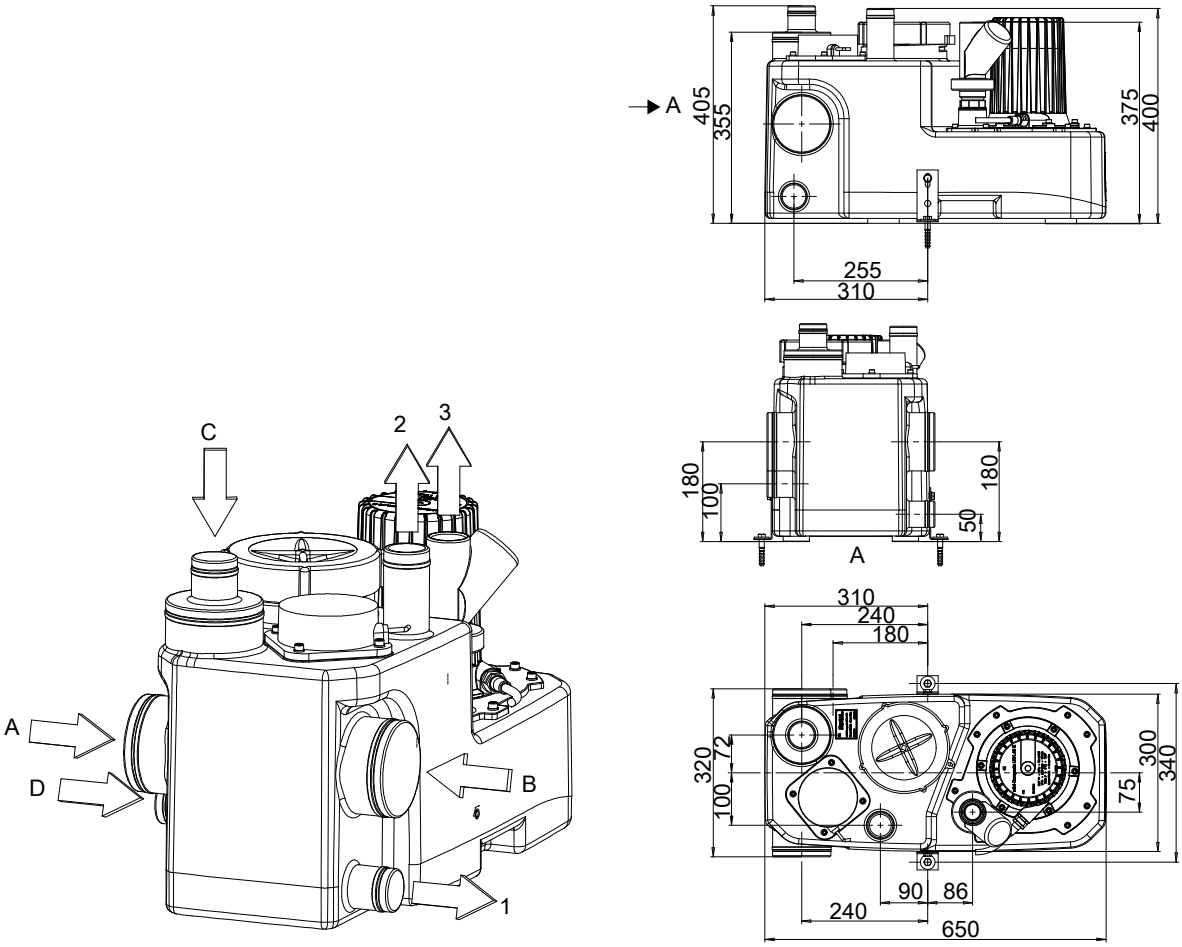


Fig. 69: mini-Compacta US (40 litres) connections and dimensions

A	Inlet DN 100
B	Inlet DN 100
C	Inlet DN 100/50
D	Inlet DN 50[67)]
1	Drain DN 40
2	Vent DN 50
3	Discharge line G 1 1/4

67 To prevent backflow, all sanitary appliances must be connected to the lifting unit with their pipe invert at least 180 mm above the tank floor. This connection is not suitable for discharge from shower basins.

mini-Compacta U (60 litres)

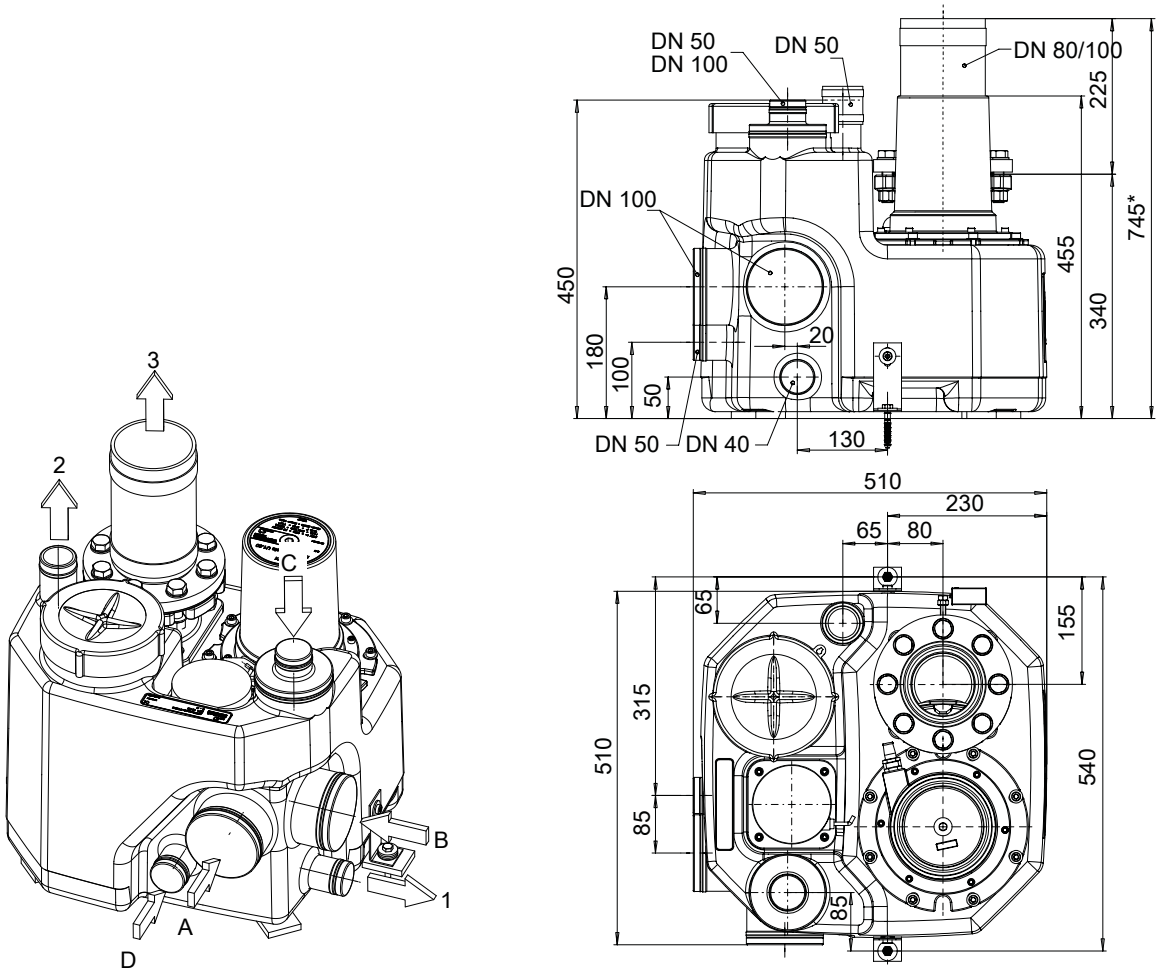


Fig. 70: mini-Compacta U (60 litres) connections and dimensions

A	Inlet DN 100
B	Inlet DN 100
C	Inlet DN 100/50
D	Inlet DN 50[68)]
1	Drain DN 40
2	Vent DN 50
3	Discharge line DN 80/100
*	Length including gate valve

68 To prevent backflow, all sanitary appliances must be connected to the lifting unit with their pipe invert at least 180 mm above the tank floor. This connection is not suitable for discharge from shower basins.

mini-Compacta U (100 litres)

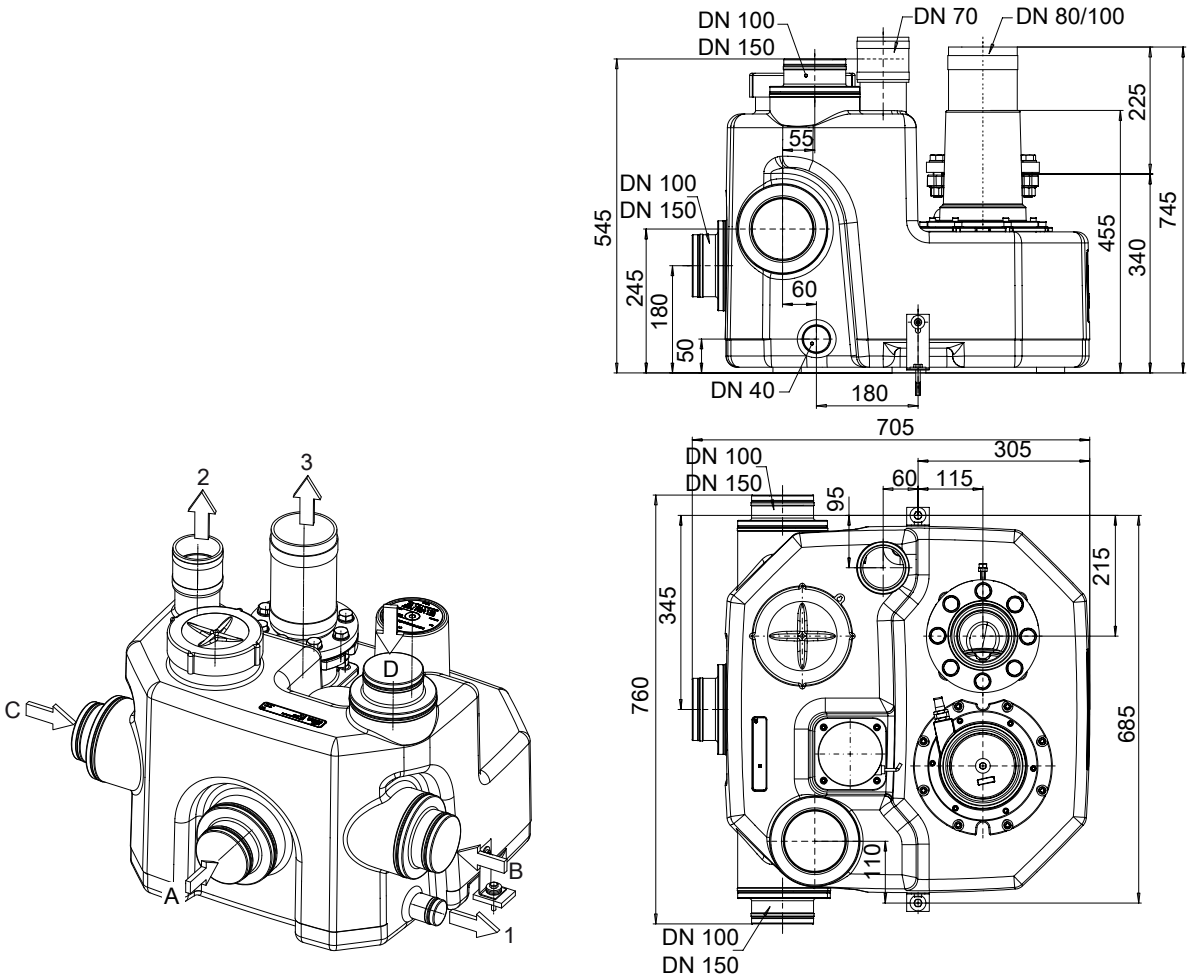


Fig. 71: mini-Compacta U (100 litres) connections and dimensions

A	Inlet DN 150/100
B	Inlet DN 150/100
C	Inlet DN 150/100
D	Inlet DN 150/100
1	Drain DN 40
2	Vent DN 70
3	Discharge line DN 80/100
*	Length including gate valve

mini-Compacta US (100 litres)

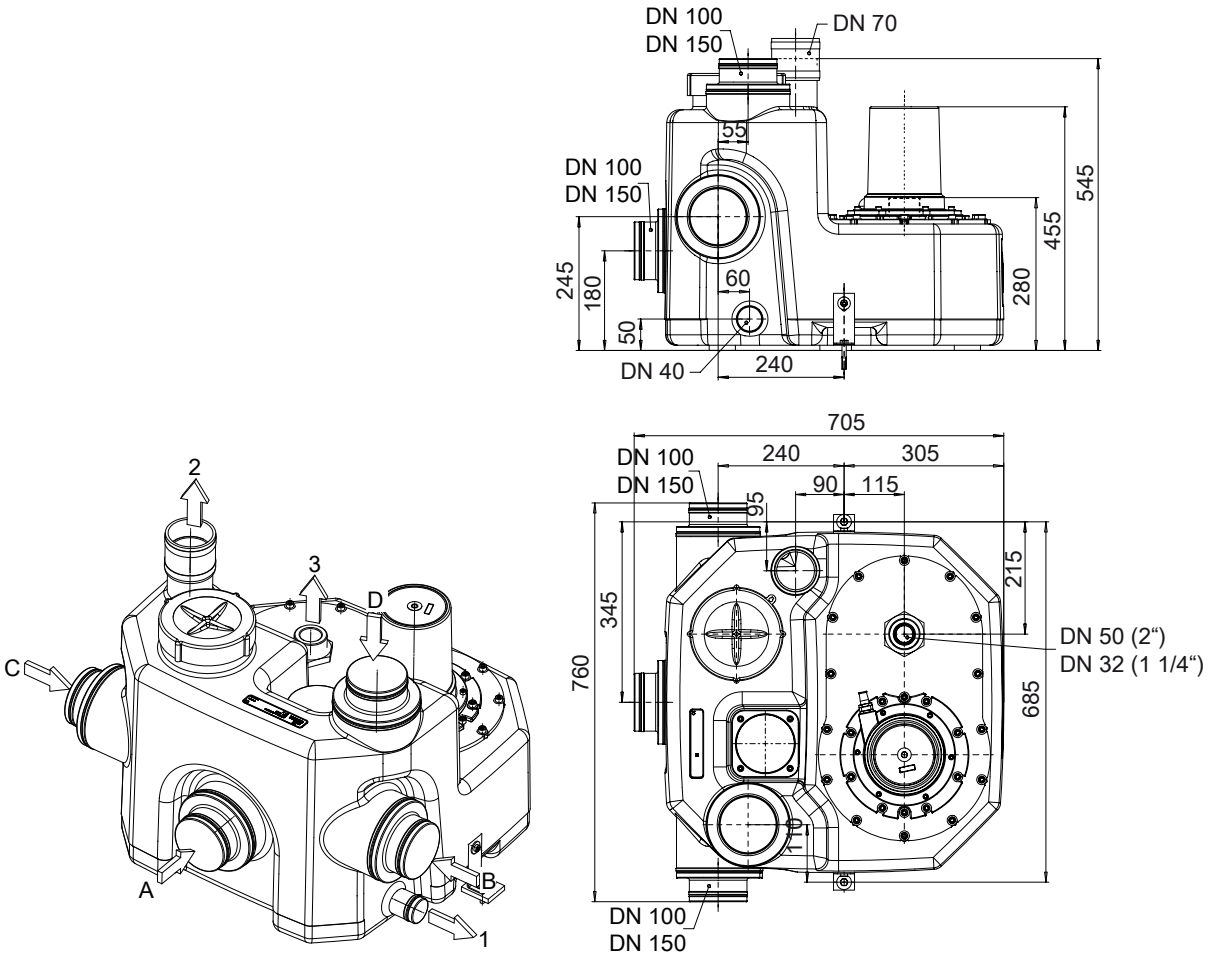


Fig. 72: mini-Compacta US (100 litres) connections and dimensions

A	Inlet DN 150/100
B	Inlet DN 150/100
C	Inlet DN 150/100
D	Inlet DN 150/100
1	Drain DN 40
2	Vent DN 70
3	Discharge line DN 50 (DN 32)

mini-Compacta UZ (150 litres)

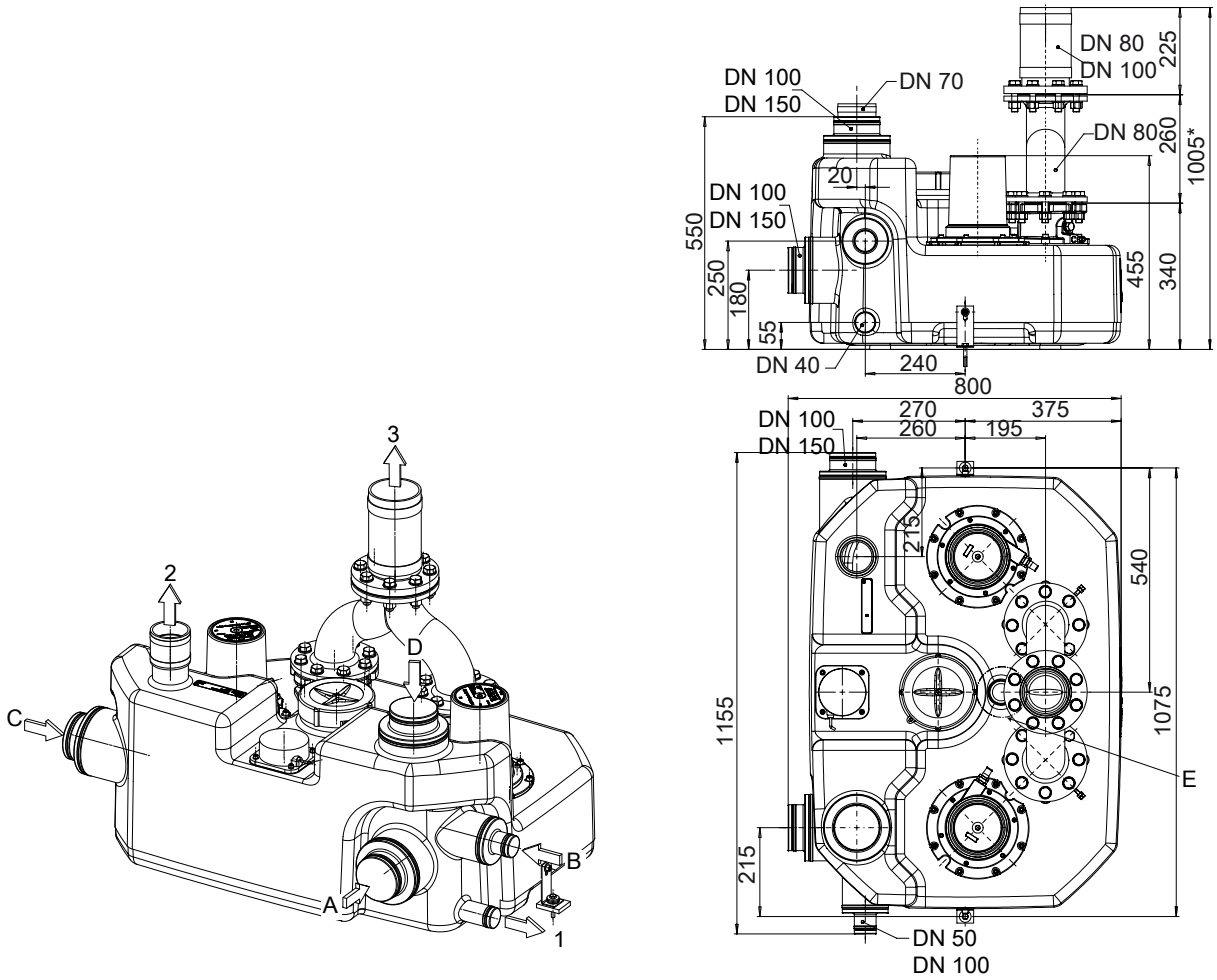


Fig. 73: mini-Compacta UZ (150 litres) connections and dimensions

A	Inlet DN 150/100
B	Inlet DN 100/50
C	Inlet DN 150/100
D	Inlet DN 150/100
E	Dome for stabilising the tank, no connection
1	Drain DN 40
2	Vent DN 70
3	Discharge line DN 80/100
*	Length including gate valve

mini-Compacta UZS (150 litres)

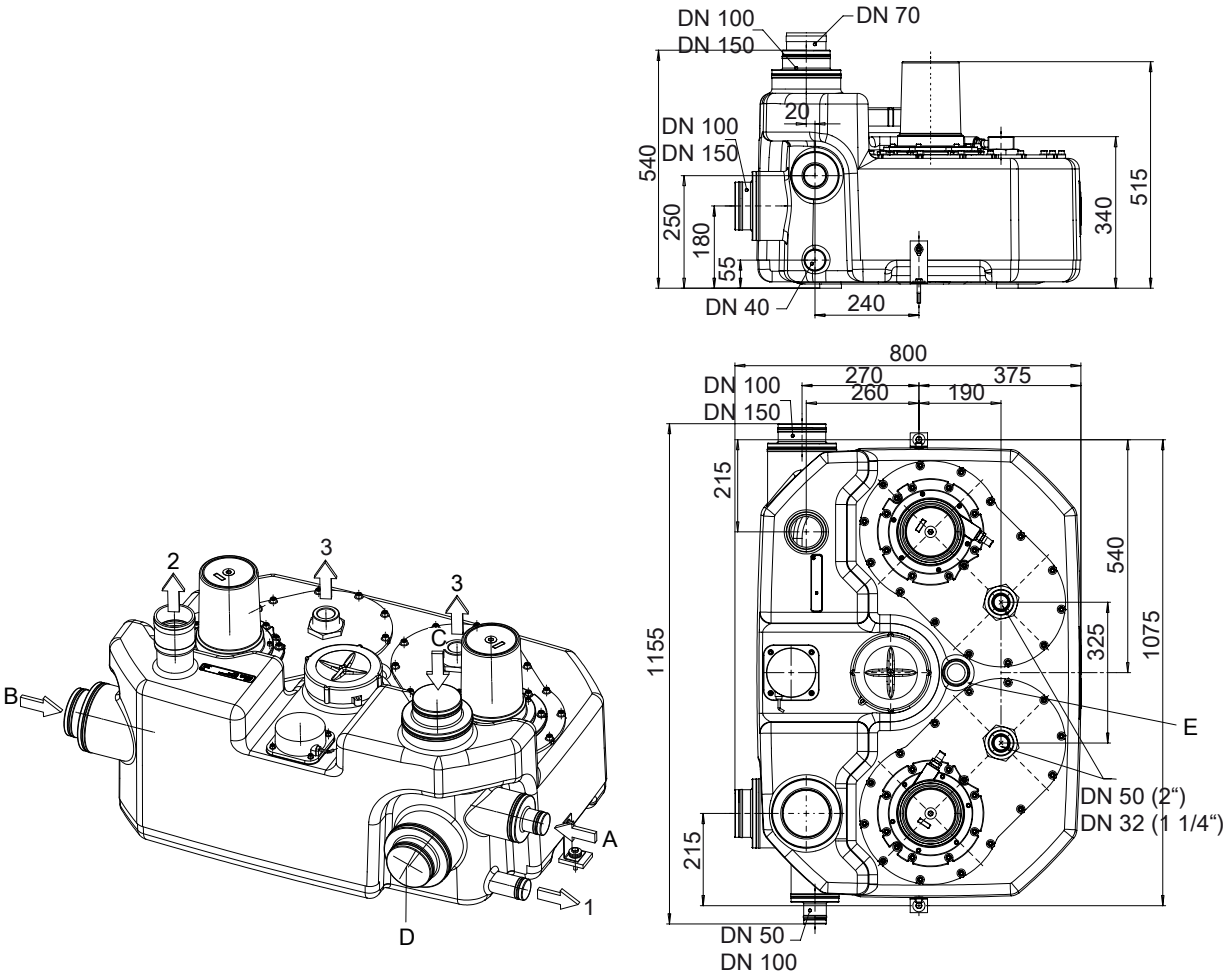


Fig. 74: mini-Compacta UZS (150 litres) connections and dimensions

A	Inlet DN 100/50
B	Inlet DN 150/100
C	Inlet DN 150/100
D	Inlet cannot be used
E	Dome for stabilising the tank, no connection
1	Drain DN 40
2	Vent DN 70
3	Discharge line 2 × DN 50 (DN 32)

Installation information

Installation example for mini-Compacta US (40 litres) and U (60 litres)

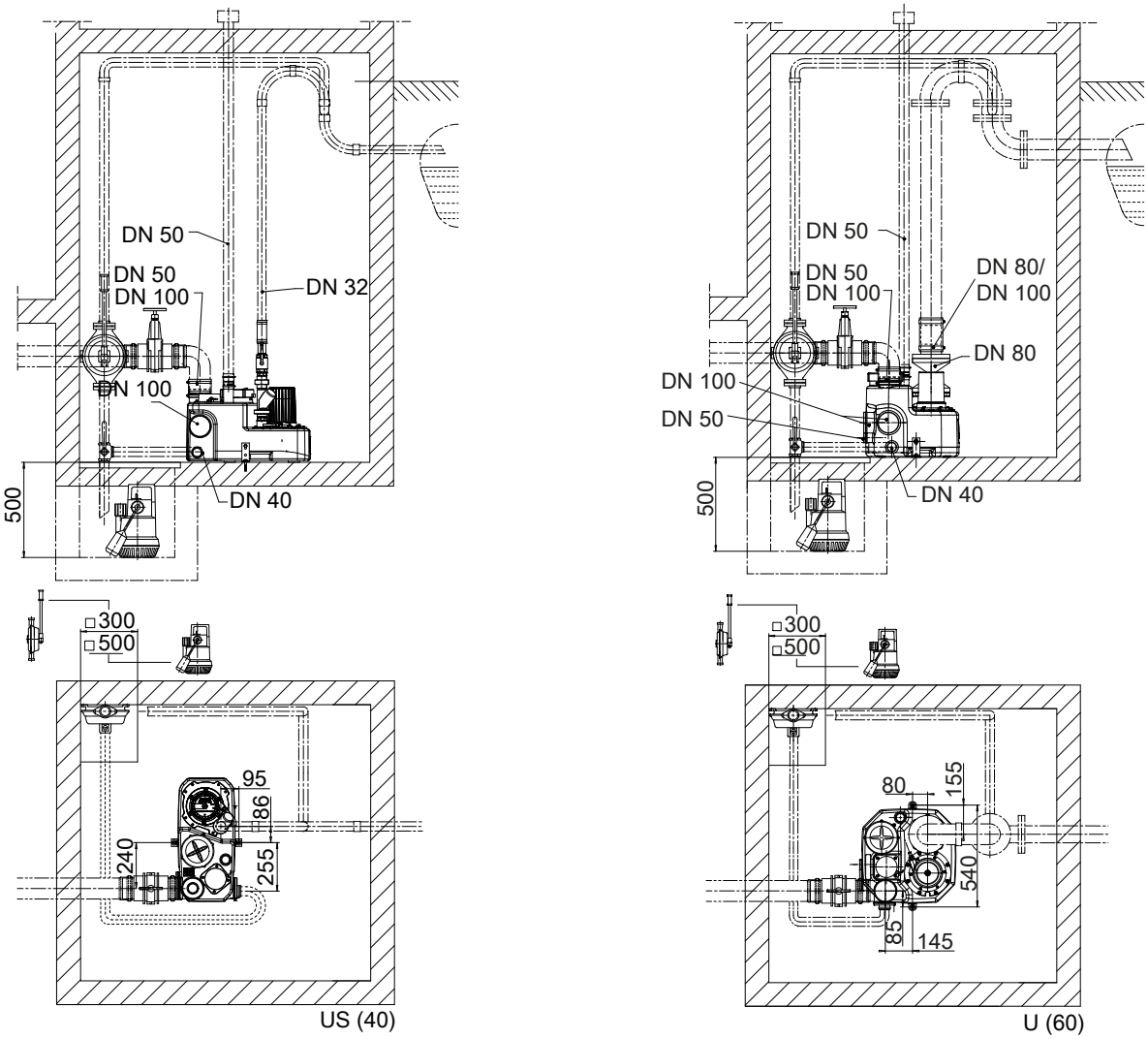


Fig. 75: Installation example for mini-Compacta US (40 litres) and U (60 litres)

For lifting units a working area of at least 600 mm width and height must be provided around and above all parts to be operated and serviced.

Installation example for mini-Compacta U/US (100 litres) and UZ/UZS (150 litres)

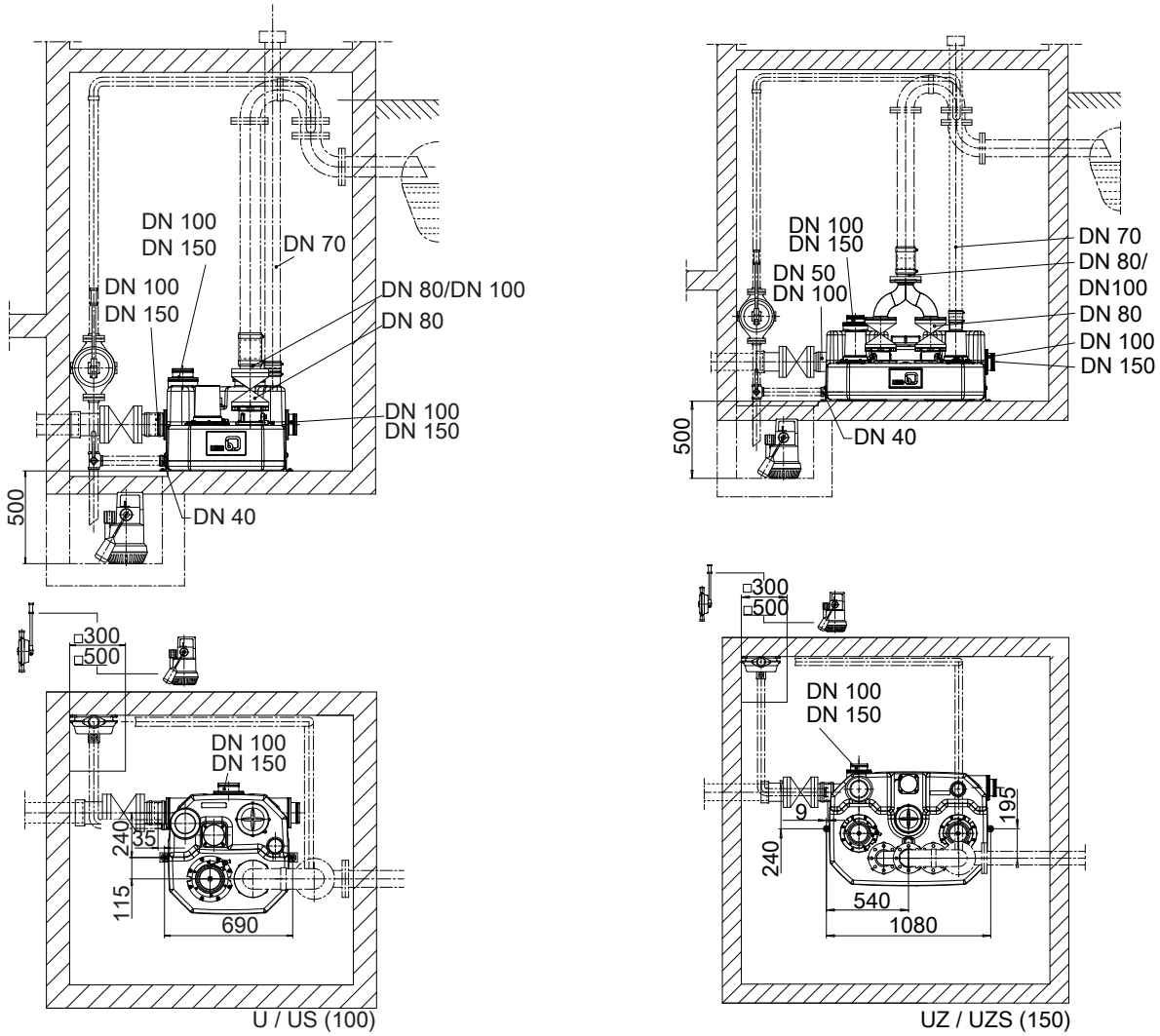


Fig. 76: Installation example for mini-Compacta U/US (100 litres) and UZ/UZS (150 litres)

For lifting units a working area of at least 600 mm width and height must be provided around and above all parts to be operated and serviced.

Installation example of direct connection to a wall-mounted toilet bowl

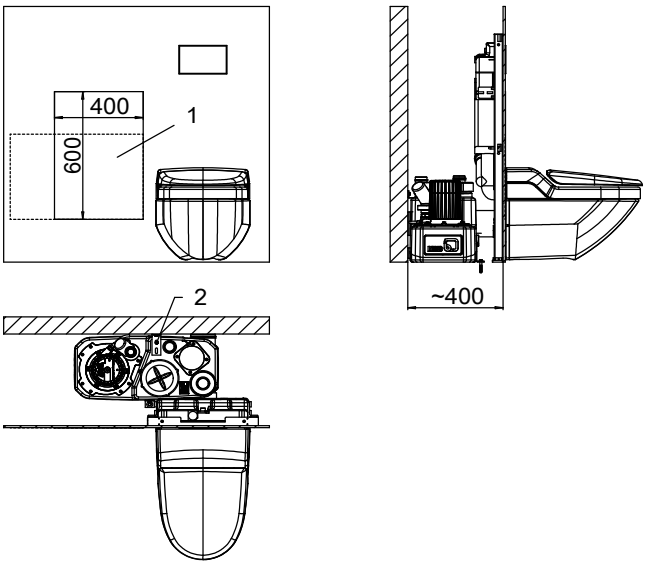


Fig. 77: Installation information for direct connection of a mini-Compacta US40 (concealed in a pre-wall system) to a wall-mounted toilet bowl

1	To enable maintenance work, provide an access opening of at least 400 x 600 mm in the pre-wall.
2	Attach the lug to the wall to prevent uplift.

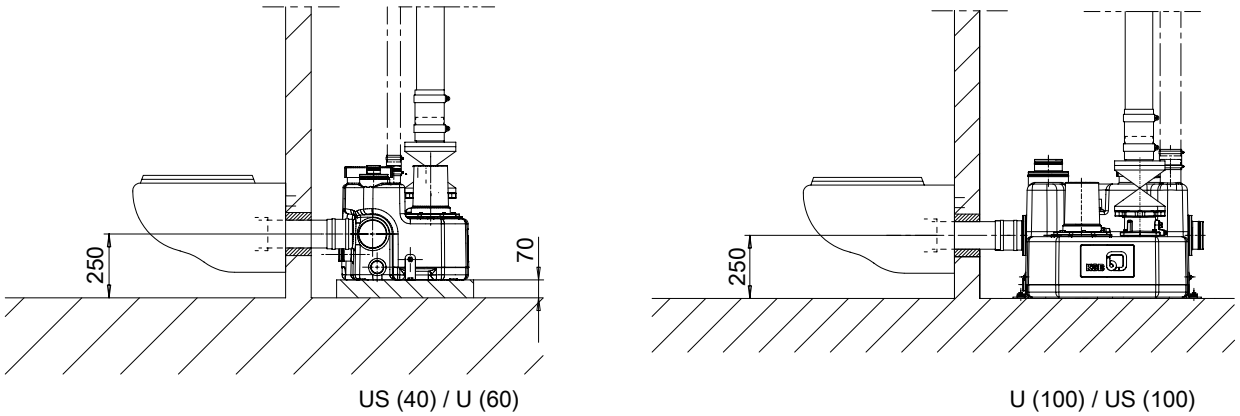


Fig. 78: Installation information for direct connection of a mini-Compacta US40 / U60 / U100 / US100 to a wall-mounted toilet bowl

Installation example of direct connection to a floor-mounted toilet bowl

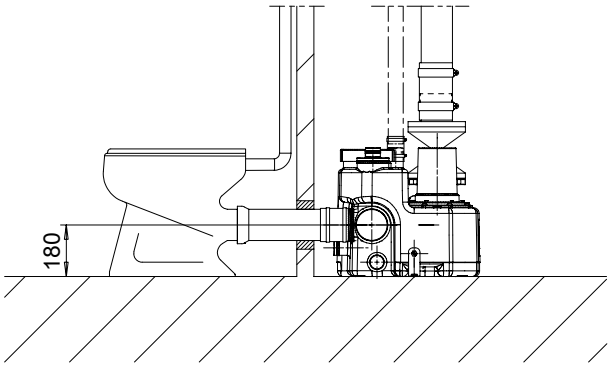


Fig. 79: Installation example for direct connection of a mini-Compacta US40 / U60 / U100 / US100 to a floor-mounted toilet bowl

Installation example of pit installation

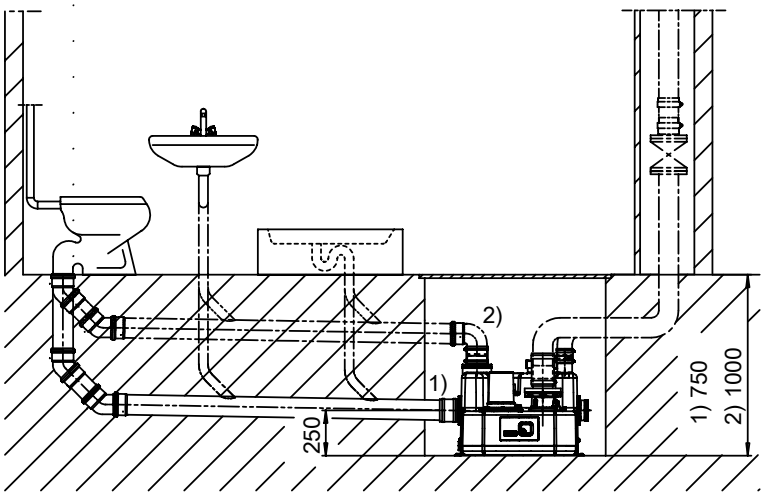


Fig. 80: Installation example for installing a mini-Compacta US40 / U60 / U100 / US100 in a pit

1	Minimum installation depth when using the horizontal inlet at a height of 250 mm
2	Minimum installation depth when using the vertical inlet

Scope of supply

mini-Compacta US (40 litres)

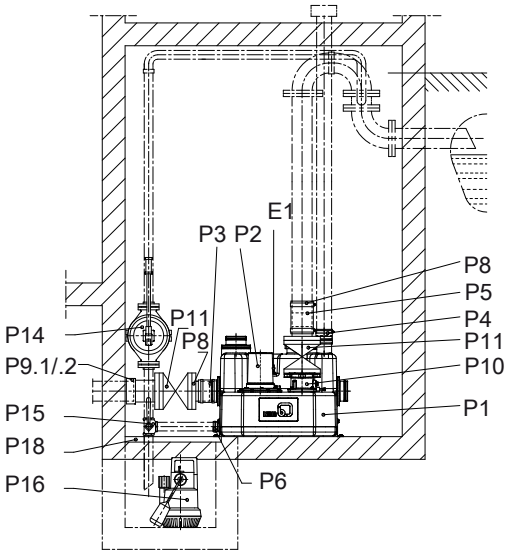


Fig. 81: Schematic of a mini-Compacta US (40 litres)

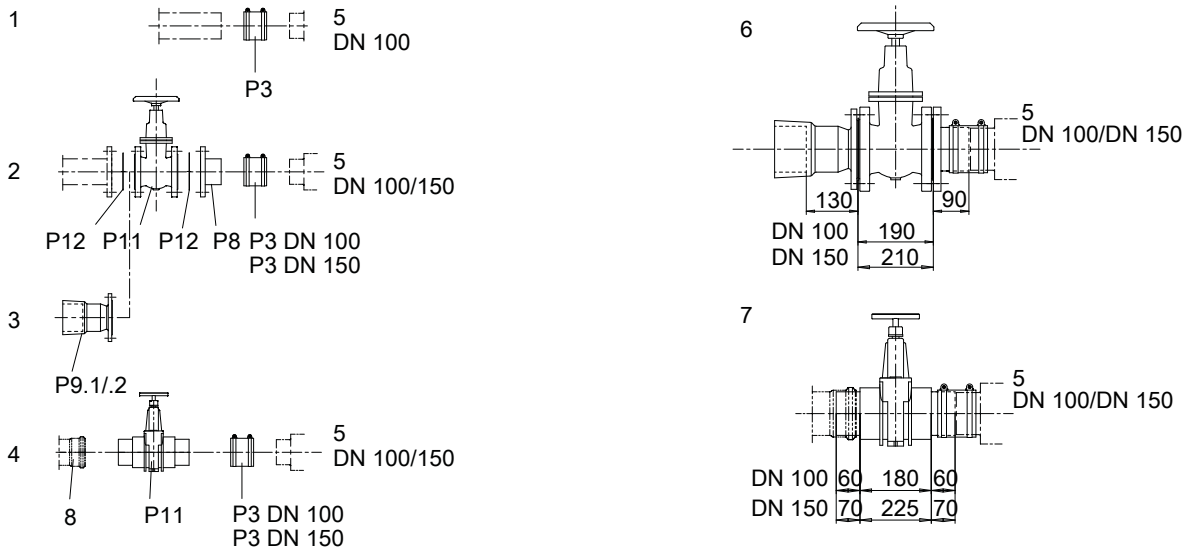


Fig. 82: Inlet line of a mini-Compacta US (40 litres)

1	Pipe connection
2	Flanged connection
3	Connection by flanged socket or flange adapter
4	Connection to the waste water pipe
5	Connection to the collecting tank
6	Gate valve made of grey cast iron
7	Gate valve made of PVC
8	Supplied by operator

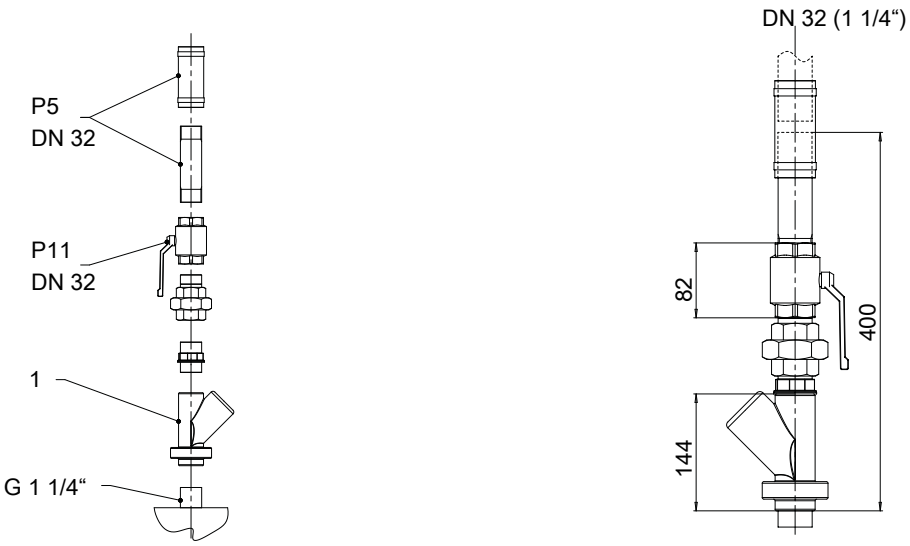


Fig. 83: Discharge line of a mini-Compacta US (40 litres)

1	Part of the unit

Items included in the scope of supply of mini-Compacta US (40 litres)

Item		Description
-	P1	Gas-tight, odour-tight, water-tight collecting tank made of impact-resistant plastic
-	P2	Fully floodable submersible motor pump
	P3	Flexible hose connection and hose clips DN 100 (inlet)
-	P4	Flexible hose connection and hose clips (venting)
-	P6	Flexible hose connection and hose clips (hand diaphragm pump)
-	P10	Check valve with full port and lifting screw
-	E1	Analog level sensor for pump and alarm buzzer
-	E3[69)]	Electronic control unit with integrated alarm circuit and charging circuit, with high-quality rechargeable battery and alarm buzzer

Accessories for mini-Compacta US (40 litres)

Item		Description
	P3	Flexible hose connection and hose clips DN 50
-	P5	Flexible hose connection and hose clips for discharge line, consisting of rubber hose, hexagon nipple and hose clips
-	P8	Stub flange
	P9.1	Flanged socket (for connecting pipes made of ductile cast iron) DN 100 for outside pipe diameter of 118 mm
	P9.2	Flange adapter (for connecting pipes of different materials) DN 100 for outside pipe diameter of 107.2 - 127.8 mm, L 105 mm
-	P11	Gate valve
	P12	Set of installation accessories
	P14	Hand diaphragm pump ISO 7/l-Rp 1 1/2
	P15	Three-way plug valve ISO 7/l-Rp 1 1/2
	P16	Fully automatic Ama-Drainer (SE/SD) drainage pump with swing check valve
-	P18	Cover plate, 560 × 560 mm, for 500 × 500 mm pits, for Ama-Drainer
-	E50[69)]	AS 0 alarm switchgear
-	E51[69)]	AS 2 alarm switchgear

69 Not shown in drawing

Item		Description
-	E52[69)]	AS 4 alarm switchgear
-	E53[69)]	AS 5 alarm switchgear
-	E64[69)]	F1 leakage sensor

mini-Compacta U (60 litres)

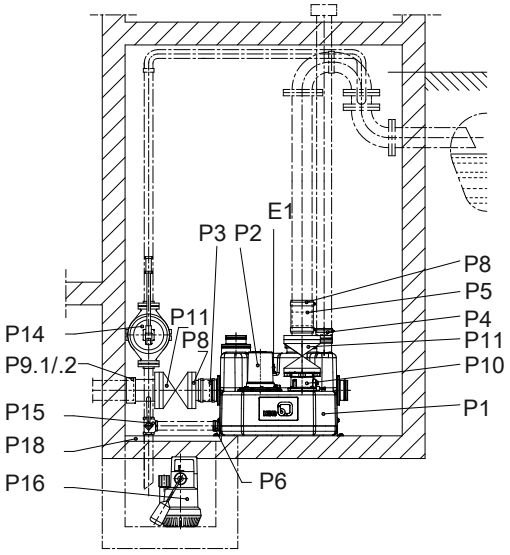


Fig. 84: mini-Compacta U (60 litres)

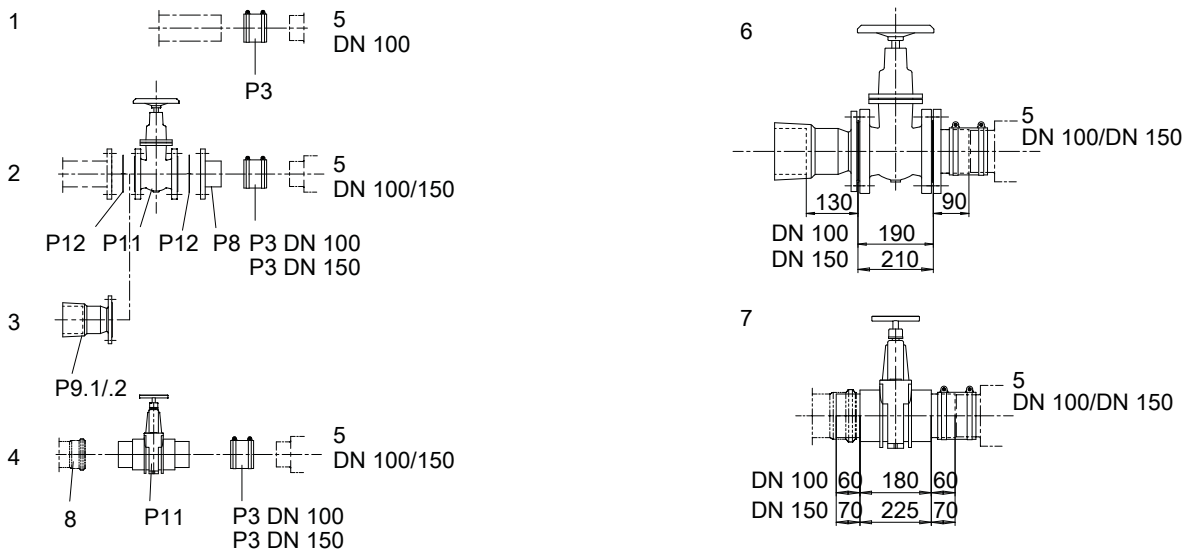


Fig. 85: Inlet line of mini-Compacta U (60 litres)

1	Pipe connection
2	Flanged connection
3	Connection by flanged socket or flange adapter
4	Connection to the waste water pipe
5	Connection to the collecting tank
6	Gate valve made of grey cast iron
7	Gate valve made of PVC
8	Supplied by operator

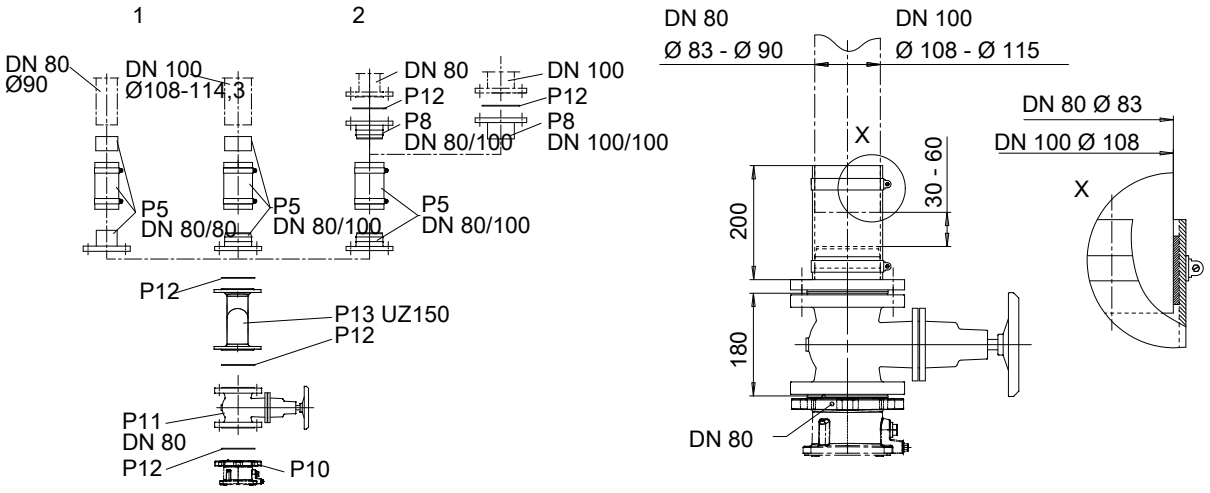


Fig. 86: Discharge line of mini-Compacta U (60 litres)

1	Pipe connection
2	Flanged connection

Items included in the scope of supply of mini-Compacta U (60 litres)

Item		Description
-	P1	Gas-tight, odour-tight, water-tight collecting tank made of impact-resistant plastic
-	P2	Fully floodable submersible motor pump
	P3	Flexible hose connection and hose clips DN 100 (inlet)
-	P4	Flexible hose connection and hose clips (venting)
-	P5	Flexible hose connection and hose clips for discharge line, consisting of DN 80 stub flange with DN 100 hosetail, fabric-reinforced rubber hose and adapter hose for outside pipe diameter of 108 - 114.3 mm
-	P6	Flexible hose connection and hose clips (hand diaphragm pump)
-	P10	Check valve with full port and lifting screw
-	E1	Analog level sensor for pump and alarm buzzer
-	E3	Electronic control unit with integrated alarm circuit and charging circuit, with high-quality rechargeable battery and alarm buzzer

Accessories for mini-Compacta U (60 litres)

Item		Description
-	P3	Flexible hose connection and hose clips DN 50
-	P5	Flexible hose connection and hose clips for discharge line, consisting of DN 80 stub flange with DN 80 hosetail, fabric-reinforced rubber hose and adapter hose for outside pipe diameter of 83 - 90 mm
-	P8	Stub flange
	P9.1	Flanged socket (for connecting pipes made of ductile cast iron) DN 100 for outside pipe diameter of 118 mm
	P9.2	Flange adapter (for connecting pipes of different materials) DN 100 for outside pipe diameter of 107.2 - 127.8 mm, L 105 mm
-	P11	Gate valve
	P12	Set of installation accessories
	P14	Hand diaphragm pump ISO 7/I-Rp 1 1/2
	P15	Three-way plug valve ISO 7/I-Rp 1 1/2
	P16	Fully automatic Ama-Drainer (SE/SD) drainage pump with swing check valve
-	P18	Cover plate, 560 × 560 mm, for 500 × 500 mm pits, for Ama-Drainer
-	E50	AS 0 alarm switchgear
-	E51	AS 2 alarm switchgear

Item		Description
-	E52	AS 4 alarm switchgear
-	E53	AS 5 alarm switchgear
-	E64	F1 leakage sensor

mini-Compacta U (100 litres)

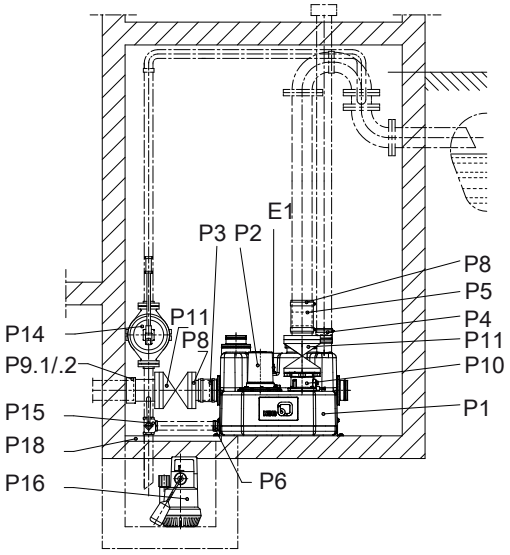


Fig. 87: mini-Compacta U (100 litres)

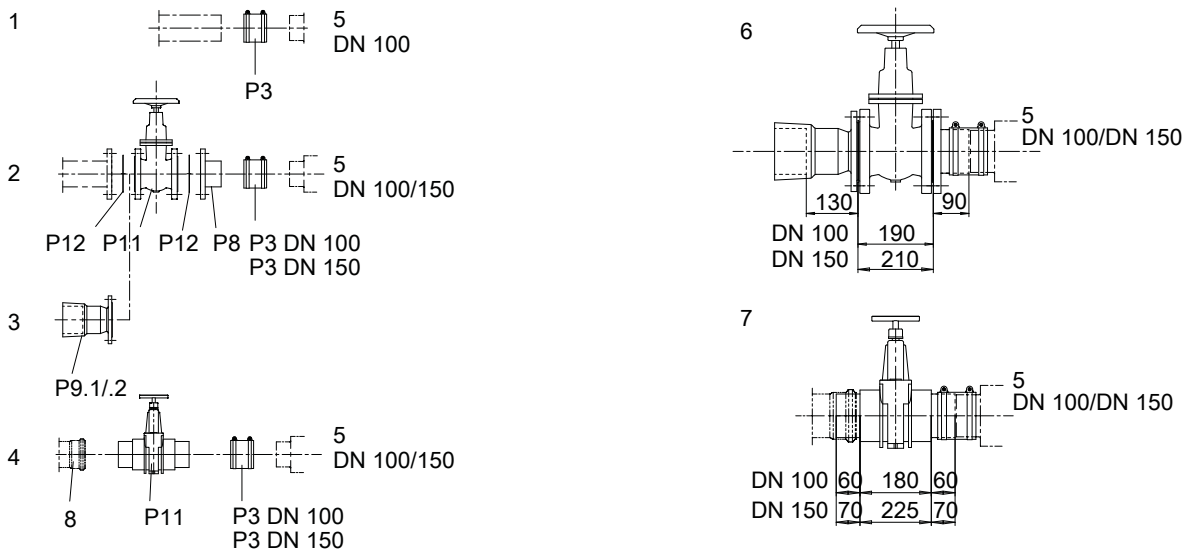


Fig. 88: Inlet line of mini-Compacta U (100 litres)

1	Pipe connection
2	Flanged connection
3	Connection by flanged socket or flange adapter
4	Connection to the waste water pipe
5	Connection to the collecting tank
6	Gate valve made of grey cast iron
7	Gate valve made of PVC
8	Supplied by operator

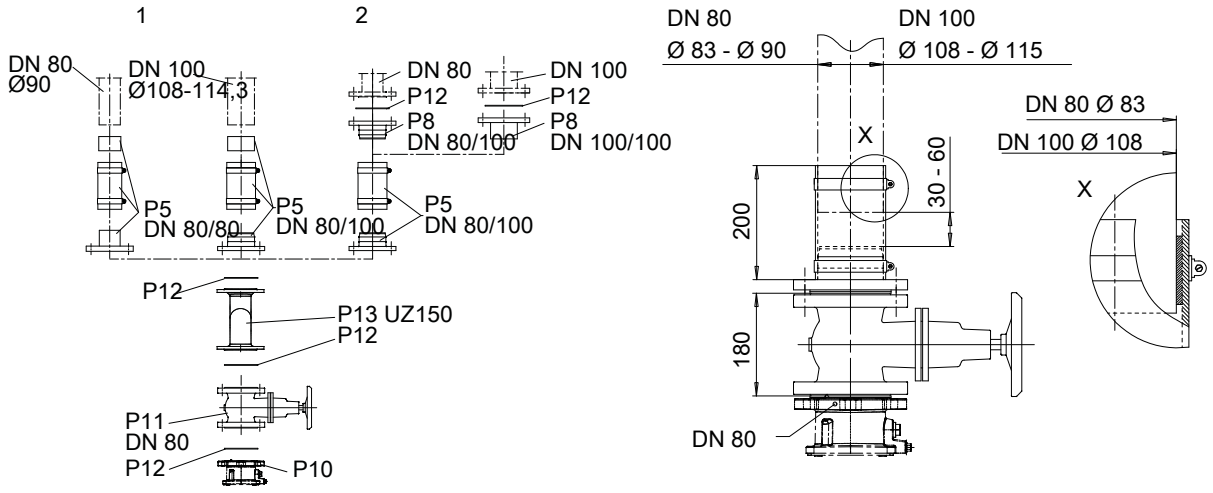


Fig. 89: Discharge line of mini-Compacta U (100 litres)

1	Pipe connection
2	Flanged connection

Items included in the scope of supply of mini-Compacta U (100 litres)

Item		Description
-	P1	Gas-tight, odour-tight, water-tight collecting tank made of impact-resistant plastic
-	P2	Fully floodable submersible motor pump
	P3	Flexible hose connection and hose clips DN 100 (inlet)
-	P4	Flexible hose connection and hose clips (venting)
-	P5	Flexible hose connection and hose clips for discharge line, consisting of DN 80 stub flange with DN 100 hosetail, fabric-reinforced rubber hose and adapter hose for outside pipe diameter of 108 - 114.3 mm
-	P6	Flexible hose connection and hose clips (hand diaphragm pump)
-	P10	Check valve with full port and lifting screw
-	E1	Analog level sensor for pump and alarm buzzer
-	E3[70)]	Electronic control unit with integrated alarm circuit and charging circuit, with high-quality rechargeable battery and alarm buzzer

Accessories for mini-Compacta U (100 litres)

Item		Description
-	P3	Flexible hose connection and hose clips DN 50 Flexible hose connection and hose clips DN 150
-	P5	Flexible hose connection and hose clips for discharge line, consisting of DN 80 stub flange with DN 80 hosetail, fabric-reinforced rubber hose and adapter hose for outside pipe diameter of 83 - 90 mm
-	P8	Stub flange
	P9.1	Flanged socket (for connecting pipes made of ductile cast iron) DN 100 for outside pipe diameter of 118 mm
	P9.2	Flange adapter (for connecting pipes of different materials) DN 100 for outside pipe diameter of 107.2 - 127.8 mm, L 105 mm
-	P11	Gate valve
	P12	Set of installation accessories
	P14	Hand diaphragm pump ISO 7/l-Rp 1 1/2
	P15	Three-way plug valve ISO 7/l-Rp 1 1/2
	P16	Fully automatic Ama-Drainer (SE/SD) drainage pump with swing check valve

70 Not shown in drawing

Item		Description
-	P18	Cover plate, 560 × 560 mm, for 500 × 500 mm pits, for Ama-Drainer
-	E50[70)]	AS 0 alarm switchgear
-	E51[70)]	AS 2 alarm switchgear
-	E52[70)]	AS 4 alarm switchgear
-	E53[70)]	AS 5 alarm switchgear
-	E64[70)]	F1 leakage sensor

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

mini-Compacta US (100 litres)

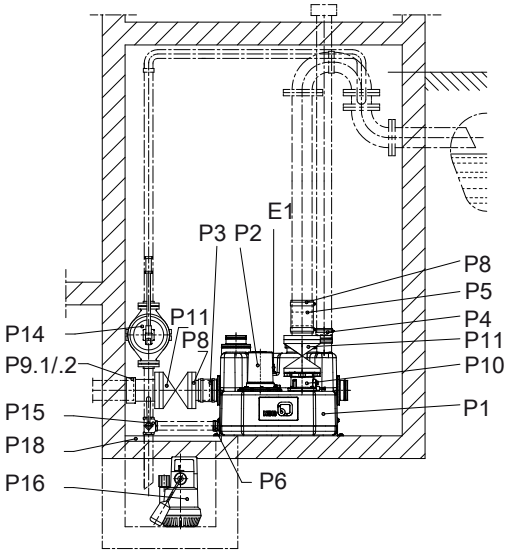


Fig. 90: Schematic of a mini-Compacta US (100 litres)

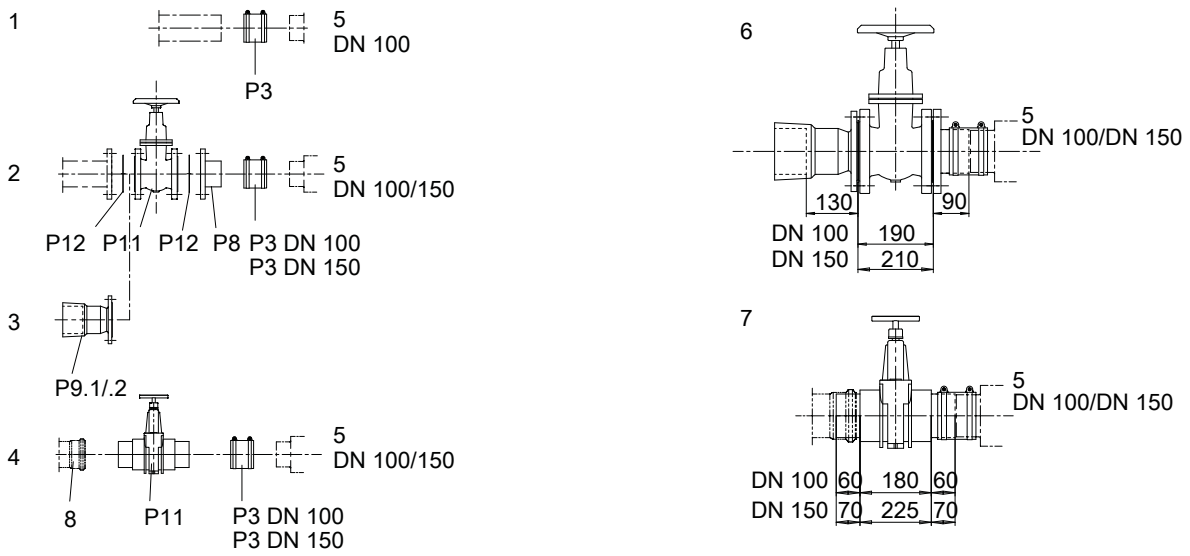


Fig. 91: Inlet line of mini-Compacta US (100 litres)

1	Pipe connection
2	Flanged connection
3	Connection by flanged socket or flange adapter
4	Connection to the waste water pipe
5	Connection to the collecting tank
6	Gate valve made of grey cast iron
7	Gate valve made of PVC
8	Supplied by operator

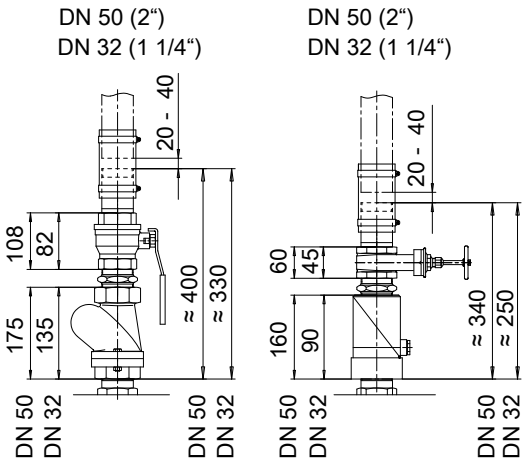


Fig. 92: Discharge line of mini-Compacta US (100 litres)

1	Pipe connection
2	Flanged connection

Items included in the scope of supply of mini-Compacta US (100 litres)

Item		Description
-	P1	Gas-tight, odour-tight, water-tight collecting tank made of impact-resistant plastic
-	P2	Fully floodable submersible motor pump
	P3	Flexible hose connection and hose clips DN 100 (inlet)
-	P4	Flexible hose connection and hose clips (venting)
-	P6	Flexible hose connection and hose clips (hand diaphragm pump)
-	E1	Analog level sensor for pump and alarm buzzer
-	E3[71)]	Electronic control unit with integrated alarm circuit and charging circuit, with high-quality rechargeable battery and alarm buzzer

Accessories for mini-Compacta US (100 litres)

Item		Description
-	P3	Flexible hose connection and hose clips DN 50 Flexible hose connection and hose clips DN 150
-	P5	Flexible hose connection and hose clips for discharge line, consisting of rubber hose, hexagon nipple and hose clips
-	P8	Stub flange
	P9.1	Flanged socket (for connecting pipes made of ductile cast iron) DN 100 for outside pipe diameter of 118 mm
	P9.2	Flange adapter (for connecting pipes of different materials) DN 100 for outside pipe diameter of 107.2 - 127.8 mm, L 105 mm
-	P10	Check valve
-	P11	Gate valve
	P12	Set of installation accessories
	P14	Hand diaphragm pump ISO 7/l-Rp 1 1/2
	P15	Three-way plug valve ISO 7/l-Rp 1 1/2
	P16	Fully automatic Ama-Drainer (SE/SD) drainage pump with swing check valve
-	P18	Cover plate, 560 × 560 mm, for 500 × 500 mm pits, for Ama-Drainer
-	E50[71)]	AS 0 alarm switchgear

71 Not shown in drawing

Item		Description
-	E51[71)]	AS 2 alarm switchgear
-	E52[71)]	AS 4 alarm switchgear
-	E53[71)]	AS 5 alarm switchgear
-	E64[71)]	F1 leakage sensor

mini-Compacta UZ (150 litres)

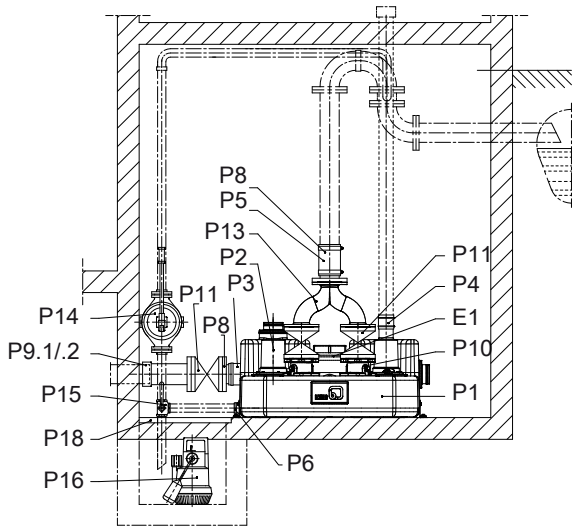


Fig. 93: mini-Compacta UZ (150 litres)

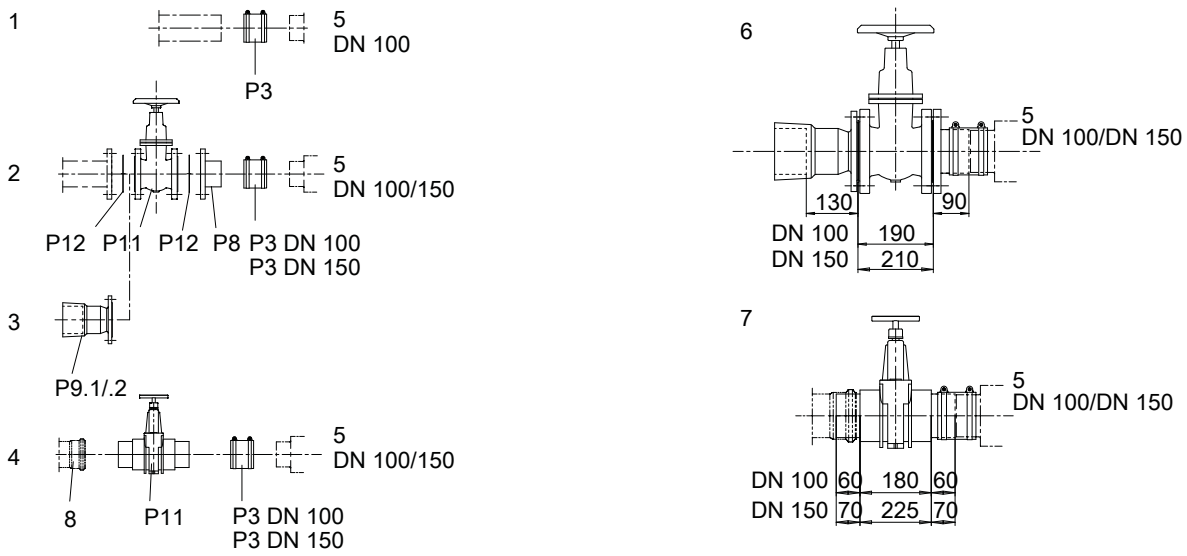


Fig. 94: Inlet line of mini-Compacta UZ (150 litres)

1	Pipe connection
2	Flanged connection
3	Connection by flanged socket or flange adapter
4	Connection to the waste water pipe
5	Connection to the collecting tank
6	Gate valve made of grey cast iron
7	Gate valve made of PVC
8	Supplied by operator

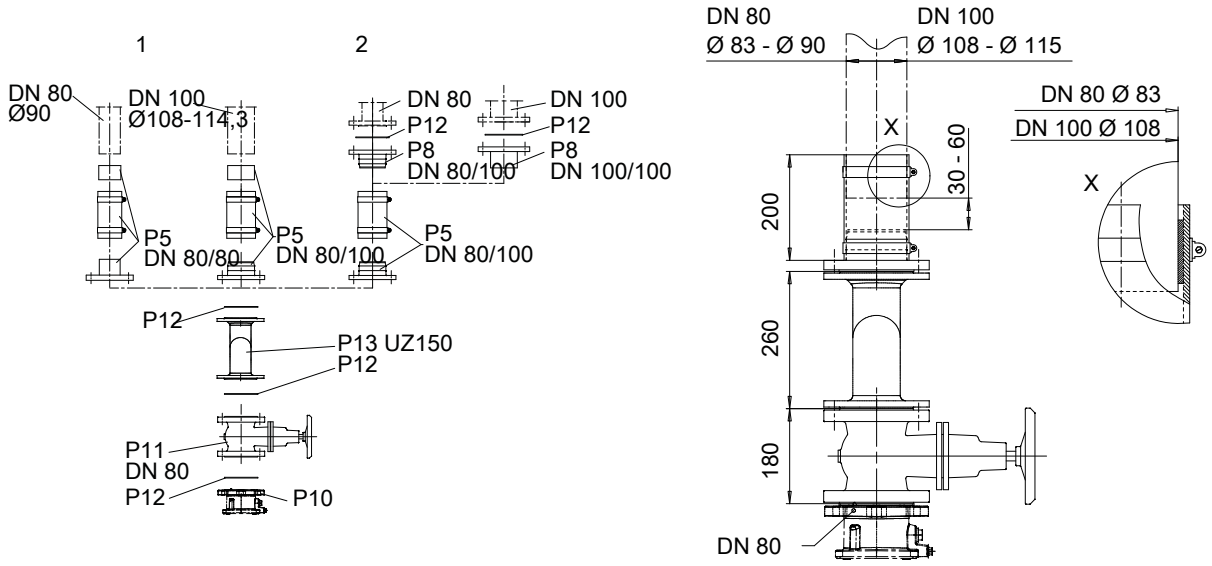


Fig. 95: Discharge line of mini-Compacta UZ (150 litres)

1	Pipe connection
2	Flanged connection

Items included in the scope of supply of mini-Compacta UZ (150 litres)

Item		Description
-	P1	Gas-tight, odour-tight, water-tight collecting tank made of impact-resistant plastic
-	P2	Fully floodable submersible motor pump
	P3	Flexible hose connection and hose clips DN 100 (inlet)
-	P4	Flexible hose connection and hose clips (venting)
-	P5	Flexible hose connection and hose clips for discharge line, consisting of DN 80 stub flange with DN 100 hosetail, fabric-reinforced rubber hose and adapter hose for outside pipe diameter of 108 - 114.3 mm
-	P6	Flexible hose connection and hose clips (hand diaphragm pump)
-	P10	Check valve with full port and lifting screw
-	P13[72)]	Y-pipe DN 80 with 2 sets of installation accessories
-	E1	Analog level sensor for pump and alarm buzzer
-	E3[73)]	Electronic control unit with integrated alarm circuit and charging circuit, with high-quality rechargeable battery and alarm buzzer

Accessories for mini-Compacta UZ (150 litres)

Item		Description
	P3	Flexible hose connection and hose clips DN 50 Flexible hose connection and hose clips DN 150
-	P5	Flexible hose connection and hose clips for discharge line, consisting of DN 80 stub flange with DN 80 hosetail, fabric-reinforced rubber hose and adapter hose for outside pipe diameter of 83 - 90 mm
-	P8	Stub flange
	P9.1	Flanged socket (for connecting pipes made of ductile cast iron) DN 100 for outside pipe diameter of 118 mm
	P9.2	Flange adapter (for connecting pipes of different materials) DN 100 for outside pipe diameter of 107.2 - 127.8 mm, L 105 mm
-	P11	Gate valve
	P12	Set of installation accessories
-	P13	Y-pipe DN 80, for variant C, with 2 sets of installation accessories
	P14	Hand diaphragm pump ISO 7/l-Rp 1 1/2

72 Not for variant C
73 Not shown in drawing

Item		Description
	P15	Three-way plug valve ISO 7/l-Rp 1 1/2
	P16	Fully automatic Ama-Drainer (SE/SD) drainage pump with swing check valve
-	P18	Cover plate, 560 × 560 mm, for 500 × 500 mm pits, for Ama-Drainer
-	E50[73)]	AS 0 alarm switchgear
-	E51[73)]	AS 2 alarm switchgear
-	E52[73)]	AS 4 alarm switchgear
-	E53[73)]	AS 5 alarm switchgear
-	E64[73)]	F1 leakage sensor

mini-Compacta UZS (150 litres)

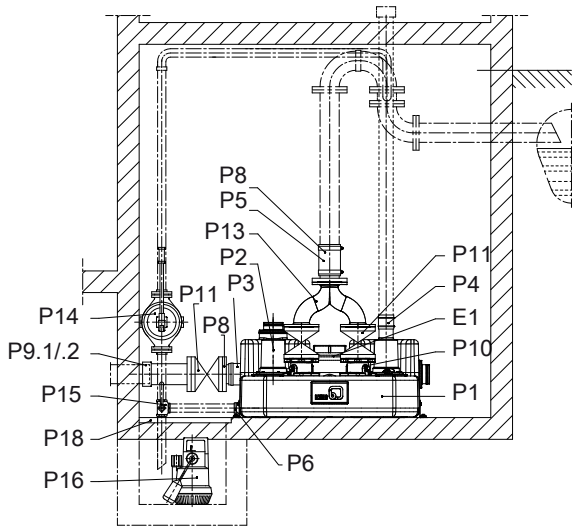


Fig. 96: Schematic of a mini-Compacta UZS (150 litres)

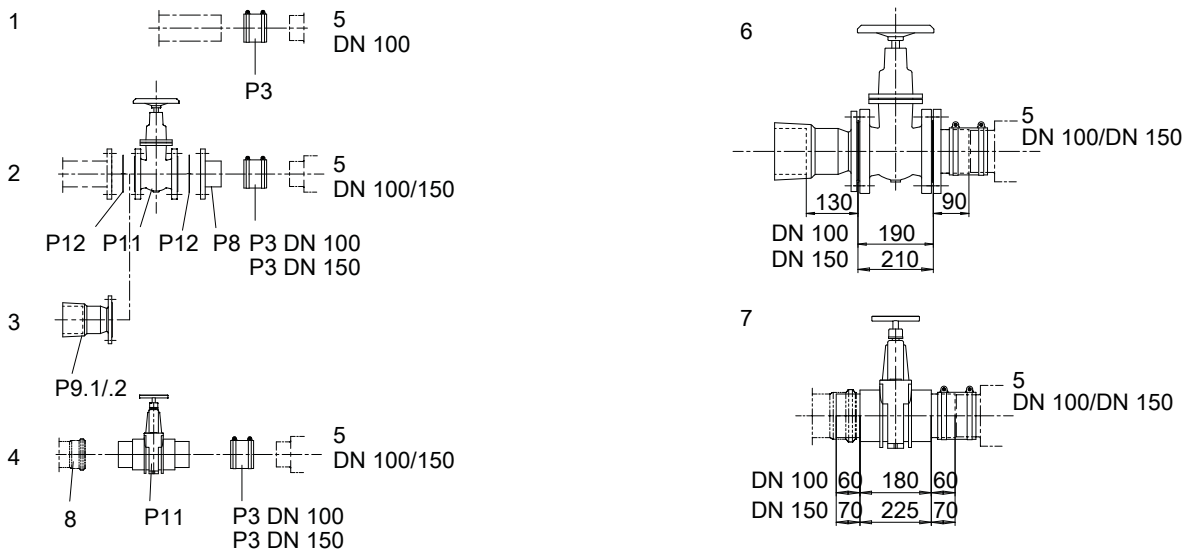


Fig. 97: Inlet line of a mini-Compacta UZS (150 litres)

1	Pipe connection
2	Flanged connection
3	Connection by flanged socket or flange adapter
4	Connection to the waste water pipe
5	Connection to the collecting tank
6	Gate valve made of grey cast iron
7	Gate valve made of PVC
8	Supplied by operator

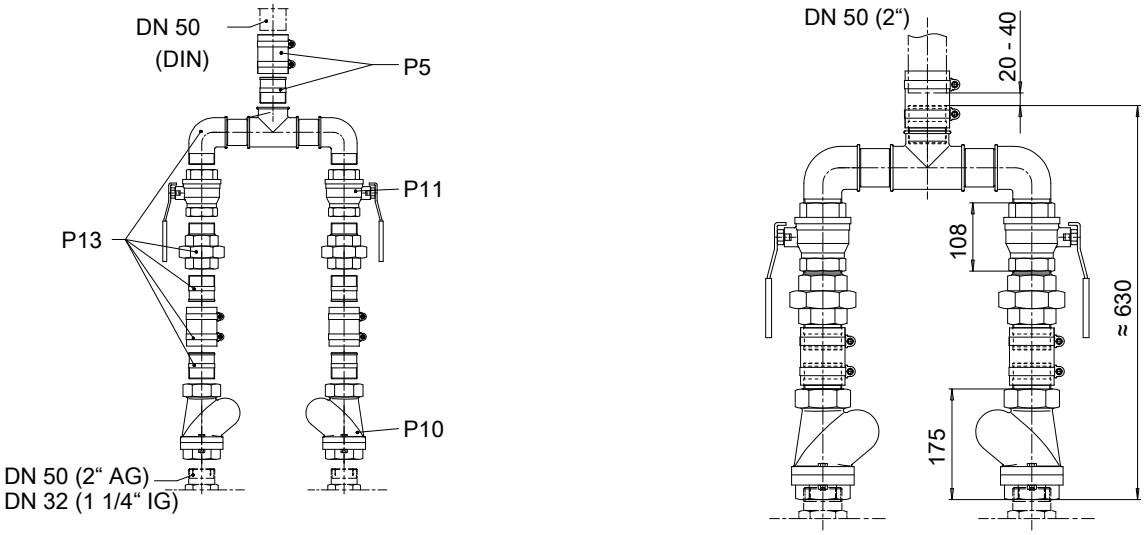


Fig. 98: Discharge line of a mini-Compacta UZS (150 litres)

Items included in the scope of supply of mini-Compacta UZS (150 litres)

Item		Description
-	P 1	Gas-tight, odour-tight, water-tight collecting tank made of impact-resistant plastic
-	P 2	Fully floodable submersible motor pump
	P 3	Flexible hose connection and hose clips DN 100 (inlet)
-	P 4	Flexible hose connection and hose clips (venting)
-	P 6	Flexible hose connection and hose clips (hand diaphragm pump)
-	E 1	Analog level sensor for pump 1, pump 2 and alarm buzzer; stand-by pump automatically starts up during peak loads
-	E 3	Electronic control unit with integrated alarm circuit and charging circuit, with high-quality rechargeable battery and alarm buzzer

Accessories for mini-Compacta UZS (150 litres)

Item		Description
	P 3	Flexible hose connection and hose clips DN 50 Flexible hose connection and hose clips DN 150
	P 5	Flexible hose connection and hose clips for discharge line, consisting of rubber hose, hexagon nipple and hose clips
-	P 8	Stub flange
	P 9.1	Flanged socket (for connecting pipes made of ductile cast iron) DN 100 for outside pipe diameter of 118 mm DN 150 for outside pipe diameter of 170 mm
	P 9.2	Flange adapter (for connecting pipes of different materials) DN 100 for outside pipe diameter of 107.2 - 127.8 mm, L 105 mm DN 150 for outside pipe diameter of 158.2 - 181.6 mm, L 105 mm
-	P 10	Check valve
-	P 11	Gate valve
	P 12	Set of installation accessories
-	P 13	Y-pipe DN 50
	P 14	Hand diaphragm pump ISO 7/I-Rp 1 1/2
	P 15	Three-way plug valve ISO 7/I-Rp 1 1/2
	P 16	Fully automatic Ama-Drainer (SE/SD) drainage pump with swing check valve
-	P 18	Cover plate, 560 × 560 mm, for 500 × 500 mm pits, for Ama-Drainer
-	E 50	AS 0 alarm switchgear

Item		Description
-	E 51	AS 2 alarm switchgear
-	E 52	AS 4 alarm switchgear
-	E 53	AS 5 alarm switchgear
-	E 64	F1 leakage sensor

Connection nozzles

Connection nozzles by model

Size	Inlet side	Discharge side	Vent	Connection Hand diaphragm pump
U60	Horizontal: 2 × DN 100, arranged at an angle of 90° Inlet nozzle level 180 mm 1 × DN 50 Vertical: 1 × DN 100/50, graded	DN 80/100 DN 80/80 (optional)	DN 50	DN 40 (Rp 1 $^{1}/_{2}$)
U100	Horizontal: 1 × DN 150/100, graded Inlet nozzle level 180 mm 2 × DN 150/100, graded Inlet nozzle level 250 mm Vertical: 1 × DN 150/100, graded	DN 80/100 DN 80/80 (optional)	DN 70	DN 40 (Rp 1 $^{1}/_{2}$)
UZ150	Horizontal: 1 × DN 150/100, graded Inlet nozzle level 180 mm 1 × DN 100/50, graded Inlet nozzle level 250 mm 1 × DN 150/100, graded Inlet nozzle level 250 mm Vertical: 1 × DN 150/100, graded	DN 80/100 (discharge line downstream of Y-pipe DN 100) DN 80/80 (optional)	DN 70	DN 40 (Rp 1 $^{1}/_{2}$)
US40	Horizontal: 2 x DN 100, arranged on the sides opposite to each other Inlet nozzle level 180 mm Vertical: 1 × DN 100/50, graded	DN 32	DN 50	DN 40 (Rp 1 $^{1}/_{2}$)
US100	Horizontal: 1 × DN 150/100, graded Inlet nozzle level 180 mm 2 × DN 150/100, graded Inlet nozzle level 250 mm Vertical: 1 × DN 150/100, graded	DN 50 (DN 32 possible)	DN 70	DN 40 (Rp 1 $^{1}/_{2}$)
UZS150	Horizontal: 1 × DN 150/50, graded 1 × DN 150/100, graded Inlet nozzle level 250 mm Vertical: 1 × DN 150/100, graded	2 × DN 50 (DN 32 possible)	DN 70	DN 40 (Rp 1 $^{1}/_{2}$)

Control units and switchgear

All switchgears and control units required for operation of the unit are included in the scope of supply. They feature an integrated acoustic alarm and volt-free fault signalling contact for transmitting fault messages to an alarm switchgear or directly to a control room. All switchgears and control units are supplied in enclosure IP54 and must be installed in a well-ventilated, flood-proof room.

LevelControl Basic 1 product description

Description

- Ready to be plugged in, with 1-metre power cable
- Analog level detection with sensor monitoring
- Manual-0-automatic selector switch
- Acknowledgement button
- Indicator lamp for pump status
- Indicator lamp for high water
- Indicator lamp for rotary field (three-phase current only)
- Pump protection by thermal circuit breaker
- Input for external fault message
- General fault message or volt-free “in operation” message
- Integrated alarm buzzer
- Battery-backed mains-independent alarm
- Straightforward parameterisation of inlet nozzle levels via DIL switch during commissioning

LevelControl Basic 2 product description

Description

- Ready to be plugged in, with 1-metre power cable
- Three-phase connection
- Integrated master switch (LevelControl Basic 2 BS only)
- Numerical display with status indication (traffic light) and navigation keys
- Fill level indication
- Indication of operating data
- Analog level detection with sensor monitoring
- Manual-0-automatic selector switch
- Indicator lamps
- Indicator lamp for high water
- Pump protection by thermal circuit breaker
- Integrated alarm buzzer
- Battery-backed mains-independent alarm
- Two inputs for external fault message and remote acknowledgement
- General fault message or volt-free “in operation” message
- Even distribution of pump operating hours due to automatic pump changeover
- Parameterisable service intervals
- Diagnostic function and signalling/message function
- Straightforward system configuration using parameterisation assistant (Wizard)
- Numerous additional functions (monitoring of supply voltage, measuring effective power, determining the power factor, intelligent system monitoring, and many more)

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Combinations of lifting and control units

LevelControl Basic 1 / LevelControl Basic 2 per model

Size	Control unit	Dimensions H × W × D [mm]
Single-pump units		
US 1.40 E	LevelControl Basic 1 E70	135 × 170 × 110
US 1.40 D	LevelControl Basic 1 D	135 × 170 × 110
U 1.60 D	LevelControl Basic 1 D	135 × 170 × 110
U 1.100 D, U 2.100 D, US 1.100 D, US 2.100 D	LevelControl Basic 1 D	135 × 170 × 110
U 1.60 E	LevelControl Basic 1 E25	135 × 170 × 110
U 1.100 E	LevelControl Basic 1 E25	135 × 170 × 110
U 2.100 E	LevelControl Basic 1 E40	135 × 170 × 110
US 1.100 E, US 2.100 E	LevelControl Basic 2 ES	400 × 281 × 135
Dual-pump units		
UZ 1.150 D, UZ 2.150 D, UZS 1.150 D, UZS 2.150 D	LevelControl Basic 2 ZD	400 × 281 × 135
UZ 1.150 E	LevelControl Basic 2 ZE25	400 × 281 × 135
UZ 2.150 E	LevelControl Basic 2 ZE40	400 × 281 × 135
UZS 1.150 E, UZS 2.150 E	LevelControl Basic 2 ZES	600 × 400 × 200

Variant-specific special features of LevelControl Basic 1

Control unit	Description
LevelControl Basic 1 D (CU 1 10 V T45 1 0 0 A D) (CU 1 10 V T45 1 0 0 M D)	▪ Standard single-pump control unit for three-phase motor ▪ Three-phase connection
LevelControl Basic 1 E25 (CU 1 10 V SC2 1 0 0 A A)	▪ Integrated run capacitor (C = 25 µF) for operating a single-phase motor with a power rating of 0.75 kW ▪ Single-phase mains connection
LevelControl Basic 1 E40 (CU 1 10 V SC4 1 0 0 A A)	▪ Integrated run capacitor (C = 40 µF) for operating a single-phase motor with a power rating of 1.5 kW ▪ Single-phase mains connection
LevelControl Basic 1 E70 (CU 1 10 V SC7 1 0 0 M A)	▪ Integrated run capacitor (C = 70 µF) for operating a single-phase motor with a power rating of 1.65 kW ▪ Single-phase mains connection

Variant-specific special features of LevelControl Basic 2

Control unit	Description
LevelControl Basic 2 ZD (BC2 400 DVNA 100 B0)	▪ Standard dual-pump control unit ▪ Three-phase connection
LevelControl Basic 2 ZE25 (BC2 230 XVNA 040 AA)	▪ Dual-pump control unit with integrated run capacitors (C = 25 µF) for operating two single-phase motors with a power rating of 0.75 kW each ▪ Single-phase mains connection
LevelControl Basic 2 ZE40 (BC2 230 YVNA 063 AA)	▪ Dual-pump control unit with integrated run capacitors (C = 40 µF) for operating two single-phase motors with a power rating of 1.5 kW each ▪ Single-phase mains connection
LevelControl Basic 2 ES (BC1 230 ZVNA 100 AA)	▪ Single-pump control unit with integrated run capacitors (C = 40 µF) for operating a single-phase motor with a power rating of 1.5 kW ▪ Additional load-dependent cut-in / cut-out of a start capacitor (C = 66 µF) ▪ Volt-free individual messages Pump Fault and High Water as standard ▪ Single-phase connection
LevelControl Basic 2 ZES (BS2 230 ZVNA 100 AA)	▪ Dual-pump control unit with integrated run capacitors (C = 40 µF) for operating two single-phase motors with a power rating of 1.5 kW each ▪ Additional load-dependent cut-in / cut-out of a start capacitor (C = 66 µF) per pump ▪ Volt-free individual messages Pump 1 Fault, Pump 2 Fault and High Water as standard ▪ Single-phase connection

Floodable Sewage Lifting Units

Compacta

UZ450

UZ300

U100

UZ150

http://shop.ksb.com/catalog/k0/en/product/ES000260

Product benefits

- Safe and reliable operation ensured by control system (LevelControl Basic 1 / LevelControl Basic 2)
- Y-pipe simplifies planning and reduces installation time (included in the scope of supply of dual-pump units up to UZ300).
- Various positioning options and diameters make it easy to adapt the unit to the most complicated of site conditions.
- Collecting tank with optimum volume/footprint ratio for effective space utilisation
- Integrated, ergonomically designed grips for safe handling during transport and installation

Further information

Prices on request

Characteristic curves 215
Dimensions and connections..... 216

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	LevelControl Basic 2 (⇨ Page 1038)	Level-dependent pump control and monitoring unit with display for either 1 or 2 pumps.

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certificates

Overview

Label	Effective in:
Type Tested and Monitored TÜVRheinland CERTIFIED www.tuv.com ID 0217007934	Europe

Fluids handled

Material variant A (standard variant)

- Waste water with faeces
- Waste water without faeces
- Waste water

Material variant C (for aggressive fluids)

- Aggressive fluids

Main applications

- Disposal of waste water occurring below the flood level
- Waste water management

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 140
	Q [l/s]	≤ 39
Head	H [m]	≤ 24,5
Fluid temperature	T [°C]	≤ +40 (continuous duty)
		≤ +65 (short-time operation ≤ 5 minutes)

Duty types

Permissible duty type

Operation	Type
Intermittent periodic duty	S3 50 % to VDE

Design details

Design

- Floodable sewage lifting unit[74)] to EN 12050-1
- Gas-tight and water-tight plastic collecting tank, pump unit, sensors and control unit

Compacta, ready to plug in:

- Hydraulics codes 3 to 5, collecting tanks 100, 150, 300, 450

Compacta, ready to connect:

- Hydraulics codes 3 to 5, collecting tank 900
- Hydraulics codes 10 to 15, collecting tanks 450, 900

Drive

- Surface-cooled
- Thermal overload protection
- To VDE 0530, Part 1/IEC 34-1
- Enclosure IP68 (permanently submerged) to EN 60529 / IEC 529
- Thermal class F
- Electrical voltage 400 V (three-phase asynchronous motor)
- Frequency 50 Hz
- DOL starting
- Star-delta starting (from 5.5 kW, hydraulics codes 12 to 15)

Impeller type

- Free-flow impeller

Bearings

- Grease-packed, maintenance-free rolling element bearings

Shaft seal

- Lubricant chamber for cooling and lubrication fitted in-between the pump-end and the drive-end shaft seals (supplied filled with ecologically acceptable white oil)
- Pump end: 1 mechanical seal
- Drive end , 1 shaft seal ring

74 Maximum flooding height: 2 metres, maximum flooding period: 7 days (does not apply to control unit). The lifting unit must be cleaned and serviced after it has been flooded.

Designation

Example: Compacta UZ X 5.300 D/C

Designation key

Code	Description	
Compacta	Type series	
UZ	Design	
	U	Single-pump lifting unit with free-flow impeller
	UZ	Dual-pump lifting unit with free-flow impeller
X	Special design	
5	Hydraulics code	
	3, 4, 5, 10, 11, 12, 13, 14, 15	
300	Total volume of collecting tank [litres]	
	100, 150, 300, 450, 900	
D	Three-phase asynchronous motor	
C	Material variant	
	C	Variant for aggressive fluids
	-[75]	Standard design

Materials

Overview of available materials

Part No.	Description	Hydraulics code		
		3 to 5		10 to 15
		Material variant A	Material variant C[76]	
591	Tank	Polyethylene		
102	Pump casing	Grey cast iron	Grey cast iron with coating	Grey cast iron
230	Impeller	Grey cast iron	Polyurethane	Grey cast iron
210	Motor shaft	Stainless steel (1.4021)	Stainless steel (1.4462)	Stainless steel (1.4021)
161	Casing cover	Grey cast iron	Grey cast iron with coating	Grey cast iron
742	Swing check valve	Grey cast iron	Stainless steel (1.4408)	Grey cast iron (accessory)
81-42	Float	Polypropylene		
-	Screws, bolts and nuts	Stainless steel (A4)		

75 Blank

76 High-quality Rilsan® powder coating (coating thickness 400 µm) is applied to all wetted components made of grey cast iron and steel in a fluidised bed.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Prices on request

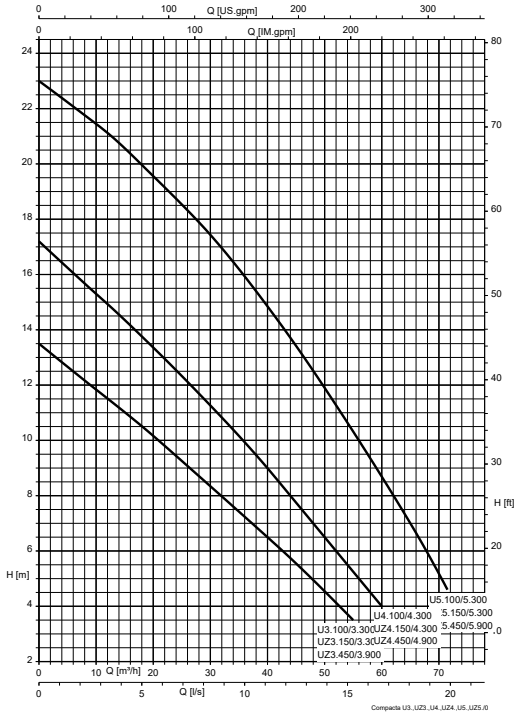
Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Characteristic curves

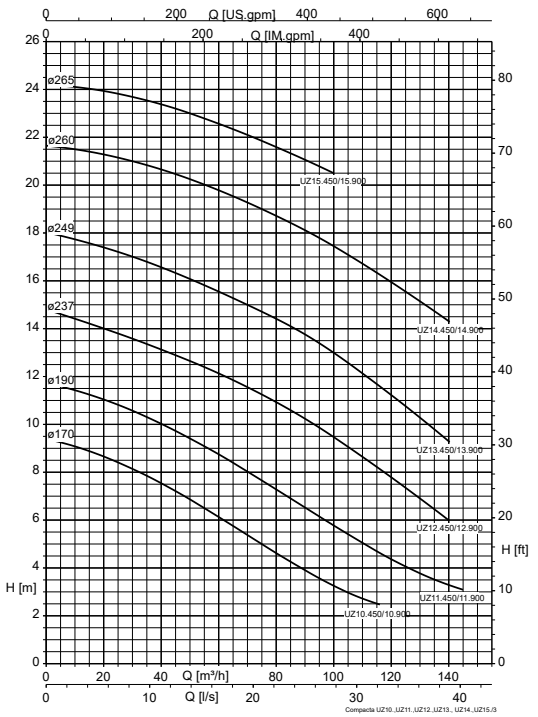
Note

Characteristic curves valid for common domestic waste water quantities. For smaller capacities please refer to the mini-Compacta type series booklet (reference number 2317.54).

Compacta U3/UZ3, U4/UZ4, U5/UZ5; n = 2800 rpm



Compacta UZ10, UZ11, UZ12, UZ13, UZ14, UZ15; n = 1450 rpm



Dimensions and connections

Compacta U (100 litres)

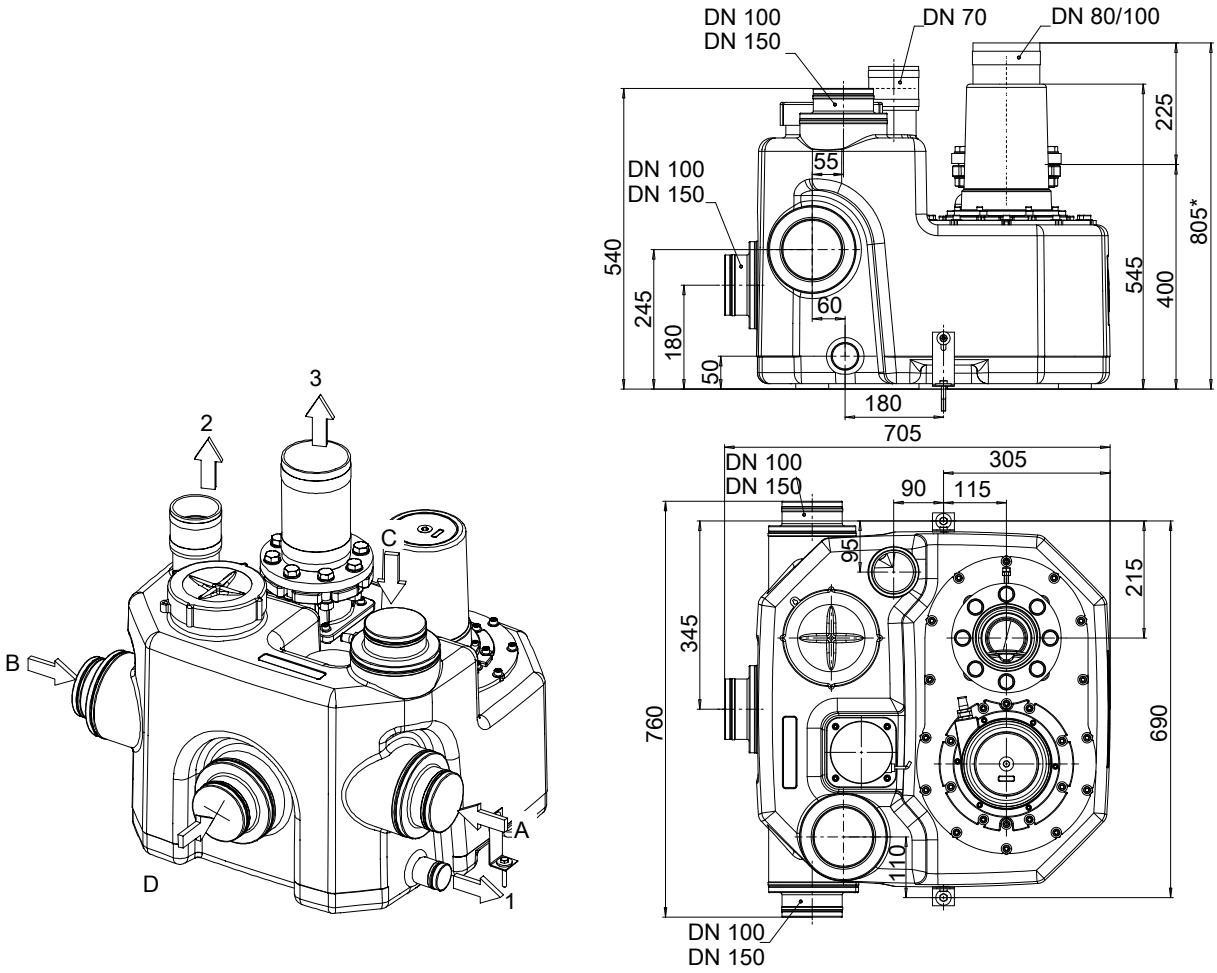


Fig. 99: Connections and dimensions for Compacta U (100 litres)

A	Inlet DN 150/100
B	Inlet DN 150/100
C	Inlet DN 150/100
D	Inlet cannot be used
1	Drain DN 40
2	Vent DN 70
3	Discharge line DN 80/100
*	Length including gate valve

Compacta U (300 litres)

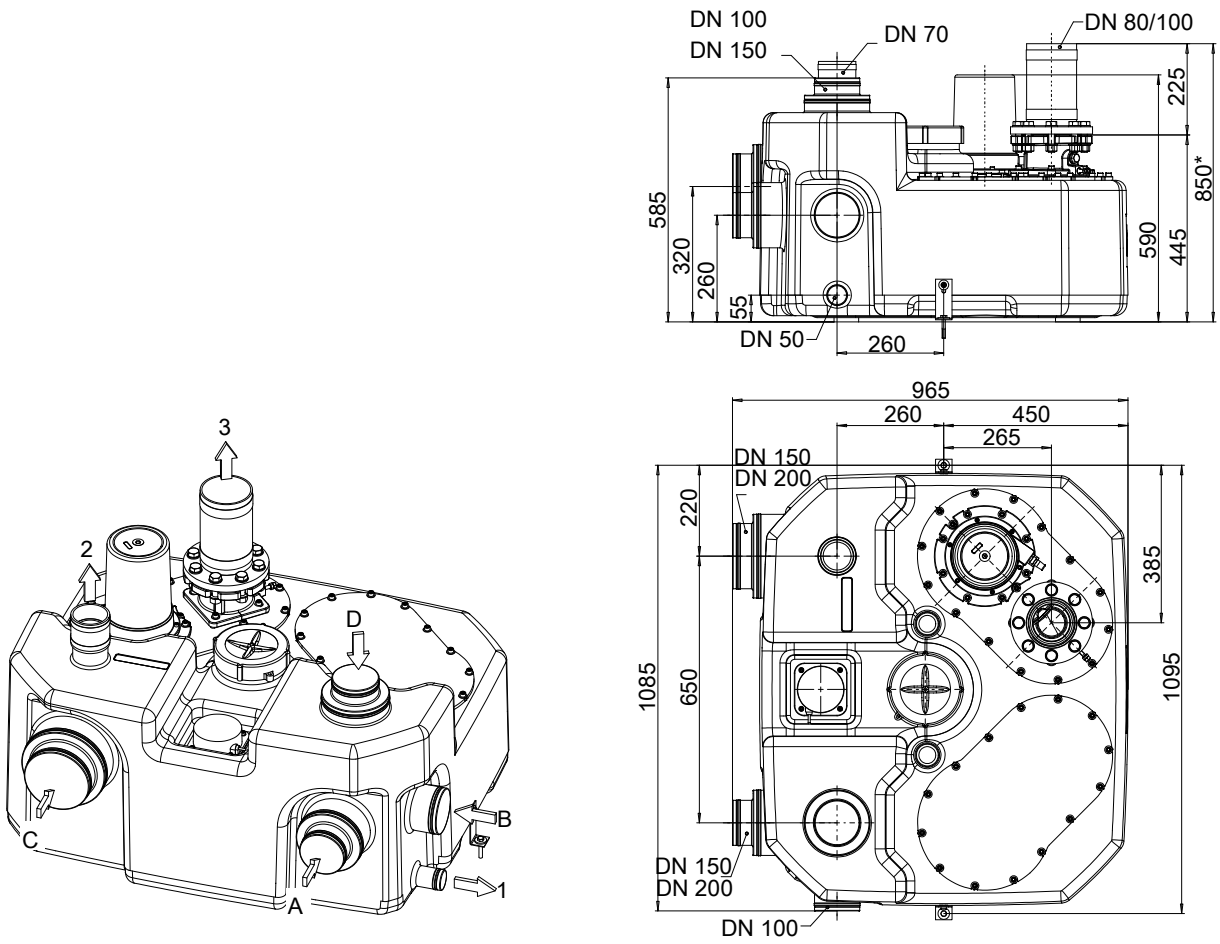


Fig. 100: Connections and dimensions for Compacta U (300 litres)

A	Inlet DN 150/100
B	Inlet DN 100
C	Inlet DN 200/150
D	Inlet DN 150/100
1	Drain DN 40
2	Vent DN 70
3	Discharge line DN 80/100
*	Length including gate valve

Compacta UZ (150 litres)

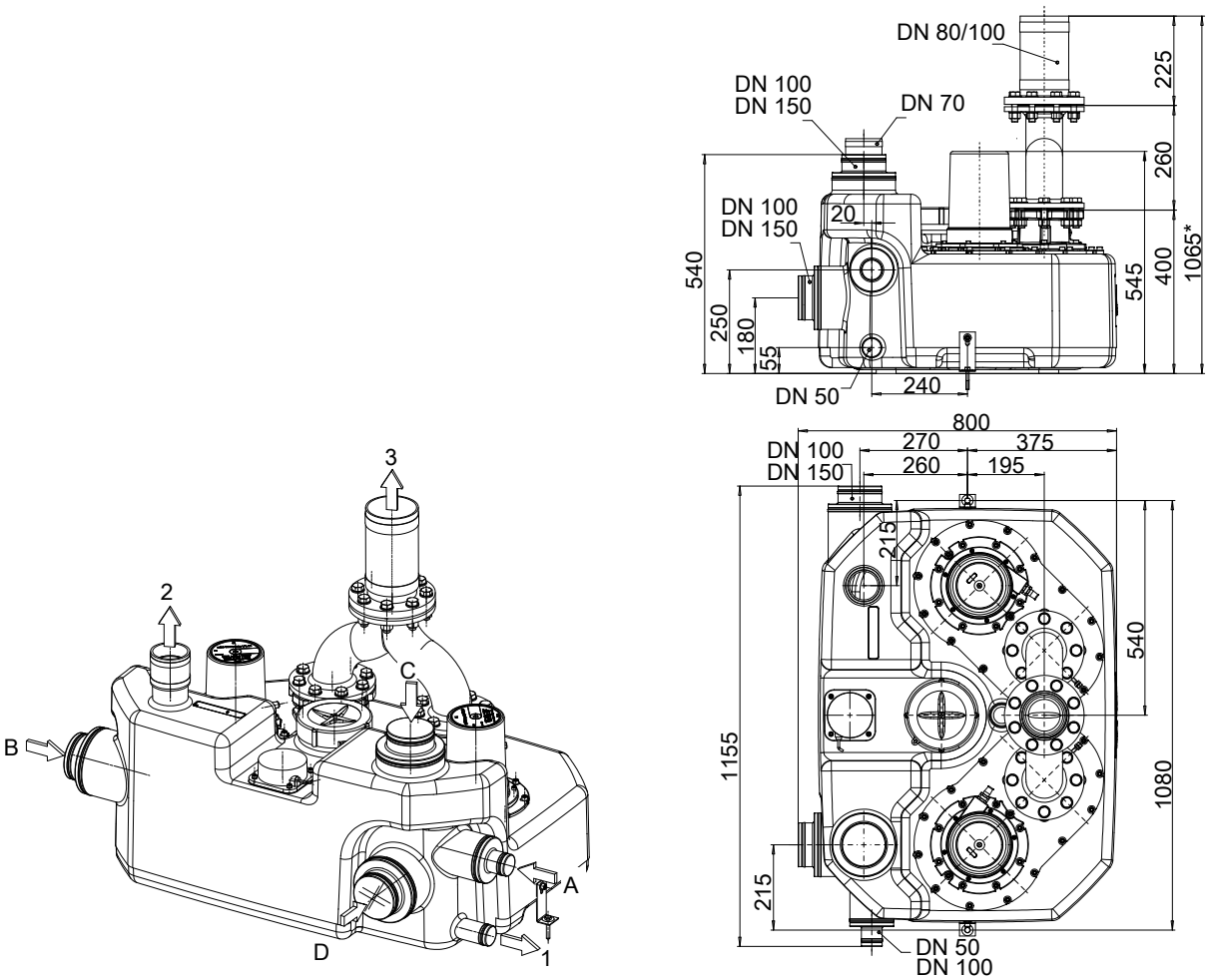


Fig. 101: Connections and dimensions for Compacta UZ (150 litres)

A	Inlet DN 100/50
B	Inlet DN 150/100
C	Inlet DN 150/100
D	Inlet cannot be used
1	Drain DN 40
2	Vent DN 70
3	Discharge line DN 80/100
*	Length including gate valve

Compacta UZ (300 litres)

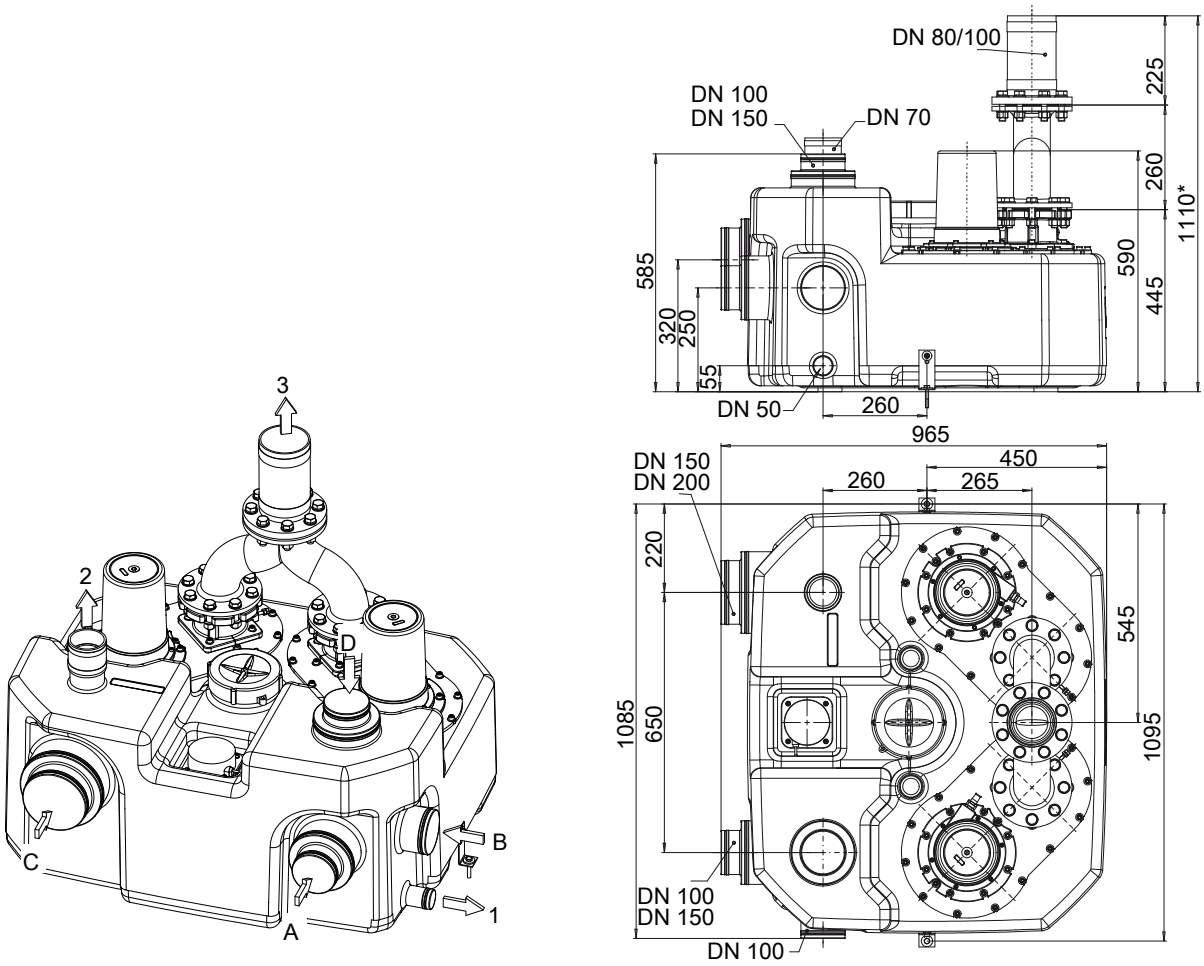


Fig. 102: Connections and dimensions for Compacta UZ (300 litres)

A	Inlet DN 150/100
B	Inlet DN 100
C	Inlet DN 200/150
D	Inlet DN 150/100
1	Drain DN 40
2	Vent DN 70
3	Discharge line DN 80/100
*	Length including gate valve

Installation information

Compacta U 3.100 to U 5.100 and U 3.300 to U 5.300

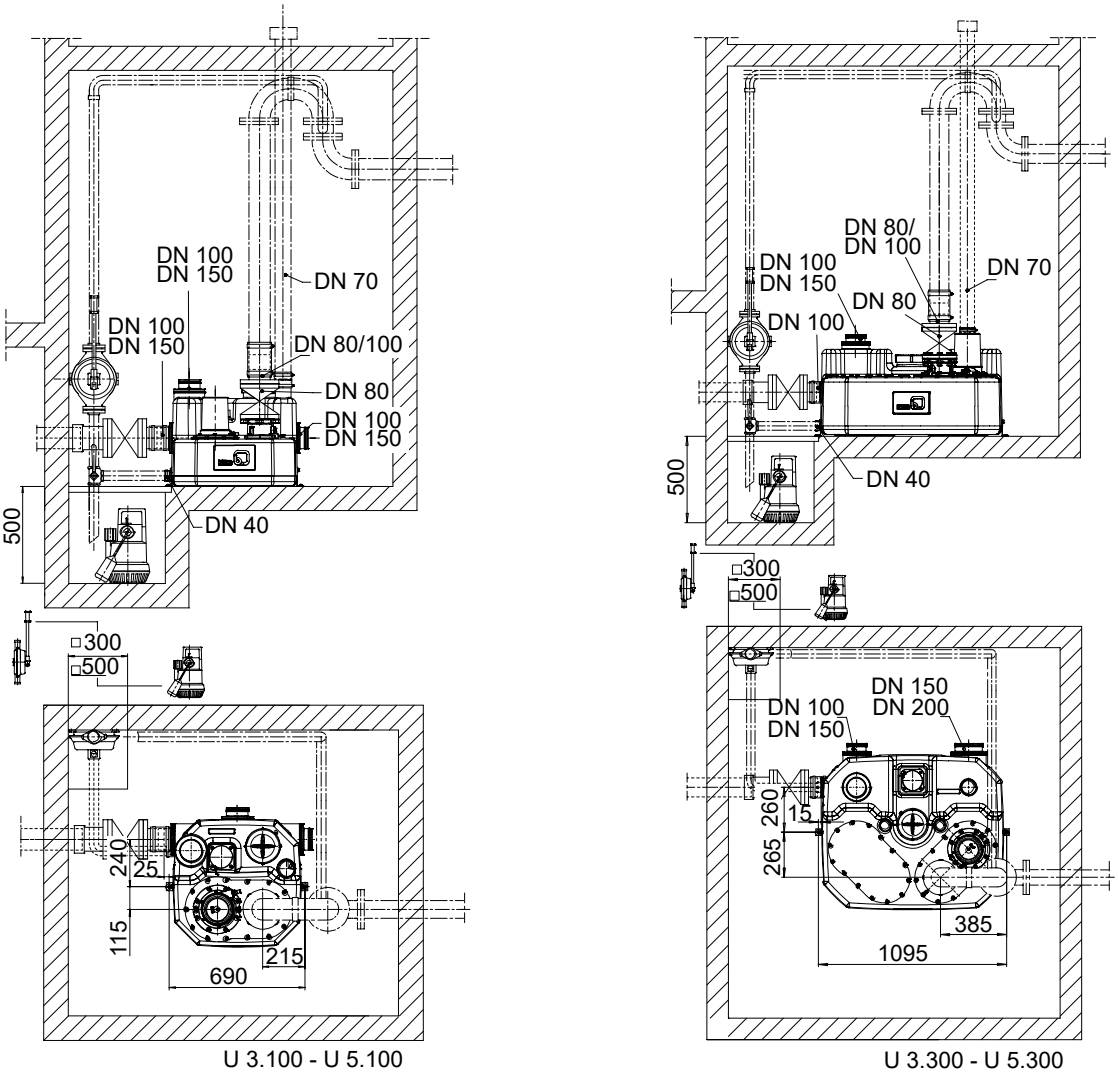


Fig. 103: Installation information for Compacta U 3.100 to U 5.100 and U 3.300 to U 5.300

For lifting units a working area of at least 600 mm width and height must be provided around and above all parts to be operated and serviced.

Compacta UZ 3.150 to UZ 5.150 and UZ 3.300 to UZ 5.300

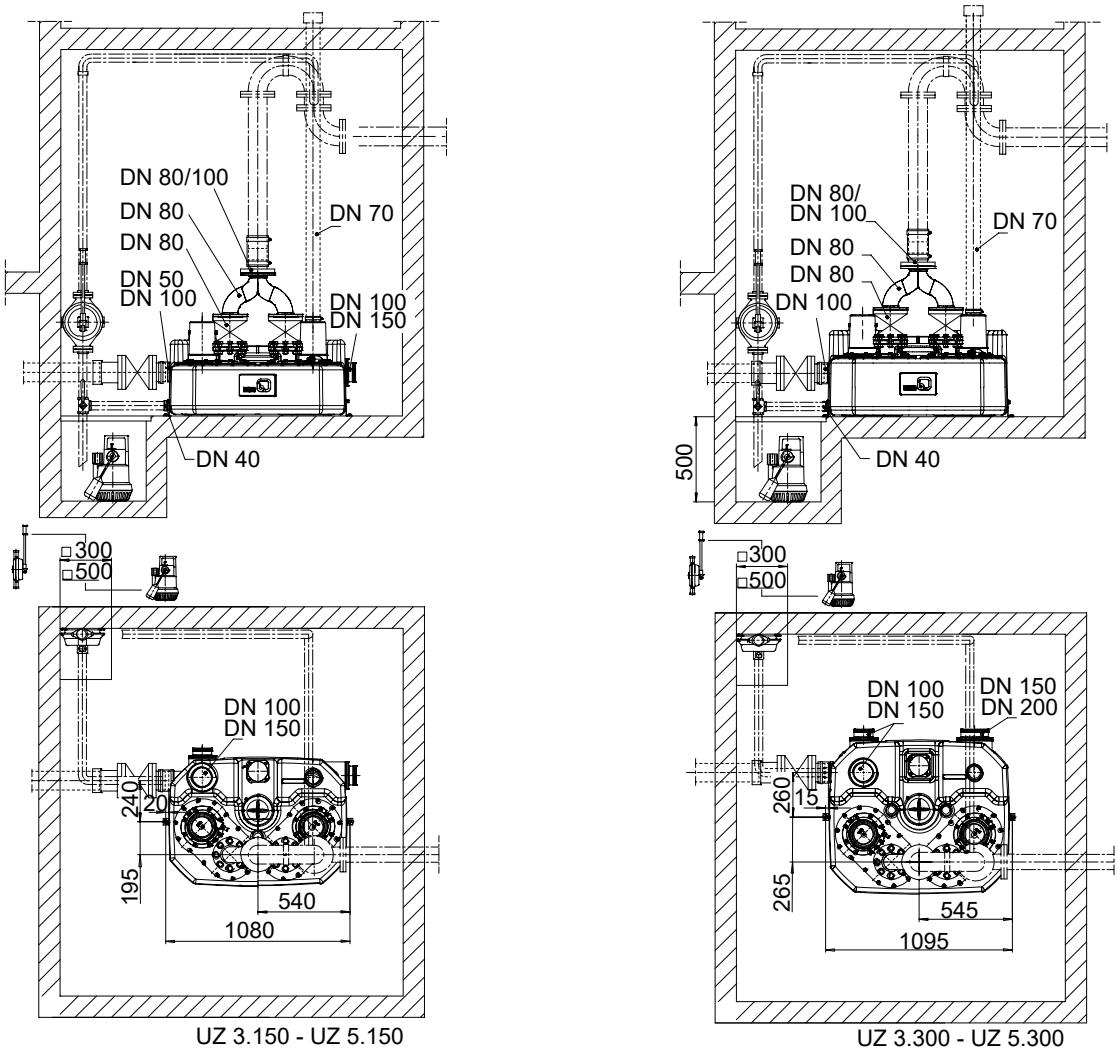


Fig. 104: Installation information for Compacta UZ 3.150 to UZ 5.150 and UZ 3.300 to UZ 5.300

For lifting units a working area of at least 600 mm width and height must be provided around and above all parts to be operated and serviced.

Compacta UZ 3.450 to UZ 5.450 and UZ 3.900 to UZ 5.900

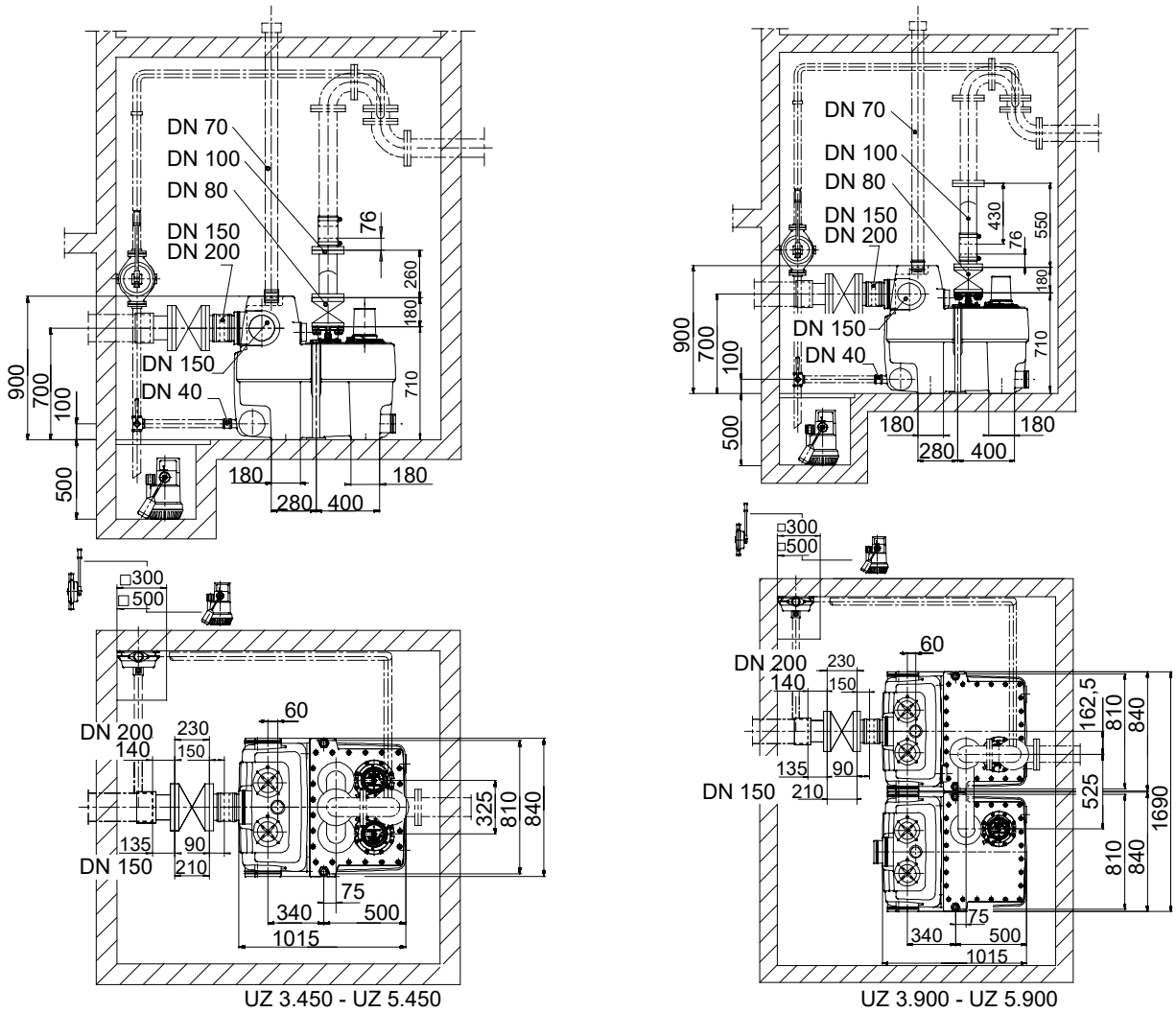


Fig. 105: Installation information for Compacta UZ 3.450 to UZ 5.450 and UZ 3.900 to UZ 5.900

For lifting units a working area of at least 600 mm width and height must be provided around and above all parts to be operated and serviced.

Compacta UZ 10.450 to UZ 15.450 and UZ 10.900 to UZ 15.900

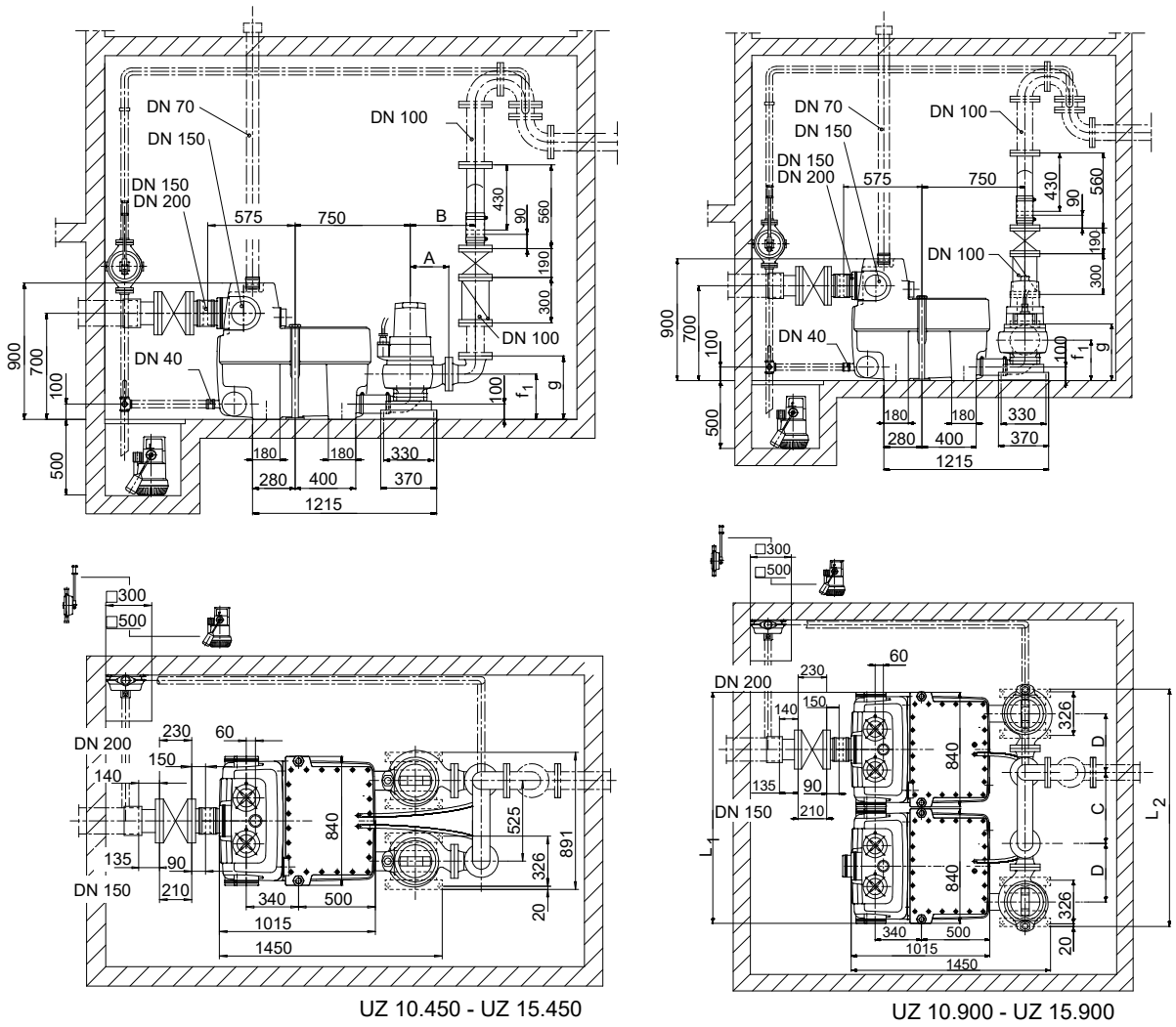


Fig. 106: Installation information for Compacta UZ 10.450 to UZ 15.450 and UZ 10.900 to UZ 15.900

Dimensions

Size	A	B	C	D	f_1	g	L_1	L_2
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
UZ 10.450 - UZ 11.450	270	445	-	-	275	395	-	-
UZ 12.450 - UZ 15.450	255	430	-	-	300	420	-	-
UZ 10.900 - UZ 11.900	-	-	490	445	275	395	1695	1746
UZ 12.900 - UZ 15.900	-	-	525	430	300	420	1700	1751

For lifting units a working area of at least 600 mm width and height must be provided around and above all parts to be operated and serviced.

Scope of supply

Compacta U 3.100 to U 5.100 and U 3.300 to U 5.300

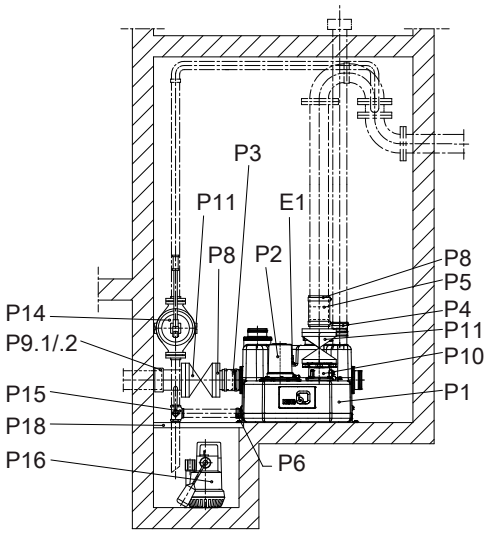


Fig. 107: Compacta U 3.100 to U 5.100 and U 3.300 to U 5.300

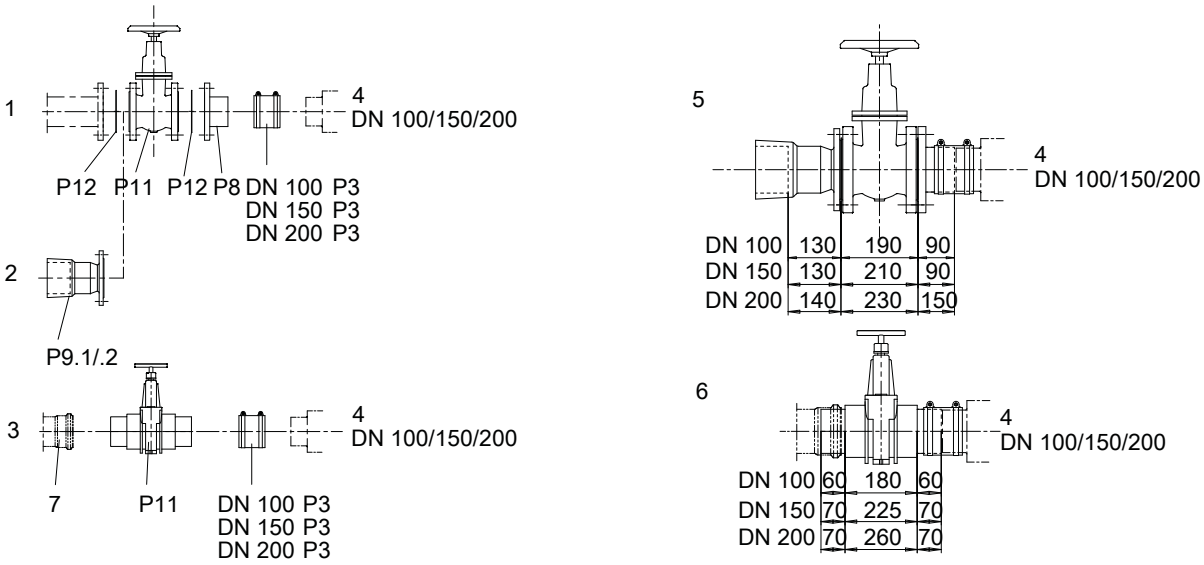


Fig. 108: Inlet line of Compacta U 3.100 to U 5.100 and U 3.300 to U 5.300

1	Flanged connection
2	Connection by flanged socket or flange adapter
3	Connection to the waste water pipe
4	Connection to the collecting tank
5	Gate valve made of grey cast iron
6	Gate valve made of PVC
7	Supplied by operator

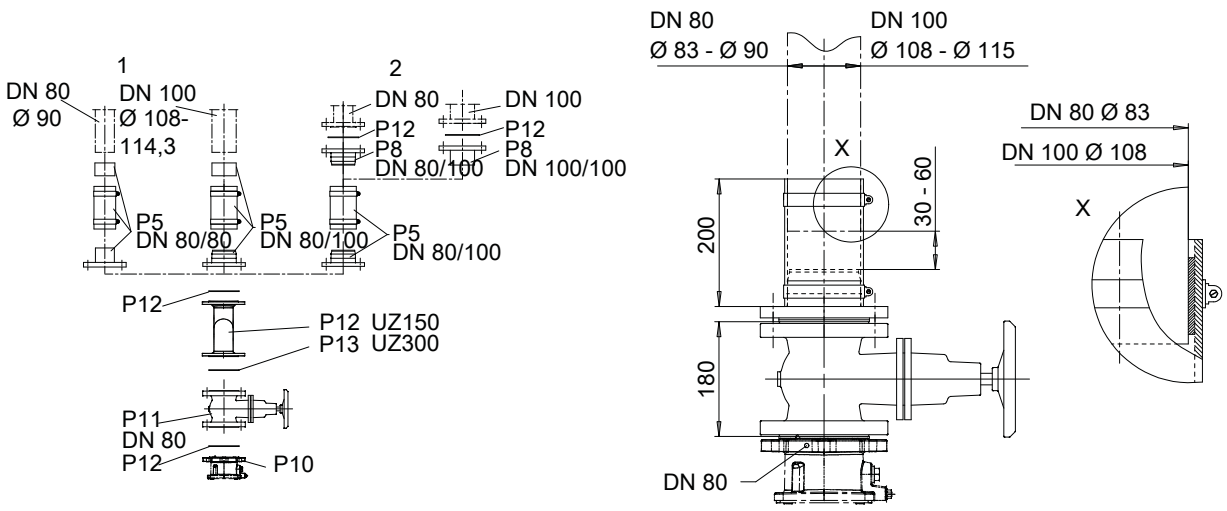


Fig. 109: Discharge line of Compacta U 3.100 to U 5.100 and U 3.300 to U 5.300

1	Pipe connection
2	Flanged connection

Scope of supply of Compacta U 3.100 to U 5.100 and U 3.300 to U 5.300

Item		Description	Compacta U 3. - U 5.	
			100	300
-	P1	Gas-tight, odour-tight, water-tight collecting tank made of impact-resistant plastic	✘	✘
-	P2	Fully floodable submersible motor pump	✘	✘
	P3	Flexible hose connection and hose clips DN 100	✘	-
	P3	Flexible hose connection and hose clips DN 150 (inlet)	-	✘
-	P4	Flexible hose connection and hose clips (venting)	✘	✘
	P5	Flexible hose connection and hose clips for discharge line, consisting of DN 80 stub flange with DN 100 hosetail, fabric-reinforced rubber hose and adapter hose for outside pipe diameter of 108 - 114.3 mm	✘	✘
-	P6	Flexible hose connection and hose clips (hand diaphragm pump)	✘	✘
-	P10	Swing check valve with full port and lifting screw	✘	✘
-	E1	Analog level sensor for pump and alarm buzzer	✘	✘
-	E3[77)]	Electronic control unit with integrated alarm circuit and charging circuit, with high-quality rechargeable battery and alarm buzzer	✘	✘

Accessories of Compacta U 3.100 to U 5.100 and U 3.300 to U 5.300

Item		Description	Compacta U 3. - U 5.	
			100	300
	P3	Flexible hose connection and hose clips DN 100	-	✘
	P3	Flexible hose connection and hose clips DN 150	✘	-
	P3	Flexible hose connection and hose clips DN 200	-	✘
	P5	Flexible hose connection and hose clips for discharge line, consisting of DN 80 stub flange with DN 80 hosetail, fabric-reinforced rubber hose and adapter hose for outside pipe diameter of 83 - 90 mm	✘	✘
	P8	Stub flange	✘	✘

77 Not shown in drawing

Item		Description	Compacta U 3. - U 5.	
			100	300
	P9.1	Flanged socket (for connecting pipes made of ductile cast iron) DN 100 for outside pipe diameter of 118 mm DN 150 for outside pipe diameter of 170 mm DN 200 for outside pipe diameter of 222 mm	✗	✗
	P9.2	Flange adapter (for connecting pipes of different materials) DN 100 for outside pipe diameter of 107.2 - 127.8 mm, L 105 mm DN 150 for outside pipe diameter of 158.2 - 181.6 mm, L 105 mm DN 200 for outside pipe diameter of 189.0 - 212.0 mm, L 145 mm	✗	✗
-	P11	Gate valve	✗	✗
	P12	Set of installation accessories	✗	✗
	P14	Hand diaphragm pump ISO 7/I-Rp 1 1/2	✗	✗
	P15	Three-way plug valve ISO 7/I-Rp 1 1/2	✗	✗
	P16	Fully automatic Ama-Drainer (SE/SD) drainage pump with swing check valve	✗	✗
-	P18	Cover plate, 560 × 560 mm, for 500 × 500 mm pits, for Ama-Drainer	✗	✗
-	E50[77)]	AS 0 alarm switchgear	✗	✗
-	E51[77)]	AS 2 alarm switchgear	✗	✗
-	E52[77)]	AS 4 alarm switchgear	✗	✗
-	E53[77)]	AS 5 alarm switchgear	✗	✗
-	E64[77)]	F1 leakage sensor	✗	✗

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Compacta UZ 3.150 to UZ 5.150 and UZ 3.300 to UZ 5.300

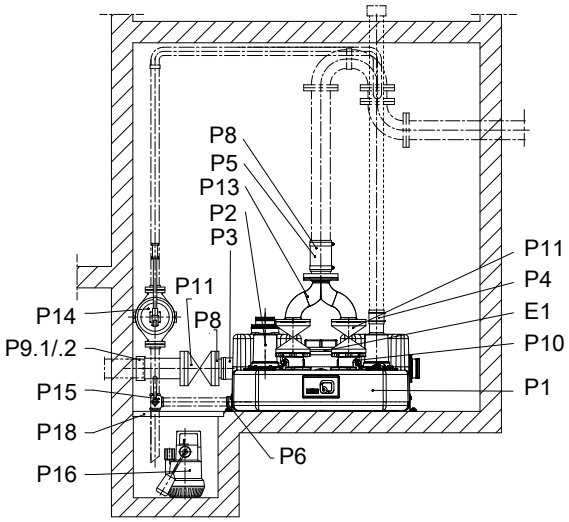


Fig. 110: Compacta UZ 3.150 to UZ 5.150 and UZ 3.300 to UZ 5.300

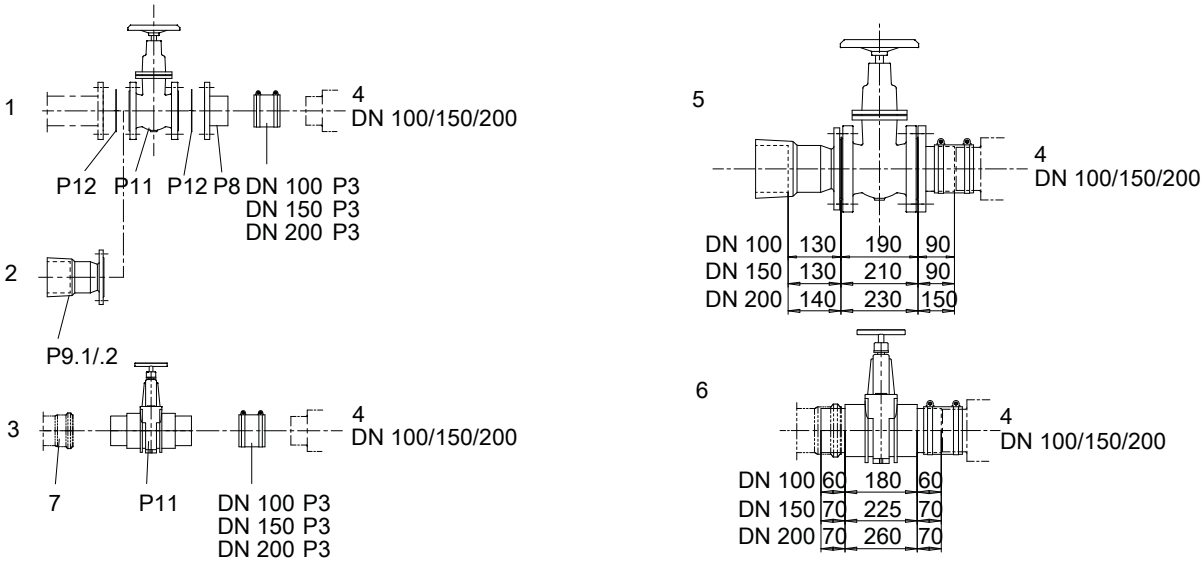


Fig. 111: Inlet line of Compacta UZ 3.150 to UZ 5.150 and UZ 3.300 to UZ 5.300

1	Flanged connection
2	Connection by flanged socket or flange adapter
3	Connection to the waste water pipe
4	Connection to the collecting tank
5	Gate valve made of grey cast iron
6	Gate valve made of PVC
7	Supplied by operator

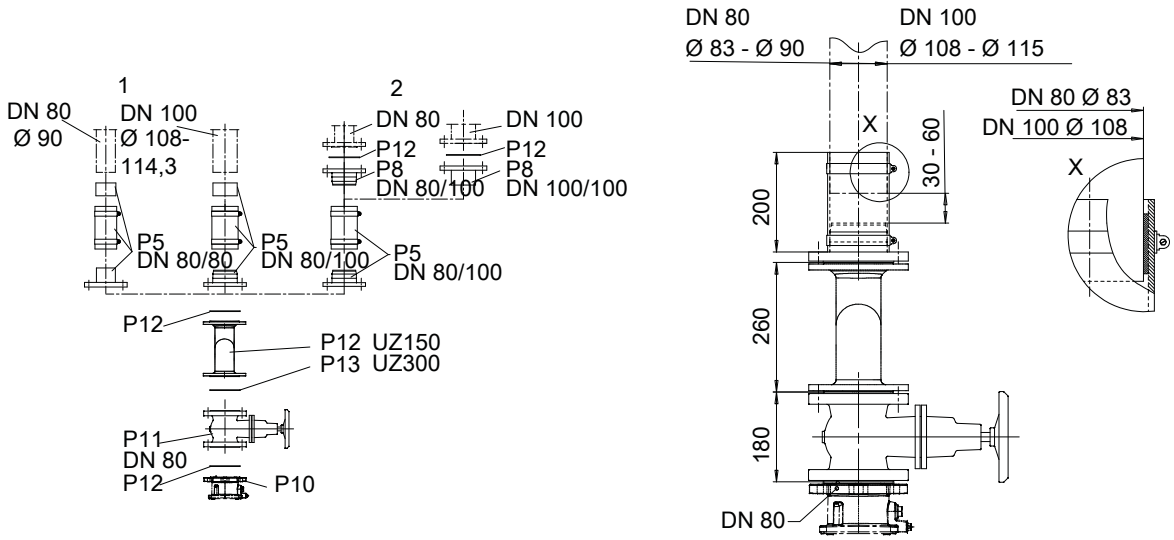


Fig. 112: Discharge line of Compacta UZ 3.150 to UZ 5.150 and UZ 3.300 to UZ 5.300

1	Pipe connection
2	Flanged connection

Scope of supply of Compacta UZ 3.150 to UZ 5.150 and UZ 3.300 to UZ 5.300

Item		Description	Compacta	
			UZ 3. - UZ 5.	
			150	300
-	P1	Gas-tight, odour-tight, water-tight collecting tank made of impact-resistant plastic	✘	✘
-	P2	Fully floodable submersible motor pump	✘	✘
	P3	Flexible hose connection and hose clips DN 100	✘	-
	P3	Flexible hose connection and hose clips DN 150 (inlet)	-	✘
-	P4	Flexible hose connection and hose clips (venting)	✘	✘
	P5	Flexible hose connection and hose clips for discharge line, consisting of DN 80 stub flange with DN 100 hosetail, fabric-reinforced rubber hose and adapter hose for outside pipe diameter of 108 - 114.3 mm	✘	✘
-	P6	Flexible hose connection and hose clips (hand diaphragm pump)	✘	✘
-	P10	Swing check valve with full port and lifting screw	✘[78)]	✘[78)]
-	P13	Y-pipe DN 80 with 2 sets of installation accessories	✘[79)]	✘[79)]
-	E1	Analog level sensor for pump 1, pump 2 and alarm buzzer; stand-by pump automatically starts up during peak loads	✘	✘
-	E3[80)]	Electronic control unit with integrated alarm circuit and charging circuit, with high-quality rechargeable battery and alarm buzzer	✘	✘

Accessories of Compacta UZ 3.150 to UZ 5.150 and UZ 3.300 to UZ 5.300

Item		Description	Compacta	
			UZ 3. - UZ 5.	
			150	300
	P3	Flexible hose connection and hose clips DN 100	-	✘
	P3	Flexible hose connection and hose clips DN 150	✘	-
	P3	Flexible hose connection and hose clips DN 200	-	✘

78 Two such pcs./sets are required for the discharge line
79 Not for variant C
80 Not shown in drawing

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Item		Description	Compacta	
			UZ 3. - UZ 5.	
			150	300
	P5	Flexible hose connection and hose clips for discharge line, consisting of DN 80 stub flange with DN 80 hosetail, fabric-reinforced rubber hose and adapter hose for outside pipe diameter of 83 - 90 mm	✗	✗
	P8	Stub flange	✗	✗
	P9.1	Flanged socket (for connecting pipes made of ductile cast iron) DN 100 for outside pipe diameter of 118 mm DN 150 for outside pipe diameter of 170 mm DN 200 for outside pipe diameter of 222 mm	✗	✗
	P9.2	Flange adapter (for connecting pipes of different materials) DN 100 for outside pipe diameter of 107.2 - 127.8 mm, L 105 mm DN 150 for outside pipe diameter of 158.2 - 181.6 mm, L 105 mm DN 200 for outside pipe diameter of 189.0 - 212.0 mm, L 145 mm	✗	✗
-	P11	Gate valve	✗[78)]	✗[78)]
	P12	Set of installation accessories	✗[78)]	✗[78)]
	P13	Y-pipe DN 80, material variant C, with 2 sets of installation accessories	✗	✗
	P14	Hand diaphragm pump ISO 7/I-Rp 1 1/2	✗	✗
	P15	Three-way plug valve ISO 7/I-Rp 1 1/2	✗	✗
	P16	Fully automatic Ama-Drainer (SE/SD) drainage pump with swing check valve	✗	✗
-	P18	Cover plate, 560 × 560 mm, for 500 × 500 mm pits, for Ama-Drainer	✗	✗
-	E50[80)]	AS 0 alarm switchgear	✗	✗
-	E51[80)]	AS 2 alarm switchgear	✗	✗
-	E52[80)]	AS 4 alarm switchgear	✗	✗
-	E53[80)]	AS 5 alarm switchgear	✗	✗
-	E64[80)]	F1 leakage sensor	✗	✗

Compacta UZ 3.450 to UZ 5.450 and UZ 3.900 to UZ 5.900

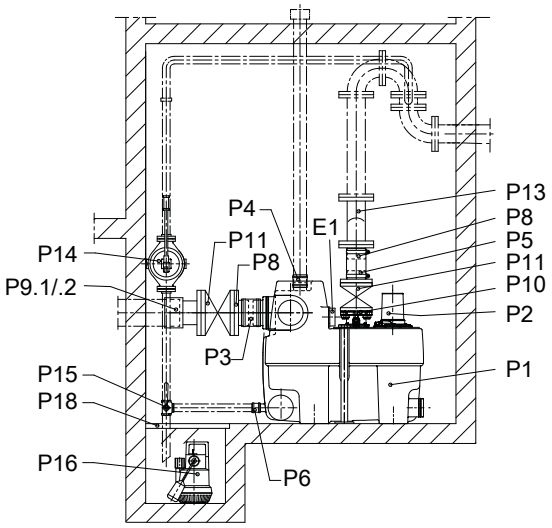


Fig. 113: Compacta UZ 3.450 to UZ 5.450 and UZ 3.900 to UZ 5.900

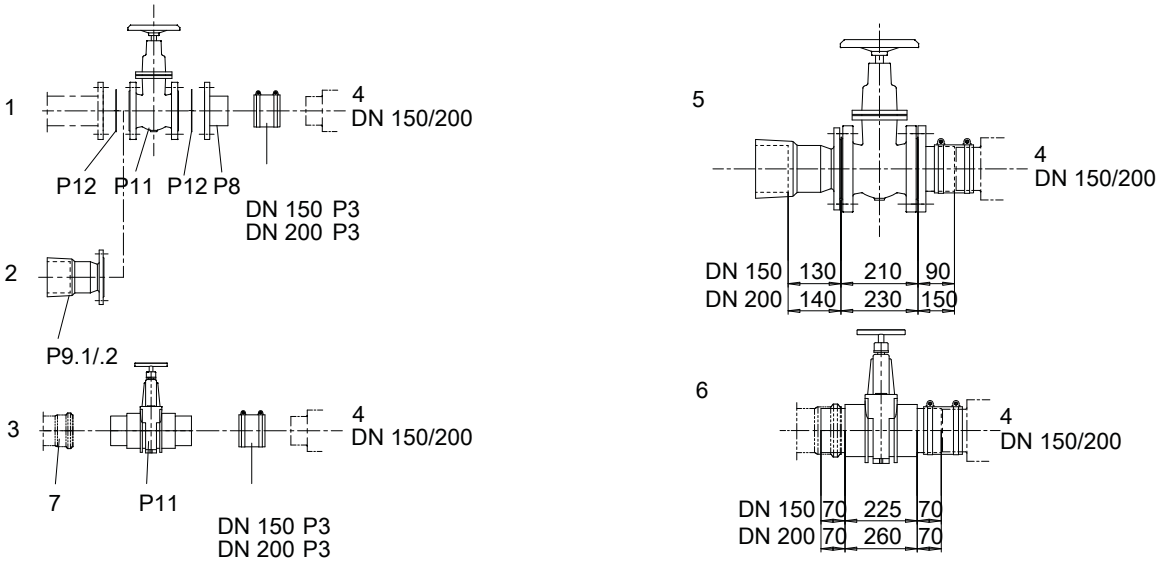


Fig. 114: Inlet line of Compacta UZ 3.450 to UZ 5.450 and UZ 3.900 to UZ 5.900

1	Flanged connection
2	Connection by flanged socket or flange adapter
3	Connection to the waste water pipe
4	Connection to the collecting tank
5	Gate valve made of grey cast iron
6	Gate valve made of PVC
7	Supplied by operator

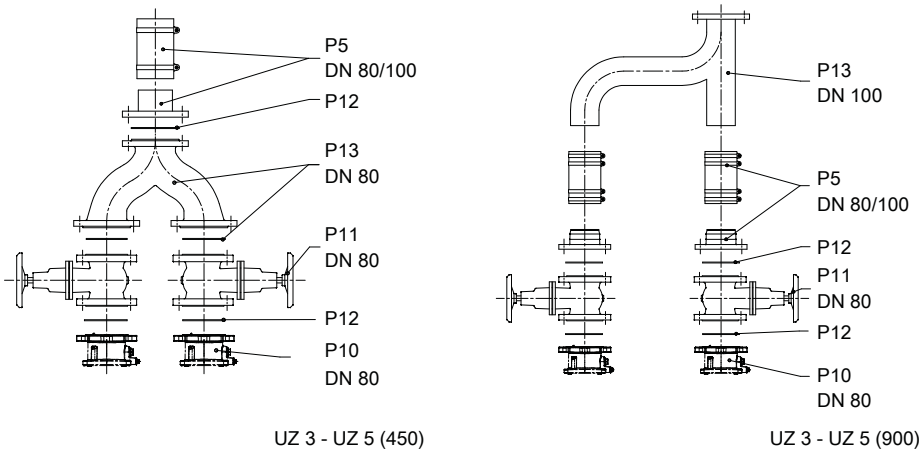


Fig. 115: Discharge line of Compacta UZ 3.450 to UZ 5.450 and UZ 3.900 to UZ 5.900

Scope of supply of Compacta UZ 3.450 to UZ 5.450 and UZ 3.900 to UZ 5.900

Item		Description	Compacta	
			UZ 3. - UZ 5.	
			450	900
-	P1	Gas-tight, odour-tight, water-tight collecting tank made of impact-resistant plastic	✗	✗
-	P2	Fully floodable submersible motor pump	✗	✗
	P3	Flexible hose connection and hose clips DN 150 (inlet)	✗	✗
-	P4	Flexible hose connection and hose clips (venting)	✗	✗
	P5	Flexible hose connection and hose clips for discharge line, consisting of DN 80 stub flange with DN 100 hosetail, fabric-reinforced rubber hose and adapter hose for outside pipe diameter of 108 - 114.3 mm	✗	✗[81)]
-	P6	Flexible hose connection and hose clips (hand diaphragm pump)	✗	✗
-	P10	Swing check valve with full port and lifting screw	✗[81)]	✗[81)]
-	E1	Analog level sensor for pump 1, pump 2 and alarm buzzer; stand-by pump automatically starts up during peak loads	✗	✗
-	E3[82)]	Electronic control unit with integrated alarm circuit and charging circuit, with high-quality rechargeable battery and alarm buzzer	✗	✗

Accessories of Compacta UZ 3.450 to UZ 5.450 and UZ 3.900 to UZ 5.900

Item		Description	Compacta	
			UZ 3 - UZ 5	
			450	900
	P3	Flexible hose connection and hose clips DN 200	✗	✗
	P5	Flexible hose connection and hose clips for discharge line, consisting of DN 80 stub flange with DN 80 hosetail, fabric-reinforced rubber hose and adapter hose for outside pipe diameter of 83 - 90 mm	✗	-
	P8	Stub flange	✗	✗[81)]
	P9.1	Flanged socket (for connecting pipes made of ductile cast iron) DN 150 for outside pipe diameter of 170 mm DN 200 for outside pipe diameter of 222 mm	✗	✗
	P9.2	Flange adapter (for connecting pipes of different materials) DN 150 for outside pipe diameter of 158.2 - 181.6 mm, L 105 mm DN 200 for outside pipe diameter of 189.0 - 212.0 mm, L 145 mm	✗	✗
-	P11	Gate valve	✗[81)]	✗[81)]
	P12	Set of installation accessories	✗[81)]	✗[81)]
	P13	Y-pipe with installation accessories	✗	✗

81 Two pcs./sets are included and required for the discharge line.
82 Not shown in drawing

Item		Description	Compacta	
			UZ 3 - UZ 5	
			450	900
	P14	Hand diaphragm pump	✗	✗
	P15	Three-way plug valve	✗	✗
	P16	Fully automatic Ama-Drainer (SE/SD) drainage pump	✗	✗
-	P18	Cover plate	✗	✗
-	E50[82)]	AS 0 alarm switchgear	✗	✗
-	E51[82)]	AS 2 alarm switchgear	✗	✗
-	E52[82)]	AS 4 alarm switchgear	✗	✗
-	E53[82)]	AS 5 alarm switchgear	✗	✗
-	E55[82)]	AS 1 alarm switchgear	✗	✗
-	E64[82)]	F1 leakage sensor	✗	✗

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Compacta UZ 10.450 to UZ 15.450 and UZ 10.900 to UZ 15.900

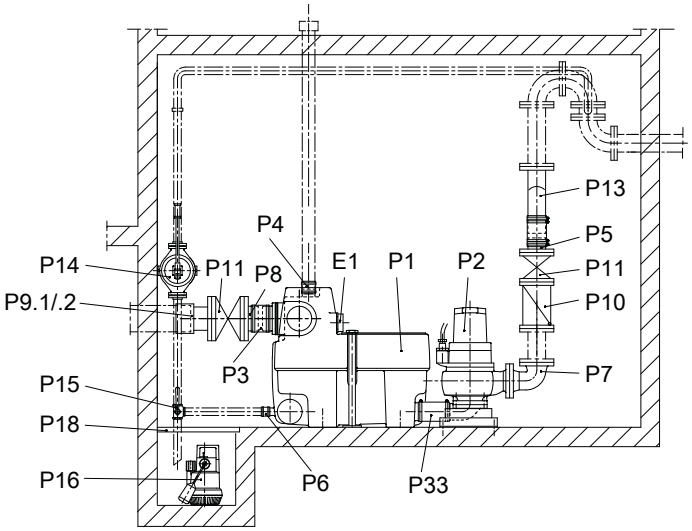


Fig. 116: Compacta UZ 10.450 to UZ 15.450 and UZ 10.900 to UZ 15.900

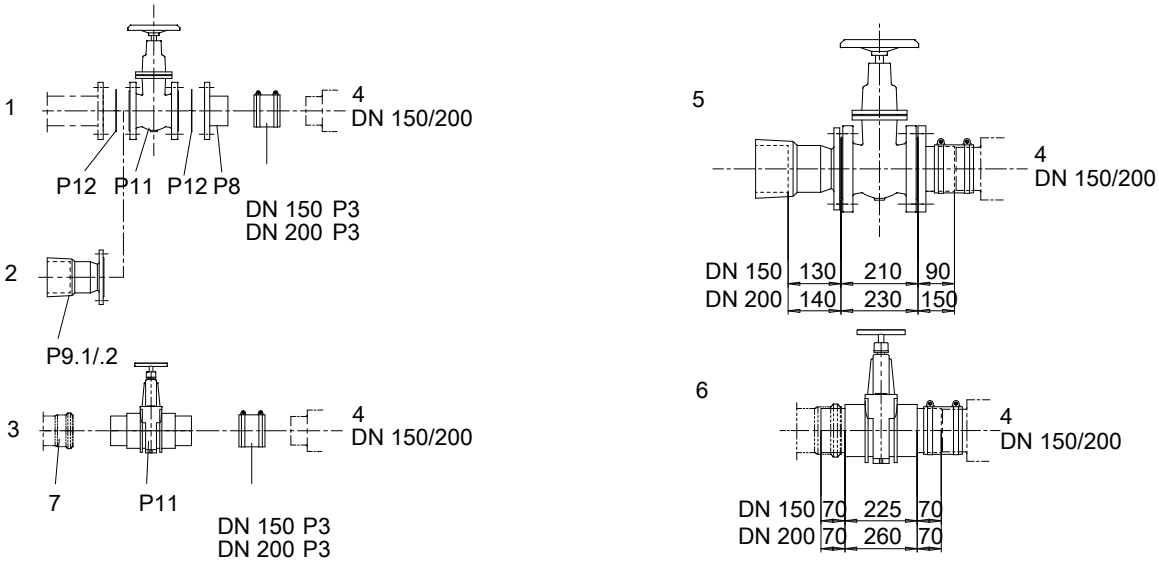


Fig. 117: Inlet line of Compacta UZ 10.450 to UZ 15.450 and UZ 10.900 to UZ 15.900

1	Flanged connection
2	Connection by flanged socket or flange adapter
3	Connection to the waste water pipe
4	Connection to the collecting tank
5	Gate valve made of grey cast iron
6	Gate valve made of PVC
7	Supplied by operator

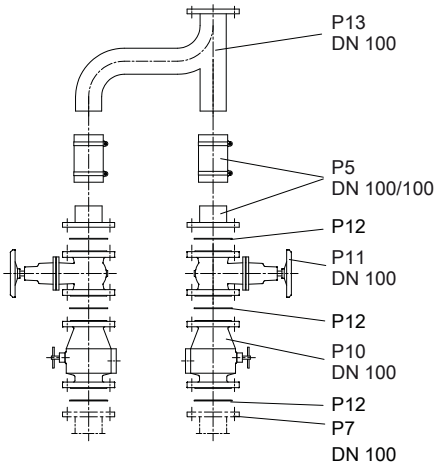


Fig. 118: Discharge line of Compacta UZ 10.450 to UZ 15.450 and UZ 10.900 to UZ 15.900

Scope of supply of Compacta UZ 10.450 to UZ 15.450 and UZ 10.900 to UZ 15.900

Item		Description	Compacta	
			UZ 10. - UZ 15.	
			450	900
-	P1	Gas-tight, odour-tight, water-tight collecting tank made of impact-resistant plastic	✗	✗
-	P2	Fully floodable submersible motor pump	✗	✗
	P3	Flexible hose connection and hose clips DN 150 (inlet)	✗	✗
-	P4	Flexible hose connection and hose clips (venting)	✗	✗
	P5	Flexible hose connection and hose clips for discharge line, consisting of DN 100 stub flange with DN 100 hosetail, fabric-reinforced rubber hose	✗[83)]	✗[83)]
-	P6	Flexible hose connection and hose clips (hand diaphragm pump)	✗	✗
-	P7	Flanged bend DN 100	✗	✗
-	P33	Flexible hose connection for tank/pump DN 100, fabric-reinforced rubber hose	✗	✗
-	E1	Automatic level transmitter for pump 1, pump 2 and alarm buzzer; stand-by pump automatically starts up during peak loads	✗	✗
-	E3[84)]	Electronic control unit with integrated alarm circuit and charging circuit, with high-quality rechargeable battery and alarm buzzer	✗	✗

Accessories of Compacta UZ 10.450 to UZ 15.450 and UZ 10.900 to UZ 15.900

Item		Description	Compacta	
			UZ 10. - UZ 15.	
			450	900
	P3	Flexible hose connection and hose clips DN 200	✗	✗
	P8	Stub flange	✗	✗
	P9.1	Flanged socket (for connecting pipes made of ductile cast iron) DN 150 for outside pipe diameter of 170 mm DN 200 for outside pipe diameter of 222 mm	✗	✗
	P9.2	Flange adapter (for connecting pipes of different materials) DN 150 for outside pipe diameter of 158.2 - 181.6 mm, L 105 mm DN 200 for outside pipe diameter of 189.0 - 212.0 mm, L 145 mm	✗	✗
	P10	Swing check valve	✗[83)]	✗[83)]
-	P11	Gate valve	✗[83)]	✗[83)]
	P12	Set of installation accessories	✗[83)]	✗[83)]

83 Two pcs./sets are included and required for the discharge line.
84 Not shown in drawing

Item		Description	Compacta	
			UZ 10. - UZ 15.	
			450	900
	P13	Y-pipe with installation accessories	✗	✗
	P13.1 84)	Adapter flange DN 100/150 to larger discharge line diameter (to be fitted downstream of Y-pipe)	✗	✗
	P14	Hand diaphragm pump	✗	✗
	P15	Three-way plug valve	✗	✗
	P16	Fully automatic Ama-Drainer (SE/SD) drainage pump	✗	✗
-	P18	Cover plate	✗	✗
-	E51 84)	AS 2 alarm switchgear	✗	✗
-	E52 84)	AS 4 alarm switchgear	✗	✗
-	E53 84)	AS 5 alarm switchgear	✗	✗
-	E55 84)	AS 1 alarm switchgear	✗	✗
-	E64 84)	F1 leakage sensor	✗	✗

Connection nozzles

Connection nozzles by model

Compacta	Inlet side	Discharge side	Vent	Connection Hand diaphragm pump
U3 to U 5 (100 litres)	Horizontal: 2 × DN 100, graded Inlet nozzle level 250 mm Vertical: 1 × DN 150/100, graded	DN 80/100 DN 80/80 (optional)	DN 70	DN 40 (Rp 1 1/2)
U3 to U5 (300 litres)	Horizontal: 1 x DN 100 1 × DN 150/100, graded Inlet nozzle level 250 mm 1 × DN 200/150, graded Inlet nozzle level 320 mm Vertical: 1 × DN 150/100, graded	DN 80/100 DN 80/80 (optional)	DN 70	DN 40 (Rp 1 1/2)
UZ3 to UZ5 (150 litres)	Horizontal: 1 × DN 100/50, graded 1 × DN 150/100, graded Inlet nozzle level 250 mm Vertical: 1 × DN 150/100, graded	DN 80/100 (discharge line downstream of Y-pipe DN 100) DN 80/80 (optional)	DN 70	DN 40 (Rp 1 1/2)
UZ3 to UZ5 (300 litres)	Horizontal: 1 x DN 100 1 × DN 150/100, graded Inlet nozzle level 250 mm 1 × DN 200/150, graded Inlet nozzle level 320 mm Vertical: 1 × DN 150/100, graded	DN 80/100 (discharge line downstream of Y-pipe DN 100) DN 80/80 (optional)	DN 70	DN 40 (Rp 1 1/2)
UZ3 to UZ5 (450 litres)	Horizontal: 2 x DN 150 1 × DN 200/150, graded Inlet nozzle level 700 mm	DN 80/100 (discharge line downstream of Y-pipe DN 100) DN 80/80 (optional)	DN 70	DN 40 (Rp 1 1/2)
UZ3 to UZ5 (900 litres)	Horizontal: 2 x DN 150 2 × DN 200/150, graded Inlet nozzle level 700 mm	DN 80/100 (discharge line downstream of Y-pipe DN 100) DN 100 (optional)	DN 70	DN 40 (Rp 1 1/2)
UZ10 to UZ15 (450 litres)	Horizontal: 2 x DN 150 1 × DN 200/150, graded Inlet nozzle level 700 mm	DN 100	DN 70	DN 40 (Rp 1 1/2)
UZ10 to UZ15 (900 litres)	Horizontal: 2 x DN 150 2 × DN 200/150, graded Inlet nozzle level 700 mm	DN 100	DN 70	DN 40 (Rp 1 1/2)

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Control units and switchgear

All switchgears and control units required for operation of the unit are included in the scope of supply. They feature an integrated acoustic alarm and volt-free fault signalling contact for transmitting fault messages to an alarm switchgear or directly to a control room. All switchgears and control units are supplied in enclosure IP54 and must be installed in a well-ventilated, flood-proof room.

LevelControl Basic 1 product description

Description

- Ready to be plugged in, with 1-metre power cable
- Three-phase connection
- 4-metre motor power cable
- Analog level detection with sensor monitoring
- Manual-0-automatic selector switch
- Acknowledgement button
- Indicator lamp for pump status
- Indicator lamp for high water
- Indicator lamp for rotary field (three-phase current only; otherwise "operational availability" is indicated)
- Pump protection by thermal circuit breaker
- Input for external fault message
- General fault message (NC, NO)
- Integrated alarm buzzer
- Battery-backed mains-independent alarm
- Very straightforward parameterisation of inlet nozzle levels via DIL switch during commissioning

LevelControl Basic 2 product description

Description

- Ready to be plugged in, with 1-metre power cable (up to UZ5.450)
- Three-phase connection
- Integrated master switch (LevelControl Basic 2 BS only)
- Numerical display with status indication (traffic light) and navigation keys
- Fill level indication
- Indication of operating data
- Analog level detection with sensor monitoring
- Manual-0-automatic selector switch
- Indicator lamps
- Indicator lamp for high water
- Pump protection by thermal circuit breaker and motor protection switch (UZ10-15)
- Integrated alarm buzzer
- Battery-backed mains-independent alarm
- Two inputs for external fault message and remote acknowledgement
- General fault message
- Even distribution of pump operating hours due to automatic pump changeover
- Parameterisable service intervals
- Diagnostic and signalling/message functions
- Very straightforward system configuration thanks to factory parameterisation and parameterisation assistant
- Numerous additional functions (monitoring of supply voltage, intelligent system monitoring, and many more)

Control units per model

LevelControl Basic 1 / LevelControl Basic 2 per model

Size	Control unit	Dimensions H × W × D [mm]
Single-pump lifting units		
U3.100 D, U4.100 D, U5.100 D, U3.300 D, U4.300 D, U5.300 D	LevelControl Basic 1 D	135 × 170 × 110
Dual-pump lifting units		
UZ3.150 D, UZ4.150 D, UZ5.150 D, UZ3.300 D, UZ4.300 D, UZ5.300 D, UZ3.450 D, UZ4.450 D, UZ5.450 D, UZ3.900 D, UZ4.900 D, UZ5.900 D	LevelControl Basic 2 ZD	400 × 281 × 135
UZ10.450 D, UZ10.900 D	LevelControl Basic 2 ZD63	400 × 281 × 135
UZ11.450 D, UZ11.900 D	LevelControl Basic 2 ZD100	400 × 281 × 135
UZ12.450 D, UZ12.900 D	LevelControl Basic 2 ZD140	800 × 600 × 200
UZ13.450 D, UZ13.900 D	LevelControl Basic 2 ZD180	800 × 600 × 200
UZ14.450 D, UZ15.450 D UZ14.900 D, UZ15.900 D	LevelControl Basic 2 ZD250	800 × 600 × 200

Variant-specific special features of LevelControl Basic 1 / LevelControl Basic 2

Control unit	Description
LevelControl Basic 1 D (CU 1 10 V T45 1 0 0 B D)	▪ Standard single-pump control unit for three-phase motor ▪ For controlling a single pump driven by a three-phase motor with a power rating of up to 4 kW
LevelControl Basic 2 ZD (BC2 400 DVNA 100 B0)	▪ Standard dual-pump control unit ▪ For controlling two pumps driven by three-phase motors with power ratings of up to 4 kW each
LevelControl Basic 2 ZD63 (BC2 400 DVNA 063 B0)	▪ Standard dual-pump control unit ▪ For controlling two pumps driven by three-phase motors with power ratings of up to 3 kW each ▪ Motor protection switch
LevelControl Basic 2 ZD100 (BC2 400 DVNA 100 B0)	▪ Standard dual-pump control unit ▪ For controlling two pumps driven by three-phase motors with power ratings of up to 4 kW each ▪ Motor protection switch
LevelControl Basic 2 ZD140 (BS2 400 SVNA 140 B0)	▪ Standard dual-pump control unit ▪ For controlling two pumps driven by three-phase motors with power ratings of up to 5.5 kW each ▪ Star-delta starting of motors ▪ Motor protection switch
LevelControl Basic 2 ZD180 (BS2 400 SVNA 180 B0)	▪ Standard dual-pump control unit ▪ For controlling two pumps driven by three-phase motors with power ratings of up to 7.5 kW each ▪ Star-delta starting of motors ▪ Motor protection switch
LevelControl Basic 2 ZD250 (BS2 400 SVNA 250 B0)	▪ Standard dual-pump control unit ▪ For controlling two pumps driven by three-phase motors with power ratings of up to 12 kW each ▪ Star-delta starting of motors ▪ Motor protection switch

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

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Pumps for Industrial Applications 922

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Testing and Inspection / Service / General 1078

Water Supply Pumps / Pressure Booster Pumps

Design / Application

Type series		Free passage	Q	H	T[85]		Waste water	Spray irrigation	General irrigation	Brackish water	Fire protection	Service water (industry)	Pressure boosting	Water containing faeces	Heating	Industry / process engineering	Air conditioning	Food processing / pharmaceutical industry	Seawater	Grey water	Swimming pools	Drinking water	Water supply
		max.	max.	max.	min.	max.																	
		[mm]	[m³/h]	[m]	[°C]	[°C]																	
Water Supply Pumps																							
	Multi Eco (⇨ Page 242)	-	≤ 8	≤ 54	≥ +4	≤ +50	-	✗	✗	-	-	-	-	-	-	-	-	-	-	-	✗	✗
Self-priming Domestic Water Supply Systems with Automatic Control Unit																							
	Multi Eco-Pro (⇨ Page 246)	-	≤ 8	≤ 54	≥ +4	≤ +50	-	✗	✗	-	-	-	-	-	-	-	-	-	-	-	✗	✗
	Multi Eco-Pro (⇨ Page 249)	-	≤ 8	≤ 54	≥ +4	≤ +50	-	✗	✗	-	-	-	-	-	-	-	-	-	-	-	✗	✗
Domestic Water Supply Systems with Automatic Control Unit																							
	Multi Eco-Top (⇨ Page 252)	-	≤ 8	≤ 54	≥ +4	≤ +50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	✗	✗
Submersible Borehole Pumps																							
	Ixo N (⇨ Page 255)	-	≤ 8	≤ 65	≥ +5	≤ +35	-	✗	✗	-	-	-	-	-	-	-	-	-	-	-	-	✗
	Ixo-Pro (⇨ Page 258)	-	≤ 3,9	≤ 60	≥ +5	≤ +35	-	✗	✗	-	-	-	-	-	-	-	-	-	-	-	-	✗
	UPA C 100 (⇨ Page 262)	-	≤ 18	≤ 600	-	≤ +30	-	✗	✗	-	-	✗	✗	-	-	-	-	-	-	-	✗	✗
	UPA C 150 (⇨ Page 280)	-	≤ 79	≤ 440	-	≤ +50	-	✗	✗	-	-	-	-	-	-	-	-	-	-	-	✗	✗
	UPA 200/250/300/350 (⇨ Page 309)	-	≤ 840	≤ 480	-	≤ +50	-	✗	✗	-	-	-	-	-	-	-	-	-	-	-	✗	✗
	UPA S 200 (⇨ Page 311)	-	≤ 170	≤ 450	-	≤ +50	-	✗	✗	-	-	-	-	-	-	-	-	-	-	-	✗	✗
Recirculation Pumps for Swimming Pool Filtering Systems																							
	Filtra N (⇨ Page 312)	-	≤ 36	≤ 21	≥ +4	≤ +35	-	-	-	-	-	-	-	-	-	-	-	-	-	✗	-	-
Rainwater Harvesting Systems																							

85 T = fluid temperature

Type series		Free passage	Q	H	T[85]		Waste water	Spray irrigation	General irrigation	Brackish water	Fire protection	Service water (industry)	Pressure boosting	Water containing faeces	Heating	Industry / process engineering	Air conditioning	Food processing / pharmaceutical industry	Seawater	Grey water	Swimming pools	Drinking water	Water supply
		max.	max.	max.	min.	max.																	
		[mm]	[m³/h]	[m]	[°C]	[°C]																	
	Hya-Rain Eco (⇨ Page 315)	-	≤ 4	≤ 43	≥ 0	≤ +35	-	✗	✗	-	-	-	-	-	-	-	-	-	-	-	-	-	✗
	Hya-Rain / Hya-Rain N (⇨ Page 319)	-	≤ 4	≤ 43	≥ 0	≤ +35	-	✗	✗	-	-	-	-	-	-	-	-	-	-	-	-	-	✗
Single-pump Pressure Booster Systems																							
	KSB Delta Solo (⇨ Page 323)	-	≤ 76	≤ 145	≥ 0	≤ +60	-	✗	✗	-	-	-	✗	-	-	-	-	-	-	-	-	✗	✗
Single-pump / Multiple-pump Pressure Booster Systems																							
	KSB Delta Compact (⇨ Page 339)	-	≤ 18	≤ 55	≥ 0	≤ +40	-	✗	✗	-	-	-	✗	-	-	-	-	-	-	-	-	✗	✗
Multiple-pump Pressure Booster Systems																							
	KSB Delta Basic (⇨ Page 347)	-	≤ 88	≤ 134	≥ 0	≤ +60	-	✗	-	-	-	-	✗	-	-	-	-	-	-	-	-	✗	✗
High-pressure In-line Pumps																							
	Movitec (⇨ Page 371)	-	≤ 160	≤ 249	≥ -20	≤ +140	-	✗	✗	-	-	-	✗	-	✗	-	✗	-	-	-	-	✗	✗
Multistage High-pressure Centrifugal Pumps																							
	Multitec / Multitec-RO (⇨ Page 383)	-	≤ 1500	≤ 1000	≥ -10	≤ +200	-	✗	✗	✗	✗	✗	✗	-	-	-	-	-	✗	-	-	✗	✗
Multistage Horizontal Centrifugal Pumps																							
	Comeo (⇨ Page 387)	-	≤ 10,8	≤ 79,5	≥ -10	≤ +60	-	-	✗	-	-	-	✗	-	-	-	-	-	-	-	-	✗	✗
	Movitec H(S)I (⇨ Page 395)	-	≤ 26,3	≤ 195	≥ -20	≤ +140	-	✗	✗	-	-	✗	✗	-	✗	-	✗	-	-	-	-	✗	✗
Multistage High-pressure Immersion Centrifugal Pumps																							
	Movitec VCI (⇨ Page 410)	-	≤ 22,5	≤ 249	≥ -10	≤ +120	-	-	-	-	-	-	✗	-	-	-	-	-	-	-	-	✗	-

Water Supply Pumps

Multi Eco

http://shop.ksb.com/catalog/k0/en/product/ES000085

Product benefits

- Reliable, sturdy pump installation thanks to corrosion-protected pump casing with stainless steel jacket
- Automatic and quick priming once the pump casing has been filled. Suction lift up to 8 m thanks to self-priming design (KSB patent).
- Energy-efficient low-noise operation thanks to wear-resistant multistage hydraulic system with optimised efficiency

Further information

Prices on request

Characteristic curve....244
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Further information

	Cervomatic EDP.2 (⇨ Page 1034)	Single-pump control unit, pressure-dependent, non-ATEX-compliant
	Controlmatic E (⇨ Page 1032)	Single-pump control unit, pressure-dependent, non-ATEX-compliant
	Controlmatic E.2 (⇨ Page 1033)	Single-pump control unit, pressure-dependent, non-ATEX-compliant

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Spray irrigation systems
- General irrigation systems
- Rainwater harvesting
- Washing plants
- Water supply systems

Fluids handled

- Clean to turbid water not containing aggressive, abrasive or solid substances
- River water, lake water and groundwater

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 8
	Q [l/s]	≤ 2,2
Head	H [m]	≤ 54
Fluid temperature	T [°C]	≤ +50 for continuous duty
		≤ +70 for 10 minutes
Operating pressure	p_d [bar]	≤ 10 or ≤ 6 depending on the size
Suction lift	H_s [m]	≤ 8

Design details

Design

- Centrifugal pump
- Close-coupled design
- Multistage
- Self-priming

Drive

Single-phase AC motor:

- Range of rated voltage: 220 - 240 V
- Frequency 50 Hz
- Thermal overload protection

Three-phase motor:

- Range of rated voltage: 380 - 415 V
- Frequency 50 Hz
- Enclosure IP44
- Thermal class F

Bearings

- Deep groove ball bearings
- Grease-lubricated for life

Designation

Example: Multi Eco 35 E

Designation key

Code	Description	
Multi Eco	Type series	
35	Size	
E	D	Three-phase asynchronous motor
	E	Single-phase AC motor
	P	Portable model

Materials

Overview of available materials

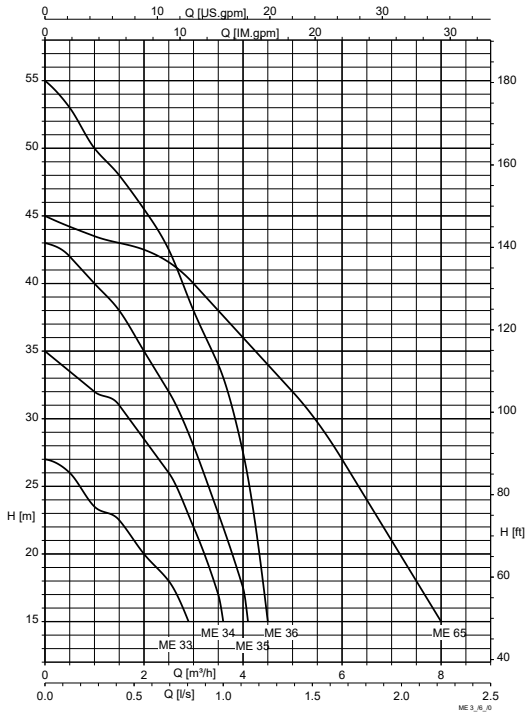
Part No.	Description	Material
101	Pump casing	Grey cast iron with anti-corrosive coating
160	Discharge cover	Grey cast iron with anti-corrosive coating
230	Impeller/stage casing	Noryl
109	Shroud	Stainless steel
210	Shaft	Chrome steel
801	Motor housing	Aluminium

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Characteristic curve

Multi Eco 33/34/35/36/65; n = 2800 rpm



The discharge head is the sum of suction lift + pressure head + friction losses in suction and discharge lines + required tap pressure. The flow rate depends on the relevant discharge head. Maximum suction lift for all pump sizes: approx. 8 m.

Dimensions

Multi Eco

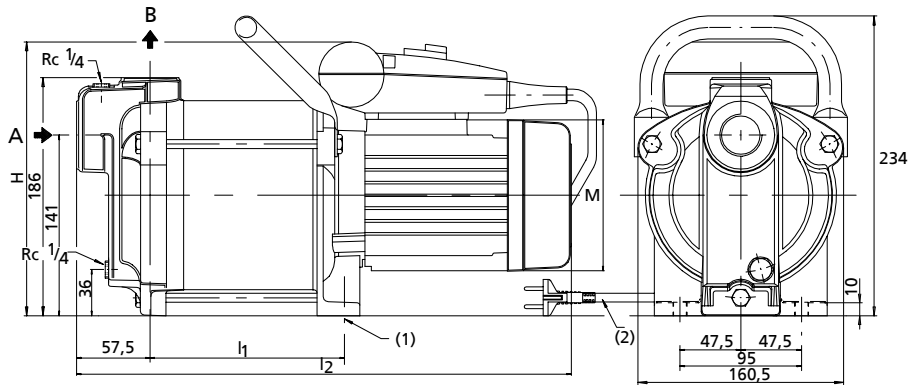


Fig. 119: Dimensions of Multi Eco P [mm]

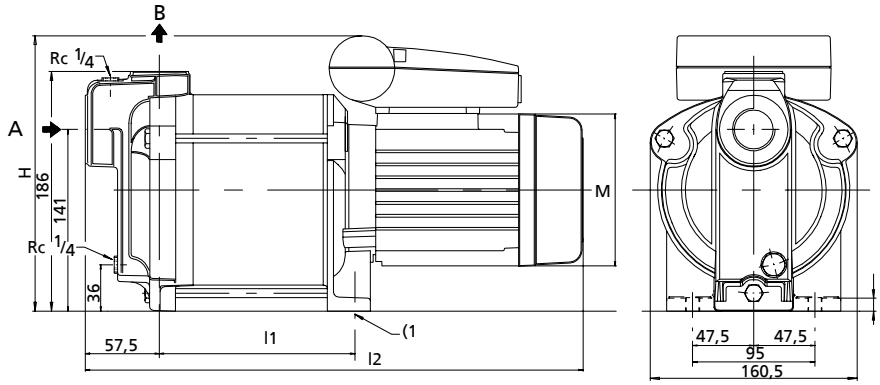


Fig. 120: Dimensions of Multi Eco E / D [mm]

A	Suction nozzle	(1)	2 holes Ø 8
B	Discharge nozzle	(2)	Length 1.5 m

Dimensions [mm]

Multi Eco	Ø A suction nozzle	Ø B discharge nozzle	l_1	l_2	H	Ø M
33	G 1	G 1	151,5	387	215	118
34	G 1	G 1	151,5	387	215	118
35	G 1	G 1	180	415	215	118
36	G 1	G 1	208,5	467	230	140
65	G 1 1/4	G 1	208,5	467	230	140

Self-priming Domestic Water Supply Systems with Automatic Control Unit

Multi Eco-Pro with Controlmatic E

http://shop.ksb.com/catalog/k0/en/product/ES000253

Product benefits

- Reliable, sturdy pump installation thanks to corrosion-protected pump casing with stainless steel jacket
- Ready-to-connect, easy installation and commissioning
- Automatic and quick priming once the pump casing has been filled. Suction lift up to 8 m thanks to self-priming design (KSB patent).
- Energy-efficient low-noise operation thanks to wear-resistant multistage hydraulic system with optimised efficiency

Further information

Prices on request

Characteristic curve 248
Dimensions 248

Further information

	Controlmatic E (⇨ Page 1032)	Single-pump control unit, pressure-dependent, non-ATEX-compliant

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- General irrigation systems
- Domestic water supply
- Washing plants

Fluids handled

- Clean to turbid water not containing aggressive, abrasive or solid substances
- River water, lake water and groundwater

Characteristic		Value
Flow rate	Q [l/s]	≤ 2,22
Head	H [m]	≤ 54
Fluid temperature	T [°C]	≤ +50 for continuous duty
		≤ +60 for 10 minutes
Operating pressure	p_d [bar]	Depending on pump size[86)]
Suction lift	H_s [m]	≤ 8

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 8

86 Controlmatic E or E.2 must be protected against pressures exceeding the permissible nominal pressure pd.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Design details

Design

- Centrifugal pump
- Close-coupled design
- Multistage
- Self-priming

Automation

- Controlmatic E is used to start up and stop the pump in line with consumer demand.
- Controlmatic E protects the pump against dry running.

Drive

- AC motor
- Range of rated voltage: 220 - 240 V
- Frequency 50 Hz
- Thermal overload protection
- Enclosure IP44
- Thermal class F

Bearings

- Deep groove ball bearings
- Grease-lubricated for life

Designation

Example: Multi Eco-Pro 35

Designation key

Code	Description
Multi Eco-Pro	Type series
35	Size

Materials

Overview of available materials

Part No.	Description	Material
101	Pump casing	Grey cast iron with anti-corrosive coating
160	Discharge cover	Grey cast iron with anti-corrosive coating
230	Impeller/stage casing	Noryl
109	Shroud	Stainless steel
210	Shaft	Chrome steel
801	Motor housing	Aluminium

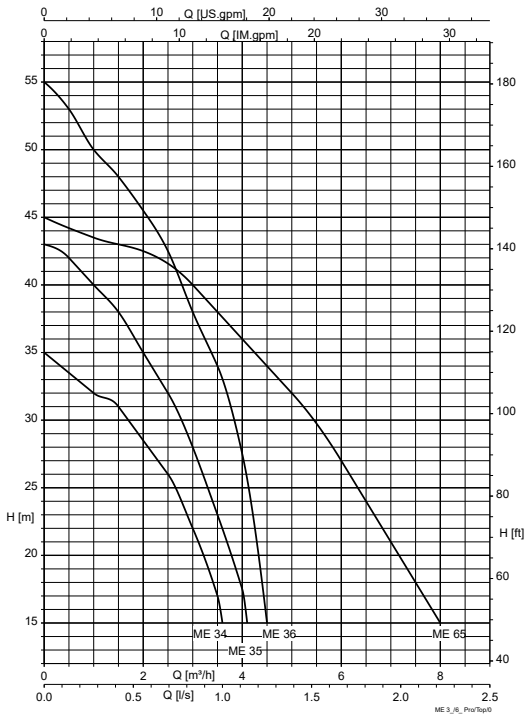
Housing of Controlmatic E or E.2 made of glass-fibre reinforced polyamide

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Characteristic curve

Multi Eco-Pro 34/35/36/65; n = 2800 rpm



The discharge head is the sum of suction lift + pressure head + friction losses in suction and discharge lines + required tap pressure. The flow rate depends on the relevant discharge head. Maximum suction lift for all pump sizes: approx. 8 m.

Dimensions

Multi Eco-Pro with Controlmatic E

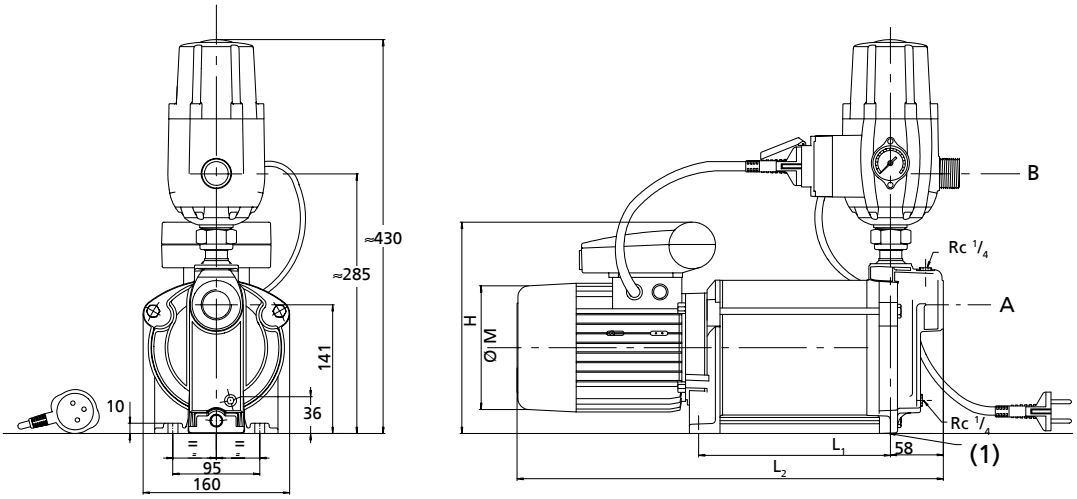


Fig. 121: Dimensions Multi Eco-Pro with Controlmatic E [mm]

A	Suction nozzle	(1)	2 holes Ø 8
B	Discharge nozzle		

Dimensions [mm]

Multi Eco-Pro	Ø A suction nozzle	Ø B discharge nozzle	L_1	L_2	H	Ø M
34	G 1	G 1	151	387	215	118
35	G 1	G 1	180	415	215	118
36	G 1	G 1	208	467	230	140
65	G 1 1/4	G 1	208	467	230	140

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Self-priming Domestic Water Supply Systems with Automatic Control Unit

Multi Eco-Pro with Controlmatic E.2

http://shop.ksb.com/catalog/k0/en/product/ES000253

Product benefits

- Reliable, sturdy pump installation thanks to corrosion-protected pump casing with stainless steel jacket
- Ready-to-connect, easy installation and commissioning
- Automatic and quick priming once the pump casing has been filled. Suction lift up to 8 m thanks to self-priming design (KSB patent).
- Energy-efficient low-noise operation thanks to wear-resistant multistage hydraulic system with optimised efficiency

Further information

Prices on request

Characteristic curve 251
Dimensions 251

Further information

	Controlmatic E.2 (⇨ Page 1033)	Single-pump control unit, pressure-dependent, non-ATEX-compliant

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- General irrigation systems
- Domestic water supply
- Washing plants

Fluids handled

- Clean to turbid water not containing aggressive, abrasive or solid substances
- River water, lake water and groundwater

Characteristic		Value
Flow rate	Q [l/s]	≤ 2,22
Head	H [m]	≤ 54
Fluid temperature	T [°C]	≤ +50 for continuous duty
		≤ +60 for 10 minutes
Operating pressure	p_d [bar]	Depending on pump size[87)]
Suction lift	H_s [m]	≤ 8

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 8

87 Controlmatic E or E.2 must be protected against pressures exceeding the permissible nominal pressure pd.

Design details

Design

- Centrifugal pump
- Close-coupled design
- Multistage
- Self-priming

Automation

- Controlmatic E.2 is used to start up and stop the pump in line with consumer demand.
- Controlmatic E.2 protects the pump against dry running

Drive

- AC motor
- Range of rated voltage: 220 - 240 V
- Frequency 50 Hz
- Thermal overload protection
- Enclosure IP44
- Thermal class F

Bearings

- Deep groove ball bearings
- Grease-lubricated for life

Designation

Example: Multi Eco-Pro 35

Designation key

Code	Description
Multi Eco-Pro	Type series
35	Size

Materials

Overview of available materials

Part No.	Description	Material
101	Pump casing	Grey cast iron with anti-corrosive coating
160	Discharge cover	Grey cast iron with anti-corrosive coating
230	Impeller/stage casing	Noryl
109	Shroud	Stainless steel
210	Shaft	Chrome steel
801	Motor housing	Aluminium

Housing of Controlmatic E or E.2 made of glass-fibre reinforced polyamide

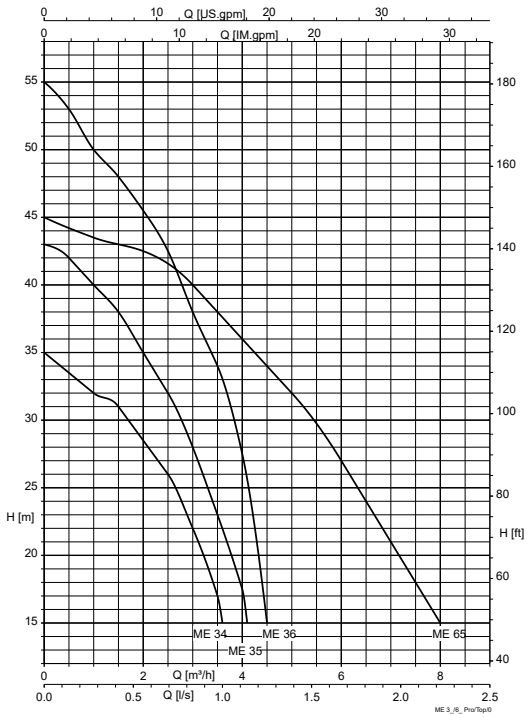
Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Characteristic curve

Multi Eco-Pro 34/35/36/65; n = 2800 rpm



The discharge head is the sum of suction lift + pressure head + friction losses in suction and discharge lines + required tap pressure. The flow rate depends on the relevant discharge head. Maximum suction lift for all pump sizes: approx. 8 m.

Dimensions

Multi Eco-Pro with Controlmatic E.2

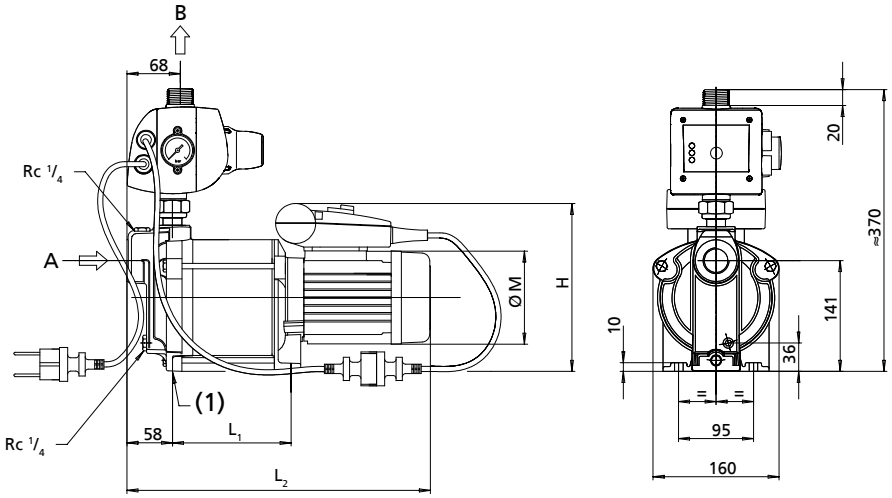


Fig. 122: Dimensions Multi Eco-Pro with Controlmatic E.2 [mm]

A	Suction nozzle	(1)	2 holes Ø 8
B	Discharge nozzle		

Dimensions [mm]

Multi Eco-Pro	Ø A suction nozzle	Ø B discharge nozzle	L_1	L_2	H	Ø M
34-1	G 1	G 1	151	387	215	118
35-1	G 1	G 1	180	415	215	118
36-1	G 1	G 1	208	467	230	140
65-1	G 1 1/4	G 1 1/4	208	467	230	140

Domestic Water Supply Systems with Automatic Control Unit

Multi Eco-Top

http://shop.ksb.com/catalog/k0/en/product/ES000254

Product benefits

- Reliable, sturdy pump installation thanks to corrosion-protected pump casing with stainless steel jacket
- Automatic and quick priming once the pump casing has been filled. Suction lift up to 8 m thanks to self-priming design (KSB patent).
- Energy-efficient low-noise operation thanks to wear-resistant multistage hydraulic system with optimised efficiency

Further information

Prices on request

Characteristic curve....254
Dimensions....254

Further information

	Controlmatic E (⇨ Page 1032)	Single-pump control unit, pressure-dependent, non-ATEX-compliant
	Controlmatic E.2 (⇨ Page 1033)	Single-pump control unit, pressure-dependent, non-ATEX-compliant

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- General irrigation systems
- Domestic water supply
- Washing plants

Fluids handled

- Clean to turbid water not containing aggressive, abrasive or solid substances
- River water, lake water and groundwater

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 8
	Q [l/s]	≤ 2,2
Head	H [m]	≤ 54
Fluid temperature	T [°C]	≤ +50 for continuous duty
		≤ +70 for 10 minutes
Operating pressure	p_d [bar]	≤ 10 or ≤ 6 depending on the size
Suction lift	H_s [m]	≤ 8

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Design details

Design

- Centrifugal pump
- Multistage
- Self-priming
- Membrane-type accumulator, pressurised at the factory
- Pressure switch for automatic operation, factory-set
- The maximum pressure p_d must not be exceeded.

Drive

- AC motor
- Range of rated voltage: 220 - 240 V
- Frequency 50 Hz
- Thermal overload protection
- Three-phase motor
- Range of rated voltage: 380 - 415 V
- Frequency 50 Hz
- Enclosure IP44
- Thermal class F

Bearings

- Deep groove ball bearings
- Grease-lubricated for life

Designation

Example: Multi Eco-Top 35 E / 50

Designation key

Code	Description	
Multi Eco-Top	Type series	
35	Size	
E	D	Three-phase asynchronous motor
	E	Single-phase AC motor
50	Total volume of collecting tank [litres]	

Materials

Overview of available materials

Part No.	Description	Material
101	Pump casing	Grey cast iron with anti-corrosive coating
160	Discharge cover	Grey cast iron with anti-corrosive coating
230	Impeller/stage casing	Noryl
109	Shroud	Stainless steel
210	Shaft	Chrome steel
801	Motor housing	Aluminium

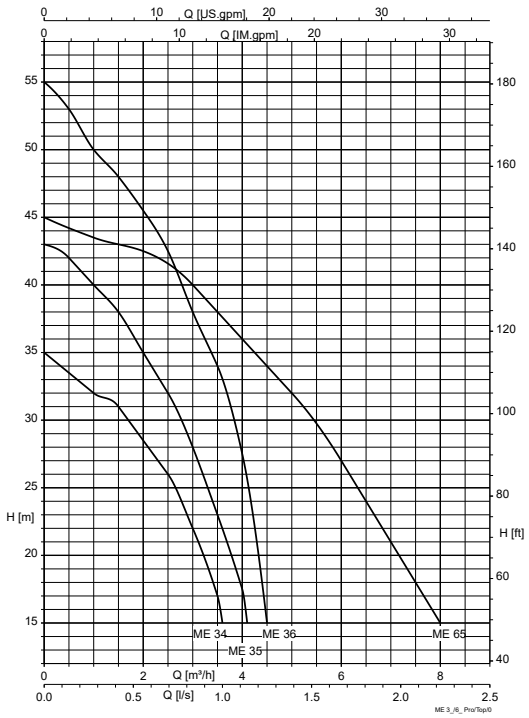
Accumulator made of steel with replaceable membrane, approved for drinking water

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Characteristic curve

Multi Eco-Top 34/35/36/65; n = 2800 rpm



The discharge head is the sum of suction lift + pressure head + friction losses in suction and discharge lines + required tap pressure. The flow rate depends on the relevant discharge head. Maximum suction lift for all pump sizes: approx. 8 m.

Dimensions

Multi Eco-Top

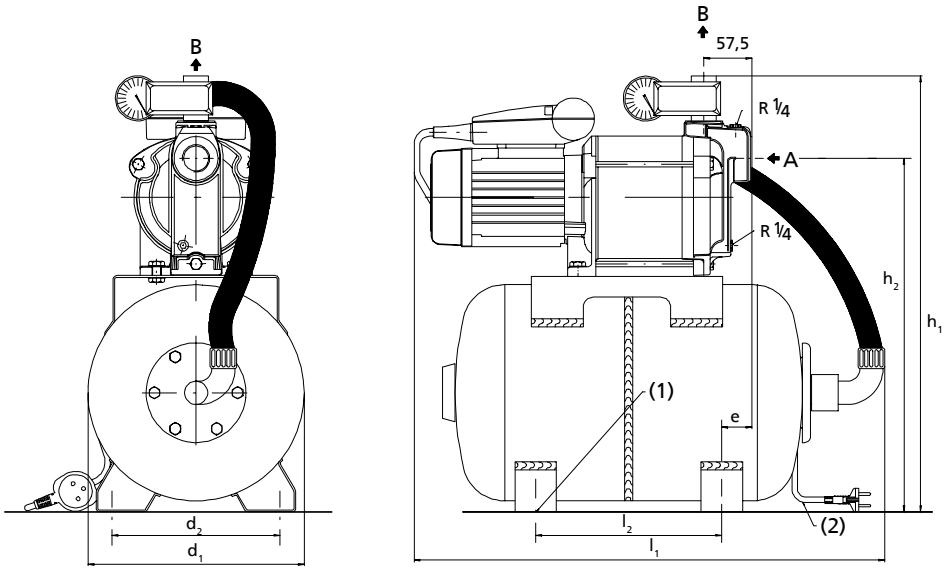


Fig. 123: Dimensions of Multi Eco-Top [mm]

A	Suction nozzle	(1)	4 holes Ø 8
B	Discharge nozzle	(2)	Length 1.5 m

Dimensions [mm]

Multi Eco-Top	Ø A suction nozzle	Ø B discharge nozzle	d_1	d_2	l_1	l_2	h_1	h_2	e
34 / 20	Rp 1	G 1	260	219	570	155	526	435	28
35 / 20	Rp 1	G 1	260	219	570	155	526	435	57
35 / 50	Rp 1	G 1	360	219	650	235	627	532	17
36 / 50	Rp 1	G 1	360	219	650	235	627	532	46
65 / 50	Rp 1 1/4	G 1	360	219	650	235	627	532	46

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Submersible Borehole Pumps

Ixo N

http://shop.ksb.com/catalog/k0/en/product/ES000007

Product advantages

- Corrosion-resistant design with high-quality stainless steel
- Energy-efficient and environmentally friendly use of resources
- Integrated motor protection prevents motor overload.
- Zero motor leakage and longer service life due to double mechanical seal
- Low-level inlet with strainer for better tank capacity utilisation
- Service-friendly thanks to easy check of capacitor without having to completely dismantle the pump

Further information

Prices on request

Characteristic curves 257
Dimensions 257

Further information

	Cervomatic EDP.2 (⇨ Page 1034)	Single-pump control unit, pressure-dependent, non-ATEX-compliant
	Controlmatic E (⇨ Page 1032)	Single-pump control unit, pressure-dependent, non-ATEX-compliant
	Controlmatic E.2 (⇨ Page 1033)	Single-pump control unit, pressure-dependent, non-ATEX-compliant

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Water supply systems
- Spray irrigation systems
- Washing plants
- Rainwater harvesting
- Water extraction

Fluids handled

- Clean to turbid water not containing aggressive, abrasive or solid substances
- River water, lake water and groundwater

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 8
	Q [l/s]	≤ 2,22
Head	H [m]	≤ 65
Fluid temperature	T [°C]	≥ +5
		≤ +35

Design details

Design

- Centrifugal pump
- Close-coupled design
- Multistage
- For fully or partly submerged operation (min. immersion depth 0.1 m)
- Low-level inlet
- Suction strainer with a maximum mesh width of 2 mm

Drive

Jacket-cooled single-phase AC motor:

- Thermal overload protection
- 230 V, 50 Hz
- IP68 enclosure
- Capacitor installed
- Motor power cable (H07 RNF) 23 m with mains plug

Jacket-cooled three-phase motor:

- 400 V, 50 Hz
- IP68 enclosure
- Motor power cable 23 m

Bearings

- Deep groove ball bearings
- Grease-lubricated for life

Shaft seal

- Double shaft seal with oil reservoir fitted in between

Designation

Example: Ixo N 45 E

Designation key

Code	Description	
Ixo	Type series	
N	New generation	
4	Number of stages	
5	Maximum permissible flow rate [m³/h]	
E	Drive	
	E	Single-phase AC motor
	D	Three-phase motor

Materials

Overview of available materials

Part No.	Description	Material
01-93	Lubricating oil	White oil, food and pharmaceuticals approved
101	Pump casing	Chrome nickel steel 1.4301 EN 10088 (AISI 304)
108	Stage casing	Chrome nickel steel 1.4301 EN 10088 (AISI 304)
143	Suction strainer	Chrome nickel steel 1.4301 EN 10088 (AISI 304)
210	Shaft	Chrome nickel steel 1.4301 EN 10088 (AISI 304)
230	Impeller	Chrome nickel steel 1.4301 EN 10088 (AISI 304)
433	Mechanical seal, motor end	Steatite, hard carbon, NBR
433	Mechanical seal, pump end	Aluminium oxide, silicon carbide, NBR
811	Motor housing	Chrome nickel steel 1.4301 EN 10088 (AISI 304)

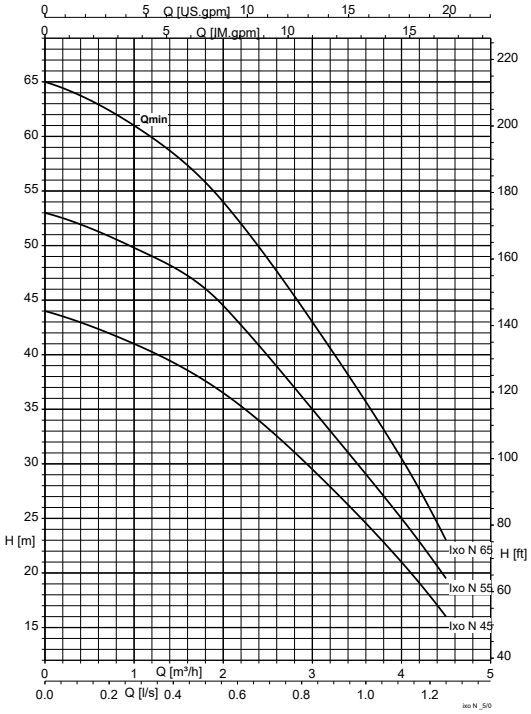
Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

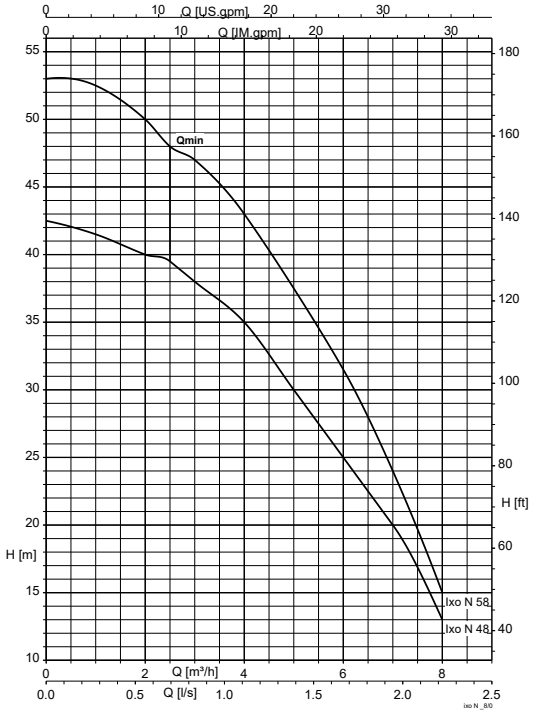
Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Characteristic curves

Ixo N 45/55/65; n = 2900 rpm



Ixo N 48/58; n = 2900 rpm



Dimensions

Ixo N

Fig. 124: Pump set dimensions

Dimensions

Size	H
	[mm]
Ixo N 45 E/D	504
Ixo N 55 E/D	553
Ixo N 65 E/D	577
Ixo N 48 E/D	529
Ixo N 58 E/D	553

Submersible Borehole Pumps

Ixo-Pro

http://shop.ksb.com/catalog/k0/en/product/ES000896

Product benefits

- Easy and convenient installation with integrated pressure switch and completely wired cable, including plug
- Corrosion-resistant with pump shroud and impellers made of stainless steel AISI 304
- Maintenance-free with motor bearing lubricated for life
- High operating reliability with water-cooled motor with integrated thermal protection, electronic dry running protection and integrated swing check valve

Further information

Prices on request

Characteristic curves 260
Dimensions 260

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Rainwater harvesting
- Pressure boosting
- General irrigation systems
- Water extraction

Fluids handled

- Clean to turbid water not containing aggressive, abrasive or solid substances

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 3,9
	Q [l/min]	≤ 65
Head	H [m]	≤ 60
Fluid temperature	T [°C]	≥ +5
		≤ +35

Design details

Design

- Centrifugal pump
- Close-coupled design
- Multistage
- Integrated pressure switch
- For fully submerged operation
- Low-level inlet
- Suction strainer with a maximum mesh width of 2 mm
- Flow sensor
- Swing check valve

Drive

- Water-cooled single-phase AC motor
- 230 V, 50 Hz
- Thermal class F
- IP68 enclosure
- Continuous duty
- Integrated capacitor
- Electronic dry running protection with 4 consecutive start-up attempts
- Thermal overload protection
- Motor connection cable 15 m (H07 RNF) and plug

Bearings

- Ball bearing
- Grease-packed bearings sealed for life

Shaft seal

- Double shaft seal with oil reservoir fitted in between

Designation

Example: Ixo-Pro 4

Designation key

Code	Description
Ixo-Pro	Type series
4	Number of stages

Materials

Overview of available materials

Part No.	Description	Material
101	Pump shroud	Stainless steel AISI 304
108	Discharge casing	Stainless steel AISI 304
143	Suction strainer	Stainless steel AISI 304
171	Diffusers	Technopolymer (glass fibre reinforced polymer)
210	Pump shaft	Stainless steel AISI 304
230	Impellers	Stainless steel AISI 304
433	Mechanical seal	Aluminium graphite, ceramic graphite
811	Motor housing	Stainless steel AISI 304

Prices on request

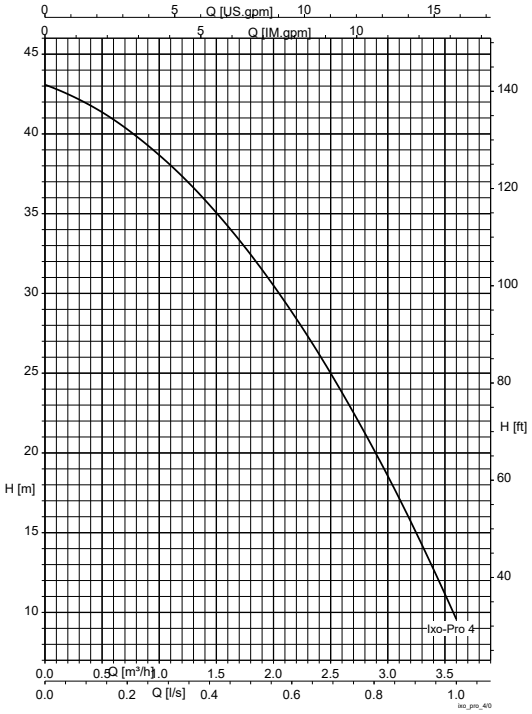
Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Operating limits

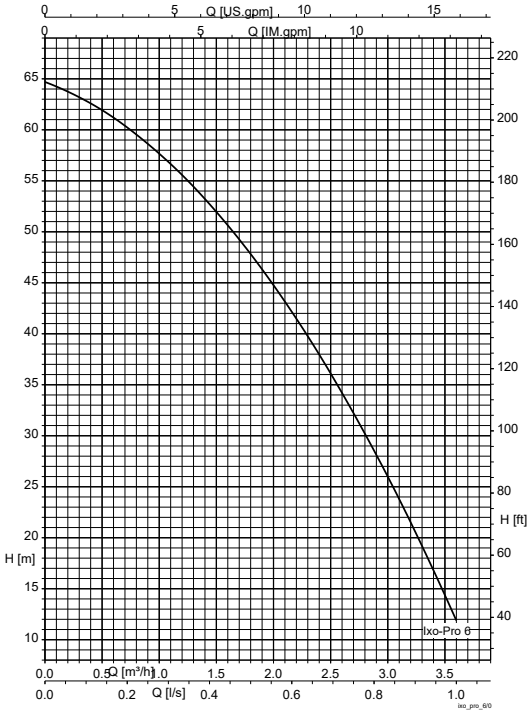
- Only suitable for vertical operation.
- Maximum immersion depth: 12 m
- Maximum particle size: 2 mm
- Maximum number of starts/hour: 30

Characteristic curves

Ixo-Pro 4, n = 2900 rpm



Ixo-Pro 6, n = 2900 rpm



Dimensions

Ixo-Pro

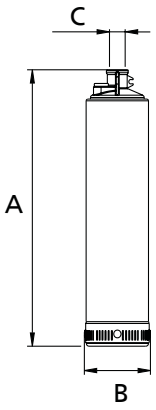


Fig. 125: Dimensions

Dimensions [mm]

Ixo-Pro	Dimensions		Thread
	A	B	C
4	493	126	Rp 1
6	560	126	Rp 1

Installation information

To protect the system against surge pressures and to prevent excessive starting/stopping in the event of leaks in the system, it is recommended to install the Kit-Press connection set in the discharge line above the water level.

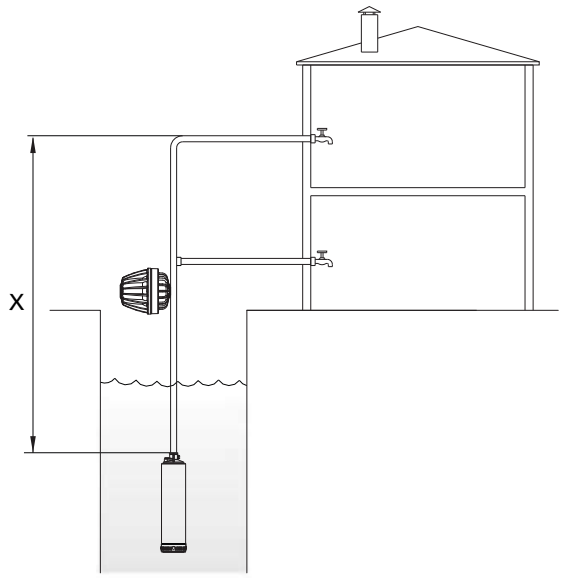


Fig. 126: Installation information

Maximum installation height x

Size	x [m]
4	20
6	30

Scope of supply

- Multistage submersible borehole pump with integrated pressure switch
- Motor connection cable 15 m (H07 RNF) and plug

Submersible Borehole Pumps

UPA C 100

http://shop.ksb.com/catalog/k0/en/product/ES000932

Product benefits

- High operating reliability as all components are made of high-quality stainless steel.
- High efficiencies through optimised hydraulic design
- High flexibility by vertical, horizontal and angular installation options
- Reliable operation by anti-jam lift check valve
- Highly flexible operating range through adjustment of motor dimensions
- Service-friendly with bearings and casing wear rings that are easy to replace

Further information

Prices on request

Further information

	Cervomatic EDP.2 (⇨ Page 1034)	Single-pump control unit, pressure-dependent, non-ATEX-compliant
	Controlmatic E (⇨ Page 1032)	Single-pump control unit, pressure-dependent, non-ATEX-compliant
	Controlmatic E.2 (⇨ Page 1033)	Single-pump control unit, pressure-dependent, non-ATEX-compliant
	UPA Control (⇨ Page 1037)	Switchgear for level-dependent control

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for 4" and 6" water pumps as per Regulation (EU) No. 547/2012.

Certifications

Overview

Label	Effective in:	Comment
	All countries	Certified quality management to ISO 9001

Main applications

- Drinking water supply
- Spray irrigation systems
- General irrigation systems
- Industry
- Pressure boosting
- Lowering groundwater levels
- Domestic water supply
- Water supply systems

Fluids handled

- Clean water not containing aggressive, abrasive or solid substances
- Max. permissible sand content of the fluid 50 g/m³

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 18
	Q [l/min]	≤ 300
Head	H [m]	≤ 600
Fluid temperature	T [°C]	≤ +30 for continuous duty
Speed	n [rpm]	≤ 3500
Rating	P_N [kW]	≤ 7,5 [88)]
Well diameter	D [mm]	≤ 100 [88)]
	D [″]	≤ 4 [88)]

Design details

Design

- Centrifugal pump
- Multistage
- Single-suction
- Ring-section design
- Rigid connection between pump and motor

Connections

- Pump end with Rp 1 1/4 to Rp 2 thread
- With lift check valve

Impeller type

- Radial or mixed flow versions

Type of installation

- Vertical installation
- Horizontal installation

Drive

- Asynchronous motor
- Interior (buried) permanent magnet synchronous motor (IPMSM)
- With squirrel cage motor for submerged use
- Standard connection to NEMA
- Frequency 50 Hz/60 Hz
- IP68 enclosure
- Thermal class B
- DOL starting
- Frequency of starts ≤ 20 starts per hour

Single-phase AC motor:

- Rated power P_N ≤ 2.2 kW
- Rated voltage V_N 220 - 230 V

Three-phase motor:

- Rated power P_N ≤ 7.5 kW
- Designs with additional stages and 6-inch motors of up to 18.5 kW are available for high heads.
- Rated voltage V_N 380 - 400 V

Electrical connection

- With 1 flat motor lead 4 x 1.5 mm² (including earth conductor and internal earthing) as standard ex works
  - Cable length of 1.5 m for motors up to 1.5 kW
  - Cable length of 2.5 m for motors from 2.2 kW

Bearings

- Radial plain bearings
- Pump bearings lubricated by fluid handled; motor bearings lubricated by water fill
- Axial thrust is balanced by a tilting-pad thrust bearing in the motor (lower end)
- Intermediate bearing in every stage

88 Designs with additional stages and 6-inch motors of up to 18.5 kW are available for high heads.

Designation

Designation example

Position																																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
U	P	A	C	-	4	-	0	1	2	/	1	1	-	-	C	C	R	D	V	+	D	N	-	-	-	4	-	0	0	3	0	C	2	-	A	D	O	T	-
See name plate and data sheet																																							

Designation key

Position	Code	Description
1-4	Pump type	
	UPA C	UPA C (sheet metal variant)
5-6	Pump diameter for min. well diameter	
	4	4" (approx. 100 mm)
8-10	Flow rate at best efficiency point [m³/h]	
	1	1 m³/h
	2	2 m³/h
	3	3 m³/h
	5	5 m³/h
	9	9 m³/h
	12	12 m³/h
12-13	Number of stages	
	01	1 stage
	02	2 stages
	03	3 stages
	...	...
	91	91 stages
	A0	100 stages (A=100+0)
	B0	110 stages (B=110+0)
16	Pump material	
	E	Stainless steel AISI 304
	C	Stainless steel AISI 316
17	Impeller material	
	E	Stainless steel AISI 304
	C	Stainless steel AISI 316
18	Pump end	
	R	RP threaded connection, Standard ISO 7-1
	D	DN flange, Standard DIN 1092
19	Diameter of pump end	
	A	1 (DN 25)
	B	1 1/4 (DN 32)
	C	1 1/2 (DN 40)
	D	2 (DN 50)
20	Lift check valve	
	O	Without lift check valve
	V	With lift check valve
	D	With lift check valve with drilled valve disc
21	Supply	
	+	Pump set (pump and motor)
	-	Pump with NEMA connection
22-24	Motor	
	UMA	Submersible motor by KSB, UMA
	DN	Submersible motor by Franklin, DN (FRANKLIN)
	SVA	Submersible motor by STAIRS, DN (SAVA)
	BSN	Submersible motor with NEMA connection
25	Motor design	
	-	Asynchronous motor
	S	Interior (buried) permanent magnet synchronous motor (IPMSM)
26, 27	Minimum motor diameter [mm]	
	4	4" (approx. 100 mm)

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Position	Code	Description
26, 27	6	6" (approx. 150 mm)
	8	8" (approx. 200 mm)
28	Design status for pump sets	
	-	No status
	E	Generation E
	D	Generation D
	Design status for individual motors	
	-	No status
	T	ACS/NSF
29-32	Motor rating PN [kW]	
	0000	Individual motor
	0003	0,37
	0005	0,55
	0007	0,75
	0011	1,1
	...	...
	0185	18,5
33	Motor material	
	-	Blank
	E	Stainless steel AISI 304
	D	Duplex
	C	Stainless steel AISI 316
	G	Grey cast iron
34	Number of motor poles	
	-	Blank
	2	2 poles
	4	4 poles
35	Winding insulation	
	-	Blank
	1	J1 (PVC)
	2	J2 (VPE/XLPE), for higher temperatures
36	Connection cable (F = flat, R = round)	
	-	Blank
	A	F4
	B	F3+F4
	C	R4
	D	R4+R4
	E	6R1+R1
	F	6R1+R1
	G	F3+R4
	H	F3+R1
	K	F3
37	Voltage	
	-	Blank
	A	3~, 415 V, 50 Hz
	B	3~, 500 V, 50 Hz
	C	3~, 380 V, 50 Hz
	D	3~, 400 V, 50 Hz
	E	1~, 230 V, 50 Hz
	F	3~, 230 V, 50 Hz
	G	3~, 220 V, 50 Hz
	H	3~, 690 V, 50 Hz
	I	3~, 865 V, 50 Hz
	G	3~, 1000 V, 50 Hz
	K	3~, 1000 V, 50 Hz
	L	3~, 220 V, 60 Hz
	M	3~, 230 V, 60 Hz
	N	3~, 380 V, 60 Hz
	O	3~, 440 V, 60 Hz

Position	Code	Description
37	P	3~, 460 V, 60 Hz
	Q	3~, 480 V, 60 Hz
	R	3~, 1000 V, 60 Hz
	S	1~, 110 V, 60 Hz
	T	1~, 230 V, 60 Hz
	U	1~, 254 V, 60 Hz
	V	3~, 400 V, 60 Hz
38	Motor fill	
	-	Blank
	O	Filled with oil
	W	Filled with water
	U	Unfilled
39	Drinking water certification	
	-	Blank
	T	ACS/NSF
	X	Other certification
40	Sprinkler version	
	-	Blank
	U	Pump set to VDS guideline
	X	Pump set to different guideline

Materials

Overview of available materials

Part No.	Description	Material	
		EE	CC [89)]
-	Pump shroud	AISI 304	AISI 316
-	Suction casing	AISI 304	AISI 316
-	Valve body	AISI 304	AISI 316
-	Shaft	AISI 431	AISI 431
-	Impeller	AISI 304	AISI 316
-	Diffuser	AISI 304	AISI 316

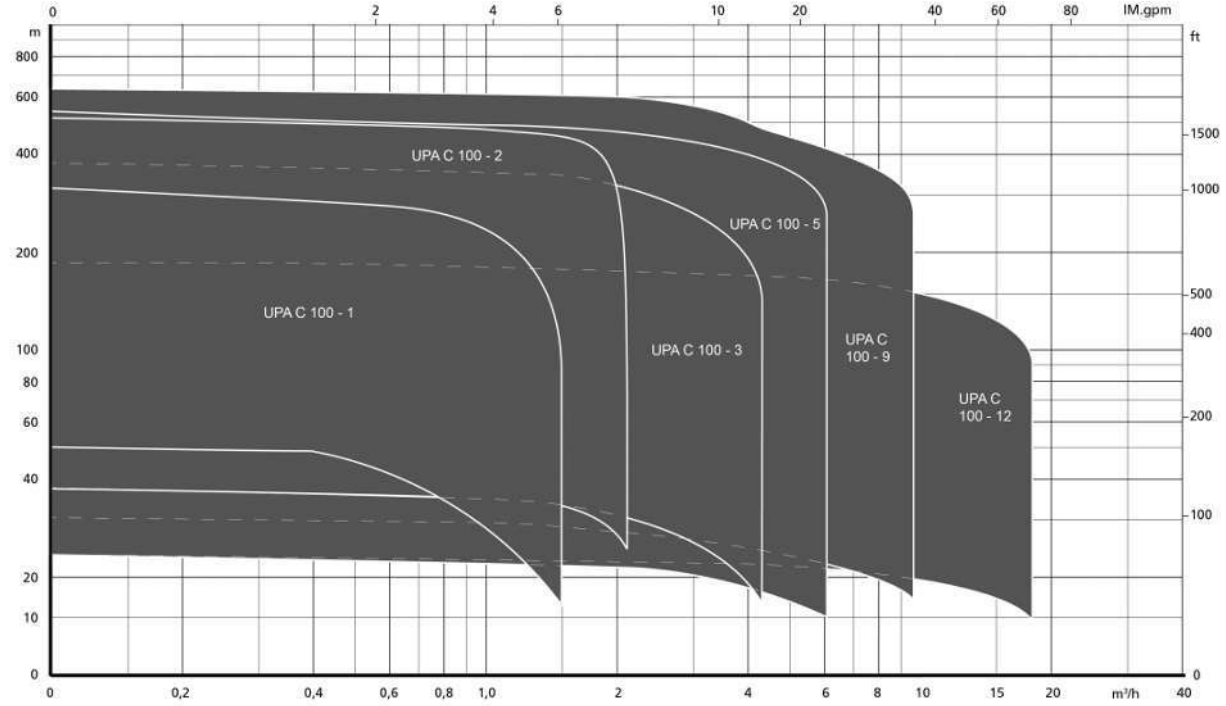
Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

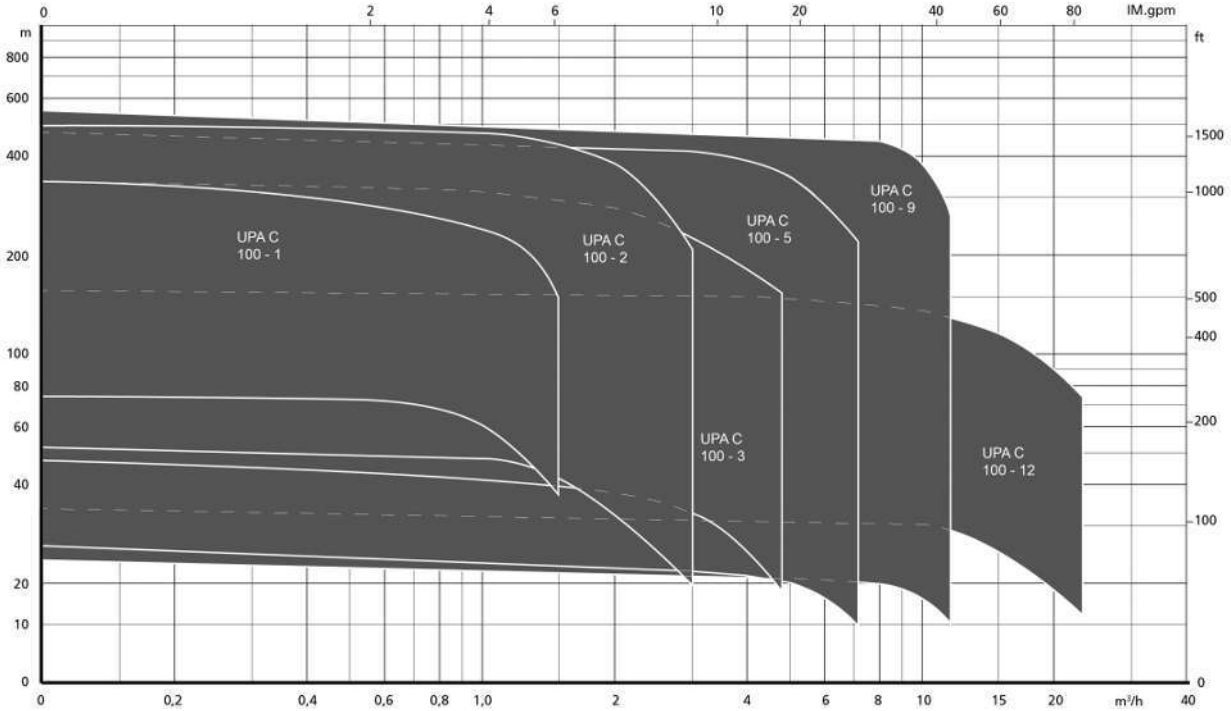
89 On request

Technical data

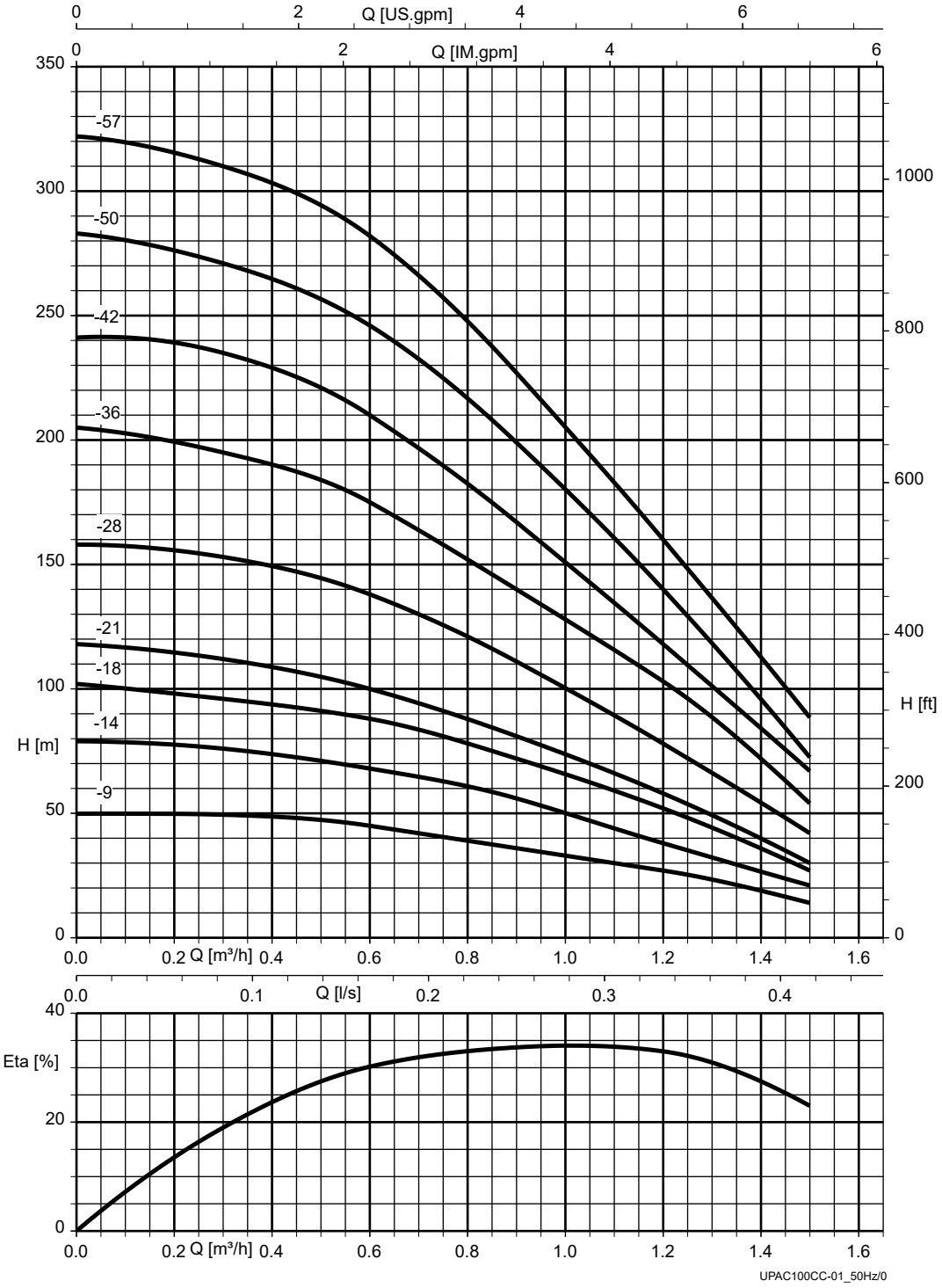
General overview, 50 Hz



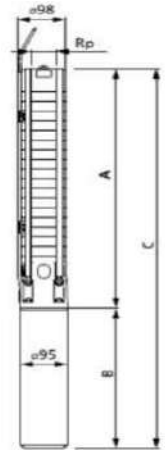
General overview, 60 Hz



UPA C 100-1 EE - 50 Hz



Dimensions



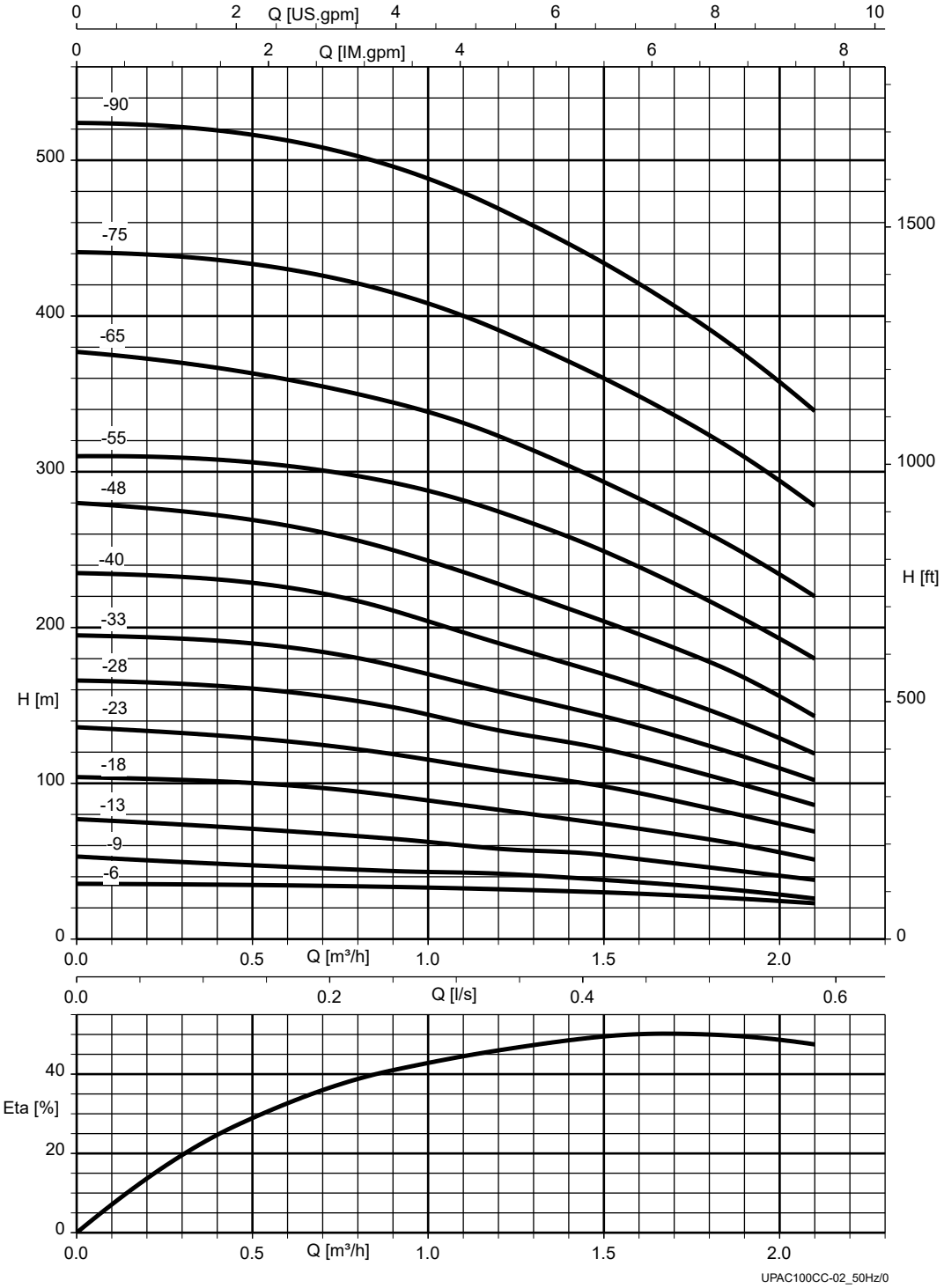
Dimensions [mm], weights [kg]

UPA C 100-	Motor diam.	Rp	1-230 V					3-400 V				
			A	B	C	Mat. No.	[kg]	A	B	C	Mat. No.	[kg]
	["]		[mm]	[mm]	[mm]			[mm]	[mm]	[mm]		
1/9 EE	4	1 1/4	356	228	582	48257382	10,1	356	214	570	48257443	10,1
1/14 EE	4	1 1/4	461	228	689	48257383	10,9	461	214	675	48257444	10,9
1/18 EE	4	1 1/4	545	253	758	48257384	12,8	545	228	773	48257445	12,1
1/21 EE	4	1 1/4	608	253	861	48257385	13,4	608	228	836	48257446	12,7
1/28 EE	4	1 1/4	755	283	1038	48257386	15,5	755	248	1003	48257447	14,9
1/36 EE	4	1 1/4	946	307	1253	48257387	20,4	946	283	1229	48257448	20,1
1/42 EE	4	1 1/4	1072	339	1411	48257388	23,2	1072	307	1379	48257449	22,5
1/50 EE	4	1 1/4	1240	339	1579	48257389	26,4	1240	307	1547	48257450	25,7
1/57 EE	4	1 1/4	1387	437	1824	48257390	33	1387	339	1726	48257451	28,9

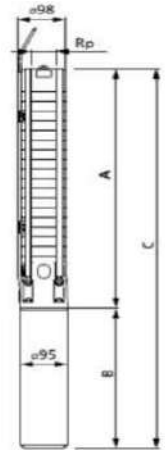
Nominal power [kW] / [hp], nominal current [A]

UPA C 100-	Motor rating		Nominal current	
			1~230 V	3~400 V
	[kW]	[hp]	[A]	[A]
1/9 EE	0,37	0,50	3,3	1,1
1/14 EE	0,37	0,50	3,3	1,1
1/18 EE	0,55	0,75	4,3	1,6
1/21 EE	0,55	0,75	4,3	1,6
1/28 EE	0,75	1,00	5,7	2,0
1/36 EE	1,10	1,50	8,4	2,8
1/42 EE	1,50	2,00	10,7	3,9
1/50 EE	1,50	2,00	10,7	3,9
1/57 EE	2,20	3,00	14,7	5,5

UPA C 100-2 EE - 50 Hz



Dimensions



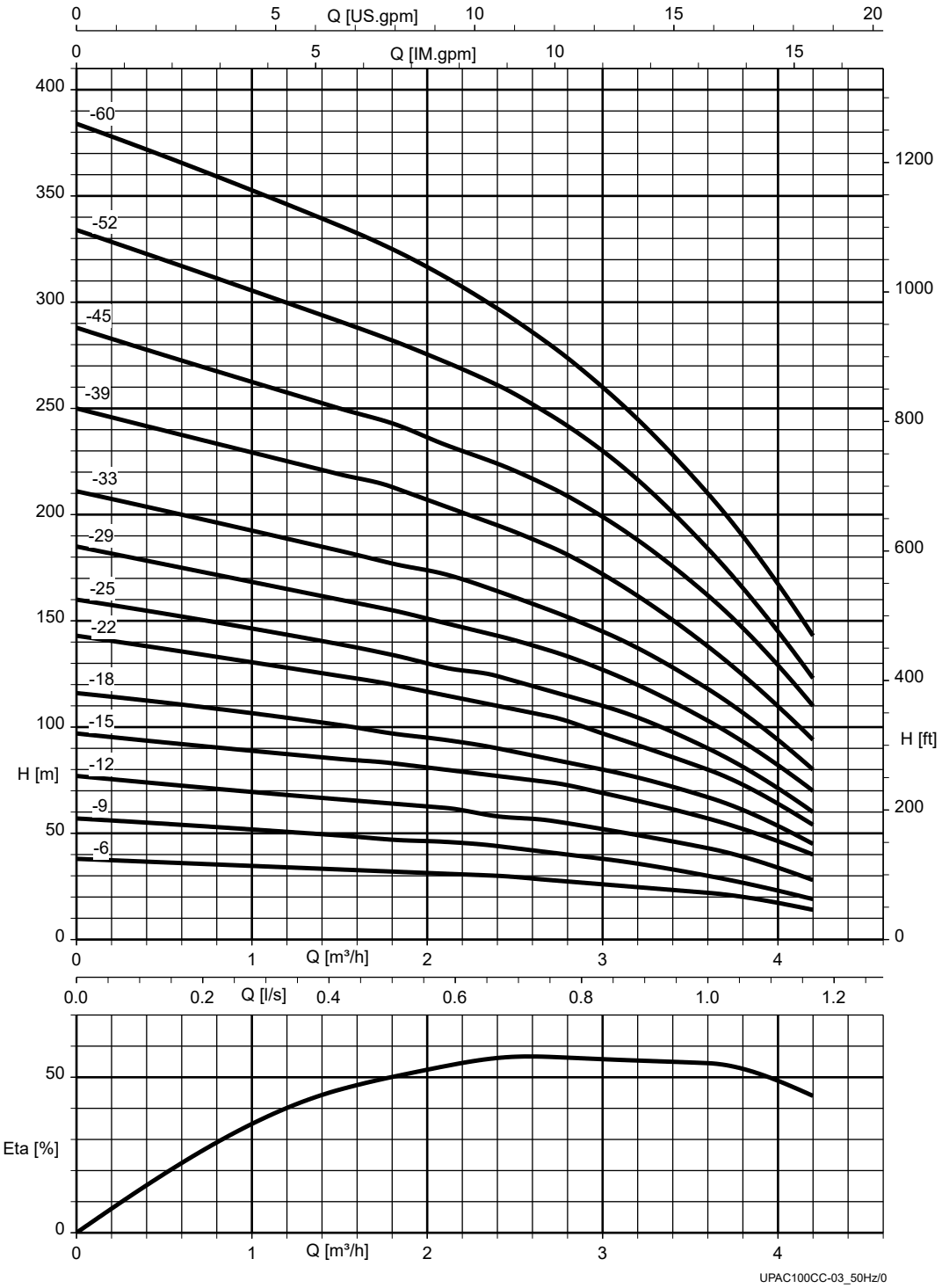
Dimensions [mm], weights [kg]

UPA C 100-	Motor diam.	Rp	1-230 V					3-400 V				
			A	B	C	Mat. No.	[kg]	A	B	C	Mat. No.	[kg]
	["]		[mm]	[mm]	[mm]			[mm]	[mm]	[mm]		
2/6 EE	4	1 1/4	293	228	521	48257391	9,2	293	214	507	48257452	9,2
2/9 EE	4	1 1/4	356	228	584	48257392	10,2	356	214	570	48257453	10,2
2/13 EE	4	1 1/4	440	253	693	48257393	12,2	440	228	668	48257454	11,5
2/18 EE	4	1 1/4	545	283	828	48257394	14	545	248	793	48257455	13,4
2/23 EE	4	1 1/4	650	307	957	48257395	16,2	650	283	933	48257456	15,9
2/28 EE	4	1 1/4	755	339	1094	48257396	18,5	755	307	1062	48257457	17,8
2/33 EE	4	1 1/4	883	339	1222	48257397	21,6	883	307	1190	48257458	20,9
2/40 EE	4	1 1/4	1030	437	1467	48257398	28,2	1030	339	1369	48257459	24,1
2/48 EE	4	1 1/4	1198	437	1635	48257399	30,2	1198	339	1537	48257460	26,1
2/55 EE	4	1 1/4	-	-	-	-	-	1345	394	1739	48257461	33,5
2/65 EE	4	1 1/4	-	-	-	-	-	1555	394	1949	48257462	36,3
2/75 EE	4	1 1/4	-	-	-	-	-	2123	543	2666	48257463	42,1
2/90 EE	4	1 1/4	-	-	-	-	-	2438	543	2981	48257464	46,3

Nominal power [kW] / [hp], nominal current [A]

UPA C 100-	Motor rating		Nominal current	
			1~230 V	3~400 V
	[kW]	[hp]	[A]	[A]
2/6 EE	0,37	0,50	3,3	1,1
2/9 EE	0,37	0,50	3,3	1,1
2/13 EE	0,55	0,75	4,3	1,6
2/18 EE	0,75	1,00	5,7	2,0
2/23 EE	1,10	1,50	8,4	2,8
2/28 EE	1,50	2,00	10,7	3,9
2/33 EE	1,50	2,00	10,7	3,9
2/40 EE	2,20	3,00	14,7	5,5
2/48 EE	2,20	3,00	14,7	5,5
2/55 EE	3,00	4,00	-	7,5
2/65 EE	3,00	4,00	-	7,5
2/75 EE	4,00	5,50	-	9,9
2/90 EE	4,00	5,50	-	9,9

UPA C 100-3 EE - 50 Hz



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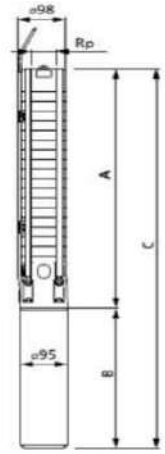


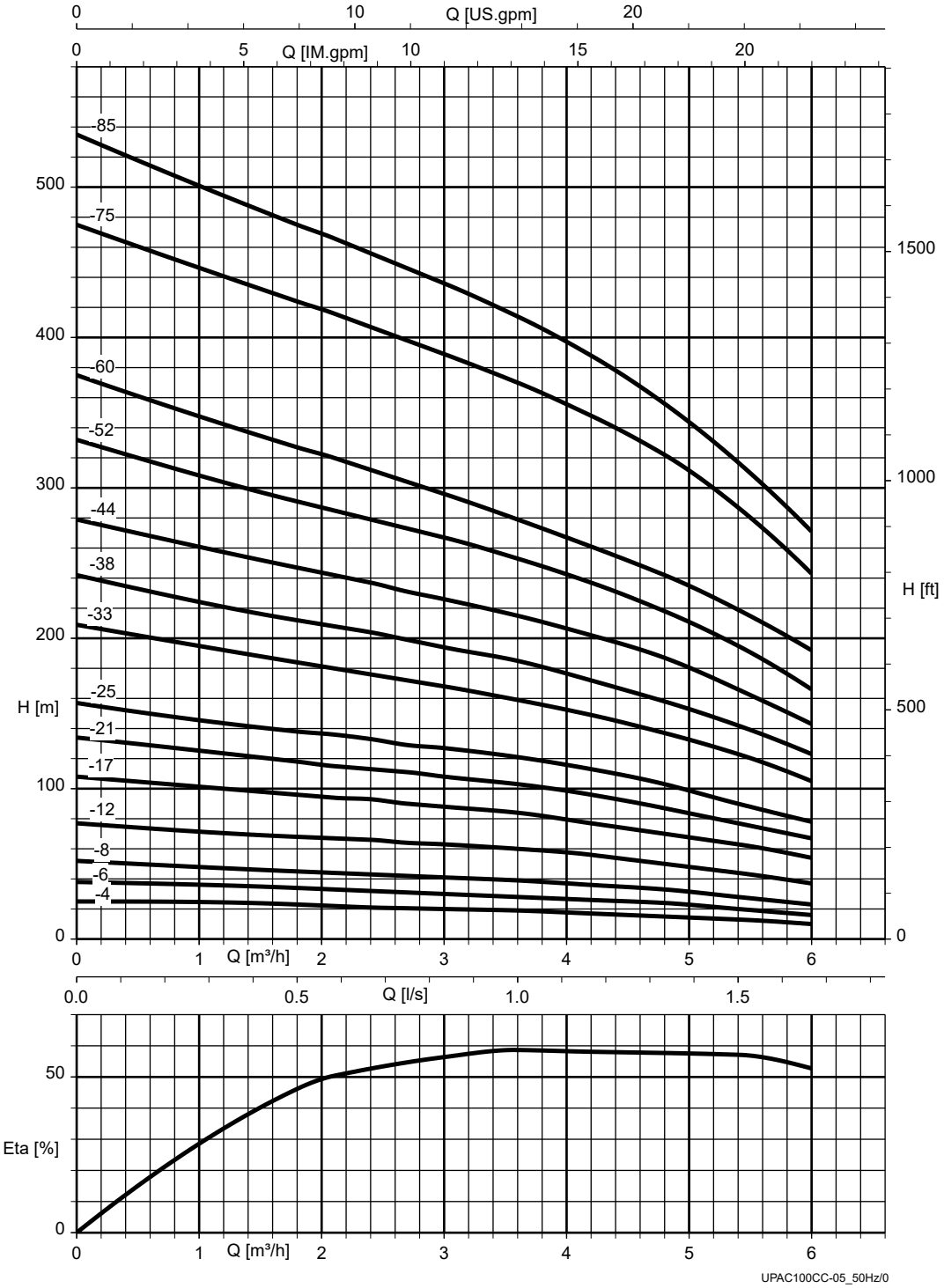
Dimensions [mm], weights [kg]

UPA C 100-	Motor diam.	Rp	1-230 V					3-400 V				
			A	B	C	Mat. No.	[kg]	A	B	C	Mat. No.	[kg]
	["]		[mm]	[mm]	[mm]			[mm]	[mm]	[mm]		
3/6 EE	4	1 1/4	293	253	546	48257404	10,8	293	228	521	48257465	10,1
3/9 EE	4	1 1/4	356	253	609	48257405	11,4	356	228	584	48257466	10,7
3/12 EE	4	1 1/4	419	283	702	48257406	12,9	419	248	667	48257467	12,3
3/15 EE	4	1 1/4	482	307	789	48257407	14,7	482	283	765	48257468	14,4
3/18 EE	4	1 1/4	545	339	884	48257408	16,6	545	307	852	48257469	15,9
3/22 EE	4	1 1/4	629	339	968	48257409	17,4	629	307	936	48257470	16,7
3/25 EE	4	1 1/4	692	437	1129	48257410	22,8	692	339	1031	48257471	18,7
3/29 EE	4	1 1/4	776	437	1213	48257411	23,5	776	339	1115	48257472	19,4
3/33 EE	4	1 1/4	883	437	1320	48257412	26,4	883	339	1222	48257473	22,3
3/39 EE	4	1 1/4	-	-	-	-	-	1009	394	1403	48257474	28,2
3/45 EE	4	1 1/4	-	-	-	-	-	1135	394	1529	48257475	29,7
3/52 EE	4	1 1/4	-	-	-	-	-	1282	543	1825	48257477	34,5
3/60 EE	4	1 1/4	-	-	-	-	-	1450	543	1993	48257478	37,7

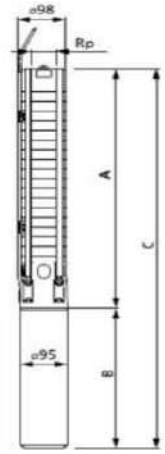
Nominal power [kW] / [hp], nominal current [A]

UPA C 100-	Motor rating		Nominal current	
			1~230 V	3~400 V
	[kW]	[hp]	[A]	[A]
3/6 EE	0,55	0,75	4,3	1,6
3/9 EE	0,55	0,75	4,3	1,6
3/12 EE	0,75	1,00	5,7	2,0
3/15 EE	1,10	1,50	8,4	2,8
3/18 EE	1,50	2,00	10,7	3,9
3/22 EE	1,50	2,00	10,7	3,9
3/25 EE	2,20	3,00	14,7	5,5
3/29 EE	2,20	3,00	14,7	5,5
3/33 EE	2,20	3,00	14,7	5,5
3/39 EE	3,00	4,00	-	7,5
3/45 EE	3,00	4,00	-	7,5
3/52 EE	4,00	5,50	-	9,9
3/60 EE	4,00	5,50	-	9,9

UPA C 100-5 EE - 50 Hz



Dimensions



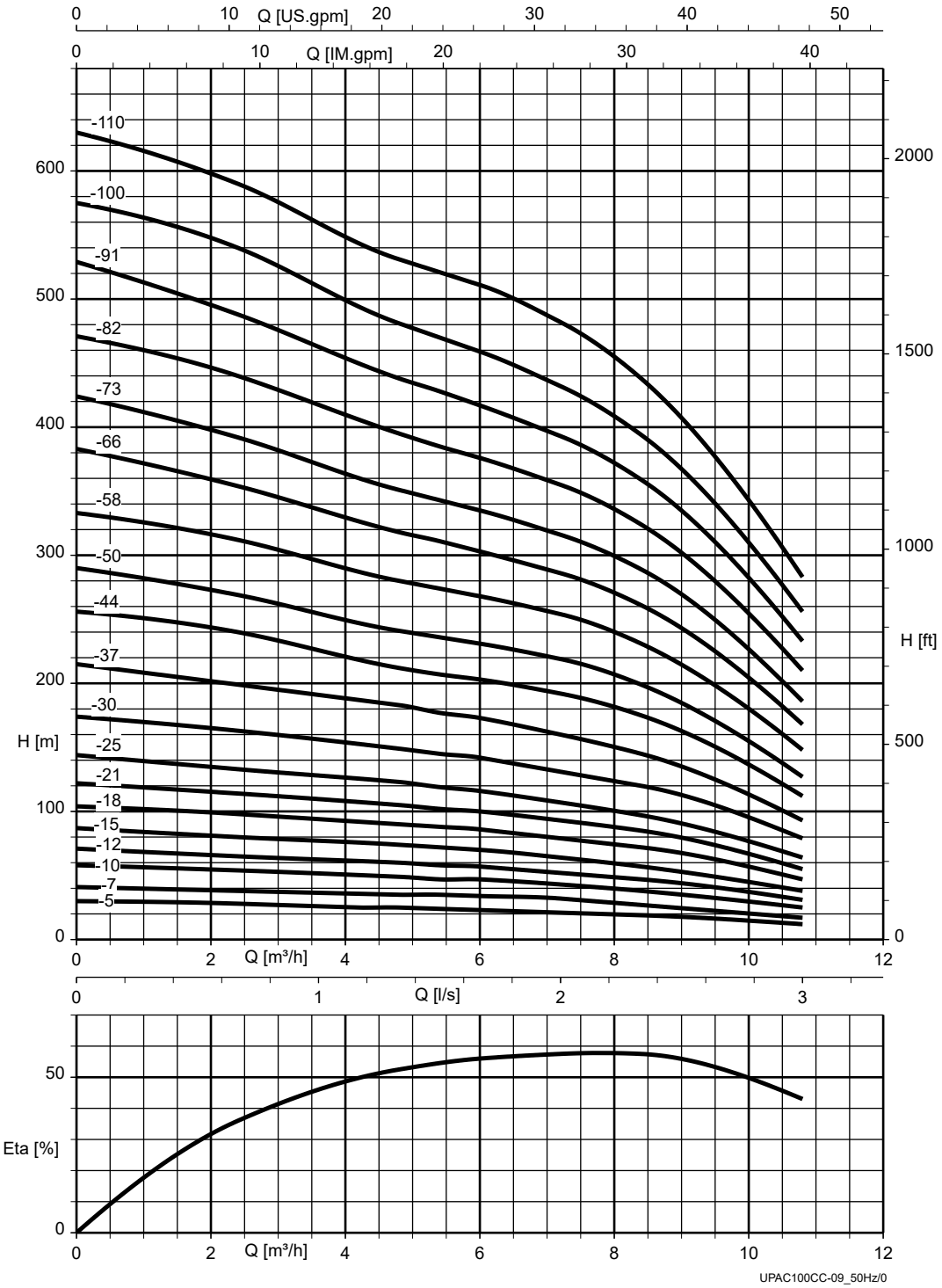
Dimensions [mm], weights [kg]

UPA C 100-	Motor diam.	Rp	1-230 V					3-400 V				
			A	B	C	Mat. No.	[kg]	A	B	C	Mat. No.	[kg]
	["]		[mm]	[mm]	[mm]			[mm]	[mm]	[mm]		
5/4 EE	4	1 1/2	251	228	479	48257417	9,2	251	214	465	48257479	9,2
5/6 EE	4	1 1/2	293	253	546	48257418	10,8	293	228	521	48257480	10,1
5/8 EE	4	1 1/2	335	283	618	48257419	12,1	335	248	583	48257481	11,5
5/12 EE	4	1 1/2	419	339	758	48257420	15,5	419	307	726	48257482	14,8
5/17 EE	4	1 1/2	524	437	961	48257421	21,2	524	339	863	48257483	17,1
5/21 EE	4	1 1/2	608	437	1045	48257422	22	608	339	947	48257484	17,9
5/25 EE	4	1 1/2	-	-	-	-	-	692	394	1086	48257485	23
5/33 EE	4	1 1/2	-	-	-	-	-	868	543	1411	48257486	29,6
5/38 EE	4	1 1/2	-	-	-	-	-	973	653	1626	48257488	37,5
5/44 EE	4	1 1/2	-	-	-	-	-	1099	653	1752	48257490	39
5/52 EE	4	1 1/2	-	-	-	-	-	1267	653	1920	48257491	42,3
5/60 EE	4	1 1/2	-	-	-	-	-	1435	731	2166	48257492	48,5
5/75 EE	6	1 1/2	-	-	-	-	-	2171	699	2870	48257874	67,1
5/85 EE	6	1 1/2	-	-	-	-	-	2335	809	3144	48257875	81

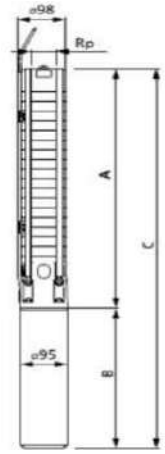
Nominal power [kW] / [hp], nominal current [A]

UPA C 100-	Motor rating		Nominal current	
			1~230 V	3~400 V
	[kW]	[hp]	[A]	[A]
5/4 EE	0,37	0,50	3,3	1,1
5/6 EE	0,55	0,75	4,3	1,6
5/8 EE	0,75	1,00	5,7	2,0
5/12 EE	1,50	2,00	10,7	3,9
5/17 EE	2,20	3,00	14,7	5,5
5/21 EE	2,20	3,00	14,7	5,5
5/25 EE	3,00	4,00	-	7,5
5/33 EE	4,00	5,50	-	9,9
5/38 EE	5,50	7,50	-	12,6
5/44 EE	5,50	7,50	-	12,6
5/52 EE	5,50	7,50	-	12,6
5/60 EE	7,50	10,00	-	17,1
5/75 EE	9,00	10,00	-	21,7
5/85 EE	9,00	15,00	-	21,7

UPA C 100-9 EE - 50 Hz



Dimensions



Dimensions [mm], weights [kg]

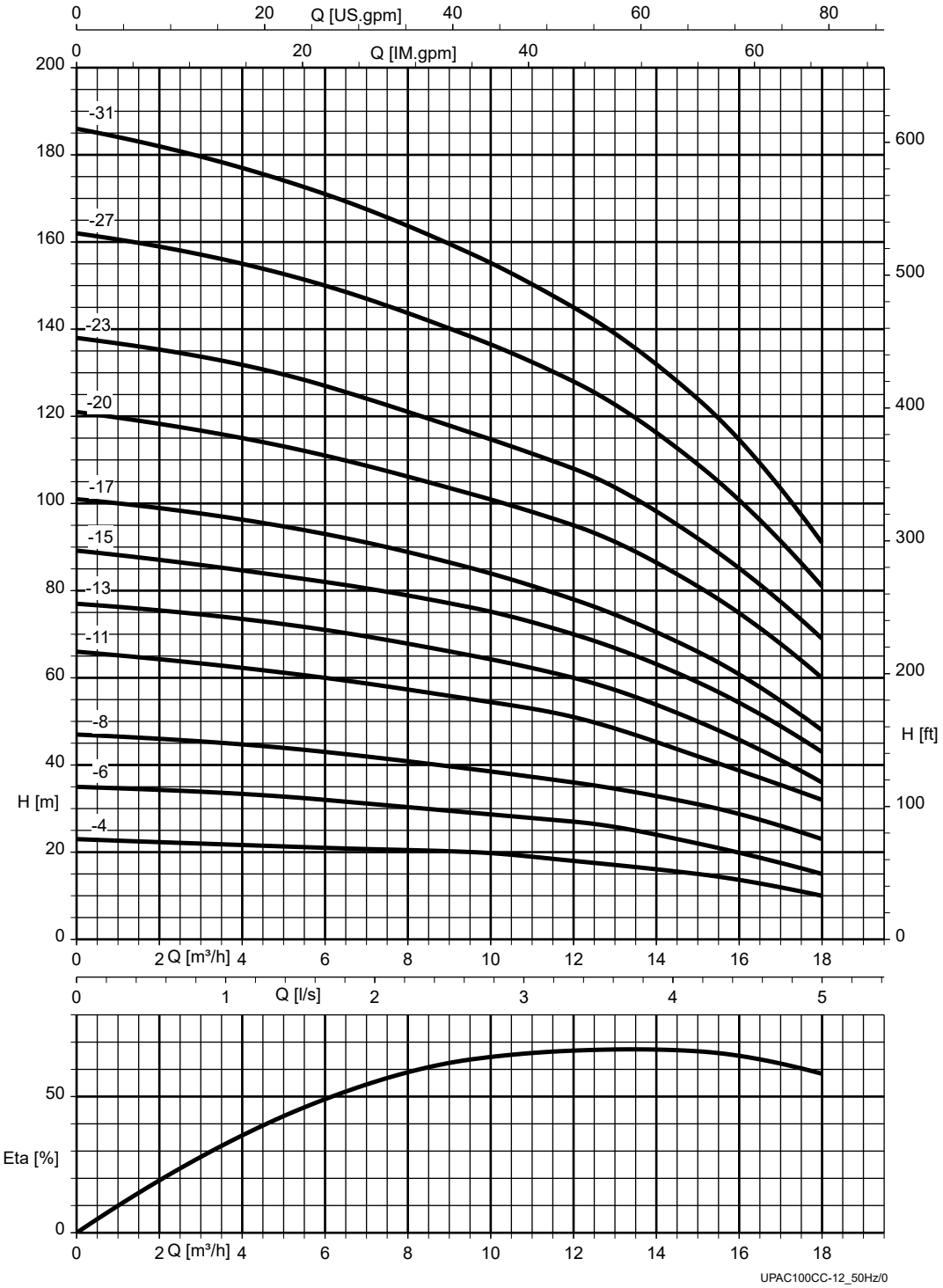
UPA C 100-	Motor diam.	Rp	1-230 V					3-400 V				
			A	B	C	Mat. No.	[kg]	A	B	C	Mat. No.	[kg]
	["]		[mm]	[mm]	[mm]			[mm]	[mm]	[mm]		
9/5 EE	4	2	412	283	694	48257427	13,6	412	248	660	48257493	13
9/7 EE	4	2	496	339	834	48257428	17,2	496	307	802	48257494	16,5
9/10 EE	4	2	622	437	1058	48257429	23,5	622	339	960	48257495	19,4
9/12 EE	4	2	706	437	1142	48257430	24,5	706	339	1044	48257496	20,4
9/15 EE	4	2	-	-	-	-	-	832	394	1225	48257497	26,3
9/18 EE	4	2	-	-	-	-	-	958	394	1351	48257498	27,8
9/21 EE	4	2	-	-	-	-	-	1084	543	1627	48257500	32,8
9/25 EE	4	2	-	-	-	-	-	1252	653	1904	48257502	40,9
9/30 EE	4	2	-	-	-	-	-	1462	653	2114	48257503	43,4
9/37 EE	4	2	-	-	-	-	-	1753	731	2484	48257504	50,9
9/44 EE	4	2	-	-	-	-	-	2047	731	2778	48257505	55,7
9/50 EE	4	2	-	-	-	-	-	2299	809	3108	48257506	84,4
9/58 EE	6	2	-	-	-	-	-	3005	809	3814	48257876	88,8
9/66 EE	6	2	-	-	-	-	-	3341	809	4150	48257877	93,2
9/73 EE	6	2	-	-	-	-	-	3635	854	4489	48257878	102,1
9/82 EE	6	2	-	-	-	-	-	4013	854	4867	48257879	107
9/91 EE	6	2	-	-	-	-	-	4391	854	5245	48257880	112,9
9/100 EE	6	2	-	-	-	-	-	4769	899	5668	48257881	121,9
9/110 EE	6	2	-	-	-	-	-	5189	899	6088	48257882	127,4

Nominal power [kW] / [hp], nominal current [A]

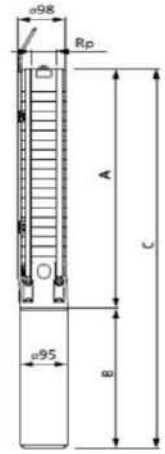
UPA C 100-	Motor rating		Nominal current	
			1~230 V	3~400 V
	[kW]	[hp]	[A]	[A]
9/5 EE	0,75	1,00	5,7	2,0
9/7 EE	1,50	2,00	10,7	3,9
9/10 EE	2,20	3,00	14,7	5,5
9/12 EE	2,20	3,00	14,7	5,5
9/15 EE	3,00	4,00	-	7,5
9/18 EE	3,00	4,00	-	7,5
9/21 EE	4,00	5,50	-	9,9
9/25 EE	5,50	7,50	-	12,6
9/30 EE	5,50	7,50	-	12,6
9/37 EE	7,50	10,00	-	17,1
9/44 EE	7,50	10,00	-	17,1
9/50 EE	9,00	15,00	-	21,7
9/58 EE	13,00	17,40	-	30,1
9/66 EE	13,00	17,40	-	30,1
9/73 EE	13,00	17,40	-	30,1

UPA C 100-	Motor rating		Nominal current	
			1~230 V	3~400 V
	[kW]	[hp]	[A]	[A]
9/82 EE	15,00	20,00	-	33,1
9/91 EE	15,00	20,00	-	33,1
9/100 EE	18,50	25,00	-	42,1
9/110 EE	18,50	25,00	-	42,1

UPA C 100-12 EE - 50 Hz



Dimensions



Dimensions [mm], weights [kg]

UPA C 100-	Motor diam.	Rp	1-230 V					3-400 V				
			A	B	C	Mat. No.	[kg]	A	B	C	Mat. No.	[kg]
	["]		[mm]	[mm]	[mm]			[mm]	[mm]	[mm]		
12/4 EE	4	2	485	307	792	48257224	15,5	485	282	768	48257437	15,2
12/6 EE	4	2	635	339	974	48257225	18,4	635	307	942	48257438	17,7
12/8 EE	4	2	785	437	1222	48257226	24,7	785	339	1124	48257439	20,6
12/11 EE	4	2	-	-	-	-	-	1010	394	1404	48257440	27,3
12/13 EE	4	2	-	-	-	-	-	1160	394	1554	48257441	28,8
12/15 EE	4	2	-	-	-	-	-	1310	543	1853	48257442	33,3
12/17 EE	4	2	-	-	-	-	-	1460	543	2003	48257507	34,8
12/20 EE	4	2	-	-	-	-	-	1685	653	2338	48257508	43,7
12/23 EE	4	2	-	-	-	-	-	1910	731	2641	48257509	50
12/27 EE	4	2	-	-	-	-	-	2210	731	2941	48257510	53
12/31 EE	4	2	-	-	-	-	-	2510	731	3241	48257511	56

Nominal power [kW] / [hp], nominal current [A]

UPA C 100-	Motor rating		Nominal current	
			1~230 V	3~400 V
	[kW]	[hp]	[A]	[A]
12/4 EE	1,10	1,50	8,4	2,8
12/6 EE	1,50	2,00	10,7	3,9
12/8 EE	2,20	3,00	14,7	5,5
12/11 EE	3,00	4,00	-	7,5
12/13 EE	3,00	4,00	-	7,5
12/15 EE	4,00	5,50	-	9,9
12/17 EE	4,00	5,50	-	9,9
12/20 EE	5,50	7,50	-	12,6
12/23 EE	5,50	7,50	-	12,6
12/27 EE	7,50	10,00	-	17,1
12/31 EE	7,50	10,00	-	17,1

Scope of supply

Depending on the model, the following items are included in the scope of supply:

- Pump set with motor lead
- Back-up name plate

Optional:

- Extension cable optional: connected or supplied but not fitted
- Cable connector
- Cable clips
- Pedestals
- Cooling shroud, suction shroud or pressure shroud
- Supporting clamps and mounting clamps
- Electrical protection equipment
- Automatic control units

Submersible Borehole Pumps

UPA C 150

http://shop.ksb.com/catalog/k0/en/product/ES000003

Product benefits

- High operating reliability and long service life due to reinforced suction strainer, robust drive lantern and lift check valve made of investment cast stainless steel, laser-welded impellers and protection against thrust reversal
- High operating reliability as all components are made of high-quality stainless steel.
- High efficiencies through optimised hydraulic design
- High efficiencies in combination with UMA S 150E synchronous motor
- High flexibility by vertical, horizontal and angular installation options
- Reliable operation by anti-jam lift check valve
- Highly flexible operating range through adjustment of motor dimensions
- Easy to install with service-friendly hydraulic system design

Further information

Prices on request

Selection chart 287
Characteristic curves 288
Dimensions and connections 305

Further information

	Cervomatic EDP.2 (⇨ Page 1034)	Single-pump control unit, pressure-dependent, non-ATEX-compliant
	UPA Control (⇨ Page 1037)	Switchgear for level-dependent control

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for 4" and 6" water pumps as per Regulation (EU) No. 547/2012.

Main applications

- Spray irrigation systems
- General irrigation systems
- Pressure boosting
- Lowering groundwater levels
- Domestic water supply
- Air-conditioning systems
- Water supply systems

Fluids handled

- Drinking water
- Cooling water
- River water, lake water and groundwater
- Max. permissible sand content of the fluid 50 g/m³

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 79
	Q [l/s]	≤ 22
Head	H [m]	≤ 440
Fluid temperature	T [°C]	≤ +50
Speed	n [rpm]	≤ 2900
Well diameter	D [mm]	150
	D [″]	6

Design details

Design

- Centrifugal pump
- Single-stage or multistage
- Single-suction
- Ring-section design
- Rigid connection between pump and motor

Type of installation

- Vertical installation
- Horizontal installation (depending on the number of stages)

Drive

Asynchronous motor:

- With squirrel cage motor for submerged use
- Standard connection to NEMA
- Frequency 50 Hz
- IP68 enclosure
- DOL starting or star-delta starting
- Frequency of starts
  - DN 100: 20 start per hour
  - UMA 150E: 15 starts per hour
- Winding J1 (PVC) or, for higher temperatures, J2 (VPE / XLPE)

Synchronous motor:

- Interior (buried) permanent magnet synchronous motor (IPMSM)
- IP68 enclosure
- Standard connection to NEMA
- Winding J2 (VPE / XLPE)
- Frequency of starts ≤ 15 starts per hour

Electrical connection

- Delivered ex-factory with 1 or 2 motor leads (including earth conductor and internal earthing)
- Extension cable connected with water-tight cable connector
- Motor lead and extension cable suitable for drinking water use

Impeller type

- Radial or mixed flow versions

Bearings

- Radial plain bearings
- Pump bearings lubricated by fluid handled; motor bearings lubricated by water fill
- Axial thrust is balanced by a tilting-pad thrust bearing in the motor (lower end)
- Intermediate bearing in every stage

Connections

- Pump screw-ended or flanged
- With lift check valve or connection branch

Designation

Example: UPA C 150 - 16 / 9

Designation key

Code	Description
UPA	Pump type series
C	Design status
150	Nominal size [mm]
16	Flow rate at best efficiency point [m³/h]
9	Number of stages

Materials

Overview of materials for material variant E: Pump

Part No.	Description	Material
106	Suction casing and valve body	CrNiMo steel (1.4408)
108	Stage casing, impeller	CrNi steel (1.4301)
210	Shaft	CrNi steel (1.4305)

Overview of materials for material variant E: Motor

Part No.	Description	Material
210	Shaft (DN 100)	CrNi steel (1.4305)
210	Shaft (UMA 150E < 18.5 kW)	Chrome steel (1.4021)
210	Shaft (UMA 150E ≥ 18.5 kW)	Chrome steel (1.4062)
-	Stator case	CrNi steel (1.4301)
-	Bearing carrier	CrNi steel (1.4301)

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Technical data

UPA C 150 - 16 / ...

Technical data

Number of stages + motor size	Pump	Motor					Motor lead, flat	
	Head Q = 0 m³/h	Rated power	Max. fluid temperature v ≥ 0,2 m/s (0,0 m/s)	Rated current	Efficiency	Power factor	Number x cross-section of cores	
	H_0 [m]	P_N [kW]	T_{max} [°C]	I_N [A]	η_M [%]	cos φ	DOL [mm²]	Y- Δ [mm²]
1 + DN 100-0.75	11,2	0,75	30 (30)	2,0	70,0	0,77	4 × 1,5	-
2 + DN 100-1.5	22	1,50	30 (30)	3,9	73,0	0,78	4 × 1,5	-
3 + DN 100-2.2	32,5	2,20	30 (30)	5,5	75,0	0,77	4 × 1,5	-
4 + DN 100-3.0	44	3,00	30 (30)	7,5	76,0	0,77	4 × 1,5	-
5 + DN 100-3.0	54	3,00	30 (30)	7,5	76,0	0,77	4 × 1,5	-
6 + DN 100-3.7	65	3,70	30 (30)	9,0	78,0	0,78	4 × 1,5	-
7 + DN 100-5.5	79	5,50	30 (20)	12,6	79,0	0,81	4 × 1,5	-
8 + DN 100-5.5	90	5,50	30 (20)	12,6	79,0	0,81	4 × 1,5	-
9 + DN 100-5.5	100	5,50	30 (20)	12,6	79,0	0,81	4 × 1,5	-
10 + DN 100-7.5	110	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
11 + DN 100-7.5	121	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
12 + DN 100-7.5	131	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
13 + DN 100-7.5	140	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
7 + UMA 150E 5/21	80	4,50	41 (38)	12,2	76,5	0,70	4 × 2,5	3/4 × 2,5
8 + UMA 150E 5/21	91	5,00	39 (35)	12,9	76,5	0,73	4 × 2,5	3/4 × 2,5
9 + UMA 150E 5/21	102	5,50	37 (32)	13,8	76,1	0,76	4 × 2,5	3/4 × 2,5
10 + UMA 150E 7/21	113	6,50	36 (31)	16,3	77,0	0,74	4 × 2,5	3/4 × 2,5
11 + UMA 150E 7/21	124	7,00	33 (28)	17,2	77,0	0,77	4 × 2,5	3/4 × 2,5
12 + UMA 150E 7/21	134	7,50	31 (25)	18,1	77,0	0,78	4 × 2,5	3/4 × 2,5
13 + UMA 150E 7/21	145	7,50	31 (25)	18,1	77,0	0,78	4 × 2,5	3/4 × 2,5
14 + UMA 150E 9/21	157	8,50	32 (27)	20,3	78,5	0,77	4 × 2,5	3/4 × 2,5
15 + UMA 150E 9/21	168	9,00	30 (24)	21,2	78,3	0,79	4 × 2,5	3/4 × 2,5
16 + UMA 150E 9/21	178	9,30	29 (23)	21,7	78,1	0,79	4 × 2,5	3/4 × 2,5
17 + UMA 150E 13/21	193	10,50	35 (30)	26,1	80,6	0,72	4 × 2,5	3/4 × 2,5
18 + UMA 150E 13/21	204	11,00	34 (29)	26,8	80,6	0,74	4 × 2,5	3/4 × 2,5
19 + UMA 150E 13/21	215	11,50	33 (27)	27,6	80,5	0,75	4 × 2,5	3/4 × 2,5
20 + UMA 150E 13/21	225	12,00	31 (26)	28,4	80,5	0,76	4 × 2,5	3/4 × 2,5
21 + UMA 150E 13/21	236	13,00	28 (22)	30,1	80,3	0,78	4 × 2,5	3/4 × 2,5
22 + UMA 150E 13/21	246	13,00	28 (22)	30,1	80,3	0,78	4 × 2,5	3/4 × 2,5
23 + UMA 150E 13/21	256	13,00	28 (22)	30,1	80,3	0,78	4 × 2,5	3/4 × 2,5
24 + UMA 150E 15/21	269	14,00	32 (26)	31,7	81,5	0,78	4 × 4,0	3/4 × 2,5
25 + UMA 150E 15/21	280	15,00	29 (23)	33,4	81,3	0,80	4 × 4,0	3/4 × 2,5
26 + UMA 150E 15/21	290	15,00	29 (23)	33,4	81,3	0,80	4 × 4,0	3/4 × 2,5
27 + UMA 150E 18/21	305	16,00	31 (25)	38,0	82,1	0,74	4 × 4,0	3/4 × 2,5
28 + UMA 150E 18/21	315	16,50	30 (24)	38,8	82,1	0,75	4 × 4,0	3/4 × 2,5
29 + UMA 150E 18/21	326	17,00	29 (22)	39,6	82,0	0,76	4 × 4,0	3/4 × 2,5
30 + UMA 150E 18/21	336	17,50	28 (21)	40,4	81,9	0,76	4 × 4,0	3/4 × 2,5
31 + UMA 150E 18/21	347	18,00	26 (19)	41,2	81,8	0,77	4 × 4,0	3/4 × 2,5
32 + UMA 150E 18/21	357	18,50	25 (18)	42,1	81,6	0,78	4 × 4,0	3/4 × 2,5
33 + UMA 150E 22/21	373	20,00	32 (26)	45,9	83,4	0,75	4 × 4,0	3/4 × 2,5
34 + UMA 150E 22/21	383	20,00	32 (26)	45,9	83,4	0,75	4 × 4,0	3/4 × 2,5
35 + UMA 150E 22/21	394	21,00	30 (24)	47,6	83,3	0,77	4 × 4,0	3/4 × 2,5
36 + UMA 150E 22/21	404	22,00	28 (21)	49,2	83,1	0,78	4 × 4,0	3/4 × 2,5
37 + UMA 150E 22/21	415	22,00	28 (21)	49,2	83,1	0,78	4 × 4,0	3/4 × 2,5

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Number of stages + motor size	Pump	Motor					Motor lead, flat	
	Head Q = 0 m^3/h	Rated power	Max. fluid temperature v ≥ 0,2 m/s (0,0 m/s)	Rated current	Efficiency	Power factor	Number x cross-section of cores	
	H_0 [m]	P_N [kW]	T_{max} [°C]	I_N [A]	η_M [%]	cos φ	DOL [mm^2]	Y- Δ [mm^2]
38 + UMA 150E 22/21	425	22,00	28 (21)	49,2	83,1	0,78	4 × 4,0	3/4 × 2,5
39 + UMA 150E 26/21	441	24,00	34 (28)	53,6	84,7	0,76	4 × 6,0	3/4 × 4,0
40 + UMA 150E 26/21	451	24,00	34 (28)	53,6	84,7	0,76	4 × 6,0	3/4 × 4,0

UPA C 150 - 30 / ...

Technical data

Number of stages + motor size	Pump	Motor					Motor lead, flat	
	Head Q = 0 m³/h	Rated power	Max. fluid temperature v ≥ 0,2 m/s (0,0 m/s)	Rated current	Efficiency	Power factor	Number x cross-section of cores	
	H_0 [m]	P_N [kW]	T_{max} [°C]	I_N [A]	η_M [%]	cos φ	DOL [mm²]	Y- Δ [mm²]
1 + DN 100-1.1	10,6	1,10	30 (30)	2,8	74,0	0,78	4 × 1,5	-
2 + DN 100-2.2	21,5	2,20	30 (30)	5,5	75,0	0,77	4 × 1,5	-
3 + DN 100-3.0	32,0	3,00	30 (30)	7,5	76,0	0,77	4 × 1,5	-
4 + DN 100-3.7	43,0	3,70	30 (30)	9,0	78,0	0,78	4 × 1,5	-
5 + DN 100-5.5	55,0	5,50	30 (20)	12,6	79,0	0,81	4 × 1,5	-
6 + DN 100-5.5	66,0	5,50	30 (20)	12,6	79,0	0,81	4 × 1,5	-
7 + DN 100-7.5	76,0	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
5 + UMA 150E 5/21	56	4,50	41 (38)	12,2	76,5	0,70	4 × 2,5	3/4 × 2,5
6 + UMA 150E 5/21	67	5,50	37 (32)	13,8	76,1	0,76	4 × 2,5	3/4 × 2,5
7 + UMA 150E 7/21	78	6,50	36 (31)	16,3	77,0	0,74	4 × 2,5	3/4 × 2,5
8 + UMA 150E 7/21	88	7,00	33 (28)	17,2	77,0	0,77	4 × 2,5	3/4 × 2,5
9 + UMA 150E 9/21	100	8,00	34 (30)	19,4	78,7	0,76	4 × 2,5	3/4 × 2,5
10 + UMA 150E 9/21	110	9,00	30 (24)	21,2	78,3	0,79	4 × 2,5	3/4 × 2,5
11 + UMA 150E 9/21	120	9,30	29 (23)	21,7	78,1	0,79	4 × 2,5	3/4 × 2,5
12 + UMA 150E 13/21	134	11,00	34 (29)	26,8	80,6	0,74	4 × 2,5	3/4 × 2,5
13 + UMA 150E 13/21	144	11,50	33 (27)	27,6	80,5	0,75	4 × 2,5	3/4 × 2,5
14 + UMA 150E 13/21	154	12,50	30 (24)	29,2	80,4	0,77	4 × 2,5	3/4 × 2,5
15 + UMA 150E 13/21	165	13,00	28 (22)	30,1	80,3	0,78	4 × 2,5	3/4 × 2,5
16 + UMA 150E 15/21	176	14,50	30 (24)	32,51	81,4	0,79	4 × 4,0	3/4 × 2,5
17 + UMA 150E 15/21	186	15,00	29 (23)	33,4	81,3	0,80	4 × 4,0	3/4 × 2,5
18 + UMA 150E 18/21	200	16,00	31 (25)	38,0	82,1	0,74	4 × 4,0	3/4 × 2,5
19 + UMA 150E 18/21	210	17,00	29 (22)	39,6	82,0	0,76	4 × 4,0	3/4 × 2,5
20 + UMA 150E 18/21	220	18,00	26 (19)	41,2	81,8	0,77	4 × 4,0	3/4 × 2,5
21 + UMA 150E 18/21	230	18,50	25 (18)	42,1	81,6	0,78	4 × 4,0	3/4 × 2,5
22 + UMA 150E 22/21	244	20,00	32 (26)	45,9	83,4	0,75	4 × 4,0	3/4 × 2,5
23 + UMA 150E 22/21	254	21,00	30 (24)	47,6	83,3	0,77	4 × 4,0	3/4 × 2,5
24 + UMA 150E 22/21	265	22,00	28 (21)	49,2	83,1	0,78	4 × 4,0	3/4 × 2,5
25 + UMA 150E 22/21	275	22,00	28 (21)	49,2	83,1	0,78	4 × 4,0	3/4 × 2,5
26 + UMA 150E 26/21	289	24,00	34 (28)	53,6	84,7	0,76	4 × 6,0	3/4 × 4,0
27 + UMA 150E 26/21	299	24,00	34 (28)	53,6	84,7	0,76	4 × 6,0	3/4 × 4,0
28 + UMA 150E 26/21	309	25,00	32 (26)	55,2	84,5	0,77	4 × 6,0	3/4 × 4,0
29 + UMA 150E 26/21	320	26,00	31 (25)	56,9	84,4	0,78	4 × 6,0	3/4 × 4,0
30 + UMA 150E 26/21	330	26,00	31 (25)	56,9	84,4	0,78	4 × 6,0	3/4 × 4,0
31 + UMA 150E 30/21	345	28,00	32 (26)	63,6	84,3	0,75	4 × 6,0	3/4 × 4,0
32 + UMA 150E 30/21	355	29,00	31 (25)	65,2	84,2	0,76	4 × 6,0	3/4 × 4,0
33 + UMA 150E 30/21	365	30,00	30 (23)	66,8	84,2	0,77	4 × 6,0	3/4 × 4,0
34 + UMA 150E 30/21	376	30,00	30 (23)	66,8	84,2	0,77	4 × 6,0	3/4 × 4,0
35 + UMA 150E 37/22	389	32,00	44 (38)	73,4	83,9	0,75	3/4 × 4,0[90)]	3/4 × 4,0

90 Parallel cable

UPA C 150 - 48 / ...

Technical data

Number of stages + motor size	Pump	Motor					Motor lead, flat	
	Head Q = 0 m³/h	Rated power	Max. fluid temperature v ≥ 0,2 m/s (0,0 m/s)	Rated current	Efficiency	Power factor	Number x cross-section of cores	
	H_0 [m]	P_N [kW]	T_{max} [°C]	I_N [A]	η_M [%]	cos φ	DOL [mm²]	Y- Δ [mm²]
1 + DN 100-2.2	13,2	2,20	30 (30)	5,5	75,0	0,77	4 × 1,5	-
2 + DN 100-3.0	26,5	3,00	30 (30)	7,5	76,0	0,77	4 × 1,5	-
3 + DN 100-5.5	41,0	5,50	30 (20)	12,6	79,0	0,81	4 × 1,5	-
4 + DN 100-7.5	54,0	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
3 + UMA 150E 5/21	42	5,00	39 (35)	12,9	76,5	0,73	4 × 2,5	3/4 × 2,5
4 + UMA 150E 7/21	55	6,50	36 (31)	16,3	77,0	0,74	4 × 2,5	3/4 × 2,5
5 + UMA 150E 9/21	69	8,00	34 (30)	19,4	78,7	0,76	4 × 2,5	3/4 × 2,5
6 + UMA 150E 9/21	81	9,30	29 (23)	21,7	78,1	0,79	4 × 2,5	3/4 × 2,5
7 + UMA 150E 13/21	97	11,50	33 (27)	27,6	80,5	0,75	4 × 2,5	3/4 × 2,5
8 + UMA 150E 13/21	109	12,50	30 (24)	29,2	80,4	0,77	4 × 2,5	3/4 × 2,5
9 + UMA 150E 15/21	123	14,50	30 (24)	32,5	81,4	0,79	4 × 4,0	3/4 × 2,5
10 + UMA 150E 18/21	138	16,00	31 (25)	38,0	82,1	0,74	4 × 4,0	3/4 × 2,5
11 + UMA 150E 18/21	151	17,50	28 (21)	40,4	81,9	0,76	4 × 4,0	3/4 × 2,5
12 + UMA 150E 18/21	163	18,50	25 (18)	42,1	81,6	0,78	4 × 4,0	3/4 × 2,5
13 + UMA 150E 22/21	179	21,00	30 (24)	47,6	83,3	0,77	4 × 4,0	3/4 × 2,5
14 + UMA 150E 22/21	191	22,00	28 (21)	49,2	83,1	0,78	4 × 4,0	3/4 × 2,5
15 + UMA 150E 26/21	207	24,00	34 (28)	53,6	84,7	0,76	4 × 6,0	3/4 × 4,0
16 + UMA 150E 26/21	219	26,00	31 (25)	56,9	84,4	0,78	4 × 6,0	3/4 × 4,0
17 + UMA 150E 26/21	232	26,00	31 (25)	56,9	84,4	0,78	4 × 6,0	3/4 × 4,0
18 + UMA 150E 30/21	248	29,00	31 (25)	65,2	84,2	0,76	4 × 6,0	3/4 × 4,0
19 + UMA 150E 30/21	261	30,00	30 (23)	66,8	84,2	0,77	4 × 6,0	3/4 × 4,0
20 + UMA 150E 37/22	276	32,00	44 (38)	73,4	83,9	0,75	3/4 × 4,0[91)]	3/4 × 4,0
21 + UMA 150E 37/22	289	33,00	43 (37)	75,0	83,8	0,76	3/4 × 4,0[91)]	3/4 × 4,0
22 + UMA 150E 37/22	301	35,00	40 (34)	78,2	83,6	0,77	3/4 × 4,0[91)]	3/4 × 4,0
23 + UMA 150E 37/22	314	36,00	39 (32)	79,9	83,4	0,78	3/4 × 4,0[91)]	3/4 × 4,0
24 + UMA 150E 37/22	327	37,00	38 (31)	81,6	83,3	0,79	3/4 × 4,0[91)]	3/4 × 4,0

91 Parallel cable

UPA C 150 - 60 / ...

Technical data

Number of stages + motor size	Pump	Motor					Motor lead, flat	
	Head Q = 0 m³/h	Rated power	Max. fluid temperature v ≥ 0,2 m/s (0,0 m/s)	Rated current	Efficiency	Power factor	Number x cross-section of cores	
	H_0 [m]	P_N [kW]	T_{max} [°C]	I_N [A]	η_M [%]	cos φ	DOL [mm²]	Y- Δ [mm²]
1 + DN 100-2.2	13,4	2,20	30 (30)	5,5	75,0	0,77	4 × 1,5	-
2 + DN 100-3.7	27	3,70	30 (30)	9,0	78,0	0,78	4 × 1,5	-
3 + DN 100-7.5	41	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
4 + DN 100-7.5	53	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
3 + UMA 150E 7/21	42	6,00	38 (34)	15,5	78,0	0,72	4 × 2,5	3/4 × 2,5
4 + UMA 150E 7/21	55	7,50	31 (25)	18,1	77,0	0,78	4 × 2,5	3/4 × 2,5
5 + UMA 150E 9/21	69	9,30	29 (23)	21,7	78,1	0,79	4 × 2,5	3/4 × 2,5
6 + UMA 150E 13/21	84	11,50	33 (27)	27,6	80,5	0,75	4 × 2,5	3/4 × 2,5
7 + UMA 150E 13/21	97	13,00	28 (22)	30,1	80,3	0,78	4 × 2,5	3/4 × 2,5
8 + UMA 150E 15/21	111	15,00	29 (23)	33,4	81,3	0,80	4 × 4,0	3/4 × 2,5
9 + UMA 150E 18/21	125	17,50	28 (21)	40,4	81,9	0,76	4 × 4,0	3/4 × 2,5
10 + UMA 150E 22/21	140	20,00	32 (26)	45,9	83,4	0,75	4 × 4,0	3/4 × 2,5
11 + UMA 150E 22/21	153	21,00	30 (24)	47,6	83,3	0,77	4 × 4,0	3/4 × 2,5
12 + UMA 150E 26/21	168	23,00	35 (30)	52,0	84,8	0,75	4 × 6,0	3/4 × 4,0
13 + UMA 150E 26/21	181	25,00	32 (26)	55,2	84,5	0,77	4 × 6,0	3/4 × 4,0
14 + UMA 150E 26/21	194	26,00	31 (25)	56,9	84,4	0,78	4 × 6,0	3/4 × 4,0
15 + UMA 150E 30/21	210	29,00	31 (25)	65,2	84,2	0,76	4 × 6,0	3/4 × 4,0
16 + UMA 150E 30/21	223	30,00	30 (23)	66,8	84,2	0,77	4 × 6,0	3/4 × 4,0
17 + UMA 150E 37/22	237	33,00	43 (37)	75,0	83,8	0,76	3/4 × 4,0[92)]	3/4 × 4,0
18 + UMA 150E 37/22	251	35,00	40 (34)	78,2	83,6	0,77	3/4 × 4,0[92)]	3/4 × 4,0
19 + UMA 150E 37/22	264	36,00	39 (32)	79,9	83,4	0,78	3/4 × 4,0[92)]	3/4 × 4,0
20 + UMA 150E 37/22	277	37,00	38 (31)	81,6	83,3	0,79	3/4 × 4,0[92)]	3/4 × 4,0

92 Parallel cable

Selection chart

n = 2900 rpm^{-1}

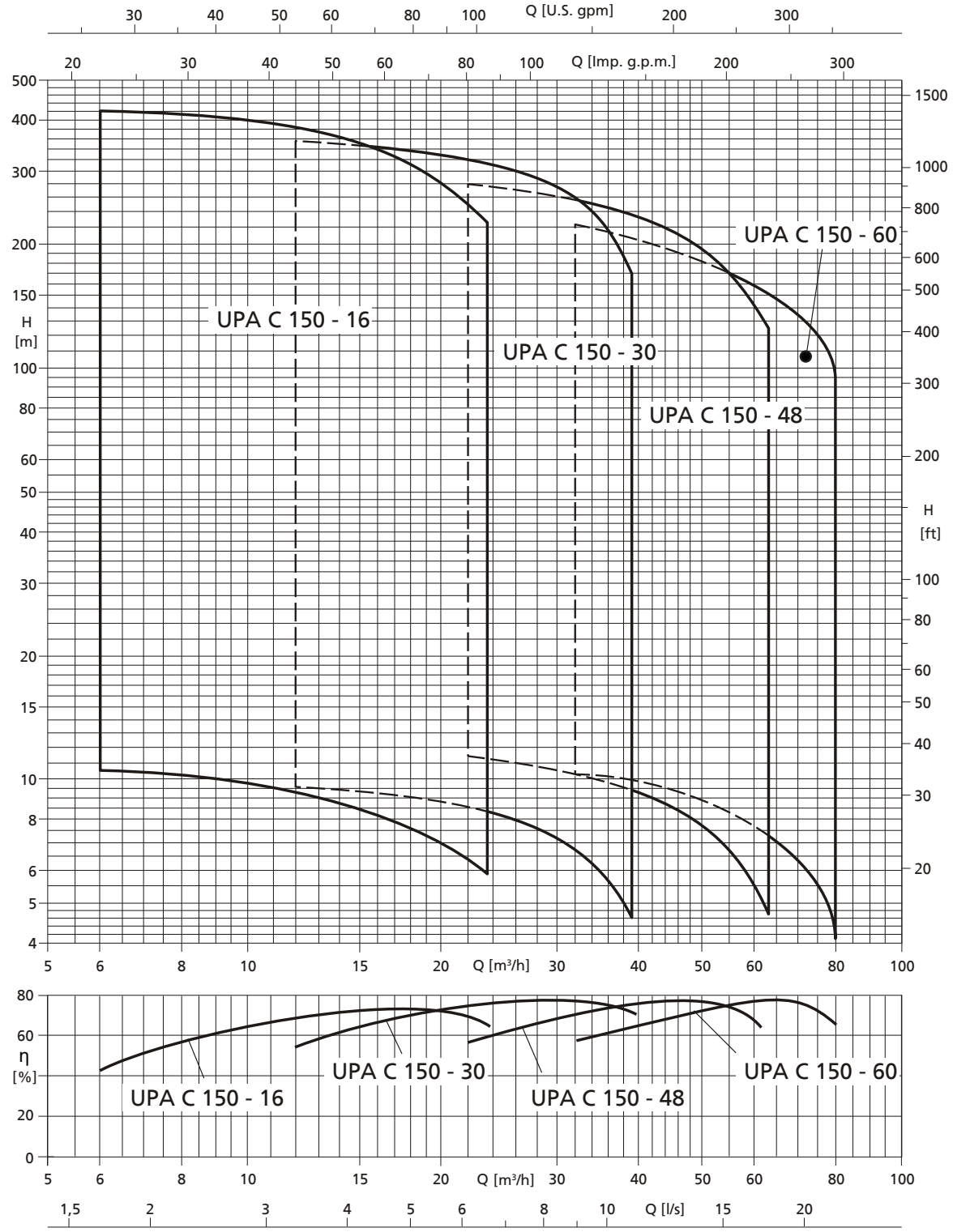


Fig. 127: Selection chart UPA C 150

Characteristic curves

The characteristic curves shown are intended to allow pre-selection. The precise selection data will be indicated in the quotation.

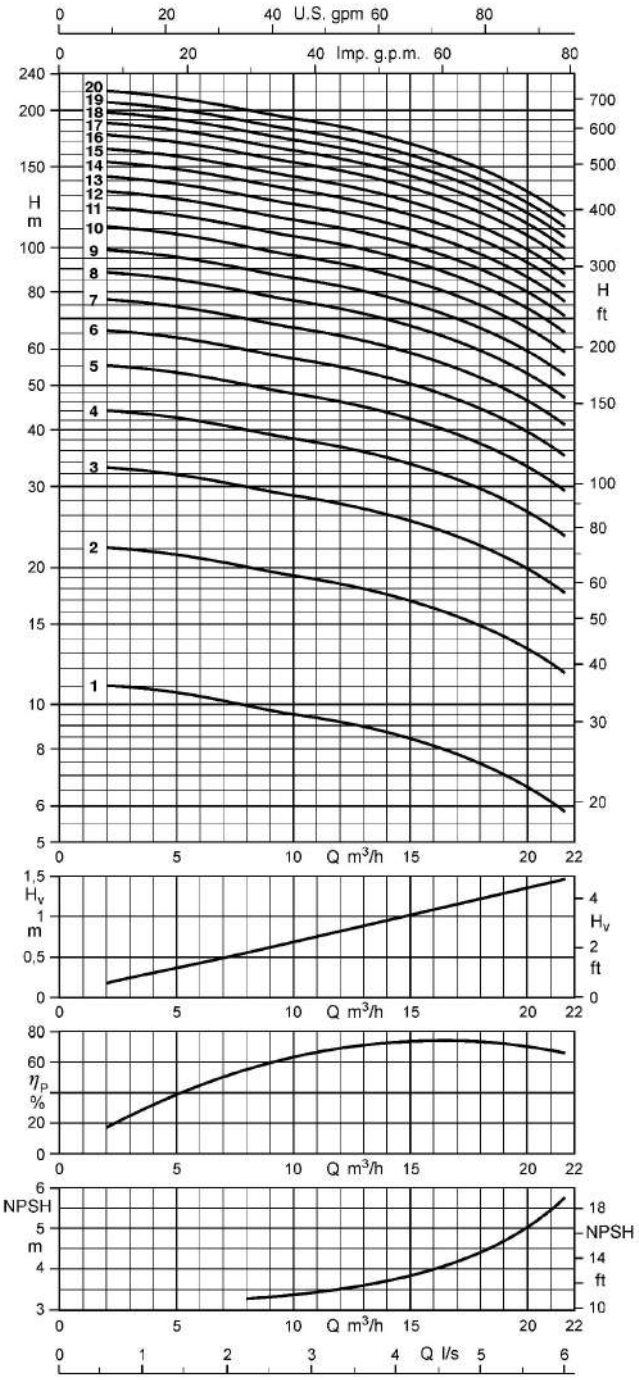
- Tolerance to ISO 9906 Cl 3B, below 10 kW to paragraph 4.4.2
- Screw-ended to DIN ISO 228, Part 1
- Flanged end to DIN EN 1092

H_v Head losses in the lift check valve. The head losses H_v in the lift check valve are **not included** in the pump characteristic curves.

η_p Pump efficiency (without lift check valve)

NPSH Net positive suction head required by pump

UPA C 150 - 16 / ..., number of stages 1 - 20



Connection types

Standard pump end = G 2 $^1/_2$

Possible connection types:

- Threaded connection
  - G 3
  - G 4
- Flanged connection
  - DN 50
  - DN 65
  - DN 80

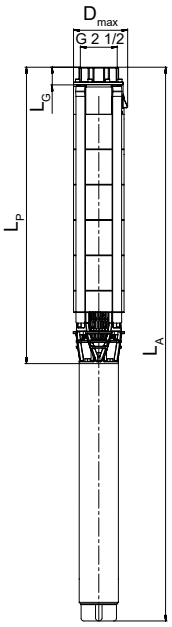
Alternative pump ends are possible.
The length of the pump set L_A and the diameter D_{max} depend on the pump end.

For an alternative pump end the length of the pump set L is calculated$_{A*}$ as follows:

$L_{A*} = L_A - L_G + L_{G*}$

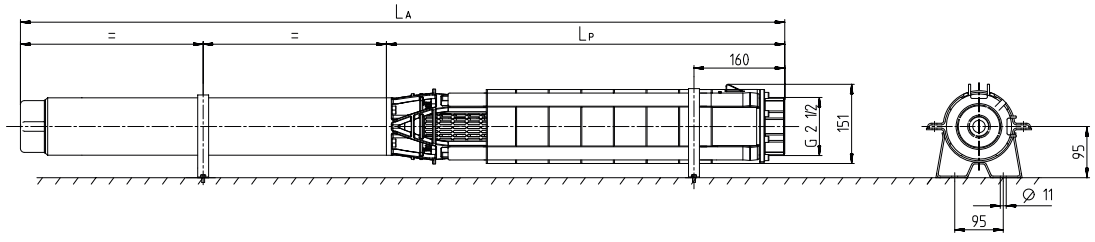
Values for calculating the dimensions if using a different pump end:

- G 2 $^1/_2$:
  L_{G*} = 40 mm
  $D_{max*} \triangleq D_{max}$
- G 3:
  L_{G*} = 48 mm
  $D_{max*} \triangleq D_{max}$
- G 4:
  L_{G*} = 93 mm
  $D_{max*} \triangleq D_{max}$
- DN 50:
  L_{G*} = 77 mm
  D_{max*} = 165 mm
- DN 65:
  L_{G*} = 77 mm
  D_{max*} = 185 mm
- DN 80:
  L_{G*} = 77 mm
  D_{max*} = 200 mm



Operating range

Q_{min} = 5 m³/h
Q_{max}= end of stage curve



Dimensions of UPA C 150 - 16 / ... [mm]

Dimensions, weights and installation type depending on the motor [mm]

UPA C 150 - 16	DN motor					UMA motor						Type of installation	
	L_P	L_A	L_G [93]	D_{max} DOL	Total weight	L_P	L_A	L_G [93]	D_{max} DOL	D_{max} Y - Δ	Total weight	Vertical	Horizontal [94]
	[mm]	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]		
1	336	607	40	139	16	-	-	-	-	-	-	✗	✗
2	397	718	40	139	19	-	-	-	-	-	-	✗	✗
3	457	810	40	139	23	-	-	-	-	-	-	✗	✗
4	518	926	40	139	26	-	-	-	-	-	-	✗	✗
5	578	986	40	139	27	-	-	-	-	-	-	✗	✗
6	639	1159	40	139	33	-	-	-	-	-	-	✗	✗
7	699	1352	40	139	42	731	1410	40	142	142	58	✗	✗
8	760	1413	40	139	43	791	1470	40	142	142	61	✗	✗
9	820	1473	40	139	45	852	1531	40	142	142	62	✗	✗
10	881	1612	40	139	50	912	1611	40	142	142	65	✗	✗
11	941	1672	40	139	51	973	1672	40	142	142	67	✗	✗
12	1002	1733	40	139	53	1033	1732	40	142	142	68	✗	✗
13	1062	1793	40	139	54	1094	1793	40	142	142	69	✗	✗
14	-	-	-	-	-	1154	1883	40	142	142	74	✗	✗
15	-	-	-	-	-	1215	1944	40	142	142	75	✗	✗
16	-	-	-	-	-	1275	2004	40	142	142	76	✗	✗
17	-	-	-	-	-	1336	2145	40	142	142	86	✗	✗
18	-	-	-	-	-	1396	2205	40	142	142	87	✗	✗
19	-	-	-	-	-	1457	2266	40	142	142	89	✗	✗
20	-	-	-	-	-	1517	2326	40	142	142	90	✗	✗

Technical data

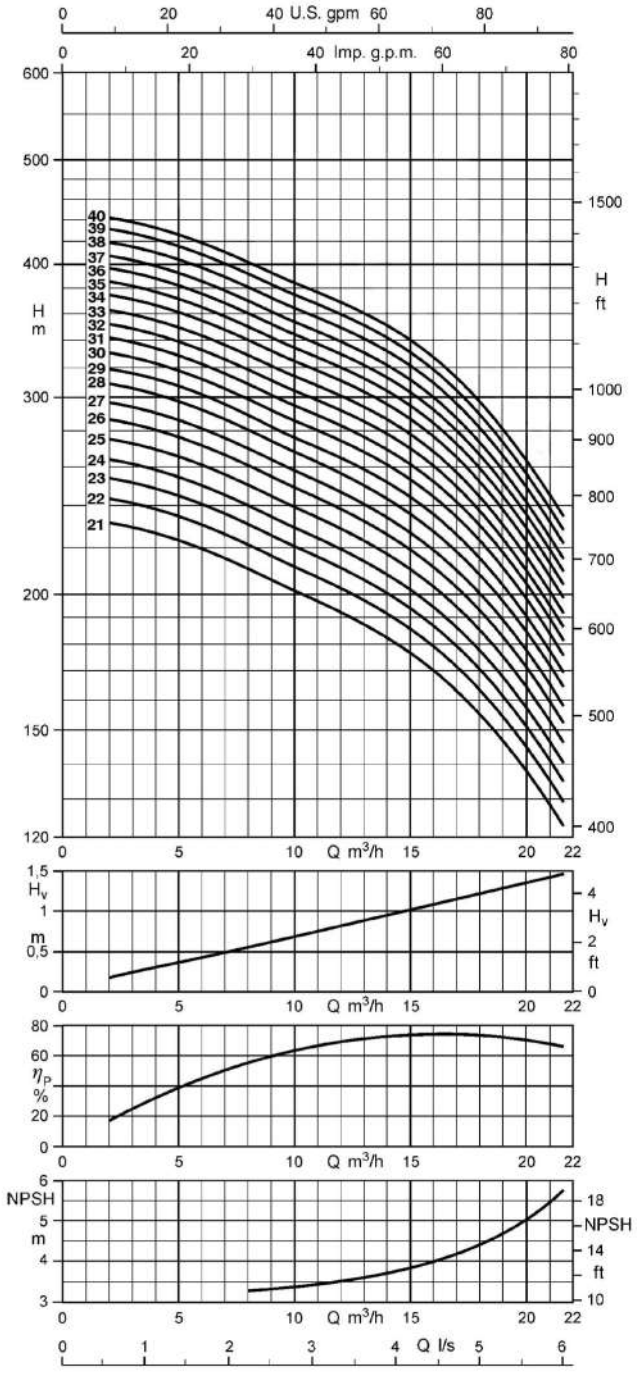
UPA C 150 - 16	Pump	Motor					Motor lead, flat	
	Head Q = 0 m^3/h	Rated power	Max. fluid temperature v ≥ 0,2 m/s (0,0 m/s)	Rated current	Efficiency	Power factor	Number × cross-section of cores	
	H_0	P_N	T_{max}	I_N	η_M	cos φ	DOL	Y - Δ
	[m]	[kW]	[°C]	[A]	[%]		[mm^2]	[mm^2]
DN motor								
1 + DN 100-0.75	11,2	0,75	30 (30)	2,0	70,0	0,77	4 × 1,5	-
2 + DN 100-1.5	22	1,50	30 (30)	3,9	73,0	0,78	4 × 1,5	-
3 + DN 100-2.2	32,5	2,20	30 (30)	5,5	75,0	0,77	4 × 1,5	-
4 + DN 100-3.0	44	3,00	30 (30)	7,5	76,0	0,77	4 × 1,5	-
5 + DN 100-3.0	54	3,00	30 (30)	7,5	76,0	0,77	4 × 1,5	-
6 + DN 100-3.7	65	3,70	30 (30)	9,0	78,0	0,78	4 × 1,5	-
7 + DN 100-5.5	79	5,50	30 (20)	12,6	79,0	0,81	4 × 1,5	-
8 + DN 100-5.5	90	5,50	30 (20)	12,6	79,0	0,81	4 × 1,5	-
9 + DN 100-5.5	100	5,50	30 (20)	12,6	79,0	0,81	4 × 1,5	-
10 + DN 100-7.5	110	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
11 + DN 100-7.5	121	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
12 + DN 100-7.5	131	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
13 + DN 100-7.5	140	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
UMA motor								
7 + UMA 150E 5/21	80	4,50	41 (38)	12,2	76,5	0,70	4 × 2,5	3/4 × 2,5
8 + UMA 150E 5/21	91	5,00	39 (35)	12,9	76,5	0,73	4 × 2,5	3/4 × 2,5
9 + UMA 150E 5/21	102	5,50	37 (32)	13,8	76,1	0,76	4 × 2,5	3/4 × 2,5
10 + UMA 150E 7/21	113	6,50	36 (31)	16,3	77,0	0,74	4 × 2,5	3/4 × 2,5
11 + UMA 150E 7/21	124	7,00	33 (28)	17,2	77,0	0,77	4 × 2,5	3/4 × 2,5
12 + UMA 150E 7/21	134	7,50	31 (25)	18,1	77,0	0,78	4 × 2,5	3/4 × 2,5
13 + UMA 150E 7/21	145	7,50	31 (25)	18,1	77,0	0,78	4 × 2,5	3/4 × 2,5
14 + UMA 150E 9/21	157	8,50	32 (27)	20,3	78,5	0,77	4 × 2,5	3/4 × 2,5
15 + UMA 150E 9/21	168	9,00	30 (24)	21,2	78,3	0,79	4 × 2,5	3/4 × 2,5
16 + UMA 150E 9/21	178	9,30	29 (23)	21,7	78,1	0,79	4 × 2,5	3/4 × 2,5
17 + UMA 150E 13/21	193	10,50	35 (30)	26,1	80,6	0,72	4 × 2,5	3/4 × 2,5
18 + UMA 150E 13/21	204	11,00	34 (29)	26,8	80,6	0,74	4 × 2,5	3/4 × 2,5
19 + UMA 150E 13/21	215	11,50	33 (27)	27,6	80,5	0,75	4 × 2,5	3/4 × 2,5
20 + UMA 150E 13/21	225	12,00	31 (26)	28,4	80,5	0,76	4 × 2,5	3/4 × 2,5

93 Length of pump end fitted as standard

94 To reliably dissipate the motor heat of pump sets installed in a horizontal position, sufficient flow velocity past the motor is necessary. A cooling shroud, hood or similar must be used.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

UPA C 150 - 16 / ..., number of stages 21 - 40



Connection types

Standard pump end = G 2 $^1/_2$

Possible connection types:

- Threaded connection
  - G 3
  - G 4
- Flanged connection
  - DN 50
  - DN 65
  - DN 80

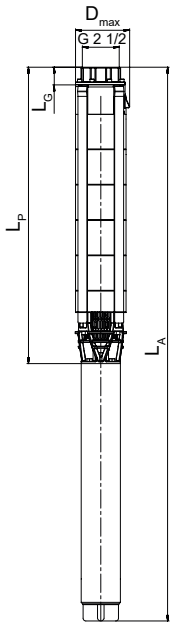
Alternative pump ends are possible.
The length of the pump set L_A and the diameter D_{max} depend on the pump end.

For an alternative pump end the length of the pump set L is calculated$_{A*}$ as follows:

$L_{A*} = L_A - L_G + L_{G*}$

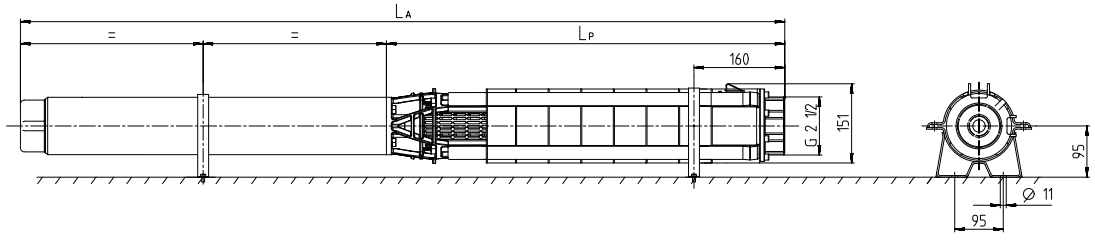
Values for calculating the dimensions if using a different pump end:

- G 2 $^1/_2$:
  L_{G*} = 40 mm
  $D_{max*} \triangleq D_{max}$
- G 3:
  L_{G*} = 48 mm
  $D_{max*} \triangleq D_{max}$
- G 4:
  L_{G*} = 93 mm
  $D_{max*} \triangleq D_{max}$
- DN 50:
  L_{G*} = 77 mm
  D_{max*} = 165 mm
- DN 65:
  L_{G*} = 77 mm
  D_{max*} = 185 mm
- DN 80:
  L_{G*} = 77 mm
  D_{max*} = 200 mm



Operating range

Q_{min} = 5 m³/h
Q_{max}= end of stage curve



Dimensions of UPA C 150 - 16 / ... [mm]

Dimensions, weights and installation type depending on the motor [mm]

UPA C 150 - 16	DN motor					UMA motor						Type of installation	
	L_P	L_A	L_G [95]	D_{max} DOL	Total weight	L_P	L_A	L_G [95]	D_{max} DOL	D_{max} Y - Δ	Total weight	Vertical	Horizontal [96]
	[mm]	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]		
21	-	-	-	-	-	1578	2387	40	142	142	91	✗	✗
22	-	-	-	-	-	1638	2447	40	142	142	93	✗	✗
23	-	-	-	-	-	1699	2508	40	142	142	94	✗	✗
24	-	-	-	-	-	1759	2613	40	142	142	100	✗	✗
25	-	-	-	-	-	1820	2674	40	142	142	101	✗	✗
26	-	-	-	-	-	1880	2734	40	142	142	102	✗	✗
27	-	-	-	-	-	1941	2840	40	142	142	109	✗	✗
28	-	-	-	-	-	2001	2900	40	142	142	110	✗	✗
29	-	-	-	-	-	2062	2961	40	142	142	111	✗	✗
30	-	-	-	-	-	2122	3021	40	142	142	113	✗	- [97]
31	-	-	-	-	-	2183	3082	40	142	142	114	✗	- [97]
32	-	-	-	-	-	2243	3142	40	142	142	115	✗	- [97]
33	-	-	-	-	-	2304	3293	40	142	142	126	✗	- [97]
34	-	-	-	-	-	2364	3353	40	142	142	127	✗	- [97]
35	-	-	-	-	-	2425	3414	40	142	142	128	✗	- [97]
36	-	-	-	-	-	2485	3474	40	142	142	130	✗	- [97]
37	-	-	-	-	-	2546	3535	40	142	142	131	✗	- [97]
38	-	-	-	-	-	2606	3595	40	142	142	133	✗	- [97]
39	-	-	-	-	-	2667	3761	40	142	142	145	✗	- [97]
40	-	-	-	-	-	2727	3821	40	142	142	146	✗	- [97]

Technical data

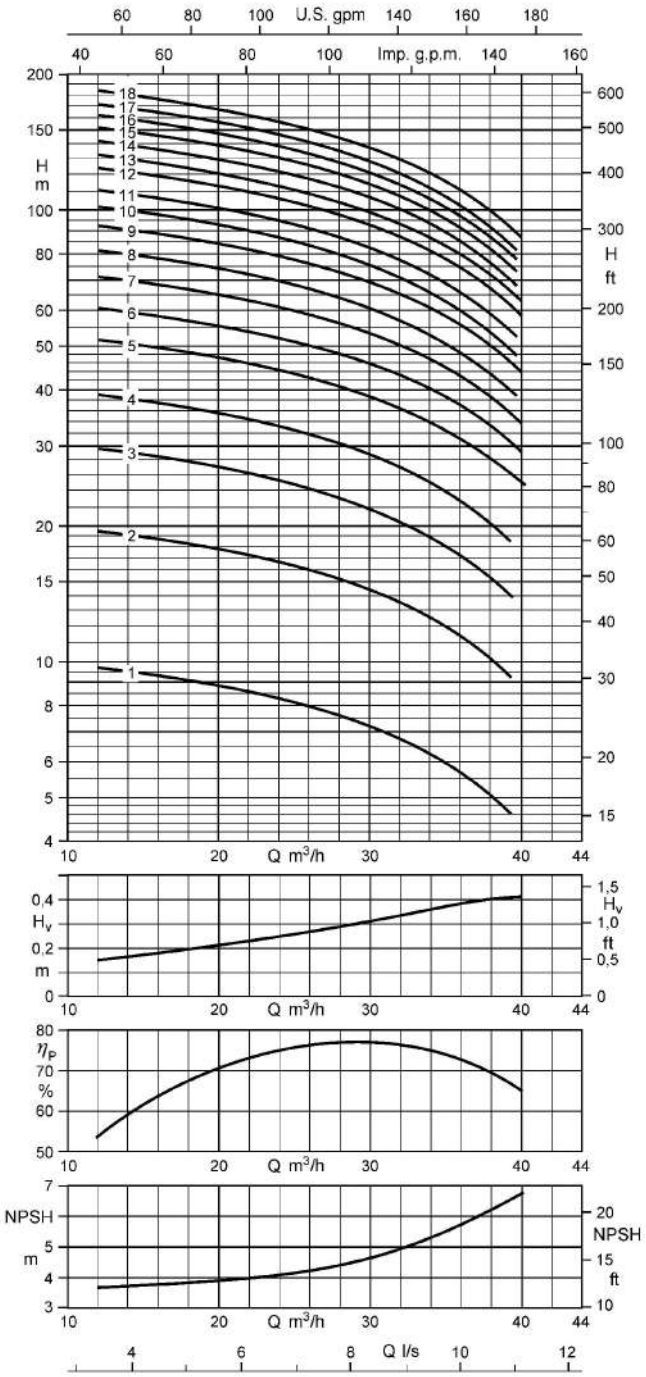
UPA C 150 - 16	Pump	Motor					Motor lead, flat	
	Head Q = 0 m^3/h	Rated power	Max. fluid temperature v ≥ 0,2 m/s (0,0 m/s)	Rated current	Efficiency	Power factor	Number × cross-section of cores	
	H_0	P_N	T_{max}	I_N	η_M	cos φ	DOL	Y - Δ
	[m]	[kW]	[°C]	[A]	[%]		[mm^2]	[mm^2]
UMA motor								
21 + UMA 150E 13/21	236	13,00	28 (22)	30,1	80,3	0,78	4 × 2,5	3/4 × 2,5
22 + UMA 150E 13/21	246	13,00	28 (22)	30,1	80,3	0,78	4 × 2,5	3/4 × 2,5
23 + UMA 150E 13/21	256	13,00	28 (22)	30,1	80,3	0,78	4 × 2,5	3/4 × 2,5
24 + UMA 150E 15/21	269	14,00	32 (26)	31,7	81,5	0,78	4 × 4,0	3/4 × 2,5
25 + UMA 150E 15/21	280	15,00	29 (23)	33,4	81,3	0,80	4 × 4,0	3/4 × 2,5
26 + UMA 150E 15/21	290	15,00	29 (23)	33,4	81,3	0,80	4 × 4,0	3/4 × 2,5
27 + UMA 150E 18/21	305	16,00	31 (25)	38,0	82,1	0,74	4 × 4,0	3/4 × 2,5
28 + UMA 150E 18/21	315	16,50	30 (24)	38,8	82,1	0,75	4 × 4,0	3/4 × 2,5
29 + UMA 150E 18/21	326	17,00	29 (22)	39,6	82,0	0,76	4 × 4,0	3/4 × 2,5
30 + UMA 150E 18/21	336	17,50	28 (21)	40,4	81,9	0,76	4 × 4,0	3/4 × 2,5
31 + UMA 150E 18/21	347	18,00	26 (19)	41,2	81,8	0,77	4 × 4,0	3/4 × 2,5
32 + UMA 150E 18/21	357	18,50	25 (18)	42,1	81,6	0,78	4 × 4,0	3/4 × 2,5
33 + UMA 150E 22/21	373	20,00	32 (26)	45,9	83,4	0,75	4 × 4,0	3/4 × 2,5
34 + UMA 150E 22/21	383	20,00	32 (26)	45,9	83,4	0,75	4 × 4,0	3/4 × 2,5
35 + UMA 150E 22/21	394	21,00	30 (24)	47,6	83,3	0,77	4 × 4,0	3/4 × 2,5
36 + UMA 150E 22/21	404	22,00	28 (21)	49,2	83,1	0,78	4 × 4,0	3/4 × 2,5
37 + UMA 150E 22/21	415	22,00	28 (21)	49,2	83,1	0,78	4 × 4,0	3/4 × 2,5
38 + UMA 150E 22/21	425	22,00	28 (21)	49,2	83,1	0,78	4 × 4,0	3/4 × 2,5
39 + UMA 150E 26/21	441	24,00	34 (28)	53,6	84,7	0,76	4 × 6,0	3/4 × 4,0
40 + UMA 150E 26/21	451	24,00	34 (28)	53,6	84,7	0,76	4 × 6,0	3/4 × 4,0

95 Length of pump end fitted as standard

96 To reliably dissipate the motor heat of pump sets installed in a horizontal position, sufficient flow velocity past the motor is necessary. A cooling shroud, hood or similar must be used.

97 On request

UPA C 150 - 30 / ..., number of stages 1 - 18



Connection types

Standard pump end = G 3

Possible connection types:

- Threaded connection
  - G 4
- Flanged connection
  - DN 65
  - DN 80

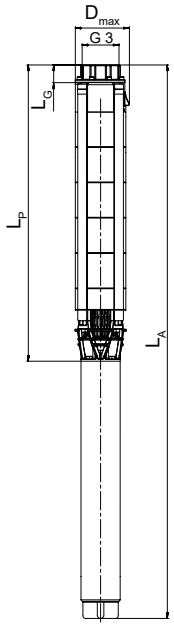
Alternative pump ends are possible.
The length of the pump set L_A and the diameter D_{max} depend on the pump end.

For an alternative pump end the length of the pump set L is calculated$_{A^*}$ as follows:

$L_{A^*} = L_A - L_G + L_{G^*}$

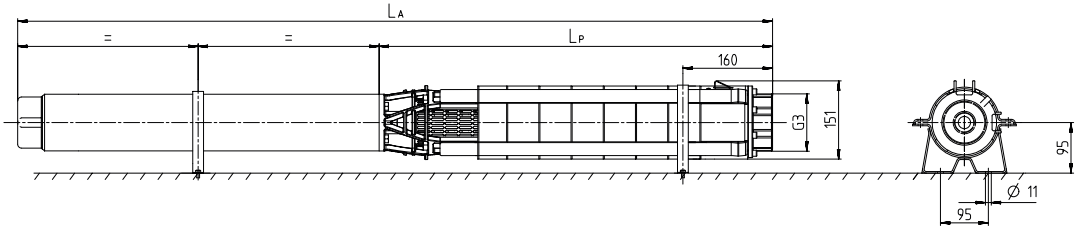
Values for calculating the dimensions if using a different pump end:

- G 3:
  L_{G^*} = 48 mm
  $D_{max^*} \triangleq D_{max}$
- G 4:
  L_{G^*} = 93 mm
  $D_{max^*} \triangleq D_{max}$
- DN 65:
  L_{G^*} = 77 mm
  D_{max^*} = 185 mm
- DN 80:
  L_{G^*} = 77 mm
  D_{max^*} = 200 mm



Operating range

Q_{min} = 12 m³/h
Q_{max}= end of stage curve



Dimensions of UPA C 150 - 30 / ... [mm]

Dimensions, weights and installation type depending on the motor [mm]

UPA C 150 - 30	DN motor					UMA motor						Type of installation	
	L_P	L_A	L_G [98]	D_{max} DOL	Total weight	L_P	L_A	L_G [98]	D_{max} DOL	D_{max} Y - Δ	Total weight	Vertical	Horizontal [99]
	[mm]	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]		
1	389	686	48	139	17	-	-	-	-	-	-	✗	✗
2	485	838	48	139	22	-	-	-	-	-	-	✗	✗
3	581	989	48	139	26	-	-	-	-	-	-	✗	✗
4	677	1197	48	139	31	-	-	-	-	-	-	✗	✗
5	773	1426	48	139	41	805	1484	48	146	148	58	✗	✗
6	869	1522	48	139	42	901	1580	48	146	148	60	✗	✗
7	965	1696	48	139	48	997	1696	48	146	148	63	✗	✗
8	-	-	-	-	-	1093	1792	48	146	148	65	✗	✗
9	-	-	-	-	-	1189	1918	48	146	148	69	✗	✗
10	-	-	-	-	-	1285	2014	48	146	148	71	✗	✗
11	-	-	-	-	-	1381	2110	48	146	148	72	✗	✗
12	-	-	-	-	-	1477	2286	48	146	148	82	✗	✗
13	-	-	-	-	-	1573	2382	48	146	148	84	✗	✗
14	-	-	-	-	-	1669	2478	48	146	148	85	✗	✗
15	-	-	-	-	-	1765	2574	48	146	148	87	✗	✗
16	-	-	-	-	-	1861	2715	48	147	148	93	✗	✗
17	-	-	-	-	-	1957	2811	48	147	148	95	✗	✗
18	-	-	-	-	-	2053	2952	48	147	148	101	✗	✗

Technical data

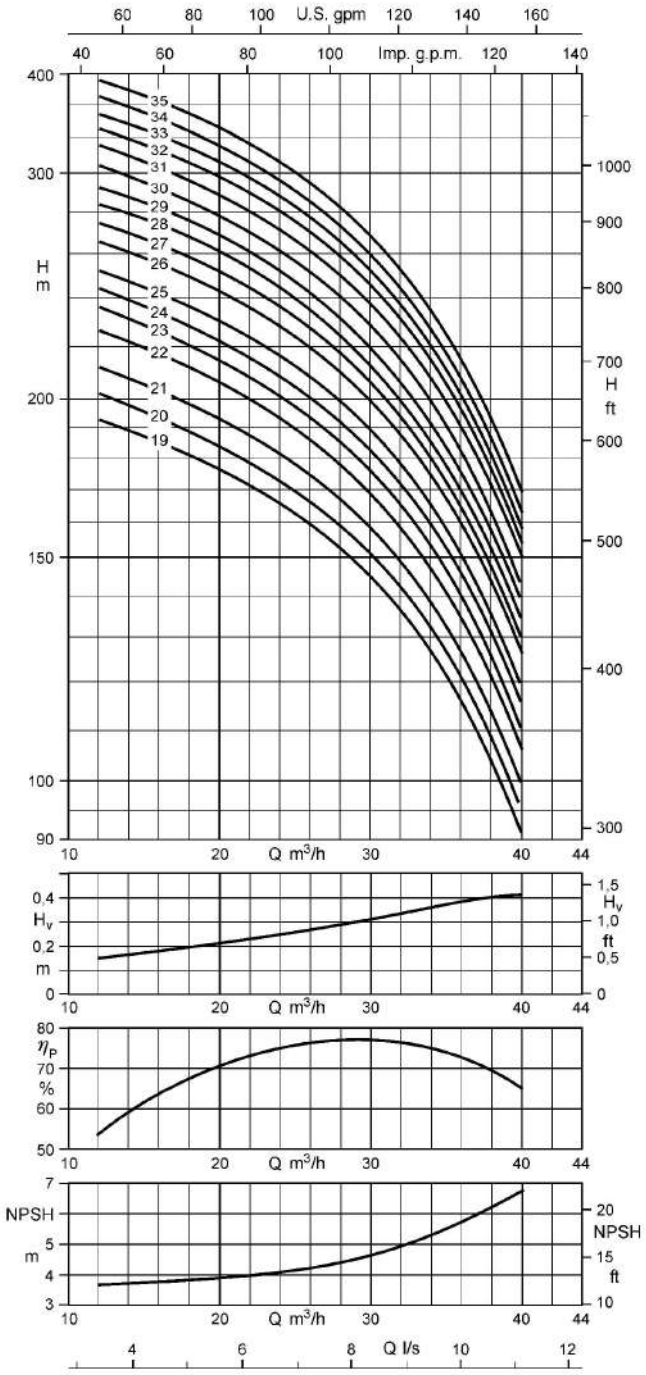
UPA C 150 - 30	Pump	Motor					Motor lead, flat	
	Head $Q = 0\ m^3/h$	Rated power	Max. fluid temperature $v \geq 0{,}2$ m/s (0,0 m/s)	Rated current	Efficiency	Power factor	Number × cross-section of cores	
	H_0	P_N	T_{max}	I_N	η_M	cos φ	DOL	Y - Δ
	[m]	[kW]	[°C]	[A]	[%]		[mm²]	[mm²]
DN motor								
1 + DN 100-1.1	10,6	1,10	30 (30)	2,8	74,0	0,78	4 × 1,5	-
2 + DN 100-2.2	21,5	2,20	30 (30)	5,5	75,0	0,77	4 × 1,5	-
3 + DN 100-3.0	32,0	3,00	30 (30)	7,5	76,0	0,77	4 × 1,5	-
4 + DN 100-3.7	43,0	3,70	30 (30)	9,0	78,0	0,78	4 × 1,5	-
5 + DN 100-5.5	55,0	5,50	30 (20)	12,6	79,0	0,81	4 × 1,5	-
6 + DN 100-5.5	66,0	5,50	30 (20)	12,6	79,0	0,81	4 × 1,5	-
7 + DN 100-7.5	76,0	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
UMA motor								
5 + UMA 150E 5/21	56	4,50	41 (38)	12,2	76,5	0,70	4 × 2,5	3/4 × 2,5
6 + UMA 150E 5/21	67	5,50	37 (32)	13,8	76,1	0,76	4 × 2,5	3/4 × 2,5
7 + UMA 150E 7/21	78	6,50	36 (31)	16,3	77,0	0,74	4 × 2,5	3/4 × 2,5
8 + UMA 150E 7/21	88	7,00	33 (28)	17,2	77,0	0,77	4 × 2,5	3/4 × 2,5
9 + UMA 150E 9/21	100	8,00	34 (30)	19,4	78,7	0,76	4 × 2,5	3/4 × 2,5
10 + UMA 150E 9/21	110	9,00	30 (24)	21,2	78,3	0,79	4 × 2,5	3/4 × 2,5
11 + UMA 150E 9/21	120	9,30	29 (23)	21,7	78,1	0,79	4 × 2,5	3/4 × 2,5
12 + UMA 150E 13/21	134	11,00	34 (29)	26,8	80,6	0,74	4 × 2,5	3/4 × 2,5
13 + UMA 150E 13/21	144	11,50	33 (27)	27,6	80,5	0,75	4 × 2,5	3/4 × 2,5
14 + UMA 150E 13/21	154	12,50	30 (24)	29,2	80,4	0,77	4 × 2,5	3/4 × 2,5
15 + UMA 150E 13/21	165	13,00	28 (22)	30,1	80,3	0,78	4 × 2,5	3/4 × 2,5
16 + UMA 150E 15/21	176	14,50	30 (24)	32,51	81,4	0,79	4 × 4,0	3/4 × 2,5
17 + UMA 150E 15/21	186	15,00	29 (23)	33,4	81,3	0,80	4 × 4,0	3/4 × 2,5
18 + UMA 150E 18/21	200	16,00	31 (25)	38,0	82,1	0,74	4 × 4,0	3/4 × 2,5

98 Length of pump end fitted as standard

99 To reliably dissipate the motor heat of pump sets installed in a horizontal position, sufficient flow velocity past the motor is necessary. A cooling shroud, hood or similar must be used.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

UPA C 150 - 30 / ..., number of stages 19 - 35



Connection types

Standard pump end = G 3

Possible connection types:

- Threaded connection
  - G 4
- Flanged connection
  - DN 65
  - DN 80

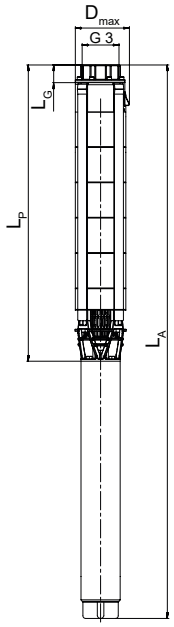
Alternative pump ends are possible.
The length of the pump set L_A and the diameter D_{max} depend on the pump end.

For an alternative pump end the length of the pump set L is calculated$_{A^*}$ as follows:

$L_{A^*} = L_A - L_G + L_{G^*}$

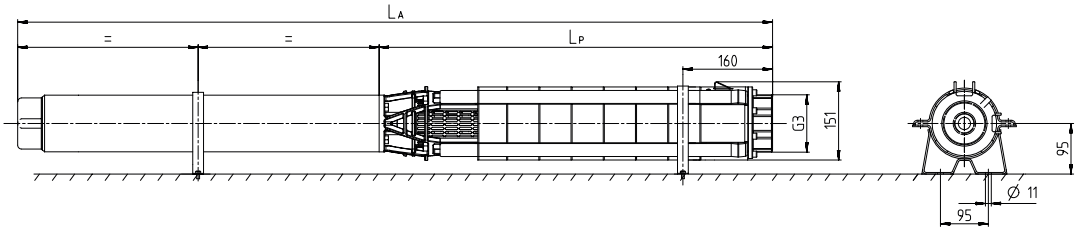
Values for calculating the dimensions if using a different pump end:

- G 3:
  L_{G^*} = 48 mm
  $D_{max^*} \triangleq D_{max}$
- G 4:
  L_{G^*} = 93 mm
  $D_{max^*} \triangleq D_{max}$
- DN 65:
  L_{G^*} = 77 mm
  D_{max^*} = 185 mm
- DN 80:
  L_{G^*} = 77 mm
  D_{max^*} = 200 mm



Operating range

Q_{min} = 12 m³/h
Q_{max}= end of stage curve



Dimensions of UPA C 150 - 30 / ... [mm]

Dimensions, weights and installation type depending on the motor [mm]

UPA C 150 - 30	DN motor					UMA motor						Type of installation	
	L_P	L_A	L_G[100]	D_{max} DOL	Total weight	L_P	L_A	L_G[100]	D_{max} DOL	D_{max} Y - Δ	Total weight	Vertical	Horizontal[101]
	[mm]	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]		
19	-	-	-	-	-	2149	3048	48	147	148	102	✗	–[102]
20	-	-	-	-	-	2245	3144	48	147	148	104	✗	–[102]
21	-	-	-	-	-	2341	3240	48	147	148	105	✗	–[102]
22	-	-	-	-	-	2437	3426	48	147	148	116	✗	–[102]
23	-	-	-	-	-	2533	3522	48	147	148	117	✗	–[102]
24	-	-	-	-	-	2629	3618	48	147	148	119	✗	–[102]
25	-	-	-	-	-	2725	3714	48	147	148	121	✗	–[102]
26	-	-	-	-	-	2821	3915	48	149	149	133	✗	–[102]
27	-	-	-	-	-	2917	4011	48	149	149	135	✗	–[102]
28	-	-	-	-	-	3013	4107	48	149	149	136	✗	–[102]
29	-	-	-	-	-	3109	4203	48	149	149	138	✗	–[102]
30	-	-	-	-	-	3205	4299	48	149	149	140	✗	–[102]
31	-	-	-	-	-	3301	4495	48	149	149	151	✗	–[102]
32	-	-	-	-	-	3397	4591	48	149	149	153	✗	–[102]
33	-	-	-	-	-	3493	4687	48	149	149	154	✗	–[102]
34	-	-	-	-	-	3589	4783	48	149	149	156	✗	–[102]
35	-	-	-	-	-	3685	4959	48	149	149	164	✗	–[102]

Technical data

UPA C 150 - 30	Pump	Motor					Motor lead, flat	
	Head Q = 0 m^3/h	Rated power	Max. fluid temperature v ≥ 0,2 m/s (0,0 m/s)	Rated current	Efficiency	Power factor	Number × cross-section of cores	
	H_0	P_N	T_{max}	I_N	η_M	cos φ	DOL	Y - Δ
	[m]	[kW]	[°C]	[A]	[%]		[mm^2]	[mm^2]
UMA motor								
19 + UMA 150E 18/21	210	17,00	29 (22)	39,6	82,0	0,76	4 × 4,0	3/4 × 2,5
20 + UMA 150E 18/21	220	18,00	26 (19)	41,2	81,8	0,77	4 × 4,0	3/4 × 2,5
21 + UMA 150E 18/21	230	18,50	25 (18)	42,1	81,6	0,78	4 × 4,0	3/4 × 2,5
22 + UMA 150E 22/21	244	20,00	32 (26)	45,9	83,4	0,75	4 × 4,0	3/4 × 2,5
23 + UMA 150E 22/21	254	21,00	30 (24)	47,6	83,3	0,77	4 × 4,0	3/4 × 2,5
24 + UMA 150E 22/21	265	22,00	28 (21)	49,2	83,1	0,78	4 × 4,0	3/4 × 2,5
25 + UMA 150E 22/21	275	22,00	28 (21)	49,2	83,1	0,78	4 × 4,0	3/4 × 2,5
26 + UMA 150E 26/21	289	24,00	34 (28)	53,6	84,7	0,76	4 × 6,0	3/4 × 4,0
27 + UMA 150E 26/21	299	24,00	34 (28)	53,6	84,7	0,76	4 × 6,0	3/4 × 4,0
28 + UMA 150E 26/21	309	25,00	32 (26)	55,2	84,5	0,77	4 × 6,0	3/4 × 4,0
29 + UMA 150E 26/21	320	26,00	31 (25)	56,9	84,4	0,78	4 × 6,0	3/4 × 4,0
30 + UMA 150E 26/21	330	26,00	31 (25)	56,9	84,4	0,78	4 × 6,0	3/4 × 4,0
31 + UMA 150E 30/21	345	28,00	32 (26)	63,6	84,3	0,75	4 × 6,0	3/4 × 4,0
32 + UMA 150E 30/21	355	29,00	31 (25)	65,2	84,2	0,76	4 × 6,0	3/4 × 4,0
33 + UMA 150E 30/21	365	30,00	30 (23)	66,8	84,2	0,77	4 × 6,0	3/4 × 4,0
34 + UMA 150E 30/21	376	30,00	30 (23)	66,8	84,2	0,77	4 × 6,0	3/4 × 4,0
35 + UMA 150E 37/22	389	32,00	44 (38)	73,4	83,9	0,75	3/4 × 4,0[103]	3/4 × 4,0

100 Length of pump end fitted as standard

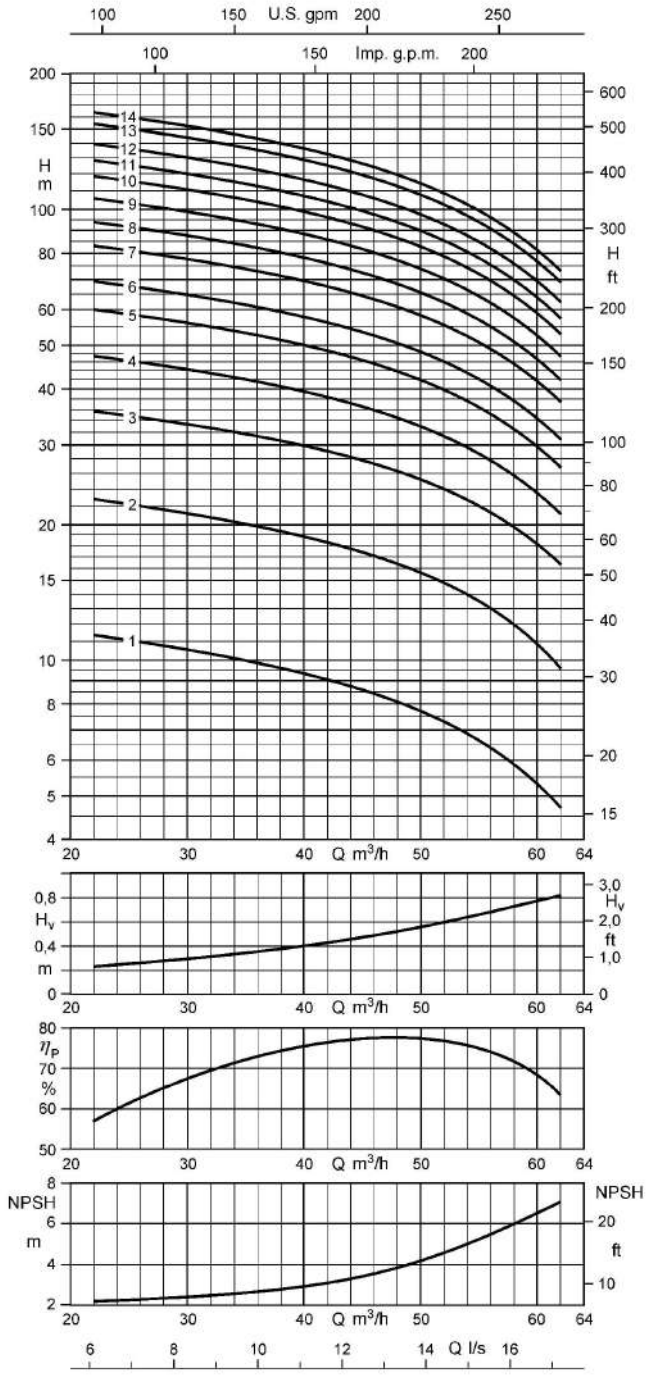
101 To reliably dissipate the motor heat of pump sets installed in a horizontal position, sufficient flow velocity past the motor is necessary. A cooling shroud, hood or similar must be used.

102 On request

103 Parallel cable

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

UPA C 150 - 48 / ..., number of stages 1 - 14



Connection types

Standard pump end = G 3

Possible connection types:

- Threaded connection
  - G 4
- Flanged connection
  - DN 65
  - DN 80

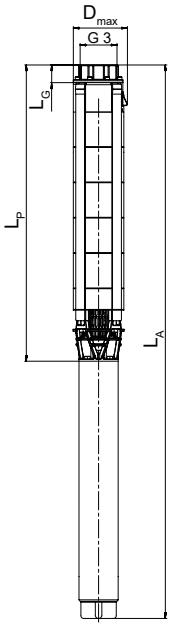
Alternative pump ends are possible.
The length of the pump set L_A and the diameter D_{max} depend on the pump end.

For an alternative pump end the length of the pump set L is calculated$_{A^*}$ as follows:

$L_{A^*} = L_A - L_G + L_{G^*}$

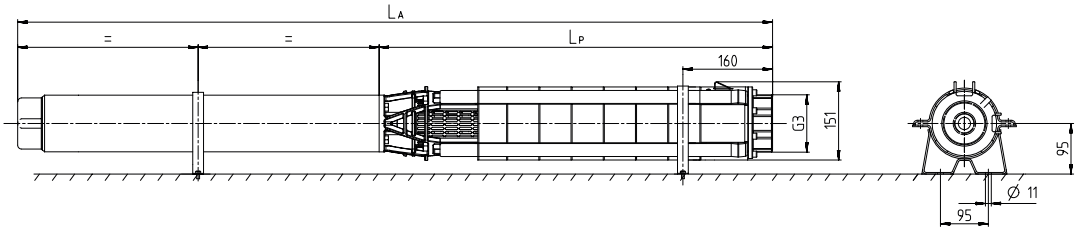
Values for calculating the dimensions if using a different pump end:

- G 3:
  L_{G^*} = 48 mm
  $D_{max^*} \triangleq D_{max}$
- G 4:
  L_{G^*} = 93 mm
  $D_{max^*} \triangleq D_{max}$
- DN 65:
  L_{G^*} = 77 mm
  D_{max^*} = 185 mm
- DN 80:
  L_{G^*} = 77 mm
  D_{max^*} = 200 mm



Operating range

Q_{min} = 22 m³/h
Q_{max}= end of stage curve



Dimensions of UPA C 150 - 48 / ... [mm]

Dimensions, weights and installation type depending on the motor [mm]

UPA C 150 - 48	DN motor					UMA motor						Type of installation	
	L_P	L_A	L_G [104]	D_{max} DOL	Total weight	L_P	L_A	L_G [104]	D_{max} DOL	D_{max} Y - Δ	Total weight	Vertical	Horizontal [105]
	[mm]	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]		
1	406	759	48	139	23	-	-	-	-	-	-	✗	✗
2	519	927	48	139	27	-	-	-	-	-	-	✗	✗
3	632	1284,5	48	139	42	663	1342	48	143	146	58,3	✗	✗
4	745	1475,5	48	139	47	776	1475	48	143	146	32,6	✗	✗
5	-	-	-	-	-	889	1618	48	143	146	67,9	✗	✗
6	-	-	-	-	-	1002	1731	48	143	146	70,1	✗	✗
7	-	-	-	-	-	1115	1924	48	143	146	80,4	✗	✗
8	-	-	-	-	-	1228	2037	48	143	146	82,7	✗	✗
9	-	-	-	-	-	1341	2195	48	145	146	89,9	✗	✗
10	-	-	-	-	-	1454	2353	48	145	146	96,2	✗	✗
11	-	-	-	-	-	1567	2466	48	145	146	98,5	✗	✗
12	-	-	-	-	-	1680	2579	48	145	146	100,7	✗	✗
13	-	-	-	-	-	1793	2782	48	145	146	112	✗	✗
14	-	-	-	-	-	1906	2895	48	145	146	114,3	✗	✗

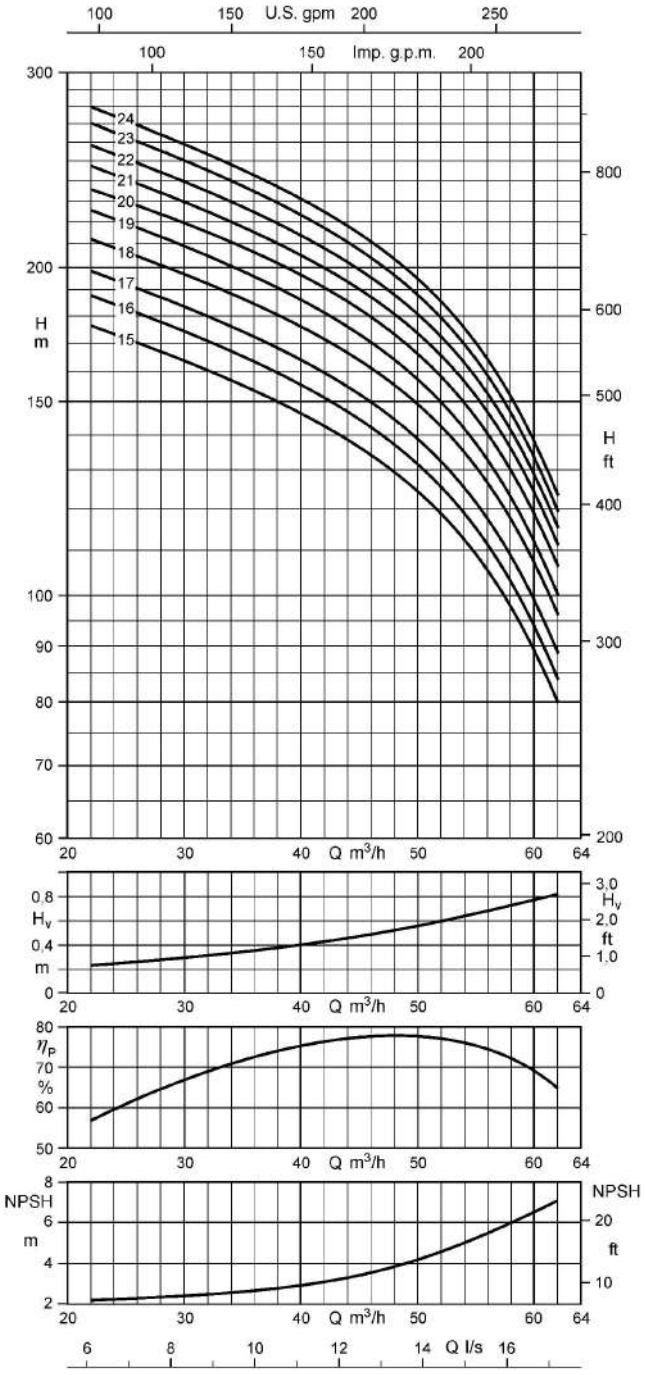
Technical data

UPA C 150 - 48	Pump	Motor					Motor lead, flat	
	Head Q = 0 m³/h	Rated power	Max. fluid temperature v ≥ 0,2 m/s (0,0 m/s)	Rated current	Efficiency	Power factor	Number × cross-section of cores	
	H_0	P_N	T_{max}	I_N	η_M	cos φ	DOL	Y - Δ
	[m]	[kW]	[°C]	[A]	[%]		[mm²]	[mm²]
DN motor								
1 + DN 100-2.2	13,2	2,20	30 (30)	5,5	75,0	0,77	4 × 1,5	-
2 + DN 100-3.0	26,5	3,00	30 (30)	7,5	76,0	0,77	4 × 1,5	-
3 + DN 100-5.5	41,0	5,50	30 (20)	12,6	79,0	0,81	4 × 1,5	-
4 + DN 100-7.5	54,0	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
UMA motor								
3 + UMA 150E 5/21	42	5,00	39 (35)	12,9	76,5	0,73	4 × 2,5	3/4 × 2,5
4 + UMA 150E 7/21	55	6,50	36 (31)	16,3	77,0	0,74	4 × 2,5	3/4 × 2,5
5 + UMA 150E 9/21	69	8,00	34 (30)	19,4	78,7	0,76	4 × 2,5	3/4 × 2,5
6 + UMA 150E 9/21	81	9,30	29 (23)	21,7	78,1	0,79	4 × 2,5	3/4 × 2,5
7 + UMA 150E 13/21	97	11,50	33 (27)	27,6	80,5	0,75	4 × 2,5	3/4 × 2,5
8 + UMA 150E 13/21	109	12,50	30 (24)	29,2	80,4	0,77	4 × 2,5	3/4 × 2,5
9 + UMA 150E 15/21	123	14,50	30 (24)	32,5	81,4	0,79	4 × 4,0	3/4 × 2,5
10 + UMA 150E 18/21	138	16,00	31 (25)	38,0	82,1	0,74	4 × 4,0	3/4 × 2,5
11 + UMA 150E 18/21	151	17,50	28 (21)	40,4	81,9	0,76	4 × 4,0	3/4 × 2,5
12 + UMA 150E 18/21	163	18,50	25 (18)	42,1	81,6	0,78	4 × 4,0	3/4 × 2,5
13 + UMA 150E 22/21	179	21,00	30 (24)	47,6	83,3	0,77	4 × 4,0	3/4 × 2,5
14 + UMA 150E 22/21	191	22,00	28 (21)	49,2	83,1	0,78	4 × 4,0	3/4 × 2,5

104 Length of pump end fitted as standard

105 To reliably dissipate the motor heat of pump sets installed in a horizontal position, sufficient flow velocity past the motor is necessary. A cooling shroud, hood or similar must be used.

UPA C 150 - 48 / ..., number of stages 15 - 24



Connection types

Standard pump end = G 3

Possible connection types:

- Threaded connection
  - G 4
- Flanged connection
  - DN 65
  - DN 80

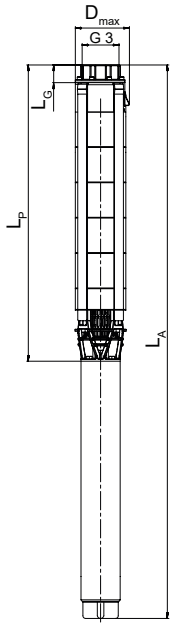
Alternative pump ends are possible.
The length of the pump set L_A and the diameter D_{max} depend on the pump end.

For an alternative pump end the length of the pump set L is calculated$_{A^*}$ as follows:

$L_{A^*} = L_A - L_G + L_{G^*}$

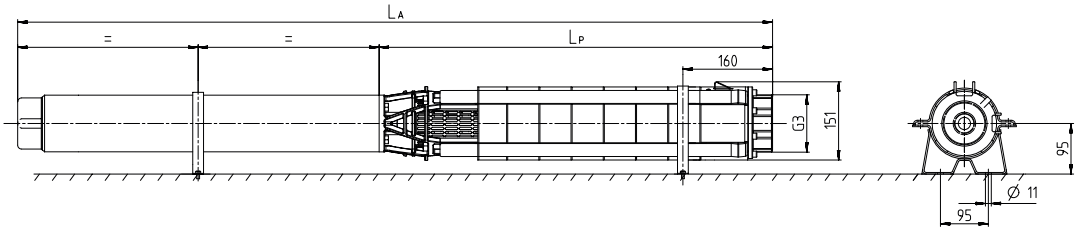
Values for calculating the dimensions if using a different pump end:

- G 3:
  L_{G^*} = 48 mm
  $D_{max^*} \triangleq D_{max}$
- G 4:
  L_{G^*} = 93 mm
  $D_{max^*} \triangleq D_{max}$
- DN 65:
  L_{G^*} = 77 mm
  D_{max^*} = 185 mm
- DN 80:
  L_{G^*} = 77 mm
  D_{max^*} = 200 mm



Operating range

Q_{min} = 22 m³/h
Q_{max}= end of stage curve



Dimensions of UPA C 150 - 48 / ... [mm]

Dimensions, weights and installation type depending on the motor [mm]

UPA C 150 - 48	DN motor					UMA motor						Type of installation	
	L_P	L_A	L_G [106]	D_{max} DOL	Total weight	L_P	L_A	L_G [106]	D_{max} DOL	D_{max} Y - Δ	Total weight	Vertical	Horizontal [107]
	[mm]	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]		
15	-	-	-	-	-	2019	3113	48	146	147	128	✗	–[108]
16	-	-	-	-	-	2132	3226	48	146	147	130	✗	–[108]
17	-	-	-	-	-	2245	3339	48	146	147	132	✗	–[108]
18	-	-	-	-	-	2358	3552	48	146	147	144	✗	–[108]
19	-	-	-	-	-	2471	3665	48	146	147	147	✗	–[108]
20	-	-	-	-	-	2584	3858	48	145	147	156	✗	–[108]
21	-	-	-	-	-	2697	3971	48	145	147	158	✗	–[108]
22	-	-	-	-	-	2810	4084	48	145	147	160	✗	–[108]
23	-	-	-	-	-	2923	4197	48	145	147	163	✗	–[108]
24	-	-	-	-	-	3036	4310	48	145	147	165	✗	–[108]

Technical data

UPA C 150 - 48	Pump	Motor					Motor lead, flat	
	Head Q = 0 m^3/h	Rated power	Max. fluid temperature v ≥ 0,2 m/s (0,0 m/s)	Rated current	Efficiency	Power factor	Number × cross-section of cores	
	H_0	P_N	T_{max}	I_N	η_M	cos φ	DOL	Y - Δ
	[m]	[kW]	[°C]	[A]	[%]		[mm^2]	[mm^2]
UMA motor								
15 + UMA 150E 26/21	207	24,00	34 (28)	53,6	84,7	0,76	4 × 6,0	3/4 × 4,0
16 + UMA 150E 26/21	219	26,00	31 (25)	56,9	84,4	0,78	4 × 6,0	3/4 × 4,0
17 + UMA 150E 26/21	232	26,00	31 (25)	56,9	84,4	0,78	4 × 6,0	3/4 × 4,0
18 + UMA 150E 30/21	248	29,00	31 (25)	65,2	84,2	0,76	4 × 6,0	3/4 × 4,0
19 + UMA 150E 30/21	261	30,00	30 (23)	66,8	84,2	0,77	4 × 6,0	3/4 × 4,0
20 + UMA 150E 37/22	276	32,00	44 (38)	73,4	83,9	0,75	3/4 × 4,0[109]	3/4 × 4,0
21 + UMA 150E 37/22	289	33,00	43 (37)	75,0	83,8	0,76	3/4 × 4,0[109]	3/4 × 4,0
22 + UMA 150E 37/22	301	35,00	40 (34)	78,2	83,6	0,77	3/4 × 4,0[109]	3/4 × 4,0
23 + UMA 150E 37/22	314	36,00	39 (32)	79,9	83,4	0,78	3/4 × 4,0[109]	3/4 × 4,0
24 + UMA 150E 37/22	327	37,00	38 (31)	81,6	83,3	0,79	3/4 × 4,0[109]	3/4 × 4,0

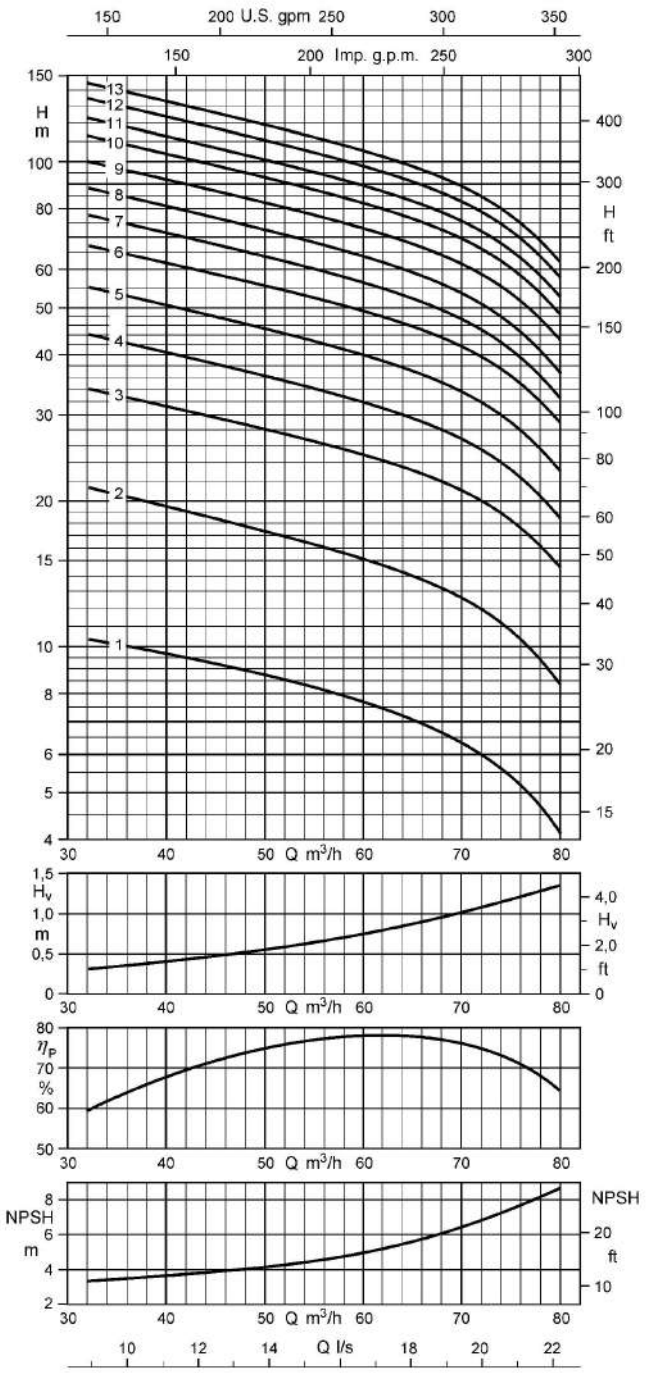
106 Length of pump end fitted as standard

107 To reliably dissipate the motor heat of pump sets installed in a horizontal position, sufficient flow velocity past the motor is necessary. A cooling shroud, hood or similar must be used.

108 On request

109 Parallel cable

UPA C 150 - 60 / ..., number of stages 1 - 13



Connection types

Standard pump end = G 3

Possible connection types:

- Threaded connection
  - G 4
- Flanged connection
  - DN 65
  - DN 80

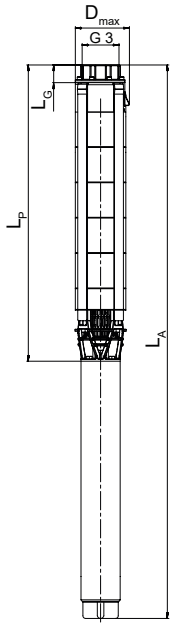
Alternative pump ends are possible.
The length of the pump set L_A and the diameter D_{max} depend on the pump end.

For an alternative pump end the length of the pump set L is calculated$_{A^*}$ as follows:

$L_{A^*} = L_A - L_G + L_{G^*}$

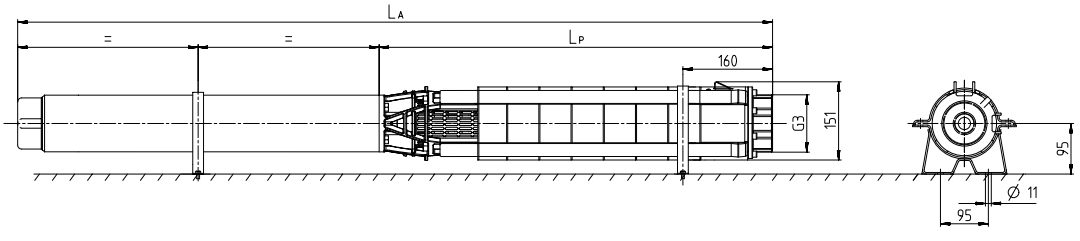
Values for calculating the dimensions if using a different pump end:

- G 3:
  L_{G^*} = 48 mm
  $D_{max^*} \triangleq D_{max}$
- G 4:
  L_{G^*} = 93 mm
  $D_{max^*} \triangleq D_{max}$
- DN 65:
  L_{G^*} = 77 mm
  D_{max^*} = 185 mm
- DN 80:
  L_{G^*} = 77 mm
  D_{max^*} = 200 mm



Operating range

Q_{min} = 32 m³/h
Q_{max}= end of stage curve



Dimensions of UPA C 150 - 60 / ... [mm]

Dimensions, weights and installation type depending on the motor [mm]

UPA C 150 - 60	DN motor					UMA motor						Type of installation	
	L_P	L_A	L_G[110]	D_{max} DOL	Total weight	L_P	L_A	L_G[110]	D_{max} DOL	D_{max} Y - Δ	Total weight	Vertical	Horizontal[111]
	[mm]	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]		
1	406	759	48	139	22	-	-	-	-	-	-	✗	✗
2	519	1039	48	139	31	-	-	-	-	-	-	✗	✗
3	632	1363	48	139	45	663	1362	48	143	146	60,2	✗	✗
4	745	1476	48	139	47	776	1475	48	143	146	62,5	✗	✗
5	-	-	-	-	-	889	1618	48	143	146	67,8	✗	✗
6	-	-	-	-	-	1002	1811	48	143	146	78	✗	✗
7	-	-	-	-	-	1115	1924	48	143	146	80,3	✗	✗
8	-	-	-	-	-	1228	2082	48	145	146	87,6	✗	✗
9	-	-	-	-	-	1341	2240	48	145	146	93,8	✗	✗
10	-	-	-	-	-	1454	2443	48	145	146	105,1	✗	✗
11	-	-	-	-	-	1567	2556	48	145	146	107,4	✗	✗
12	-	-	-	-	-	1680	2774	48	146	147	120,6	✗	✗
13	-	-	-	-	-	1793	2887	48	146	147	122,9	✗	✗

Technical data

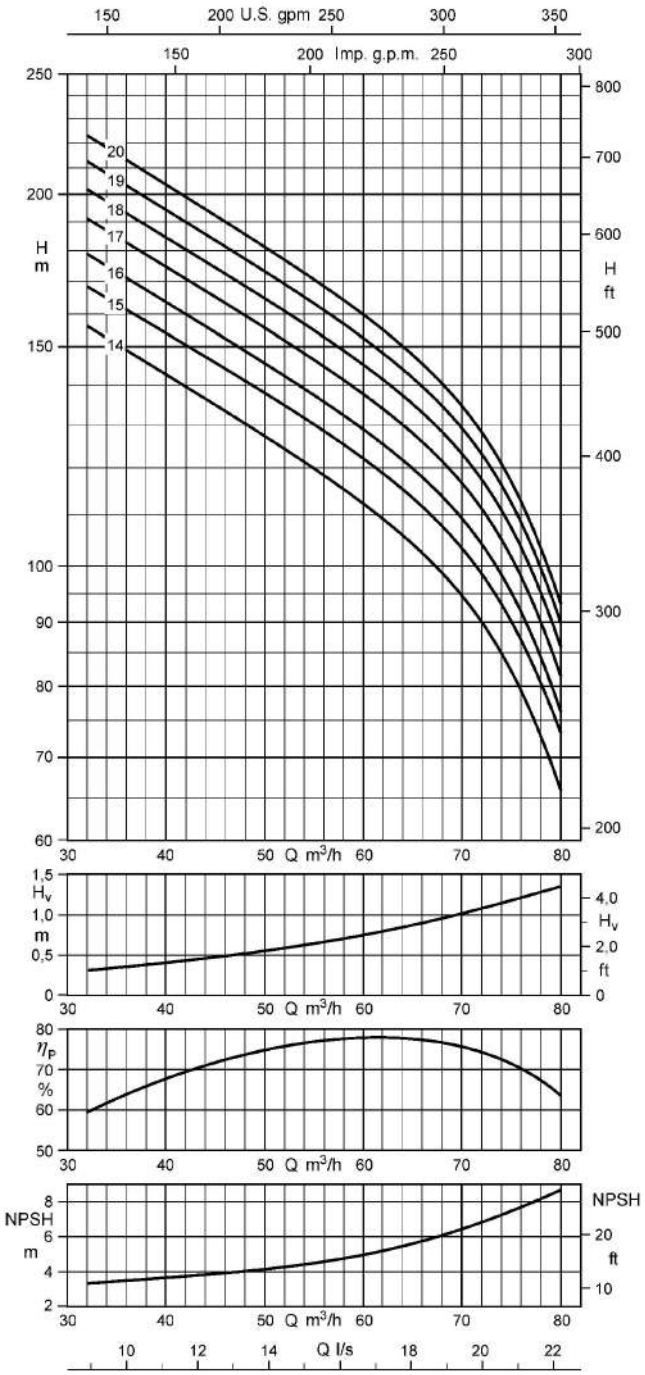
UPA C 150 - 60	Pump	Motor					Motor lead, flat	
	Head $Q = 0$ m³/h	Rated power	Max. fluid temperature $v \geq 0{,}2$ m/s (0,0 m/s)	Rated current	Efficiency	Power factor	Number × cross-section of cores	
	H_0	P_N	T_{max}	I_N	η_M	cos φ	DOL	Y - Δ
	[m]	[kW]	[°C]	[A]	[%]		[mm²]	[mm²]
DN motor								
1 + DN 100-2.2	13,4	2,20	30 (30)	5,5	75,0	0,77	4 × 1,5	-
2 + DN 100-3.7	27	3,70	30 (30)	9,0	78,0	0,78	4 × 1,5	-
3 + DN 100-7.5	41	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
4 + DN 100-7.5	53	7,50	30 (20)	17,1	79,0	0,81	4 × 1,5	-
UMA motor								
3 + UMA 150E 7/21	42	6,00	38 (34)	15,5	78,0	0,72	4 × 2,5	3/4 × 2,5
4 + UMA 150E 7/21	55	7,50	31 (25)	18,1	77,0	0,78	4 × 2,5	3/4 × 2,5
5 + UMA 150E 9/21	69	9,30	29 (23)	21,7	78,1	0,79	4 × 2,5	3/4 × 2,5
6 + UMA 150E 13/21	84	11,50	33 (27)	27,6	80,5	0,75	4 × 2,5	3/4 × 2,5
7 + UMA 150E 13/21	97	13,00	28 (22)	30,1	80,3	0,78	4 × 2,5	3/4 × 2,5
8 + UMA 150E 15/21	111	15,00	29 (23)	33,4	81,3	0,80	4 × 4,0	3/4 × 2,5
9 + UMA 150E 18/21	125	17,50	28 (21)	40,4	81,9	0,76	4 × 4,0	3/4 × 2,5
10 + UMA 150E 22/21	140	20,00	32 (26)	45,9	83,4	0,75	4 × 4,0	3/4 × 2,5
11 + UMA 150E 22/21	153	21,00	30 (24)	47,6	83,3	0,77	4 × 4,0	3/4 × 2,5
12 + UMA 150E 26/21	168	23,00	35 (30)	52,0	84,8	0,75	4 × 6,0	3/4 × 4,0
13 + UMA 150E 26/21	181	25,00	32 (26)	55,2	84,5	0,77	4 × 6,0	3/4 × 4,0

110 Length of pump end fitted as standard

111 To reliably dissipate the motor heat of pump sets installed in a horizontal position, sufficient flow velocity past the motor is necessary. A cooling shroud, hood or similar must be used.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

UPA C 150 - 60 / ..., number of stages 14 - 20



Connection types

Standard pump end = G 3

Possible connection types:

- Threaded connection
  - G 4
- Flanged connection
  - DN 65
  - DN 80

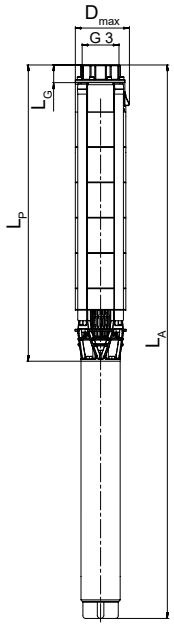
Alternative pump ends are possible.
The length of the pump set L_A and the diameter D_{max} depend on the pump end.

For an alternative pump end the length of the pump set L is calculated$_{A^*}$ as follows:

$L_{A^*} = L_A - L_G + L_{G^*}$

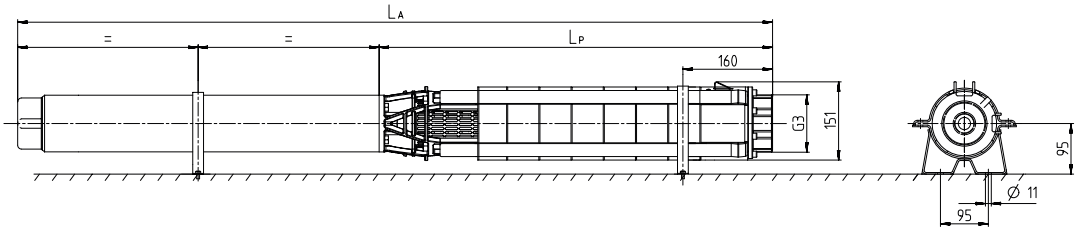
Values for calculating the dimensions if using a different pump end:

- G 3:
  L_{G^*} = 48 mm
  $D_{max^*} \triangleq D_{max}$
- G 4:
  L_{G^*} = 93 mm
  $D_{max^*} \triangleq D_{max}$
- DN 65:
  L_{G^*} = 77 mm
  D_{max^*} = 185 mm
- DN 80:
  L_{G^*} = 77 mm
  D_{max^*} = 200 mm



Operating range

Q_{min} = 32 m³/h
Q_{max}= end of stage curve



Dimensions of UPA C 150 - 60 / ... [mm]

Dimensions, weights and installation type depending on the motor [mm]

UPA C 150 - 60	DN motor					UMA motor						Type of installation	
	L_P	L_A	L_G[112]	D_{max} DOL	Total weight	L_P	L_A	L_G[112]	D_{max} DOL	D_{max} Y - Δ	Total weight	Vertical	Horizontal[113]
	[mm]	[mm]	[mm]	[mm]	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]		
14	-	-	-	-	-	1906	3000	48	146	147	125,1	✗	–[114]
15	-	-	-	-	-	2019	3213	48	146	147	137	✗	–[114]
16	-	-	-	-	-	2132	3326	48	146	147	140	✗	–[114]
17	-	-	-	-	-	2245	3519	48	145	147	149	✗	–[114]
18	-	-	-	-	-	2358	3632	48	145	147	151	✗	–[114]
19	-	-	-	-	-	2471	3745	48	145	147	154	✗	–[114]
20	-	-	-	-	-	2584	3858	48	145	147	156	✗	–[114]

Technical data

UPA C 150 - 60	Pump	Motor					Motor lead, flat	
	Head $Q = 0$ m³/h	Rated power	Max. fluid temperature $v \geq 0{,}2$ m/s (0,0 m/s)	Rated current	Efficiency	Power factor	Number × cross-section of cores	
	H_0	P_N	T_{max}	I_N	η_M	cos φ	DOL	Y - Δ
	[m]	[kW]	[°C]	[A]	[%]		[mm²]	[mm²]
UMA motor								
14 + UMA 150E 26/21	194	26,00	31 (25)	56,9	84,4	0,78	4 × 6,0	3/4 × 4,0
15 + UMA 150E 30/21	210	29,00	31 (25)	65,2	84,2	0,76	4 × 6,0	3/4 × 4,0
16 + UMA 150E 30/21	223	30,00	30 (23)	66,8	84,2	0,77	4 × 6,0	3/4 × 4,0
17 + UMA 150E 37/22	237	33,00	43 (37)	75,0	83,8	0,76	3/4 × 4,0[115]	3/4 × 4,0
18 + UMA 150E 37/22	251	35,00	40 (34)	78,2	83,6	0,77	3/4 × 4,0[115]	3/4 × 4,0
19 + UMA 150E 37/22	264	36,00	39 (32)	79,9	83,4	0,78	3/4 × 4,0[115]	3/4 × 4,0
20 + UMA 150E 37/22	277	37,00	38 (31)	81,6	83,3	0,79	3/4 × 4,0[115]	3/4 × 4,0

112 Length of pump end fitted as standard

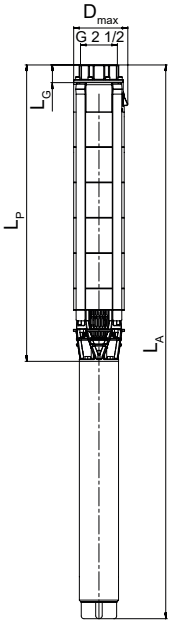
113 To reliably dissipate the motor heat of pump sets installed in a horizontal position, sufficient flow velocity past the motor is necessary. A cooling shroud, hood or similar must be used.

114 On request

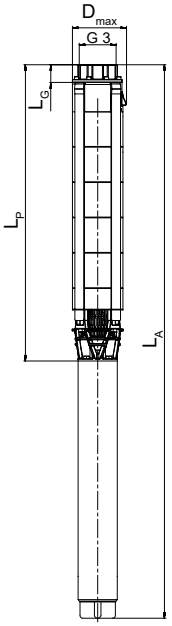
115 Parallel cable

Dimensions and connections

Dimensions and connections



UPA C 150 - 16



UPA C 150 - 30/48/60

Possible installation types and dimensions per motor [mm]

UPA C 150	DN motor				UMA motor					Type of installation	
	L_P	L_A	L_G [116]	D_{max}	L_P	L_A	L_G [116]	D_{max}		Vertical	Horizontal [117]
								DOL	YΔ		
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		
16/1	336	584	40	139	-	-	-	-	-	✘	✘
16/2	397	704	40	139	-	-	-	-	-	✘	✘
16/3	457	796	40	139	-	-	-	-	-	✘	✘
16/4	518	912	40	139	-	-	-	-	-	✘	✘
16/5	578	972	40	139	-	-	-	-	-	✘	✘
16/6	639	1159	40	139	-	-	-	-	-	✘	✘
16/7	699	1352	40	139	731	1410	40	142	142	✘	✘
16/8	760	1413	40	139	791	1470	40	142	142	✘	✘
16/9	820	1473	40	139	852	1531	40	142	142	✘	✘
16/10	881	1612	40	139	912	1611	40	142	142	✘	✘
16/11	941	1672	40	139	973	1672	40	142	142	✘	✘
16/12	1002	1733	40	139	1033	1732	40	142	142	✘	✘
16/13	1062	1793	40	139	1094	1793	40	142	142	✘	✘
16/14	-	-	-	-	1154	1883	40	142	142	✘	✘
16/15	-	-	-	-	1215	1944	40	142	142	✘	✘
16/16	-	-	-	-	1275	2004	40	142	142	✘	✘
16/17	-	-	-	-	1336	2145	40	142	142	✘	✘
16/18	-	-	-	-	1396	2205	40	142	142	✘	✘
16/19	-	-	-	-	1457	2266	40	142	142	✘	✘
16/20	-	-	-	-	1517	2326	40	142	142	✘	✘
16/21	-	-	-	-	1578	2387	40	142	142	✘	✘
16/22	-	-	-	-	1638	2447	40	142	142	✘	✘
16/23	-	-	-	-	1699	2508	40	142	142	✘	✘
16/24	-	-	-	-	1759	2613	40	142	142	✘	✘

116 Length of pump end installed as standard

117 To reliably dissipate the motor heat of pump sets installed in a horizontal position, sufficient flow velocity past the motor is necessary. A cooling shroud, hood or similar device must be used.

UPA C 150	DN motor				UMA motor					Type of installation	
	L_P	L_A	L_G [116]	D_{max}	L_P	L_A	L_G [116]	D_{max}		Vertical	Horizontal [117]
								DOL	YΔ		
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		
16/25	-	-	-	-	1820	2674	40	142	142	✗	✗
16/26	-	-	-	-	1880	2734	40	142	142	✗	✗
16/27	-	-	-	-	1941	2840	40	142	142	✗	✗
16/28	-	-	-	-	2001	2900	40	142	142	✗	✗
16/29	-	-	-	-	2062	2961	40	142	142	✗	✗
16/30	-	-	-	-	2122	3021	40	142	142	✗	-[118]
16/31	-	-	-	-	2183	3082	40	142	142	✗	-[118]
16/32	-	-	-	-	2243	3142	40	142	142	✗	-[118]
16/33	-	-	-	-	2304	3293	40	142	142	✗	-[118]
16/34	-	-	-	-	2364	3353	40	142	142	✗	-[118]
16/35	-	-	-	-	2425	3414	40	142	142	✗	-[118]
16/36	-	-	-	-	2485	3474	40	142	142	✗	-[118]
16/37	-	-	-	-	2546	3535	40	142	142	✗	-[118]
16/38	-	-	-	-	2606	3595	40	142	142	✗	-[118]
16/39	-	-	-	-	2667	3761	40	142	142	✗	-[118]
16/40	-	-	-	-	2727	3821	40	142	142	✗	-[118]
30/1	389	672	48	139	-	-	-	-	-	✗	✗
30/2	485	824	48	139	-	-	-	-	-	✗	✗
30/3	581	975	48	139	-	-	-	-	-	✗	✗
30/4	677	1197	48	139	-	-	-	-	-	✗	✗
30/5	773	1426	48	139	805	1484	48	146	148	✗	✗
30/6	869	1522	48	139	901	1580	48	146	148	✗	✗
30/7	965	1696	48	139	997	1696	48	146	148	✗	✗
30/8	-	-	-	-	1093	1792	48	146	148	✗	✗
30/9	-	-	-	-	1189	1918	48	146	148	✗	✗
30/10	-	-	-	-	1285	2014	48	146	148	✗	✗
30/11	-	-	-	-	1381	2110	48	146	148	✗	✗
30/12	-	-	-	-	1477	2286	48	146	148	✗	✗
30/13	-	-	-	-	1573	2382	48	146	148	✗	✗
30/14	-	-	-	-	1669	2478	48	146	148	✗	✗
30/15	-	-	-	-	1765	2574	48	146	148	✗	✗
30/16	-	-	-	-	1861	2715	48	147	148	✗	✗
30/17	-	-	-	-	1957	2811	48	147	148	✗	✗
30/18	-	-	-	-	2053	2952	48	147	148	✗	✗
30/19	-	-	-	-	2149	3048	48	147	148	✗	-[118]
30/20	-	-	-	-	2245	3144	48	147	148	✗	-[118]
30/21	-	-	-	-	2341	3240	48	147	148	✗	-[118]
30/22	-	-	-	-	2437	3426	48	147	148	✗	-[118]
30/23	-	-	-	-	2533	3522	48	147	148	✗	-[118]
30/24	-	-	-	-	2629	3618	48	147	148	✗	-[118]
30/25	-	-	-	-	2725	3714	48	147	148	✗	-[118]
30/26	-	-	-	-	2821	3915	48	149	149	✗	-[118]
30/27	-	-	-	-	2917	4011	48	149	149	✗	-[118]
30/28	-	-	-	-	3013	4107	48	149	149	✗	-[118]
30/29	-	-	-	-	3109	4203	48	149	149	✗	-[118]
30/30	-	-	-	-	3205	4299	48	149	149	✗	-[118]
30/31	-	-	-	-	3301	4495	48	149	149	✗	-[118]
30/32	-	-	-	-	3397	4591	48	149	149	✗	-[118]
30/33	-	-	-	-	3493	4687	48	149	149	✗	-[118]
30/34	-	-	-	-	3589	4783	48	149	149	✗	-[118]
30/35	-	-	-	-	3685	4959	48	149	149	✗	-[118]
48/1	406	744,6	48	139	-	-	-	-	-	✗	✗
48/2	519	912,6	48	139	-	-	-	-	-	✗	✗

118 On request

UPA C 150	DN motor				UMA motor					Type of installation	
	L_P	L_A	L_G [116]	D_{max}	L_P	L_A	L_G [116]	D_{max}		Vertical	Horizontal [117]
								DOL	YΔ		
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		
48/3	632	1284,5	48	139	663	1342	48	143	146	✘	✘
48/4	745	1475,5	48	139	776	1475	48	143	146	✘	✘
48/5	-	-	-	-	889	1618	48	143	146	✘	✘
48/6	-	-	-	-	1002	1731	48	143	146	✘	✘
48/7	-	-	-	-	1115	1924	48	143	146	✘	✘
48/8	-	-	-	-	1228	2037	48	143	146	✘	✘
48/9	-	-	-	-	1341	2195	48	145	146	✘	✘
48/10	-	-	-	-	1454	2353	48	145	146	✘	✘
48/11	-	-	-	-	1567	2466	48	145	146	✘	✘
48/12	-	-	-	-	1680	2579	48	145	146	✘	✘
48/13	-	-	-	-	1793	2782	48	145	146	✘	✘
48/14	-	-	-	-	1906	2895	48	145	146	✘	✘
48/15	-	-	-	-	2019	3113	48	146	147	✘	-[118]
48/16	-	-	-	-	2132	3226	48	146	147	✘	-[118]
48/17	-	-	-	-	2245	3339	48	146	147	✘	-[118]
48/18	-	-	-	-	2358	3552	48	146	147	✘	-[118]
48/19	-	-	-	-	2471	3665	48	146	147	✘	-[118]
48/20	-	-	-	-	2584	3858	48	145	147	✘	-[118]
48/21	-	-	-	-	2697	3971	48	145	147	✘	-[118]
48/22	-	-	-	-	2810	4084	48	145	147	✘	-[118]
48/23	-	-	-	-	2923	4197	48	145	147	✘	-[118]
48/24	-	-	-	-	3036	4310	48	145	147	✘	-[118]
60/1	406	745	48	139	-	-	-	-	-	✘	✘
60/2	519	1039	48	139	-	-	-	-	-	✘	✘
60/3	632	1363	48	139	663	1362	48	143	146	✘	✘
60/4	745	1476	48	139	776	1475	48	143	146	✘	✘
60/5	-	-	-	-	889	1618	48	143	146	✘	✘
60/6	-	-	-	-	1002	1811	48	143	146	✘	✘
60/7	-	-	-	-	1115	1924	48	143	146	✘	✘
60/8	-	-	-	-	1228	2082	48	145	146	✘	✘
60/9	-	-	-	-	1341	2240	48	145	146	✘	✘
60/10	-	-	-	-	1454	2443	48	145	146	✘	✘
60/11	-	-	-	-	1567	2556	48	145	146	✘	✘
60/12	-	-	-	-	1680	2774	48	146	147	✘	✘
60/13	-	-	-	-	1793	2887	48	146	147	✘	✘
60/14	-	-	-	-	1906	3000	48	146	147	✘	-[118]
60/15	-	-	-	-	2019	3213	48	146	147	✘	-[118]
60/16	-	-	-	-	2132	3326	48	146	147	✘	-[118]
60/17	-	-	-	-	2245	3519	48	145	147	✘	-[118]
60/18	-	-	-	-	2358	3632	48	145	147	✘	-[118]
60/19	-	-	-	-	2471	3745	48	145	147	✘	-[118]
60/20	-	-	-	-	2584	3858	48	145	147	✘	-[118]

Types of connection

Selection of available pump ends

UPA C 150	Threaded connection			Flanged connection		
	G 2 1/2	G 3	G 4	DN 50	DN 65	DN 80
16	✘	✘	✘	✘	✘	✘
30	-	✘	✘	-	✘	✘
48	-	✘	✘	-	✘	✘
60	-	✘	✘	-	✘	✘

The pump can also be supplied with an alternative pump end.
The length of the pump set (L_A) and the diameter (D_{max}) depend on the pump end selected.
If an alternative pump end is selected, the length of the pump (L_{A*}) is calculated as follows:
$L_{A*} = L_A - L_G + L_{G*}$
The diameter D_{max*} is specified directly.

Values for calculating the dimensions if using a different pump end

Pump end	L_{G*}	D_{max*}
	[mm]	[mm]
Standard pump end **G 2 1/2** (UPA C 150 - 16)	40	= D_{max}
Standard pump end **G 3** (UPA C 150 - 30/48/60)	48	= D_{max}
Alternative pump end **G 4**	93	= D_{max}
Alternative pump end **DN 50**	77	165
Alternative pump end **DN 65**	77	185
Alternative pump end **DN 80**	77	200

Connections

Selection of available pump ends

UPA C 150	Threaded pump end			Flanged pump end		
	G 2 1/2	G 3	G 4	DN 50	DN 65	DN 80
16	✘	✘	✘	✘	✘	✘
30	-	✘	✘	-	✘	✘
48	-	✘	✘	-	✘	✘
60	-	✘	✘	-	✘	✘

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Submersible Borehole Pumps

UPA 200 / 250

http://shop.ksb.com/catalog/k0/en/product/ES000003

Product benefits

- High efficiencies through optimised hydraulic design
- High operating reliability and a long service life by integrated sand separator, robust wear rings and enclosed pump bearings
- Reliable operation by anti-jam lift check valve
- High flexibility by vertical, horizontal and angular installation options
- Durable, completely maintenance-free design with hydrodynamic bearings
- Easy to install with service-friendly hydraulic system design
- Low noise level

Further information

Prices on request

Further information

	Cervomatic EDP.2 (⇨ Page 1034)	Single-pump control unit, pressure-dependent, non-ATEX-compliant

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

Single-stage or multistage single-entry centrifugal pump in ring-section design for vertical or horizontal installation. Optionally available with lift check valve or connection branch. For well diameters of 8 inches and above.

Main applications

- Water supply systems
- Spray irrigation systems
- Mining
- General irrigation systems
- Pressure boosting
- Fire-fighting systems
- Lowering groundwater levels

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Submersible Borehole Pumps

UPA 300 / 350

http://shop.ksb.com/catalog/k0/en/product/ES000003

Product benefits

- High efficiencies through optimised hydraulic design
- High operating reliability and a long service life by integrated sand separator, robust wear rings and enclosed pump bearings
- Reliable operation by anti-jam lift check valve
- High flexibility by vertical, horizontal and angular installation options
- Durable, completely maintenance-free design with hydrodynamic bearings
- Easy to install with service-friendly hydraulic system design
- Low noise level

Further information

Prices on request

Further information

	Cervomatic EDP.2 (⇨ Page 1034)	Single-pump control unit, pressure-dependent, non-ATEX-compliant

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

Single-stage or multistage single-entry centrifugal pump in ring-section design for vertical or horizontal installation. Mixed flow hydraulic systems with trimmable impellers. Optionally available with lift check valve or connection branch. For well diameters of 12 inches and above.

Main applications

- Water supply systems
- Spray irrigation systems
- Mining
- General irrigation systems
- Pressure boosting
- Fire-fighting systems
- Lowering groundwater levels

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Submersible Borehole Pumps

UPA S 200

http://shop.ksb.com/catalog/k0/en/product/ES000003

Product benefits

- High efficiencies through optimised hydraulic design
- High operating reliability as all components are made of high-quality stainless steel.
- Overall efficiency can be increased further by combining the pump with an UMA S 150E or UMA S 200D synchronous motor.
- Reliable operation by anti-jam lift check valve
- Easy to install with service-friendly hydraulic system design
- Solids-induced wear can be minimised by metal wear rings and bearings with enhanced wear resistance (optional).
- Patented intake chamber provides optimum flow conditions at low heads.

Further information

Prices on request

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certifications

Overview

Label	Effective in:	Comment
	All countries	Certified quality management to ISO 9001

Description / design

Single-stage or multistage single-entry centrifugal pump in ring-section design for vertical or horizontal installation. Mixed flow hydraulic systems with trimmable impellers. Optionally available with lift check valve or connection branch.

Main applications

- Spray irrigation systems
- General irrigation systems
- Pressure boosting
- Lowering groundwater levels
- Water supply systems

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Recirculation Pumps for Swimming Pool Filtering Systems

Filtra N

http://shop.ksb.com/catalog/k0/en/product/ES000090

Product benefits

- Corrosion-proof thanks to pump casing made of impact-resistant plastic material
- Maintenance-free and reliable due to mechanical seal
- Energy-efficient and low-noise operation of single-phase AC motor with integrated overload protection or three-phase motor
- Low-clogging, hinged filter basket of patented design

Further information

Prices on request

Characteristic curve 314
Dimensions 314

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Swimming pools

Fluids handled

- Clear water
- Swimming pool water[119)]
- **Not suitable for seawater (35 g/l)**

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 36
	Q [l/s]	≤ 10
Head	H [m]	≤ 21
Fluid temperature	T [°C]	≤ +35
Operating pressure	p_d [bar]	≤ 2,5

119 Swimming pool water (0.4 to 1.4 mg/l free chlorine, max. 0.6 mg/l combined chlorine, pH 6.9 to 7.7, water hardness 10 to 30 °dH, max. salt content 7 g/l)

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Design details

Design

- Centrifugal pump
- Single-stage
- Self-priming
- Horizontal installation
- Integrated pre-filter consisting of a filter basket with intermediate pipe; the filter can be hinged open in the middle to facilitate cleaning.

Drive

- Surface-cooled
- Enclosure IP44
- Thermal class F

Single-phase AC motor:

- 230 V
- Temperature switch with automatic reset and start-up

Three-phase motor:

- 230/400 V

Shaft seal

- Mechanical seal

Bearings

- Motor runs in grease-lubricated rolling element bearings

Designation

Example: Filtra N 6 E

Designation key

Code	Description	
Filtra N	Type series	
6	Size; rated flow [m³/h]	
	6, 8, 12, 14, 18, 22, 24, 30	
E	Drive	
	D	Three-phase motor
	E	Single-phase AC motor

Materials

Overview of available materials

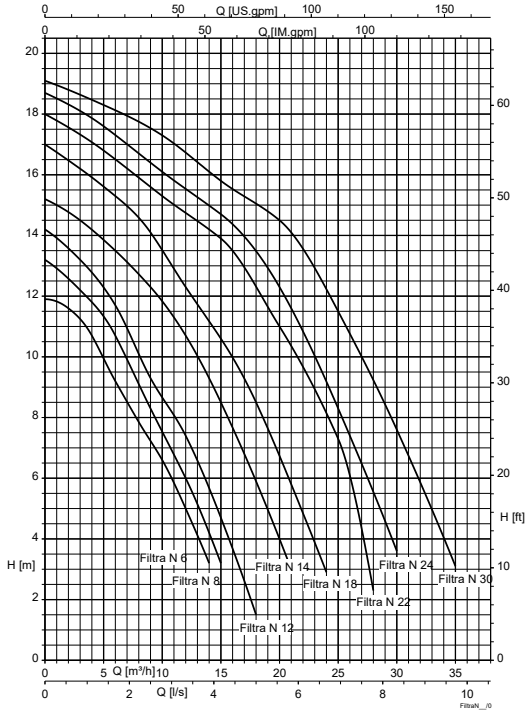
Part No.	Description	Material
101	Pump casing	Polypropylene, 30 % glass fibre reinforced with stainless steel ring
171	Diffuser	Polypropylene, 30 % glass fibre reinforced
230	Impeller	Noryl GFN2
160	Cover	PMMA
210	Shaft	Chrome steel 1.4028
801	Motor housing	Aluminium
160	Discharge cover	Polypropylene, 30 % glass fibre reinforced

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Characteristic curve

Filtra N; 6, 8, 12, 14, 18, 22, 24, 30; n = 2800 rpm



Dimensions

Filtra N

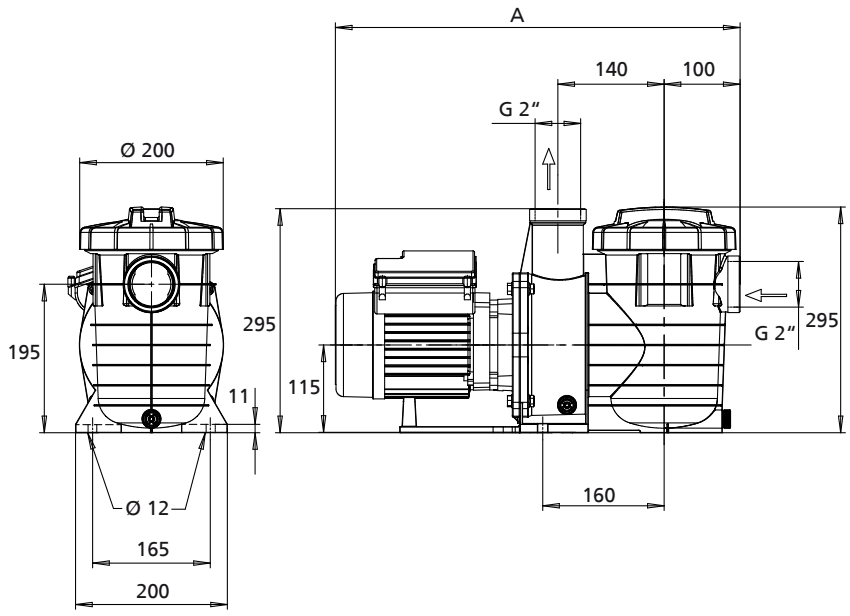


Fig. 128: Filtra N

Dimensions [mm]

Filtra N	A
	[mm]
6, 8, 10, 12, 14, 18	512,5
22, 24, 30	534

Rainwater Harvesting Systems

Hya-Rain Eco

http://shop.ksb.com/catalog/k0/en/product/ES000600

Product benefits

- Very low noise operation (≤ 55 dB)
- Integrated dry running protection
- Automatic switching to mains water if the rainwater storage tank is empty
- User-friendly indication of operating pressure
- Ready-to-connect, easy installation and commissioning
- Float switch for rainwater storage tank
- Very compact, space-saving design
- Comprehensive range of accessories for connection to the mains water supply as well as to the consumer line

Further information

Prices on request

Characteristic curve....317
Dimensions....317

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Rainwater harvesting
- Service water supply systems
- General irrigation systems
- Spray irrigation systems

Fluids handled

- Service water
- Rainwater (not containing abrasive substances)

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 4
	Q [l/s]	≤ 1,1
Head	H [m]	≤ 43
Fluid temperature	T [°C]	≥ 0
		≤ +35
Operating pressure	p_d [bar]	≤ 6
Start-up pressure of the pump	p [bar]	≤ 2,5
Suction lift	H_s [m]	≤ 7
Inlet pressure of the pump	p_{inl} [bar]	≤ 1
Inlet pressure of mains water back-up system	p [bar]	≤ 4
Max. mains water back-up flow rate at 4 bar	[l/s]	~ 1

Design details

Design

- Angled tank designed for wall mounting
- Mains water storage tank to EN 1717
  - Material: PE-LLD, dark
  - Storage volume approx. 13 l
- Float valve for mains water supply (approx. 2.7 m^3/h)
- IP42 enclosure

Pump set

- 230 V ± 10 %
- DOL starting
- Thermal class F
- Enclosure IP44
- Thermal motor protection with automatic reset and start-up

Bearings:

- Grease-packed deep groove ball bearings sealed for life

Electrical connection

- 230 V, 50 Hz, 800 W
- Power input in stand-by mode: 2.5 - 3 Watt
- 1.5 m power cable with shockproof plug

Designation

Example: Hya-Rain Eco

Designation key

Code	Description
Hya-Rain Eco	Type series

Materials

Overview of available materials (pump set)

Part No.	Description	Material
-	Pump casing	Stainless steel
-	Discharge cover	Grey cast iron with anti-corrosive coating
-	Stage casing	Noryl
-	Impeller	Noryl
-	Diffuser	Polypropylene
-	Shaft	Stainless steel
-	Motor housing	Aluminium
-	Shaft seal / mechanical seal	Carbon/ceramics
-	Expansion joints	PN 10[120)]

Overview of available materials (mains water storage tank)

Part No.	Description	Material
-	Mains water storage tank	PE-LLD
-	Valve with electric actuator	Brass
-	Piping	Plastic / brass[121)]
-	Float valve	Plastic / stainless steel[121)]

Prices on request

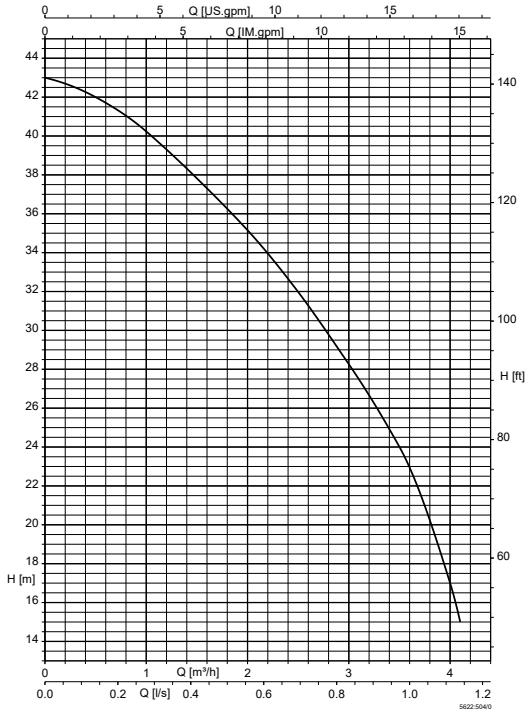
Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

120 DVGW-approved / TÜV-approved and 10-year warranty
121 KTW-approved for contact with drinking water

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

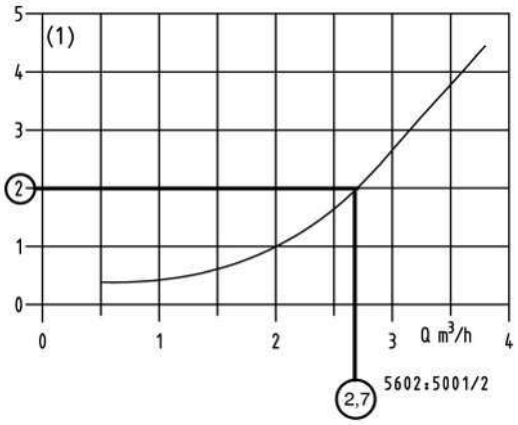
Characteristic curve

Hya-Rain, n = 2800 rpm



Selection information

The discharge head of the pump **minus** the static suction lift and pressure losses in the suction line equals the discharge pressure of the pump (pressure gauge).
The flow rate depends on the relevant discharge head and, in mains water mode, on the mains water back-up flow rate.
Maximum permissible system pressure p_d 6 bar.
Mains water back-up flow rate: The mains water back-up flow rate depends on the mains pressure and the cross-section of the mains water supply pipe.
Example: pipe cross-section ¾", mains pressure ≥ 2 bar, mains water back-up flow rate≈ 2.7 m³/h ≈ 0.75 l/s.

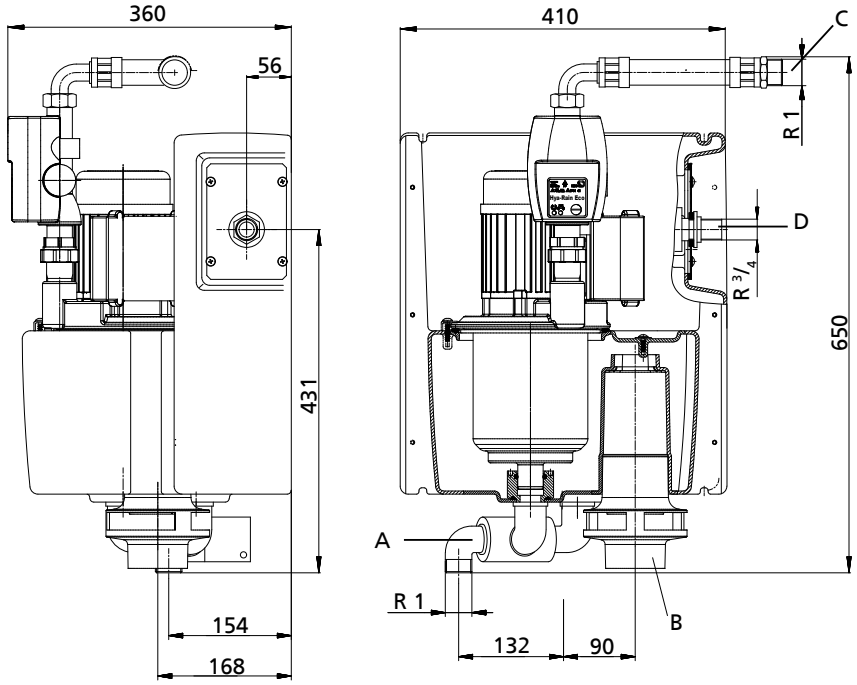


(1)	Mains water back-up flow rate in bar

Dimensions

Hya-Rain Eco

Dimensions [mm]



A	Suction side
B	Overflow, drain line DN 70
C	Discharge side
D	Mains water connection

Allow 200 mm clearance in all directions for servicing!

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Rainwater Harvesting Systems

Hya-Rain / Hya-Rain N

http://shop.ksb.com/catalog/k0/en/product/ES000256

Product benefits

- Very low noise operation (≤ 50 dB)
- Integrated dry running protection
- Automatic switching to mains water if the rainwater storage tank is empty
- User-friendly indication of operating pressure
- Terminals for connecting a booster pump
- Programmable mains water replacement function / functional check run (Hya-Rain N only)
- Ready-to-connect, easy installation and commissioning
- Float switch for rainwater storage tank
- Space-saving compact design
- Comprehensive range of accessories for connection to the mains water supply as well as to the consumer line

Further information

Prices on request

Characteristic curve 321
Dimensions 322

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Rainwater harvesting
- Service water supply systems
- General irrigation systems
- Spray irrigation systems

Fluids handled

- Service water
- Rainwater (not containing abrasive substances)

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 4
	Q [l/s]	≤ 1,1
Head	H [m]	≤ 43
Fluid temperature	T [°C]	≥ 0
		≤ +35
Operating pressure	p_d [bar]	≤ 6
Start-up pressure of the pump	p [bar]	≤ 2,5
Suction lift	H_s [m]	≤ 7
Inlet pressure of the pump	p_{inl} [bar]	≤ 1
Inlet pressure of mains water back-up system	p [bar]	≤ 4
Max. mains water back-up flow rate at 4 bar	[l/s]	~ 1

Design details

Design

- Angled tank designed for wall mounting
- Mains water storage tank to EN 1717
  - Material: PE-LLD, dark
  - Storage volume approx. 13 l
- Float valve for mains water supply (approx. 2.7 m^3/h)
- IP42 enclosure

Pump set

- 230 V ± 10 %
- DOL starting
- Thermal class F
- Enclosure IP44
- Thermal motor protection with automatic reset and start-up

Bearings:

- Grease-packed deep groove ball bearings sealed for life

Electrical connection

- 230 V, 50 Hz, 800 W
- Power input in stand-by mode: 2.5 - 3 Watt
- 1.5 m power cable with shockproof plug

Designation

Example: Hya-Rain N

Designation key

Code	Description	
Hya-Rain	Type series	
	Hya-Rain	With float switch
	Hya-Rain N	With fill level display and sensor

Materials

Overview of available materials (pump set)

Part No.	Description	Material
-	Pump casing	Stainless steel
-	Discharge cover	Grey cast iron with anti-corrosive coating
-	Stage casing	Noryl
-	Impeller	Noryl
-	Diffuser	Polypropylene
-	Shaft	Stainless steel
-	Motor housing	Aluminium
-	Shaft seal / mechanical seal	Carbon/ceramics
-	Expansion joints	PN 10[122)]

Overview of available materials (mains water storage tank)

Part No.	Description	Material
-	Mains water storage tank	PE-LLD
-	Valve with electric actuator	Brass
-	Piping	Plastic / brass[123)]
-	Float valve	Plastic / stainless steel[123)]

Prices on request

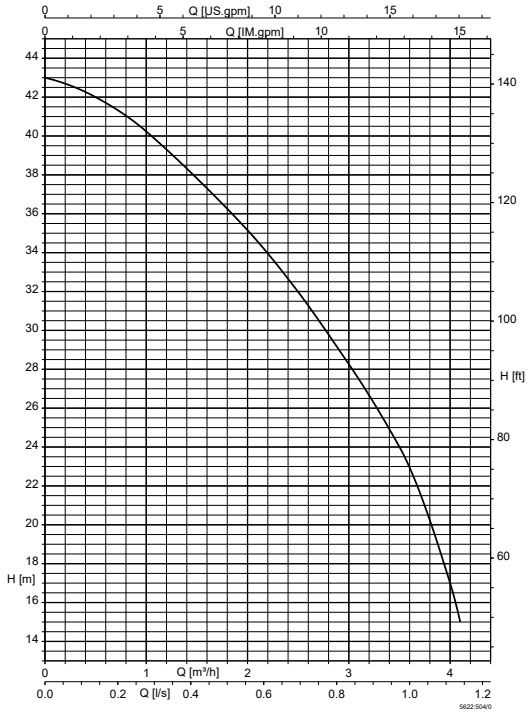
Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

122 DVGW-approved / TÜV-approved and 10-year warranty
123 KTW-approved for contact with drinking water

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

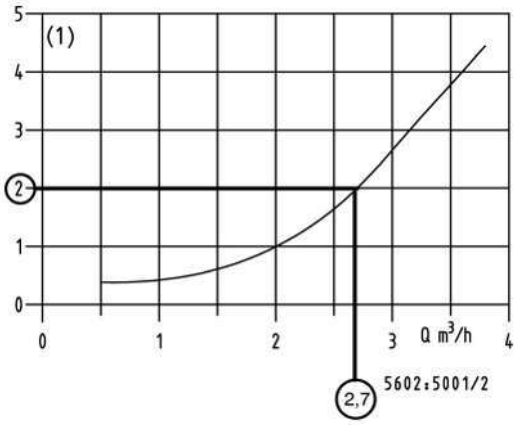
Characteristic curve

Hya-Rain, n = 2800 rpm



Selection information

The discharge head of the pump **minus** the static suction lift and pressure losses in the suction line equals the discharge pressure of the pump (pressure gauge).
The flow rate depends on the relevant discharge head and, in mains water mode, on the mains water back-up flow rate.
Maximum permissible system pressure p_d 6 bar.
Mains water back-up flow rate: The mains water back-up flow rate depends on the mains pressure and the cross-section of the mains water supply pipe.
Example: pipe cross-section ¾", mains pressure ≥ 2 bar, mains water back-up flow rate≈ 2.7 m³/h ≈ 0.75 l/s.

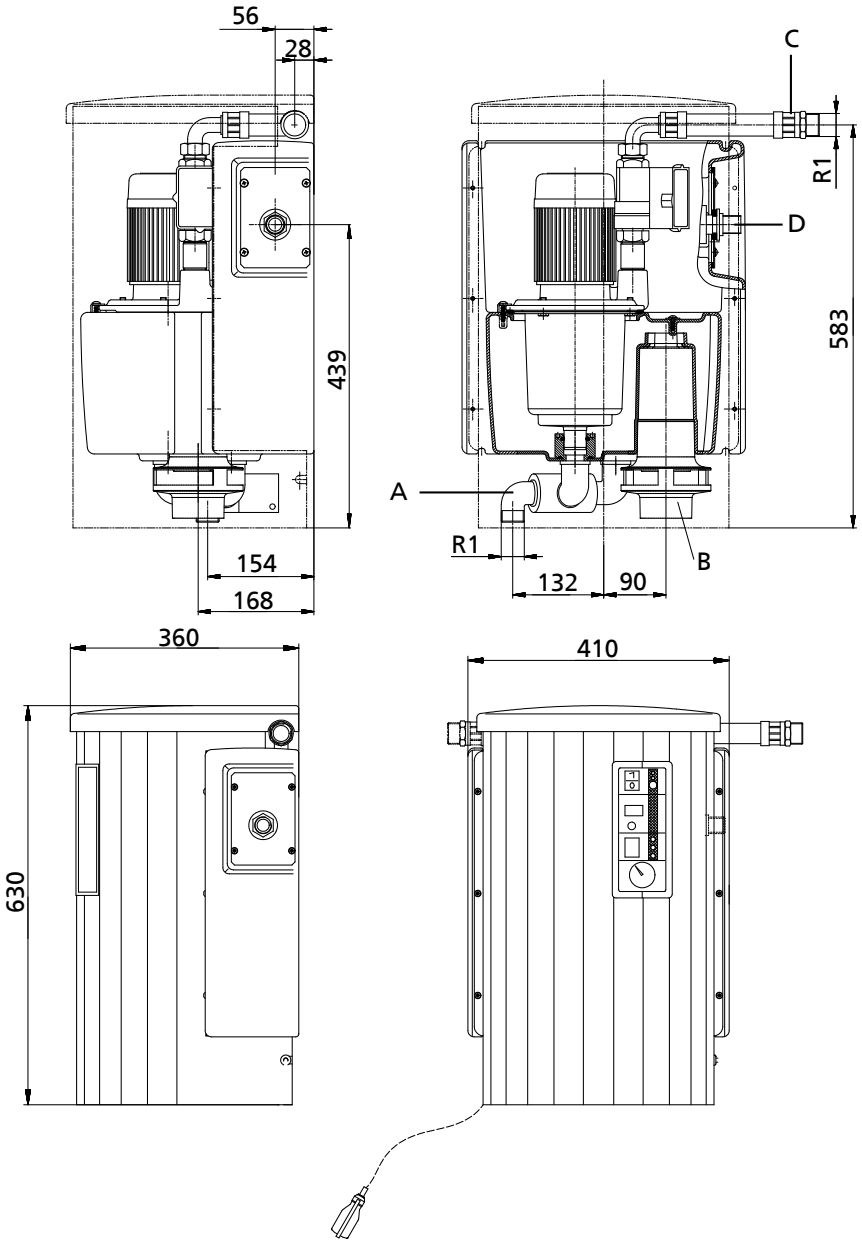


(1)	Mains water back-up flow rate in bar

Dimensions

Hya-Rain

Dimensions in mm



A	Suction side
B	Overflow DN 70 drain pipe
C	Discharge side
D	Mains water connection

Allow 200 mm clearance in all directions for servicing!

Single-pump Pressure Booster Systems

KSB Delta Solo

KSB Delta Solo SVP

KSB Delta Solo MVP

http://shop.ksb.com/catalog/k0/en/product/ES000939

Product benefits

- Energy-efficient operation and constant pressure ensured by speed control
- Suitable for drinking water; manufactured under stringent hygienic conditions
- Easy and fast commissioning of ready-to-connect, pre-assembled and tested system
- Corrosion resistance provided by powder-coated materials and stainless steel
- Integral dry running protection for reliable operation

Further information

Prices on request

Characteristic curves 330
Dimensions and connections 334

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certifications

Overview

Label	Effective in:	Comment
WRAS APPROVED PRODUCT	United Kingdom	Approved in accordance with the UK drinking water regulation

Main applications

- Pressure boosting

Fluids handled

- Drinking water
- Service water
- Cooling water
- Fluids not chemically or mechanically aggressive to the materials

Operating data

Operating properties

Characteristic		Value	
		MVP	SVP
Flow rate	Q [m³/h]	≤ 22	≤ 76
	Q [l/s]	≤ 6,1	≤ 21,1
Head	H [m]	≤ 108	≤ 145
Fluid temperature	$T_{min.}$ [°C]	≥ 0	≥ 0
	$T_{max.}$ [°C]	≤ +60	≤ +60
Operating pressure	p [bar]	≤ 16	≤ 16
Max. inlet pressure	p_{inl} [bar]	≤ 8[124)]	≤ 8[124)]
Motor rating	P [kW]	2,20	22,00

124 For higher inlet pressures contact the manufacturer. Maximum inlet pressure ≤ 4 bar (standard design), designs for up to 8 bar available on option

Design details

Design

- Fully automatic pressure booster package system
- Variable speed operation
- Baseplate-mounted
- Vertical high-pressure centrifugal pump
- Hydraulic components made of stainless steel / brass
- Check valve
- Discharge-side, direct-flow membrane-type accumulator, approved for drinking water
- Pressure gauge
- Integrated dry running protection
- Pressure transmitter on the discharge side
- Vibration damping

Installation

- Stationary dry installation

Drive

- Electric motor
- Enclosure IP55

MVP:

- Efficiency class IE3 to IEC 60034-30

SVP:

- Efficiency class IE5 to IEC 60034-30

Automation

- Frequency inverter

SVP:

- Display on each drive
- Fault message signalling contact
- Operation signalling contact

Designation

Designation example

Position																								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
K	D	B		S	V	P	2	-	0	1	0	/	1	1	0	M	5	A	1	1		/	0	0	0
K	D	C		M	V	P	2	-	0	0	2	/	1	4	0	M	5	A	0	1	0	/	0	0	0
K	D	M		S	V	P	4	-	0	4	0	/	0	3	0	M	5	A	1	1		/	0	0	0
K	D	P		-	V	C	3	-	0	1	5	/	0	8	0	M	5	S	3	1		/	1	0	0
K	D	S		M	V	P	1	-	0	0	4	/	1	2	0	M	5	S	3	1		/	0	0	0
See data sheet																									

Designation key

Position	Code	Description
1-3	Type series	
	KDB	KSB Delta Basic
	KDC	KSB Delta Solo Compact / KSB Delta Basic Compact
	KDM	KSB Delta Macro
	KDP	KSB Delta Primo
	KDS	KSB Delta Solo
5-7	Type of control	
	-F-	Fixed speed pumps
	-VC	Frequency inverter for variable speed operation, cabinet-mounted frequency inverter
	MVP	Frequency inverter for variable speed operation (Nastec Mida), motor-mounted frequency inverter, intelligent control of system by frequency inverter
	SVP	Frequency inverter per pump (PumpDrive 2 Eco / PumpDrive 2) at the motor
8	Number of pumps	
	1	1 pump
	2	2 pumps
	3	3 pumps
	4	4 pumps
	5	5 pumps
	6	6 pumps
10-12	Pump size	
	002	Movitec 2
	004	Movitec 4
	006	Movitec 6
	010	Movitec 10
	015	Movitec 15
	025	Movitec 25

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Position	Code	Description
10-12	040	Movitec 40
	060	Movitec 60
	090	Movitec 90
	125	Movitec 125
	C02	Comeo 2
	C04	Comeo 4
	C06	Comeo 6
14-15	Number of pump stages	
	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 26, 28, 30	
16	Impeller design	
	0	No trimmed impeller
	1	1 trimmed impeller
	2	2 trimmed impellers
	L	Impeller for low NPSH value
	R	1 trimmed L-version impeller[125)]
	S	2 trimmed L-version impellers[125)]
17	Inlet conditions	
	M	Inlet side of pressure booster system connected to the municipal water supply, suction head operation
	F	Pressure booster system with break tank arranged on same level as pump, suction head operation
	L	Pressure booster system with break tank arranged at a lower level, suction lift operation
18	Frequency [Hz]	
	5	50 Hz
	6	60 Hz
19	Drive	
	A	Asynchronous motor (IEC), standard
	S	KSB SuPremE
20	Frequency inverter design	
	0	Fixed speed
	1	Nastec Mida
	2	Danfoss Mididrive (FC280)
	3	PumpDrive 2 Eco
	4	PumpDrive 2
21	Control system design	
	0	Integrated in drive
	1	KSB Booster Control Advanced
22	Dry running protection (RDP) design	
	0	Cos phi
	1	Pressure switch
	2	Pressure switch with pressure gauge
	3	Pressure transmitters
	4	Pressure transmitter with pressure gauge
24	Connection type	
	0	C × T (cap x thread)
	1	C × F (cap x flange)
	2	F × F (blind flange x flange)
25	Control cabinet design	
	0	No optional equipment
	1	With optional equipment
26	Design	
	0	Standard design
	1/2	Special design

125 L-version impeller = design for low NPSH values

Materials

Overview of available materials

Part No.	Description	Material
101	Pump casing	1.4308
10-6	Pump shroud	1.4301
200	Hydraulic system	1.4301
412	Elastomer	EPDM
433	Mechanical seal	To EN 12756
591	Membrane-type accumulator, connection	1.4401
742	Swing check valve	POM (polyoxymethylene)
743	Ball valve	Brass, nickel-coated
890	Baseplate	Steel, powder-coated
-	Membrane	Approved for drinking water

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Technical data

KSB Delta Solo MVP

MVP = variable speed pressure booster system

1 × 230 V ± 10 %

Dry running protection = pressure switch

50 Hz

KSB Delta Solo	Number of pumps	Movitec	Number of stages	DN1	DN2	P_N [kW]	Efficiency class	I_N [A]	Frequency of starts [x/h]	$I_{min\ Overcurrent\ protection}$ [A]	$I_{max\ Overcurrent\ protection}$ [A]	Sound pressure level [dB(A)]	Enclosure	PN	Mat. No.	[kg]
MVP	1	02	02	G 1 1/4	G 1 1/4	0,37	IE-	4,5	50	4,5	-	60	IP54	16	48281234	27,03
MVP	1	02	03	G 1 1/4	G 1 1/4	0,37	IE-	4,5	50	4,5	-	60	IP54	16	48281235	27,48
MVP	1	02	04	G 1 1/4	G 1 1/4	0,37	IE-	4,5	50	4,5	-	60	IP54	16	48281236	27,94
MVP	1	02	05	G 1 1/4	G 1 1/4	0,37	IE-	4,5	50	4,5	-	60	IP54	16	48278796	28,41
MVP	1	02	06	G 1 1/4	G 1 1/4	0,55	IE-	4,5	50	4,5	-	60	IP54	16	48281237	30,36
MVP	1	02	07	G 1 1/4	G 1 1/4	0,55	IE-	4,5	50	4,5	-	60	IP54	16	48281238	30,8
MVP	1	02	08	G 1 1/4	G 1 1/4	0,55	IE-	4,5	50	4,5	-	60	IP54	16	48278797	31,27
MVP	1	02	09	G 1 1/4	G 1 1/4	0,75	IE3	7	180	7	-	55	IP54	16	48281239	34,13
MVP	1	02	10	G 1 1/4	G 1 1/4	0,75	IE3	7	180	7	-	55	IP54	16	48278798	34,61
MVP	1	02	11	G 1 1/4	G 1 1/4	1,10	IE3	7	180	7	-	55	IP54	16	48281240	37,38
MVP	1	02	12	G 1 1/4	G 1 1/4	1,10	IE3	7	180	7	-	55	IP54	16	48281241	37,85
MVP	1	02	14	G 1 1/4	G 1 1/4	1,10	IE3	7	180	7	-	55	IP54	16	48278799	38,78
MVP	1	02	16	G 1 1/4	G 1 1/4	1,50	IE3	11	50	11	-	55	IP54	16	48281242	44,44
MVP	1	02	18	G 1 1/4	G 1 1/4	1,50	IE3	11	50	11	-	55	IP54	16	48281243	45,37
MVP	1	02	20	G 1 1/4	G 1 1/4	1,50	IE3	11	50	11	-	55	IP54	16	48281244	46,32
MVP	1	04	02	G 1 1/4	G 1 1/4	0,37	IE-	4,5	50	4,5	-	60	IP54	16	48278800	26,95
MVP	1	04	03	G 1 1/4	G 1 1/4	0,55	IE-	4,5	50	4,5	-	60	IP54	16	48281245	28,85
MVP	1	04	04	G 1 1/4	G 1 1/4	0,55	IE-	4,5	50	4,5	-	60	IP54	16	48278801	29,27
MVP	1	04	05	G 1 1/4	G 1 1/4	0,75	IE3	7	180	7	-	55	IP54	16	48278802	32,07
MVP	1	04	06	G 1 1/4	G 1 1/4	1,10	IE3	7	180	7	-	55	IP54	16	48281246	34,8
MVP	1	04	07	G 1 1/4	G 1 1/4	1,10	IE3	7	180	7	-	55	IP54	16	48278803	35,21
MVP	1	04	08	G 1 1/4	G 1 1/4	1,50	IE3	11	50	11	-	55	IP54	16	48281247	40,36
MVP	1	04	09	G 1 1/4	G 1 1/4	1,50	IE3	11	50	11	-	55	IP54	16	48281248	40,81
MVP	1	04	10	G 1 1/4	G 1 1/4	1,50	IE3	11	50	11	-	55	IP54	16	48278804	41,25
MVP	1	04	11	G 1 1/4	G 1 1/4	2,20 (2,00)	IE3	11	30	11	-	55	IP54	16	48281249	45,97
MVP	1	04	12	G 1 1/4	G 1 1/4	2,20 (2,00)	IE3	11	30	11	-	55	IP54	16	48281250	46,41
MVP	1	06	02	G 1 1/4	G 1 1/4	0,37	IE-	4,5	50	4,5	-	60	IP54	16	48278805	27,07
MVP	1	06	03	G 1 1/4	G 1 1/4	0,75	IE3	7	180	7	-	55	IP54	16	48278806	31,4
MVP	1	06	04	G 1 1/4	G 1 1/4	1,10	IE3	7	180	7	-	55	IP54	16	48281251	34,2
MVP	1	06	05	G 1 1/4	G 1 1/4	1,10	IE3	7	180	7	-	55	IP54	16	48278807	34,69
MVP	1	06	06	G 1 1/4	G 1 1/4	1,50	IE3	11	50	11	-	55	IP54	16	48281252	39,88
MVP	1	06	07	G 1 1/4	G 1 1/4	1,50	IE3	11	50	11	-	55	IP54	16	48278808	40,39
MVP	1	06	08	G 1 1/4	G 1 1/4	2,20 (2,00)	IE3	11	30	11	-	55	IP54	16	48281253	45,19
MVP	1	06	09	G 1 1/4	G 1 1/4	2,20 (2,00)	IE3	11	30	11	-	55	IP54	16	48281254	45,67
MVP	1	10	01	G 1 1/2	G 1 1/2	0,75	IE3	7	180	7	-	55	IP54	16	48281255	40,59
MVP	1	10	02	G 1 1/2	G 1 1/2	0,75	IE3	7	180	7	-	55	IP54	16	48278810	40,85
MVP	1	10	03	G 1 1/2	G 1 1/2	1,10	IE3	7	180	7	-	55	IP54	16	48278811	44,05
MVP	1	10	04	G 1 1/2	G 1 1/2	1,50	IE3	11	50	11	-	55	IP54	16	48278812	49,71
MVP	1	10	05	G 1 1/2	G 1 1/2	2,20 (2,00)	IE3	11	30	11	-	55	IP54	16	48281256	54,92
MVP	1	15	01	G 2	G 2	1,10	IE3	7	180	7	-	55	IP54	16	48281257	43,22
MVP	1	15	02	G 2	G 2	2,20 (2,00)	IE3	11	30	11	-	55	IP54	16	48281258	52,66

KSB Delta Solo SVP

SVP = variable speed pressure booster system with KSB SuPremE motor

3 × 400 V ± 10 %

Dry running protection = pressure sensor

50 Hz

KSB Delta Solo	Number of pumps	Movitec	Number of stages	DN1	DN2	P_N [kW]	Efficiency class	I_N [A]	Frequency of starts [x/h]	$I_{min\ Overcurrent\ protection}$ [A]	$I_{max\ Overcurrent\ protection}$ [A]	Sound pressure level [dB(A)]	Enclosure	PN	Mat. No.	[kg]
SVP	1	02	02	G 1 1/4	G 1 1/4	0,37	IE-	1,3	~	0	-	70	IP54	16	48281259	31,55
SVP	1	02	03	G 1 1/4	G 1 1/4	0,37	IE-	1,3	~	0	-	70	IP54	16	48281260	32
SVP	1	02	04	G 1 1/4	G 1 1/4	0,37	IE-	1,3	~	0	-	70	IP54	16	48281261	32,46
SVP	1	02	05	G 1 1/4	G 1 1/4	0,55	IE5	1,8	~	0	-	70	IP54	16	48278813	40,93
SVP	1	02	06	G 1 1/4	G 1 1/4	0,55	IE5	1,8	~	0	-	70	IP54	16	48281262	41,39
SVP	1	02	07	G 1 1/4	G 1 1/4	0,55	IE5	1,8	~	0	-	70	IP54	16	48281263	41,83
SVP	1	02	08	G 1 1/4	G 1 1/4	0,75	IE5	2,5	~	0	-	70	IP54	16	48278814	34,3
SVP	1	02	09	G 1 1/4	G 1 1/4	0,75	IE5	2,5	~	0	-	70	IP54	16	48281264	36,36
SVP	1	02	10	G 1 1/4	G 1 1/4	0,75	IE5	2,5	~	0	-	70	IP54	16	48278815	36,84
SVP	1	02	11	G 1 1/4	G 1 1/4	1,10	IE5	3,5	~	0	-	70	IP54	16	48281265	39,31
SVP	1	02	12	G 1 1/4	G 1 1/4	1,10	IE5	3,5	~	0	-	70	IP54	16	48281266	39,78
SVP	1	02	14	G 1 1/4	G 1 1/4	1,10	IE5	3,5	~	0	-	70	IP54	16	48278816	40,71
SVP	1	02	16	G 1 1/4	G 1 1/4	1,50	IE5	25	~	0	-	70	IP54	16	48281267	45,08
SVP	1	02	18	G 1 1/4	G 1 1/4	1,50	IE5	25	~	0	-	70	IP54	16	48281268	46,01
SVP	1	02	20	G 1 1/4	G 1 1/4	1,50	IE5	25	~	0	-	70	IP54	16	48281269	46,95
SVP	1	04	02	G 1 1/4	G 1 1/4	0,37	IE-	1,3	~	0	-	70	IP54	16	48278817	31,47
SVP	1	04	03	G 1 1/4	G 1 1/4	0,55	IE5	1,8	~	0	-	70	IP54	16	48281270	39,88
SVP	1	04	04	G 1 1/4	G 1 1/4	0,75	IE5	2,5	~	0	-	70	IP54	16	48278818	32,3
SVP	1	04	05	G 1 1/4	G 1 1/4	0,75	IE5	2,5	~	0	-	70	IP54	16	48278819	34,3
SVP	1	04	06	G 1 1/4	G 1 1/4	1,10	IE5	3,5	~	0	-	70	IP54	16	48281271	36,73
SVP	1	04	07	G 1 1/4	G 1 1/4	1,10	IE5	3,5	~	0	-	70	IP54	16	48278820	37,14
SVP	1	04	08	G 1 1/4	G 1 1/4	1,50	IE5	25	~	0	-	70	IP54	16	48281272	40,99
SVP	1	04	09	G 1 1/4	G 1 1/4	1,50	IE5	25	~	0	-	70	IP54	16	48281273	41,44
SVP	1	04	10	G 1 1/4	G 1 1/4	1,50	IE5	25	~	0	-	70	IP54	16	48278821	41,88
SVP	1	04	11	G 1 1/4	G 1 1/4	2,20	IE5	6	~	0	-	70	IP54	16	48281274	46,81
SVP	1	04	12	G 1 1/4	G 1 1/4	2,20	IE5	6	~	0	-	70	IP54	16	48281275	47,24
SVP	1	04	14	G 1 1/4	G 1 1/4	2,20	IE5	6	~	0	-	70	IP54	16	48278822	48,09
SVP	1	04	16	G 1 1/4	G 1 1/4	3,00	IE5	8	~	0	-	71	IP54	16	48281276	55,51
SVP	1	06	02	G 1 1/4	G 1 1/4	0,55	IE5	1,8	~	0	-	70	IP54	16	48278823	39,59
SVP	1	06	03	G 1 1/4	G 1 1/4	0,75	IE5	2,5	~	0	-	70	IP54	16	48278824	33,63
SVP	1	06	04	G 1 1/4	G 1 1/4	1,10	IE5	3,5	~	0	-	70	IP54	16	48281277	36,13
SVP	1	06	05	G 1 1/4	G 1 1/4	1,10	IE5	3,5	~	0	-	70	IP54	16	48278825	36,62
SVP	1	06	06	G 1 1/4	G 1 1/4	1,50	IE5	25	~	0	-	70	IP54	16	48281278	40,52
SVP	1	06	07	G 1 1/4	G 1 1/4	1,50	IE5	25	~	0	-	70	IP54	16	48278826	41,03
SVP	1	06	08	G 1 1/4	G 1 1/4	2,20	IE5	6	~	0	-	70	IP54	16	48281279	46,02
SVP	1	06	09	G 1 1/4	G 1 1/4	2,20	IE5	6	~	0	-	70	IP54	16	48281280	46,51
SVP	1	06	10	G 1 1/4	G 1 1/4	2,20	IE5	6	~	0	-	70	IP54	16	48278827	47,01
SVP	1	06	11	G 1 1/4	G 1 1/4	3,00	IE5	8	~	0	-	71	IP54	16	48281281	54,06
SVP	1	06	12	G 1 1/4	G 1 1/4	3,00	IE5	8	~	0	-	71	IP54	16	48281282	54,55
SVP	1	06	14	G 1 1/4	G 1 1/4	3,00	IE5	8	~	0	-	71	IP54	16	48278828	55,54
SVP	1	06	16	G 1 1/4	G 1 1/4	4,00	IE5	10	~	0	-	71	IP54	16	48281283	67,34
SVP	1	10	01	G 1 1/2	G 1 1/2	0,75	IE5	2,5	~	0	-	70	IP54	16	48281284	42,82
SVP	1	10	02	G 1 1/2	G 1 1/2	0,75	IE5	2,5	~	0	-	70	IP54	16	48278829	43,08
SVP	1	10	03	G 1 1/2	G 1 1/2	1,10	IE5	3,5	~	0	-	70	IP54	16	48278830	45,98
SVP	1	10	04	G 1 1/2	G 1 1/2	1,50	IE5	25	~	0	-	70	IP54	16	48278831	50,34
SVP	1	10	05	G 1 1/2	G 1 1/2	2,20	IE5	6	~	0	-	70	IP54	16	48281285	55,75
SVP	1	10	06	G 1 1/2	G 1 1/2	2,20	IE5	6	~	0	-	70	IP54	16	48278832	56,66

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

KSB Delta Solo	Number of pumps	Movitec	Number of stages	DN1	DN2	P_N [kW]	Efficiency class	I_N [A]	Frequency of starts [x/h]	$I_{min\ Overcurrent\ protection}$ [A]	$I_{max\ Overcurrent\ protection}$ [A]	Sound pressure level [dB(A)]	Enclosure	PN	Mat. No.	[kg]
SVP	1	10	07	G 1 1/2	G 1 1/2	3,00	IE5	8	~	0	-	71	IP54	16	48281286	64,19
SVP	1	10	08	G 1 1/2	G 1 1/2	3,00	IE5	8	~	0	-	71	IP54	16	48278833	65,13
SVP	1	10	09	G 1 1/2	G 1 1/2	4,00	IE5	10	~	0	-	71	IP54	16	48281287	77,45
SVP	1	10	10	G 1 1/2	G 1 1/2	4,00	IE5	10	~	0	-	71	IP54	16	48281288	78,41
SVP	1	10	11	G 1 1/2	G 1 1/2	4,00	IE5	10	~	0	-	71	IP54	16	48278834	79,37
SVP	1	10	13	G 1 1/2	G 1 1/2	5,50	IE5	14	~	0	-	71	IP54	16	48281289	99,32
SVP	1	15	01	G 2	G 2	1,10	IE5	3,5	~	0	-	70	IP54	16	48281290	45,15
SVP	1	15	02	G 2	G 2	2,20	IE5	6	~	0	-	70	IP54	16	48278835	53,5
SVP	1	15	03	G 2	G 2	3,00	IE5	8	~	0	-	71	IP54	16	48278836	61,16
SVP	1	15	04	G 2	G 2	4,00	IE5	10	~	0	-	71	IP54	16	48278837	73,02
SVP	1	15	05	G 2	G 2	5,50	IE5	14	~	0	-	71	IP54	16	48281291	90,33
SVP	1	15	06	G 2	G 2	5,50	IE5	14	~	0	-	71	IP54	16	48278838	91,39
SVP	1	15	07	G 2	G 2	7,50	IE5	18	~	0	-	71	IP54	16	48281292	108,43
SVP	1	15	08	G 2	G 2	7,50	IE5	18	~	0	-	71	IP54	16	48278839	109,47
SVP	1	15	09	G 2	G 2	11,00	IE5	25	~	0	-	71	IP54	16	48281293	22,49
SVP	1	15	10	G 2	G 2	11,00	IE5	25	~	0	-	71	IP54	16	48281294	22,49
SVP	1	25	01	DN 65	DN 65	2,20	IE5	6	~	0	-	70	IP54	16	48276252	120,91
SVP	1	25	02	DN 65	DN 65	4,00	IE5	10	~	0	-	71	IP54	16	48276253	141,22
SVP	1	25	03	DN 65	DN 65	5,50	IE5	14	~	0	-	71	IP54	16	48276254	160,65
SVP	1	25	04	DN 65	DN 65	7,50	IE5	18	~	0	-	71	IP54	16	48276255	179,39
SVP	1	25	05	DN 65	DN 65	11,00	IE5	25	~	0	-	71	IP54	16	48276256	209,1
SVP	1	25	06	DN 65	DN 65	11,00	IE5	25	~	0	-	71	IP54	16	48276257	211,78
SVP	1	25	07	DN 65	DN 65	15,00	IE5	33	~	0	-	71	IP54	16	48276258	251,52
SVP	1	40	01-1	DN 80	DN 80	3,00	IE5	8	~	0	-	71	IP54	16	48276259	149,57
SVP	1	40	01	DN 80	DN 80	4,00	IE5	10	~	0	-	71	IP54	16	48276260	160,58
SVP	1	40	02-2	DN 80	DN 80	5,50	IE5	14	~	0	-	71	IP54	16	48276261	184,53
SVP	1	40	02	DN 80	DN 80	7,50	IE5	18	~	0	-	71	IP54	16	48276262	200,54
SVP	1	40	03-2	DN 80	DN 80	11,00	IE5	25	~	0	-	71	IP54	16	48276263	228,65
SVP	1	40	03	DN 80	DN 80	11,00	IE5	25	~	0	-	71	IP54	16	48276264	228,66
SVP	1	40	04-2	DN 80	DN 80	15,00	IE5	33	~	0	-	71	IP54	16	48276265	269
SVP	1	40	04	DN 80	DN 80	15,00	IE5	33	~	0	-	71	IP54	16	48276266	269,01
SVP	1	40	05-2	DN 80	DN 80	18,50	IE5	42	~	0	-	72	IP54	16	48276267	282,7
SVP	1	40	05	DN 80	DN 80	18,50	IE5	42	~	0	-	72	IP54	16	48276268	282,71
SVP	1	40	06-2	DN 80	DN 80	18,50	IE5	42	~	0	-	72	IP54	16	48276269	286,16
SVP	1	60	01-1	DN 100	DN 100	4,00	IE5	10	~	0	-	71	IP54	16	48276270	177,33
SVP	1	60	01	DN 100	DN 100	5,50	IE5	14	~	0	-	71	IP54	16	48276271	197,87
SVP	1	60	02-2	DN 100	DN 100	7,50	IE5	18	~	0	-	71	IP54	16	48276272	217,34
SVP	1	60	02	DN 100	DN 100	11,00	IE5	25	~	0	-	71	IP54	16	48276273	242,11
SVP	1	60	03-2	DN 100	DN 100	15,00	IE5	33	~	0	-	71	IP54	16	48276274	282,51
SVP	1	60	03	DN 100	DN 100	18,50	IE5	42	~	0	-	72	IP54	16	48276275	292,82
SVP	1	60	04-2	DN 100	DN 100	18,50	IE5	42	~	0	-	72	IP54	16	48276276	296,21
SVP	1	60	04	DN 100	DN 100	22,00	IE4	51	~	0	-	72	IP54	16	48276277	369,08
SVP	1	60	05-2	DN 100	DN 100	22,00	IE4	51	~	0	-	72	IP54	16	48276278	372,47
SVP	1	60	05	DN 100	DN 100	30,00	IE4	66	~	0	-	72	IP54	16	48282341	419,97

Characteristic curves

KSB Delta Solo MVP, Movitec 02, n = 2900 rpm

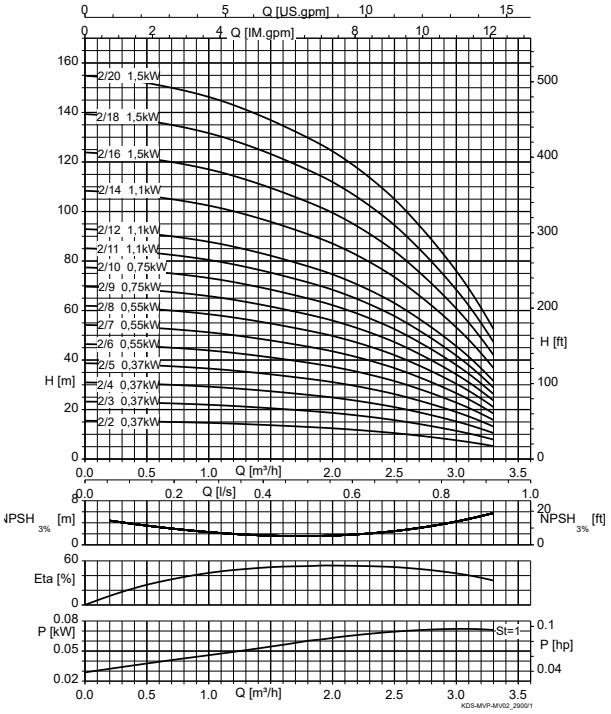


Fig. 129: St = 1: P per stage

KSB Delta Solo MVP, Movitec 04, n = 2900 rpm

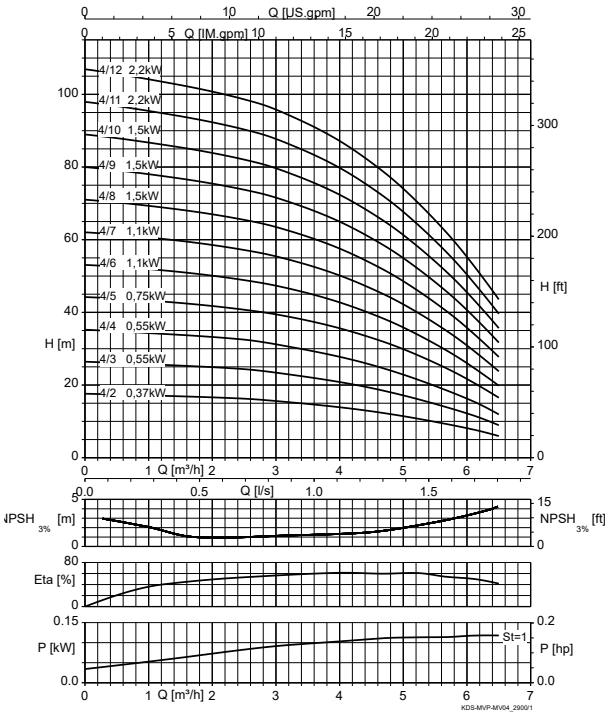


Fig. 130: St = 1: P per stage

KSB Delta Solo MVP, Movitec 06, n = 2900 rpm

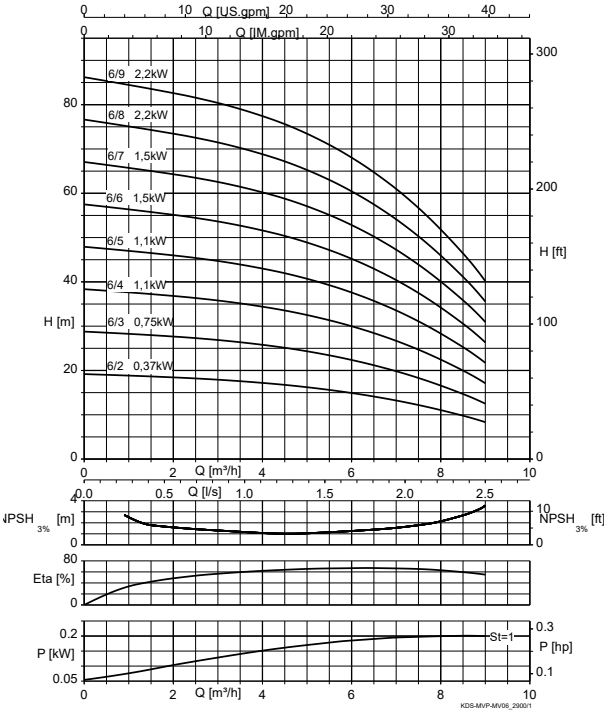


Fig. 131: St = 1: P per stage

KSB Delta Solo MVP, Movitec 10, n = 2900 rpm

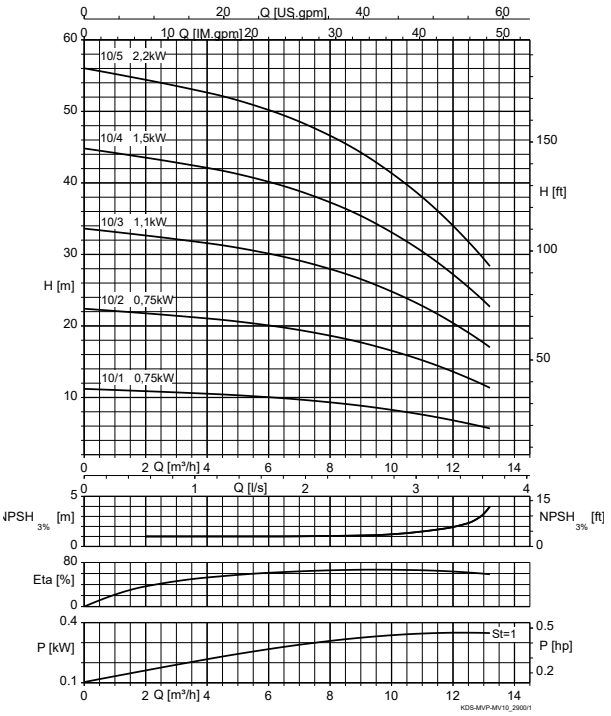


Fig. 132: St = 1: P per stage

KSB Delta Solo MVP, Movitec 15, n = 2900 rpm

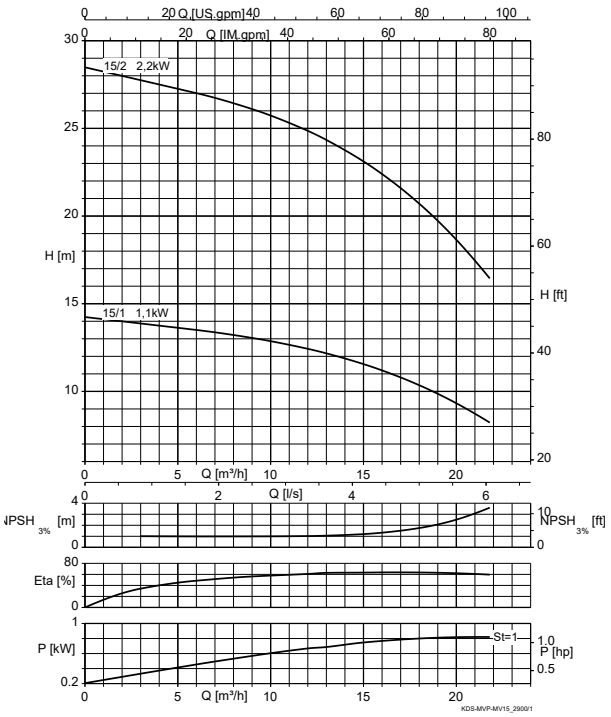


Fig. 133: St = 1: P per stage

KSB Delta Solo SVP, Movitec 02, n = 2900 rpm

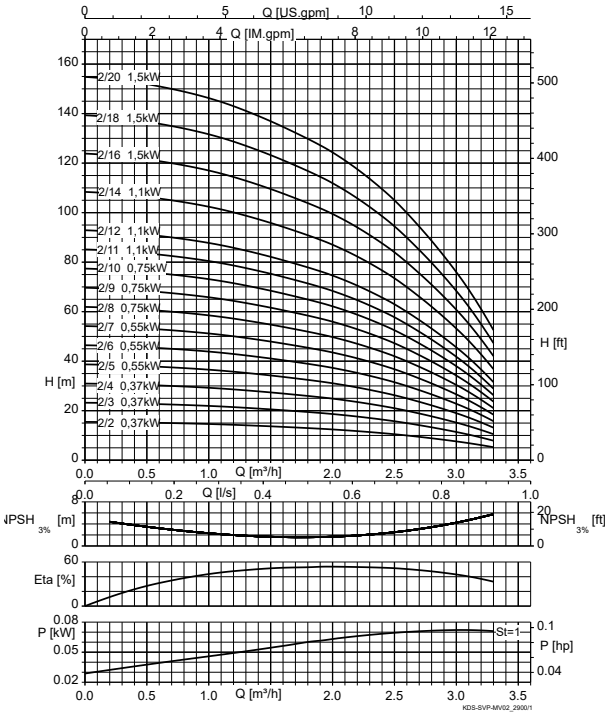


Fig. 134: St = 1: P per stage

KSB Delta Solo SVP, Movitec 04, n = 2900 rpm

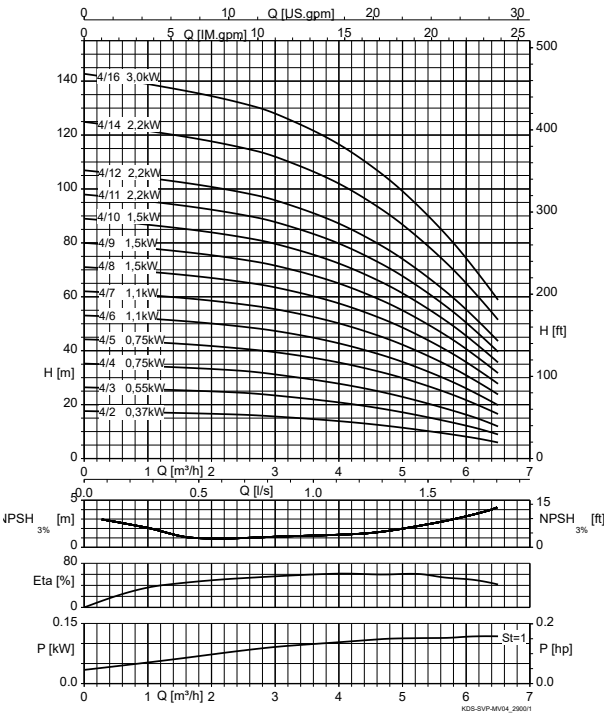


Fig. 135: St = 1: P per stage

KSB Delta Solo SVP, Movitec 06, n = 2900 rpm

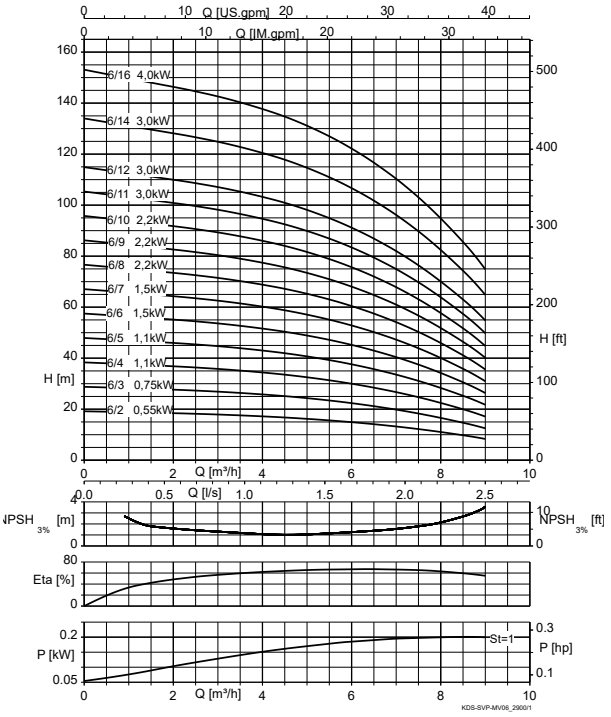


Fig. 136: St = 1: P per stage

KSB Delta Solo SVP, Movitec 10, n = 2900 rpm

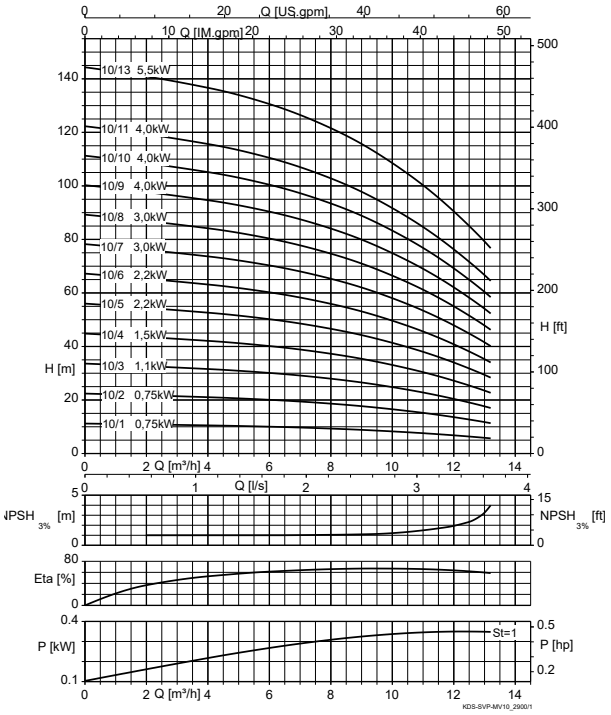


Fig. 137: St = 1: P per stage

KSB Delta Solo SVP, Movitec 15, n = 2900 rpm

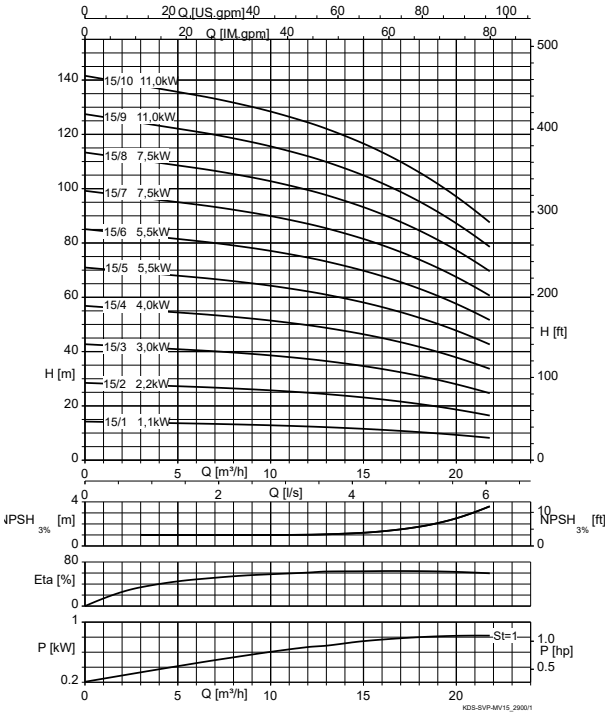
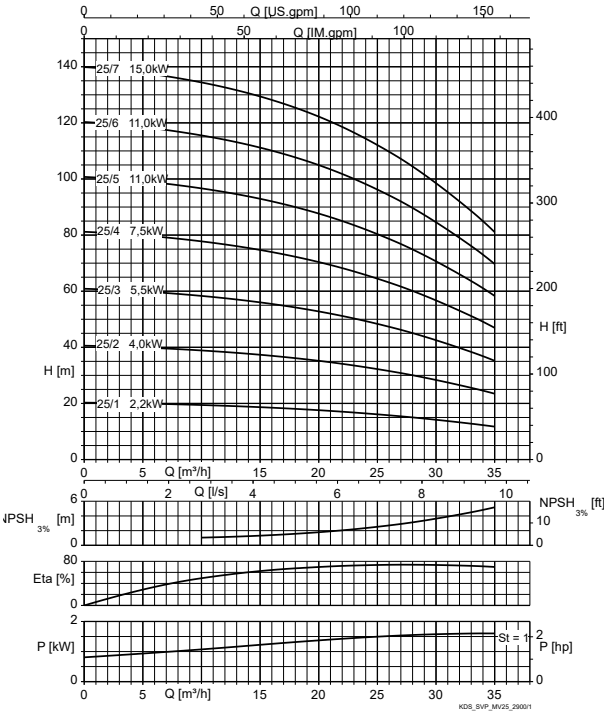
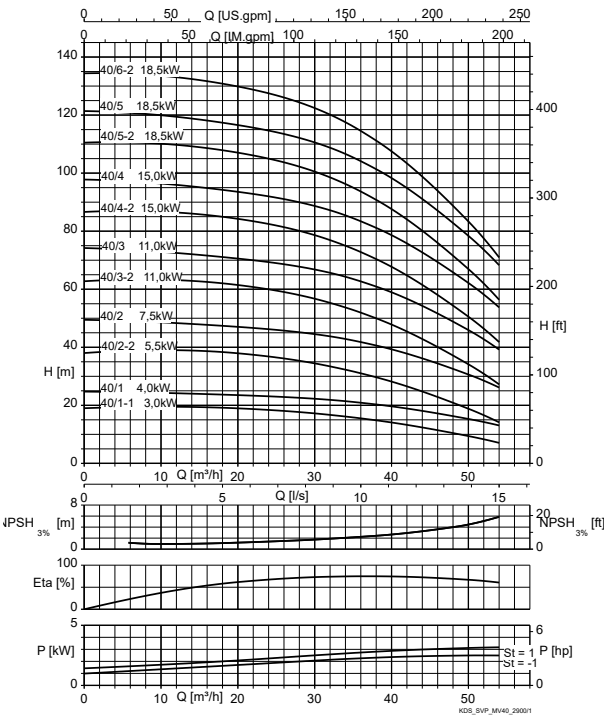


Fig. 138: St = 1: P per stage

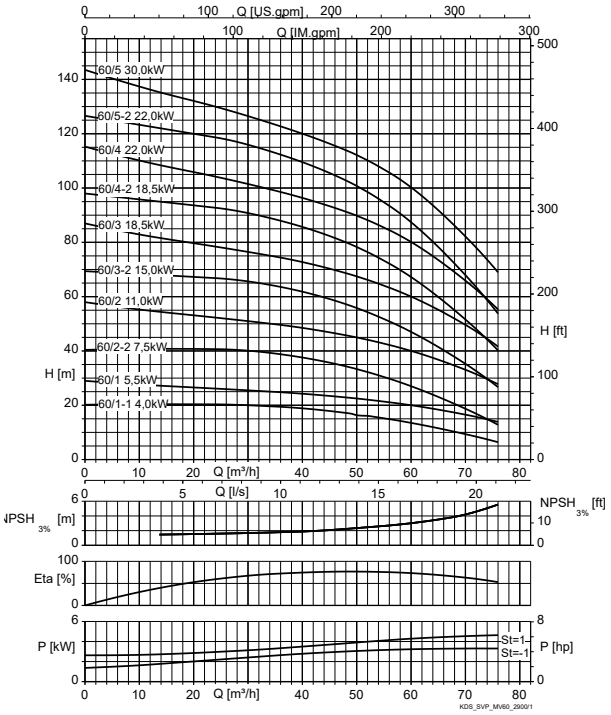
KSB Delta Solo SVP, Movitec 25, n = 2900 rpm



KSB Delta Solo SVP, Movitec 40, n = 2900 rpm



KSB Delta Solo SVP, Movitec 60, n = 2900 rpm



Dimensions and connections

KSB Delta Solo MVP, Movitec 02 / 04 / 06 / 10 / 15

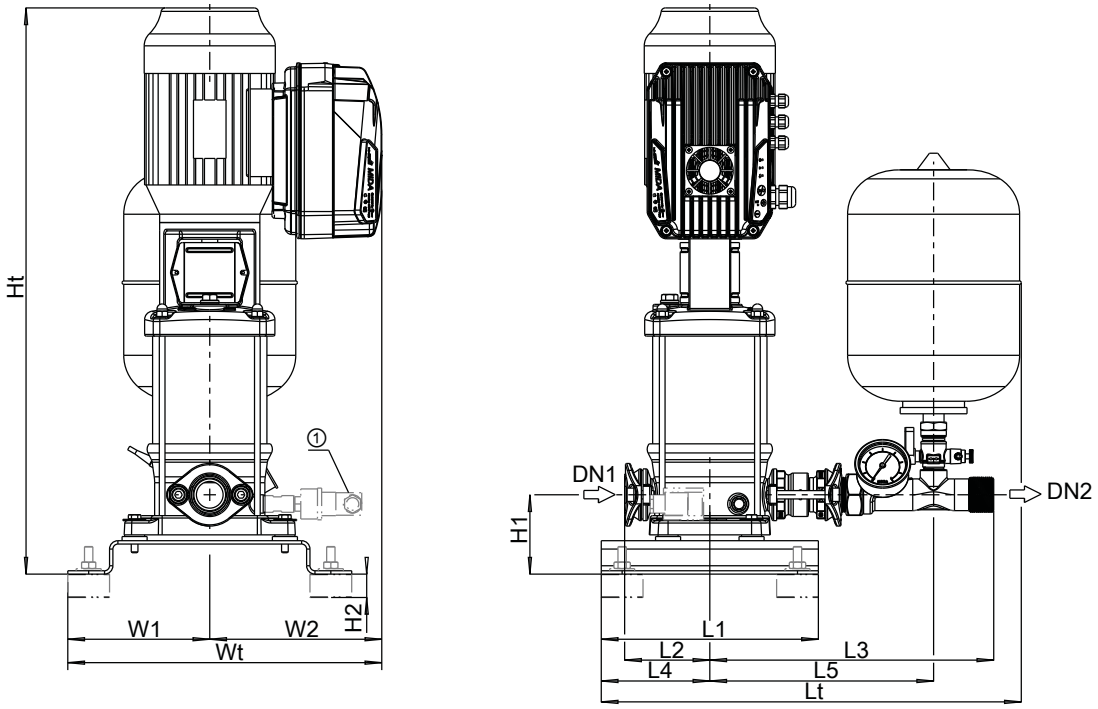


Fig. 139: Dimensions

①	Switch

Dimensions [mm] and connections

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	L3	L4	L5	Lt	H1	H2	Ht	W1	W2	Wt
1	02	02	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	523	170	193	363
1	02	03	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	544	170	193	363
1	02	04	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	566	170	193	363
1	02	05	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	587	170	193	363
1	02	06	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	609	170	193	363
1	02	07	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	630	170	193	363
1	02	08	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	652	170	193	363
1	02	09	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	698	170	207	377
1	02	10	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	720	170	207	377
1	02	11	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	771	170	207	377
1	02	12	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	793	170	207	377
1	02	14	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	836	170	207	377
1	02	16	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	906	170	222	392
1	02	18	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	949	170	222	392
1	02	20	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	992	170	222	392
1	04	02	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	523	170	193	363
1	04	03	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	544	170	193	363
1	04	04	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	566	170	193	363
1	04	05	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	612	170	207	377
1	04	06	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	664	170	207	377
1	04	07	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	685	170	207	377
1	04	08	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	734	170	222	392
1	04	09	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	755	170	222	392
1	04	10	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	777	170	222	392

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	L3	L4	L5	Lt	H1	H2	Ht	W1	W2	Wt
1	04	11	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	798	170	222	392
1	04	12	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	820	170	222	392
1	06	02	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	530	170	193	363
1	06	03	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	580	170	207	377
1	06	04	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	635	170	207	377
1	06	05	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	660	170	207	377
1	06	06	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	712	170	222	392
1	06	07	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	737	170	222	392
1	06	08	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	762	170	222	392
1	06	09	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	787	170	222	392
1	10	01	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	635	190	207	397
1	10	02	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	635	190	207	397
1	10	03	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	692	190	207	397
1	10	04	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	745	190	222	412
1	10	05	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	771	190	222	412
1	15	01	G 2	G 2	340	134	384	170	314	587	125	28	665	190	207	397
1	15	02	G 2	G 2	340	134	384	170	314	587	125	28	692	190	222	412

KSB Delta Solo SVP, Movitec 02 / 04 / 06 / 10 / 15

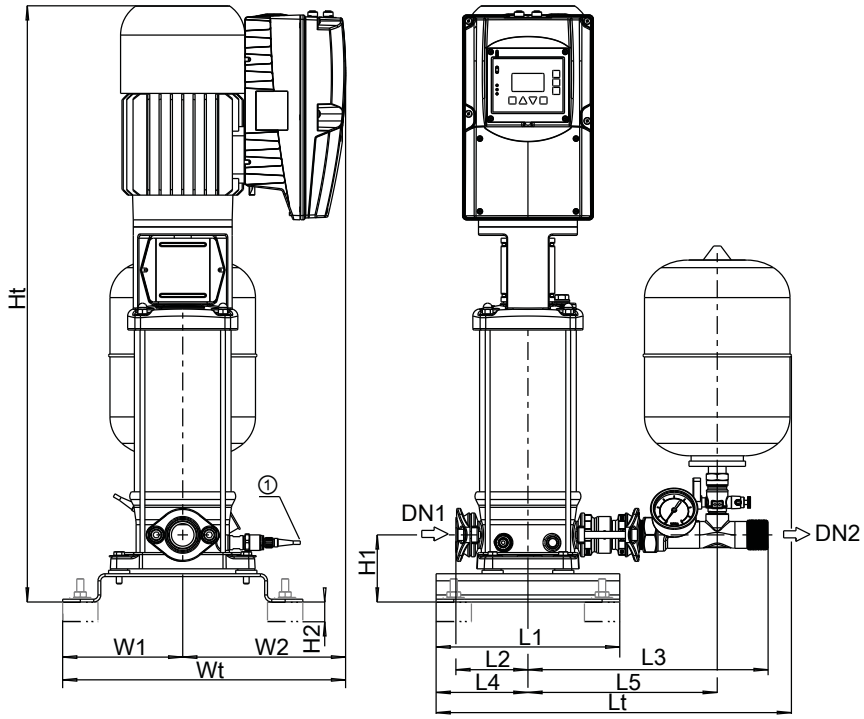


Fig. 140: Dimensions

①	Sensor (dry running protection)

Dimensions [mm] and connections

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	L3	L4	L5	Lt	H1	H2	Ht	W1	W2	Wt
1	02	02	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	519	170	220	390
1	02	03	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	540	170	220	390
1	02	04	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	562	170	220	390
1	02	05	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	583	170	220	390
1	02	06	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	605	170	220	390
1	02	07	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	626	170	220	390
1	02	08	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	695	170	220	390
1	02	09	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	716	170	235	405
1	02	10	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	738	170	235	405
1	02	11	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	759	170	235	405
1	02	12	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	781	170	235	405
1	02	14	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	824	170	235	405
1	02	16	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	912	170	240	410
1	02	18	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	955	170	240	410
1	02	20	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	998	170	240	410
1	04	02	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	519	170	220	390
1	04	03	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	540	170	220	390
1	04	04	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	609	170	220	390
1	04	05	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	630	170	235	405
1	04	06	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	652	170	235	405
1	04	07	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	673	170	235	405
1	04	08	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	740	170	240	410
1	04	09	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	761	170	240	410
1	04	10	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	783	170	240	410
1	04	11	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	828	170	230	400
1	04	12	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	850	170	230	400

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	L3	L4	L5	Lt	H1	H2	Ht	W1	W2	Wt
1	04	14	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	893	170	230	400
1	04	16	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	976	170	240	410
1	06	02	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	526	170	220	390
1	06	03	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	598	170	235	405
1	06	04	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	623	170	235	405
1	06	05	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	648	170	235	405
1	06	06	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	718	170	240	410
1	06	07	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	743	170	240	410
1	06	08	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	792	170	230	400
1	06	09	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	817	170	230	400
1	06	10	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	842	170	230	400
1	06	11	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	907	170	240	410
1	06	12	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	932	170	240	410
1	06	14	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	982	170	240	410
1	06	16	G 1 1/4	G 1 1/4	260	102	338	130	266	499	95	28	1053	170	255	425
1	10	01	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	653	190	235	425
1	10	02	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	653	190	235	425
1	10	03	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	680	190	235	425
1	10	04	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	751	190	240	430
1	10	05	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	801	190	230	420
1	10	06	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	828	190	230	420
1	10	07	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	894	190	240	430
1	10	08	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	921	190	240	430
1	10	09	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	968	190	255	445
1	10	10	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	995	190	255	445
1	10	11	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	1021	190	255	445
1	10	13	G 1 1/2	G 1 1/2	340	129	379	170	309	582	125	28	1176,5	190	310	500
1	15	01	G 2	G 2	340	134	384	170	314	587	125	28	653	190	235	425
1	15	02	G 2	G 2	340	134	384	170	314	587	125	28	722	190	230	420
1	15	03	G 2	G 2	340	134	384	170	314	587	125	28	789	190	240	430
1	15	04	G 2	G 2	340	134	384	170	314	587	125	28	836	190	255	445
1	15	05	G 2	G 2	340	134	384	170	314	587	125	28	964,5	190	310	500
1	15	06	G 2	G 2	340	134	384	170	314	587	125	28	991,5	190	310	500
1	15	07	G 2	G 2	340	134	384	170	314	587	125	28	1017,5	190	330	520
1	15	08	G 2	G 2	340	134	384	170	314	587	125	28	1044,5	190	330	520
1	15	09	G 2	G 2	340	134	384	170	314	587	125	28	1220,5	190	343	533
1	15	10	G 2	G 2	340	134	384	170	314	587	125	28	1247,5	190	343	533

KSB Delta Solo SVP, Movitec 25 / 40 / 60

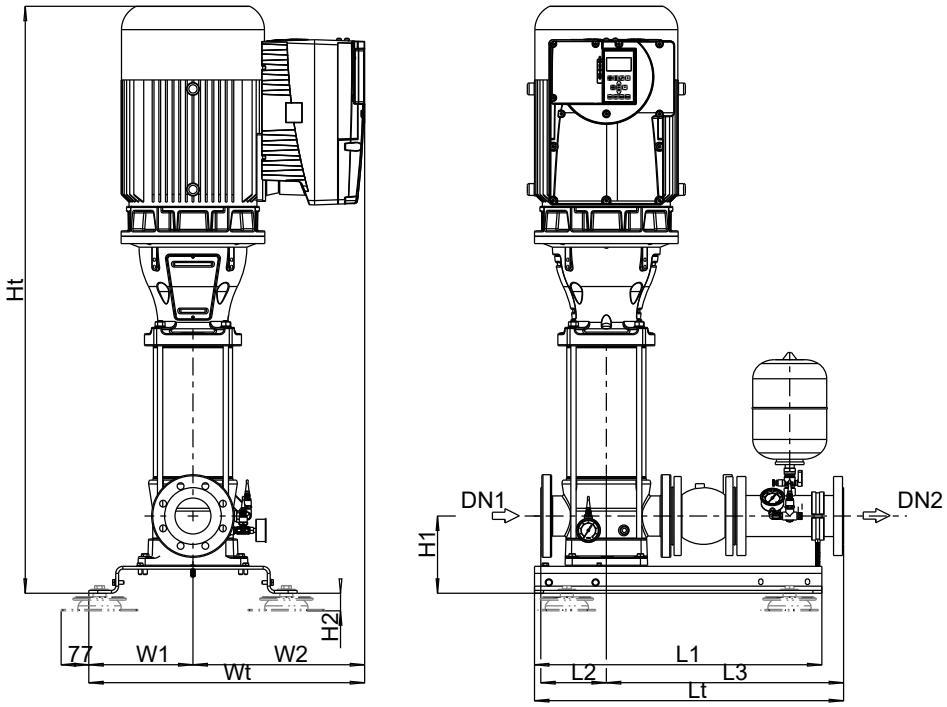


Fig. 141: Dimensions

Dimensions [mm] and connections

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	L3	Lt	H1	H2	Ht	W1	W2	Wt
1	25	01	DN 65	DN 65	800	160	584	784	180	49	794	290	230	520
1	25	02	DN 65	DN 65	800	160	584	784	180	49	915	290	255	545
1	25	03	DN 65	DN 65	800	160	584	784	180	49	1094	290	310	600
1	25	04	DN 65	DN 65	800	160	584	784	180	49	1159	290	330	620
1	25	05	DN 65	DN 65	800	160	584	784	180	49	1374	290	343	633
1	25	06	DN 65	DN 65	800	160	584	784	180	49	1439	290	343	633
1	25	07	DN 65	DN 65	800	160	584	784	180	49	1504	290	458	748
1	40	01-1	DN 80	DN 80	800	182,5	626,5	826,5	215	49	903	290	240	530
1	40	01	DN 80	DN 80	800	182,5	626,5	826,5	215	49	924	290	255	545
1	40	02-2	DN 80	DN 80	800	182,5	626,5	826,5	215	49	1115	290	310	600
1	40	02	DN 80	DN 80	800	182,5	626,5	826,5	215	49	1115	290	330	620
1	40	03-2	DN 80	DN 80	800	182,5	626,5	826,5	215	49	1343	290	343	633
1	40	03	DN 80	DN 80	800	182,5	626,5	826,5	215	49	1343	290	343	633
1	40	04-2	DN 80	DN 80	800	182,5	626,5	826,5	215	49	1421	290	458	748
1	40	04	DN 80	DN 80	800	182,5	626,5	826,5	215	49	1421	290	458	748
1	40	05-2	DN 80	DN 80	800	182,5	626,5	826,5	215	49	1544	290	458	748
1	40	05	DN 80	DN 80	800	182,5	626,5	826,5	215	49	1544	290	458	748
1	40	06-2	DN 80	DN 80	800	182,5	626,5	826,5	215	49	1622	290	458	748
1	60	01-1	DN 100	DN 100	800	182,5	656,5	856,5	215	49	924	290	255	545
1	60	01	DN 100	DN 100	800	182,5	656,5	856,5	215	49	1037	290	310	600
1	60	02-2	DN 100	DN 100	800	182,5	656,5	856,5	215	49	1115	290	330	620
1	60	02	DN 100	DN 100	800	182,5	656,5	856,5	215	49	1265	290	343	633
1	60	03-2	DN 100	DN 100	800	182,5	656,5	856,5	215	49	1343	290	458	748
1	60	03	DN 100	DN 100	800	182,5	656,5	856,5	215	49	1388	290	458	748
1	60	04-2	DN 100	DN 100	800	182,5	656,5	856,5	215	49	1466	290	458	748
1	60	04	DN 100	DN 100	800	182,5	656,5	856,5	215	49	1505	290	463	753
1	60	05-2	DN 100	DN 100	800	182,5	656,5	856,5	215	49	1583	290	463	753
1	60	05	DN 100	DN 100	800	182,5	656,5	856,5	215	49	1630	290	480	770

Single-pump / Multiple-pump Pressure Booster Systems

KSB Delta Compact

KSB Delta Solo Compact MVP

KSB Delta Basic Compact MVP

http://shop.ksb.com/catalog/k0/en/product/ES000940

Product benefits

- Plug-and-play design for straightforward commissioning
- Very compact, space-saving design
- Energy-efficient operation and constant pressure ensured by speed control of all pumps.
- Corrosion resistance provided by powder-coated materials and stainless steel
- Integral dry running protection for reliable operation

Further information

Prices on request

Characteristic curves 344
Dimensions and connections..... 345

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certifications

Overview

Label	Effective in:	Comment
WRAS APPROVED PRODUCT	United Kingdom	Approved in accordance with the UK drinking water regulation

Main applications

- Spray irrigation systems
- General irrigation systems
- Service water supply systems
- Domestic water supply
- Rainwater harvesting
- Water supply systems

Fluids handled

- Drinking water
- Service water
- Cooling water
- Fluids not chemically or mechanically aggressive to the materials

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 18[126]
	Q [l/s]	≤ 5
Head	H [m]	≤ 55
Fluid temperature	$T_{min.}$ [°C]	≥ 0
	$T_{max.}$ [°C]	≤ +40
Operating pressure	p [bar]	≤ 10
Inlet pressure	p_{inl} [bar]	4 - 5,5[127]
Motor rating	P [kW]	1,50

Design details

Design

- Fully automatic pressure booster system
- Variable speed operation
- Baseplate-mounted
- Membrane-type accumulator (direct-flow) to DIN 4807-5 on the discharge side, approved for drinking water, with shut-off element and drain valve.
- One or two horizontal high-pressure pumps with variable speed system
- Hydraulic components made of stainless steel / brass
- Lift check valve for each pump
- Pressure gauge
- Integrated dry running protection
- Pressure transmitter on the discharge side
- Anti-vibration pads per system

KSB Delta Basic Compact:

- Discharge-side gate valve per pump
- Suction-side gate valve per pump
- Suction-side manifold and discharge-side manifold made of stainless steel

Installation

- Stationary dry installation

Drive

- Electric motor
- Enclosure IP55
- Efficiency class IE3 to IEC 60034-30 (≥ 0.75 kW)

Automation

- One frequency inverter per pump
- Motor protection switch per pump
- Fuse box

Designation

Designation example

Position																								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
K	D	B		S	V	P	2	-	0	1	0	/	1	1	0	M	5	A	1	1		/	0	0	0
K	D	C		M	V	P	2	-	0	0	2	/	1	4	0	M	5	A	0	1	0	/	0	0	0
K	D	M		S	V	P	4	-	0	4	0	/	0	3	0	M	5	A	1	1		/	0	0	0
K	D	P		-	V	C	3	-	0	1	5	/	0	8	0	M	5	S	3	1		/	1	0	0
K	D	S		M	V	P	1	-	0	0	4	/	1	2	0	M	5	S	3	1		/	0	0	0

See data sheet

Designation key

Position	Code	Description
1-3	Type series	
	KDB	KSB Delta Basic
	KDC	KSB Delta Solo Compact / KSB Delta Basic Compact
	KDM	KSB Delta Macro
	KDP	KSB Delta Primo
	KDS	KSB Delta Solo
5-7	Type of control	
	-F-	Fixed speed pumps
	-VC	Frequency inverter for variable speed operation, cabinet-mounted frequency inverter
	MVP	Frequency inverter for variable speed operation (Nastec Mida), motor-mounted frequency inverter, intelligent control of system by frequency inverter
	SVP	Frequency inverter per pump (PumpDrive 2 Eco / PumpDrive 2) at the motor
8	Number of pumps	
	1	1 pump
	2	2 pumps
	3	3 pumps

126 Without stand-by pump
127 The inlet pressure depends on the pump size.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Position	Code	Description
8	4	4 pumps
	5	5 pumps
	6	6 pumps
10-12	Pump size	
	002	Movitec 2
	004	Movitec 4
	006	Movitec 6
	010	Movitec 10
	015	Movitec 15
	025	Movitec 25
	040	Movitec 40
	060	Movitec 60
	090	Movitec 90
	125	Movitec 125
	C02	Comeo 2
	C04	Comeo 4
	C06	Comeo 6
14-15	Number of pump stages	
	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 26, 28, 30	
16	Impeller design	
	0	No trimmed impeller
	1	1 trimmed impeller
	2	2 trimmed impellers
	L	Impeller for low NPSH value
	R	1 trimmed L-version impeller[128)]
	S	2 trimmed L-version impellers[128)]
17	Inlet conditions	
	M	Inlet side of pressure booster system connected to the municipal water supply, suction head operation
	F	Pressure booster system with break tank arranged on same level as pump, suction head operation
	L	Pressure booster system with break tank arranged at a lower level, suction lift operation
18	Frequency [Hz]	
	5	50 Hz
	6	60 Hz
19	Drive	
	A	Asynchronous motor (IEC), standard
	S	KSB SuPremE
20	Frequency inverter design	
	0	Fixed speed
	1	Nastec Mida
	2	Danfoss Mididrive (FC280)
	3	PumpDrive 2 Eco
	4	PumpDrive 2
21	Control system design	
	0	Integrated in drive
	1	KSB Booster Control Advanced
22	Dry running protection (RDP) design	
	0	Cos phi
	1	Pressure switch
	2	Pressure switch with pressure gauge
	3	Pressure transmitters
	4	Pressure transmitter with pressure gauge
24	Connection type	
	0	C × T (cap x thread)
	1	C × F (cap x flange)
	2	F × F (blind flange x flange)

128 L-version impeller = design for low NPSH values

Position	Code	Description
25	Control cabinet design	
	0	No optional equipment
	1	With optional equipment
26	Design	
	0	Standard design
	1/2	Special design

Materials

Overview of available materials

Part No.	Description	Material
101	Pump casing	1.4308
10-6	Pump shroud	1.4301
200	Hydraulic system	1.4301
412	Elastomer	EPDM
433	Mechanical seal	To EN 12756
591	Membrane-type accumulator, connection	1.4401
742	Swing check valve	POM (polyoxymethylene)
743	Ball valve	Brass, nickel-coated
890	Baseplate	Steel, powder-coated
-	Membrane	Approved for drinking water

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Technical data

KSB Delta Solo Compact MVP

MVP = variable speed pressure booster system

1 × 230 V ± 10 %

Dry running protection = via power factor, external contact (standard) and pressure switch (optional)

50 Hz

KSB Delta Solo Compact	With pressure switch	Number of pumps	Comeo C	Number of stages	DN1	DN2	P_N [kW]	Efficiency class	I_N [A]	Frequency of starts [x/h]	$I_{min\ Overcurrent\ protection}$ [A]	$I_{max\ Overcurrent\ protection}$ [A]	Sound pressure level [dB(A)]	Enclosure	PN	Mat. No.	[kg]
MVP	-	1	02	02	G 1 1/4	G 1	0,37	IE-	4,5	20	4,5	-	58	IP54	10	48281225	25,66
MVP	-	1	02	04	G 1 1/4	G 1	0,37	IE-	4,5	20	4,5	-	58	IP54	10	48281226	26,14
MVP	-	1	02	06	G 1 1/4	G 1	0,55	IE-	4,5	20	4,5	-	58	IP54	10	48278697	27,68
MVP	✘	1	02	06	G 1 1/4	G 1	0,55	IE-	4,5	20	4,5	-	58	IP54	10	48281231	27,88
MVP	-	1	04	02	G 1 1/4	G 1	0,37	IE-	4,5	20	4,5	-	58	IP54	10	48281227	25,68
MVP	-	1	04	04	G 1 1/4	G 1	0,55	IE-	4,5	20	4,5	-	58	IP54	10	48281228	26,97
MVP	-	1	04	06	G 1 1/4	G 1	1,10	IE3	7	25	7	-	60	IP54	10	48278698	34,09
MVP	✘	1	04	06	G 1 1/4	G 1	1,10	IE3	7	25	7	-	60	IP54	10	48281232	34,29
MVP	-	1	06	02	G 1 1/4	G 1	0,37	IE-	4,5	20	4,5	-	58	IP54	10	48281229	26,48
MVP	-	1	06	04	G 1 1/4	G 1	1,10	IE3	7	25	7	-	60	IP54	10	48281230	33,41
MVP	-	1	06	06	G 1 1/4	G 1	1,50	IE3	11	25	11	-	63	IP54	10	48278699	33,93
MVP	✘	1	06	06	G 1 1/4	G 1	1,50	IE3	11	25	11	-	63	IP54	10	48281233	34,13

KSB Delta Basic Compact MVP

MVP = variable speed pressure booster system

3 × 400 V + N ± 10 %

Dry running protection = via power factor, external contact (standard) and pressure switch (optional)

50 Hz

KSB Delta Basic Compact	With pressure switch	Number of pumps	Comeo C	Number of stages	DN1	DN2	P_N [kW]	Efficiency class	I_N [A]	Frequency of starts [x/h]	$I_{min\ Overcurrent\ protection}$ [A]	$I_{max\ Overcurrent\ protection}$ [A]	Sound pressure level [dB(A)]	Enclosure	PN	Mat. No.	[kg]
MVP	-	2	02	02	G 1 1/2	G 1 1/2	0,37	IE-	4,5	20	4,5	25	58	IP54	10	48281295	52,64
MVP	-	2	02	04	G 1 1/2	G 1 1/2	0,37	IE-	4,5	20	4,5	25	58	IP54	10	48281296	53,59
MVP	-	2	02	06	G 1 1/2	G 1 1/2	0,55	IE-	4,5	20	4,5	25	58	IP54	10	48278700	56,68
MVP	✘	2	02	06	G 1 1/2	G 1 1/2	0,55	IE-	4,5	20	4,5	25	58	IP54	10	48281301	57,29
MVP	-	2	04	02	G 1 1/2	G 1 1/2	0,37	IE-	4,5	20	4,5	25	58	IP54	10	48281297	52,67
MVP	-	2	04	04	G 1 1/2	G 1 1/2	0,55	IE-	4,5	20	4,5	25	58	IP54	10	48281298	55,26
MVP	-	2	04	06	G 1 1/2	G 1 1/2	1,10	IE3	7	25	7	25	60	IP54	10	48278701	69,5
MVP	✘	2	04	06	G 1 1/2	G 1 1/2	1,10	IE3	7	25	7	25	60	IP54	10	48281302	70,11
MVP	-	2	06	02	G 1 1/2	G 1 1/2	0,37	IE-	4,5	20	4,5	25	58	IP54	10	48281299	54,28
MVP	-	2	06	04	G 1 1/2	G 1 1/2	1,10	IE3	7	25	7	25	60	IP54	10	48281300	68,14
MVP	-	2	06	06	G 1 1/2	G 1 1/2	1,50	IE3	11	25	11	25	63	IP54	10	48278702	69,18
MVP	✘	2	06	06	G 1 1/2	G 1 1/2	1,50	IE3	11	25	11	25	63	IP54	10	48281303	69,79

Characteristic curves

KSB Delta Solo/Basic Compact MVP, Comeo 02, n ≈ 2880 rpm

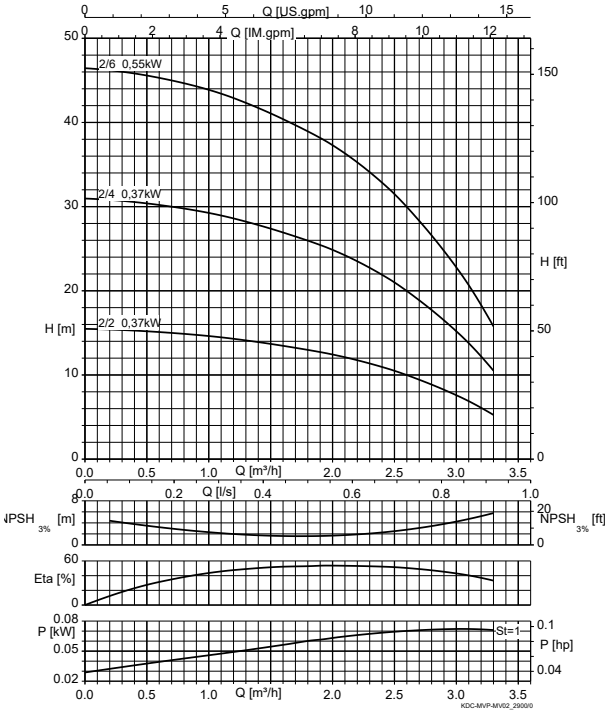


Fig. 142: St = 1: P per stage

KSB Delta Solo/Basic Compact MVP, Comeo 04, n ≈ 2880 rpm

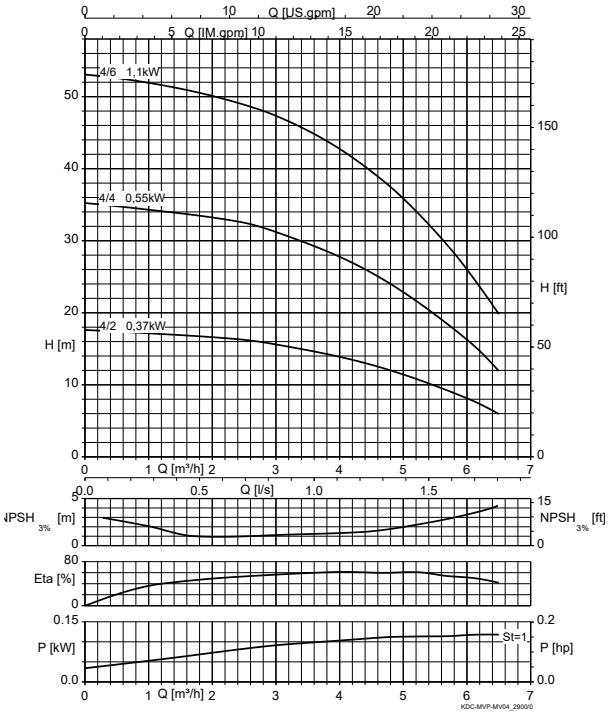


Fig. 143: St = 1: P per stage

KSB Delta Solo/Basic Compact MVP, Comeo 06, n ≈ 2880 rpm

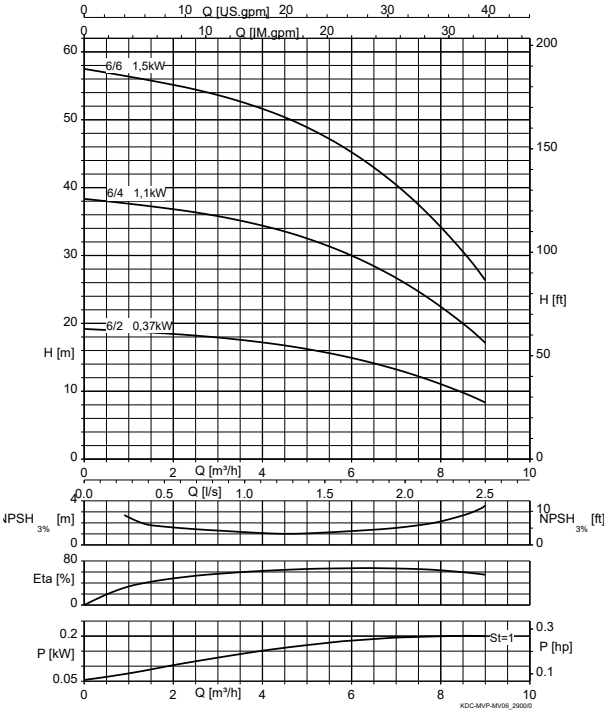


Fig. 144: St = 1: P per stage

Dimensions and connections

KSB Delta Solo Compact MVP, Comeo 02 / 04 / 06

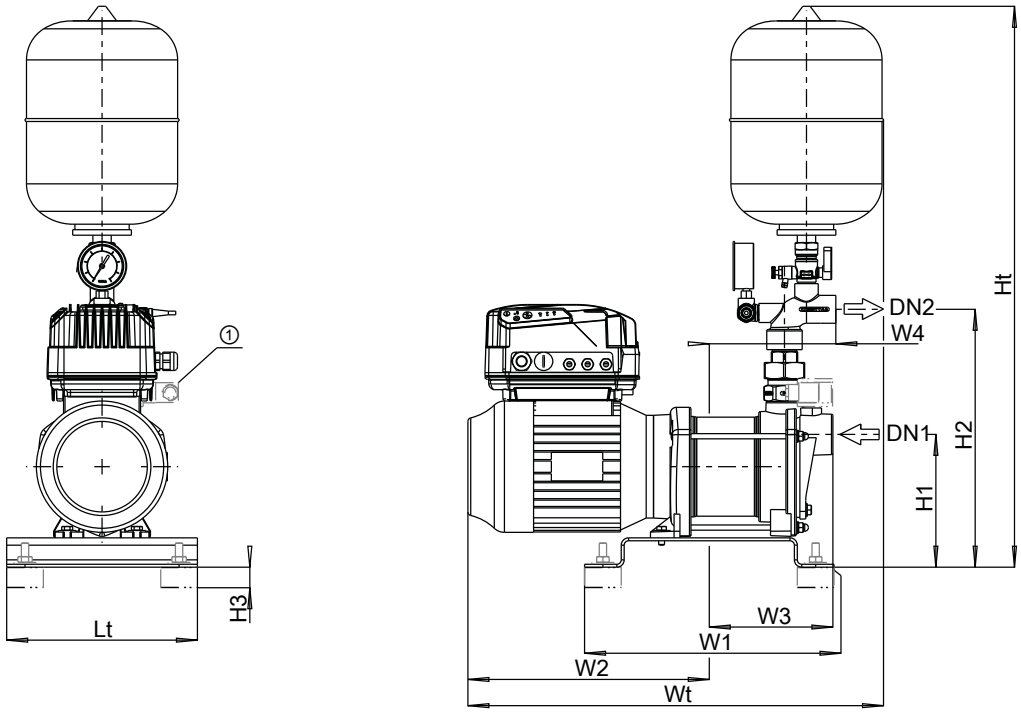


Fig. 145: Dimensions

①	Optional: pressure switch

Dimensions [mm] and connections

Number of pumps	With pressure switch	Comeo C	Number of stages	DN1	DN2	Lt	H1	H2	H3	Ht	W1	W2	W3	W4	WT
1	-	02	02	G 1 1/4	G 1	260	181	373	28	783	340	254	111	115	432
1	-	02	04	G 1 1/4	G 1	260	181	373	28	783	340	254	143	147	464
1	-	02	06	G 1 1/4	G 1	260	181	373	28	783	340	289	151	155	507
1	✘	02	06	G 1 1/4	G 1	260	181	373	28	783	340	289	151	155	507
1	-	04	02	G 1 1/4	G 1	260	181	373	28	783	340	254	111	115	432
1	-	04	04	G 1 1/4	G 1	260	181	373	28	783	340	254	143	147	464
1	-	04	06	G 1 1/4	G 1	260	181	373	28	783	340	329	151	155	547
1	✘	04	06	G 1 1/4	G 1	260	181	373	28	783	340	329	151	155	547
1	-	06	02	G 1 1/4	G 1	260	181	373	28	783	340	254	111	115	432
1	-	06	04	G 1 1/4	G 1	260	181	373	28	783	340	298	154	158	519
1	-	06	06	G 1 1/4	G 1	260	181	373	28	783	340	329	169	173	565
1	✘	06	06	G 1 1/4	G 1	260	181	373	28	783	340	329	169	173	565

KSB Delta Basic Compact MVP, Comeo 02 / 04 / 06

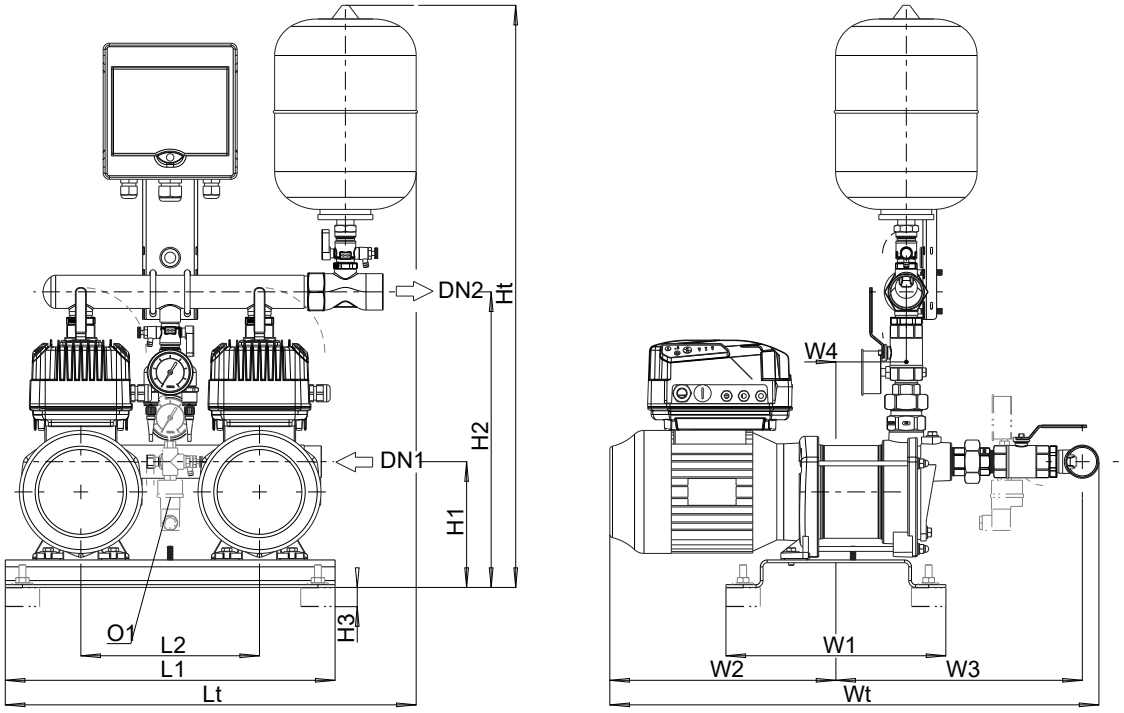


Fig. 146: Dimensions

①	Optional: pressure switch

Dimensions [mm] and connections

Number of pumps	With pressure switch	Comeo C	Number of stages	DN1	DN2	L1	L2	Lt	H1	H2	H3	Ht	W1	W2	W3	W4	WT
2	-	02	02	G 1 1/2	G 1 1/2	480	260	598	181	450	28	870	320	254	301	45	579
2	-	02	04	G 1 1/2	G 1 1/2	480	260	598	181	450	28	870	320	254	333	77	611
2	-	02	06	G 1 1/2	G 1 1/2	480	260	598	181	450	28	870	320	289	341	85	654
2	✘	02	06	G 1 1/2	G 1 1/2	480	260	598	181	450	28	870	320	289	341	85	654
2	-	04	02	G 1 1/2	G 1 1/2	480	260	598	181	450	28	870	320	254	301	45	579
2	-	04	04	G 1 1/2	G 1 1/2	480	260	598	181	450	28	870	320	254	333	77	611
2	-	04	06	G 1 1/2	G 1 1/2	480	260	598	181	450	28	870	320	329	341	85	694
2	✘	04	06	G 1 1/2	G 1 1/2	480	260	598	181	450	28	870	320	329	341	85	694
2	-	06	02	G 1 1/2	G 1 1/2	480	260	598	181	450	28	870	320	254	301	45	579
2	-	06	04	G 1 1/2	G 1 1/2	480	260	598	181	450	28	870	320	298	344	88	666
2	-	06	06	G 1 1/2	G 1 1/2	480	260	598	181	450	28	870	320	329	359	103	712
2	✘	06	06	G 1 1/2	G 1 1/2	480	260	598	181	450	28	870	320	329	359	103	712

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Multiple-pump Pressure Booster Systems

KSB Delta Basic

KSB Delta Basic SVP

KSB Delta Basic MVP

http://shop.ksb.com/catalog/k0/en/product/ES000942

Product benefits

- Energy-efficient operation and constant pressure ensured by speed control of all pumps.
- Suitable for drinking water; manufactured under stringent hygienic conditions
- Easy and fast commissioning of ready-to-connect, pre-assembled and tested system
- Corrosion resistance provided by powder-coated materials and stainless steel
- Integral dry running protection for reliable operation

SVP:

- Prevention of damage to the piping through pipe priming/filling function on version 3~400 V
- Remote monitoring of the system through connection to building management system

Further information

Prices on request

Characteristic curves 357
Dimensions and connections..... 360

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certifications

Overview

Label	Effective in:	Comment
WRAS	United Kingdom	Approved in accordance with the UK drinking water regulation

Main applications

- Pressure boosting

Fluids handled

- Drinking water
- Service water
- Cooling water
- Fluids not chemically or mechanically aggressive to the materials

Operating data

Operating properties

Characteristic		Value	
		MVP	SVP
Flow rate	Q [m³/h]	≤ 66	≤ 88
	Q [l/s]	≤ 18,3	≤ 24,4
Head	H [m]	≤ 108	≤ 134
Fluid temperature	$T_{min.}$ [°C]	≥ 0	≥ 0
	$T_{max.}$ [°C]	≤ +60	≤ +60
Operating pressure	p [bar]	≤ 16	≤ 16
Max. inlet pressure	p_{inl} [bar]	≤ 8	≤ 8
Motor rating	P [kW]	2,20	7,50

Design details

Design

- Fully automatic pressure booster system
- Variable speed operation
- Baseplate-mounted
- Membrane-type accumulator (direct-flow) to DIN 4807-5 on the discharge side, approved for drinking water, with shut-off element and drain valve.
- 2 (MVP / SVP) / 3 (MVP / SVP) / 4 (SVP) vertical high-pressure pumps with variable speed control
- Hydraulic components made of stainless steel / brass
- Check valve per pump
- Pressure gauge
- Integrated dry running protection
- Pressure transmitter on the discharge side
- Anti-vibration pads per system
- Discharge-side gate valve per pump
- Suction-side gate valve per pump
- Suction-side manifold and discharge-side manifold made of stainless steel

Installation

- Stationary dry installation

Drive

- Electric motor
- Enclosure IP55

MVP:

- Efficiency class IE3 to IEC 60034-30

SVP:

- Efficiency class IE5 to IEC 60034-30

Automation

- One frequency inverter per pump

SVP:

- Display on each frequency inverter
- Fault message signalling contact per pump
- Operation signalling contact per pump

Designation

Designation example

Position																								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
K	D	B		S	V	P	2	-	0	1	0	/	1	1	0	M	5	A	1	1		/	0	0	0
K	D	C		M	V	P	2	-	0	0	2	/	1	4	0	M	5	A	0	1	0	/	0	0	0
K	D	M		S	V	P	4	-	0	4	0	/	0	3	0	M	5	A	1	1		/	0	0	0
K	D	P		-	V	C	3	-	0	1	5	/	0	8	0	M	5	S	3	1		/	1	0	0
K	D	S		M	V	P	1	-	0	0	4	/	1	2	0	M	5	S	3	1		/	0	0	0
See data sheet																									

Designation key

Position	Code	Description
1-3	Type series	
	KDB	KSB Delta Basic
	KDC	KSB Delta Solo Compact / KSB Delta Basic Compact
	KDM	KSB Delta Macro
	KDP	KSB Delta Primo
	KDS	KSB Delta Solo
5-7	Type of control	
	-F-	Fixed speed pumps
	-VC	Frequency inverter for variable speed operation, cabinet-mounted frequency inverter
	MVP	Frequency inverter for variable speed operation (Nastec Mida), motor-mounted frequency inverter, intelligent control of system by frequency inverter
	SVP	Frequency inverter per pump (PumpDrive 2 Eco / PumpDrive 2) at the motor
8	Number of pumps	
	1	1 pump
	2	2 pumps
	3	3 pumps
	4	4 pumps
	5	5 pumps
	6	6 pumps
10-12	Pump size	
	002	Movitec 2
	004	Movitec 4
	006	Movitec 6

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Position	Code	Description
10-12	010	Movitec 10
	015	Movitec 15
	025	Movitec 25
	040	Movitec 40
	060	Movitec 60
	090	Movitec 90
	125	Movitec 125
	C02	Comeo 2
	C04	Comeo 4
	C06	Comeo 6
14-15	Number of pump stages	
	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 26, 28, 30	
16	Impeller design	
	0	No trimmed impeller
	1	1 trimmed impeller
	2	2 trimmed impellers
	L	Impeller for low NPSH value
	R	1 trimmed L-version impeller[129)]
	S	2 trimmed L-version impellers[129)]
17	Inlet conditions	
	M	Inlet side of pressure booster system connected to the municipal water supply, suction head operation
	F	Pressure booster system with break tank arranged on same level as pump, suction head operation
	L	Pressure booster system with break tank arranged at a lower level, suction lift operation
18	Frequency [Hz]	
	5	50 Hz
	6	60 Hz
19	Drive	
	A	Asynchronous motor (IEC), standard
	S	KSB SuPremE
20	Frequency inverter design	
	0	Fixed speed
	1	Nastec Mida
	2	Danfoss Mididrive (FC280)
	3	PumpDrive 2 Eco
	4	PumpDrive 2
21	Control system design	
	0	Integrated in drive
	1	KSB Booster Control Advanced
22	Dry running protection (RDP) design	
	0	Cos phi
	1	Pressure switch
	2	Pressure switch with pressure gauge
	3	Pressure transmitters
	4	Pressure transmitter with pressure gauge
24	Connection type	
	0	C × T (cap x thread)
	1	C × F (cap x flange)
	2	F × F (blind flange x flange)
25	Control cabinet design	
	0	No optional equipment
	1	With optional equipment
26	Design	
	0	Standard design
	1/2	Special design

129 L-version impeller = design for low NPSH values

Materials

Overview of available materials

Part No.	Description	Material
101	Pump casing	1.4308
10-6	Pump shroud	1.4301
200	Hydraulic system	1.4301
412	Elastomer	EPDM
433	Mechanical seal	To EN 12756
591	Membrane-type accumulator, connection	1.4401
742	Swing check valve	POM (polyoxymethylene)
743	Ball valve	Brass, nickel-coated
890	Baseplate	Steel, powder-coated
-	Membrane	Approved for drinking water

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Technical data

KSB Delta Basic MVP

MVP = variable speed pressure booster system

3 × 400 V + N ± 10 %

Dry running protection = pressure switch

50 Hz

KSB Delta Basic	Number of pumps	Movitec	Number of stages	DN1	DN2	P_N [kW]	Efficiency class	I_N [A]	Frequency of starts [x/h]	$I_{min\ Overcurrent\ protection}$ [A]	$I_{max\ Overcurrent\ protection}$ [A]	Sound pressure level [dB(A)]	Enclosure	PN	Mat. No.	[kg]
MVP	2	02	02	G 1 1/2	G 1 1/2	0,37	IE-	4,5	50	7,8	25	60	IP55	16	48281304	64,08
MVP	2	02	03	G 1 1/2	G 1 1/2	0,37	IE-	4,5	50	7,8	25	60	IP55	16	48281305	64,97
MVP	2	02	04	G 1 1/2	G 1 1/2	0,37	IE-	4,5	50	7,8	25	60	IP55	16	48281306	65,9
MVP	2	02	05	G 1 1/2	G 1 1/2	0,37	IE-	4,5	50	7,8	25	60	IP55	16	48278511	66,83
MVP	2	02	06	G 1 1/2	G 1 1/2	0,55	IE-	4,5	50	7,8	25	60	IP55	16	48281307	70,74
MVP	2	02	07	G 1 1/2	G 1 1/2	0,55	IE-	4,5	50	7,8	25	60	IP55	16	48281308	71,62
MVP	2	02	08	G 1 1/2	G 1 1/2	0,55	IE-	4,5	50	7,8	25	60	IP55	16	48278512	73,04
MVP	2	02	09	G 1 1/2	G 1 1/2	0,75	IE3	7	180	13	25	55	IP55	16	48281309	78,76
MVP	2	02	10	G 1 1/2	G 1 1/2	0,75	IE3	7	180	13	25	55	IP55	16	48278513	79,72
MVP	2	02	11	G 1 1/2	G 1 1/2	1,10	IE3	7	180	13	25	55	IP55	16	48281310	85,25
MVP	2	02	12	G 1 1/2	G 1 1/2	1,10	IE3	7	180	13	25	55	IP55	16	48281311	86,2
MVP	2	02	14	G 1 1/2	G 1 1/2	1,10	IE3	7	180	13	25	55	IP55	16	48278514	88,53
MVP	2	02	18	G 1 1/2	G 1 1/2	1,50	IE3	11	50	19,1	25	55	IP55	16	48281313	101,72
MVP	2	02	20	G 1 1/2	G 1 1/2	1,50	IE3	11	50	19,1	25	55	IP55	16	48281314	109,16
MVP	2	04	02	G 1 1/2	G 1 1/2	0,37	IE-	4,5	50	7,8	25	60	IP55	16	48278515	63,92
MVP	2	04	03	G 1 1/2	G 1 1/2	0,55	IE-	4,5	50	7,8	25	60	IP55	16	48281315	67,71
MVP	2	04	04	G 1 1/2	G 1 1/2	0,55	IE-	4,5	50	7,8	25	60	IP55	16	48278516	68,56
MVP	2	04	05	G 1 1/2	G 1 1/2	0,75	IE3	7	180	13	25	55	IP55	16	48278517	74,16
MVP	2	04	06	G 1 1/2	G 1 1/2	1,10	IE3	7	180	13	25	55	IP55	16	48281316	79,62
MVP	2	04	07	G 1 1/2	G 1 1/2	1,10	IE3	7	180	13	25	55	IP55	16	48278518	80,91
MVP	2	04	08	G 1 1/2	G 1 1/2	1,50	IE3	11	50	19,1	25	55	IP55	16	48281317	91,21
MVP	2	04	09	G 1 1/2	G 1 1/2	1,50	IE3	11	50	19,1	25	55	IP55	16	48281318	92,11
MVP	2	04	10	G 1 1/2	G 1 1/2	1,50	IE3	11	50	19,1	25	55	IP55	16	48278519	92,99
MVP	2	04	11	G 1 1/2	G 1 1/2	2,20 (2,00)	IE3	11	30	19,1	25	55	IP55	16	48281319	102,92
MVP	2	04	12	G 1 1/2	G 1 1/2	2,20 (2,00)	IE3	11	30	19,1	25	55	IP55	16	48281320	103,79
MVP	2	06	02	G 1 1/2	G 1 1/2	0,37	IE-	4,5	50	7,8	25	60	IP55	16	48278520	66,42
MVP	2	06	03	G 1 1/2	G 1 1/2	0,75	IE3	7	180	13	25	55	IP55	16	48278521	75,09
MVP	2	06	04	G 1 1/2	G 1 1/2	1,10	IE3	7	180	13	25	55	IP55	16	48281321	80,67
MVP	2	06	05	G 1 1/2	G 1 1/2	1,10	IE3	7	180	13	25	55	IP55	16	48278522	81,65
MVP	2	06	06	G 1 1/2	G 1 1/2	1,50	IE3	11	50	19,1	25	55	IP55	16	48281322	92,52
MVP	2	06	07	G 1 1/2	G 1 1/2	1,50	IE3	11	50	19,1	25	55	IP55	16	48281323	93,55
MVP	2	06	08	G 1 1/2	G 1 1/2	2,20 (2,00)	IE3	11	30	19,1	25	55	IP55	16	48281324	103,13
MVP	2	06	09	G 1 1/2	G 1 1/2	2,20 (2,00)	IE3	11	30	19,1	25	55	IP55	16	48281325	104,11
MVP	2	10	01	G 2	G 2	0,75	IE3	7	180	13	25	55	IP55	16	48281326	97,39
MVP	2	10	02	G 2	G 2	0,75	IE3	7	180	13	25	55	IP55	16	48278525	97,91
MVP	2	10	03	G 2	G 2	1,10	IE3	7	180	13	25	55	IP55	16	48278526	104,79
MVP	2	10	04	G 2	G 2	1,50	IE3	11	50	19,1	25	55	IP55	16	48278527	116,1
MVP	2	10	05	G 2	G 2	2,20 (2,00)	IE3	11	30	19,1	25	55	IP55	16	48281327	126,52
MVP	2	15	01	DN 65	DN 65	1,10	IE3	7	180	13	25	55	IP55	16	48281328	109,74
MVP	2	15	02	DN 65	DN 65	2,20 (2,00)	IE3	11	30	19,1	25	55	IP55	16	48281329	129,1
MVP	3	02	02	G 1 1/2	G 1 1/2	0,37	IE-	4,5	50	7,8	25	60	IP55	16	48281533	88,52
MVP	3	02	03	G 1 1/2	G 1 1/2	0,37	IE-	4,5	50	7,8	25	60	IP55	16	48281534	89,86
MVP	3	02	04	G 1 1/2	G 1 1/2	0,37	IE-	4,5	50	7,8	25	60	IP55	16	48281535	91,26
MVP	3	02	05	G 1 1/2	G 1 1/2	0,37	IE-	4,5	50	7,8	25	60	IP55	16	48278528	92,65

KSB Delta Basic	Number of pumps	Movitec	Number of stages	DN1	DN2	P_N [kW]	Efficiency class	I_N [A]	Frequency of starts [x/h]	$I_{min\ Overcurrent\ protection}$ [A]	$I_{max\ Overcurrent\ protection}$ [A]	Sound pressure level [dB(A)]	Enclosure	PN	Mat. No.	[kg]
MVP	3	02	06	G 1 1/2	G 1 1/2	0,55	IE-	4,5	50	7,8	25	60	IP55	16	48281536	98,52
MVP	3	02	07	G 1 1/2	G 1 1/2	0,55	IE-	4,5	50	7,8	25	60	IP55	16	48281537	99,84
MVP	3	02	08	G 1 1/2	G 1 1/2	0,55	IE-	4,5	50	7,8	25	60	IP55	16	48278529	101,72
MVP	3	02	09	G 1 1/2	G 1 1/2	0,75	IE3	7	180	13	25	55	IP55	16	48281538	110,31
MVP	3	02	10	G 1 1/2	G 1 1/2	0,75	IE3	7	180	13	25	55	IP55	16	48278530	111,75
MVP	3	02	11	G 1 1/2	G 1 1/2	1,10	IE3	7	180	13	25	55	IP55	16	48281539	120,05
MVP	3	02	12	G 1 1/2	G 1 1/2	1,10	IE3	7	180	13	25	55	IP55	16	48281540	121,46
MVP	3	02	14	G 1 1/2	G 1 1/2	1,10	IE3	7	180	13	25	55	IP55	16	48278531	124,72
MVP	3	02	16	G 1 1/2	G 1 1/2	1,50	IE3	11	50	19,1	25	55	IP55	16	48281541	141,72
MVP	3	02	18	G 1 1/2	G 1 1/2	1,50	IE3	11	50	19,1	25	55	IP55	16	48281542	144,51
MVP	3	02	20	G 1 1/2	G 1 1/2	1,50	IE3	11	50	19,1	25	55	IP55	16	48281543	153,89
MVP	3	04	02	G 1 1/2	G 1 1/2	0,37	IE-	4,5	50	7,8	25	60	IP55	16	48278532	88,28
MVP	3	04	03	G 1 1/2	G 1 1/2	0,55	IE-	4,5	50	7,8	25	60	IP55	16	48281544	93,97
MVP	3	04	04	G 1 1/2	G 1 1/2	0,55	IE-	4,5	50	7,8	25	60	IP55	16	48278533	95,25
MVP	3	04	05	G 1 1/2	G 1 1/2	0,75	IE3	7	180	13	25	55	IP55	16	48278534	103,65
MVP	3	04	06	G 1 1/2	G 1 1/2	1,10	IE3	7	180	13	25	55	IP55	16	48281545	111,84
MVP	3	04	07	G 1 1/2	G 1 1/2	1,10	IE3	7	180	13	25	55	IP55	16	48278535	113,53
MVP	3	04	08	G 1 1/2	G 1 1/2	1,50	IE3	11	50	19,1	25	55	IP55	16	48281546	128,98
MVP	3	04	09	G 1 1/2	G 1 1/2	1,50	IE3	11	50	19,1	25	55	IP55	16	48281547	130,33
MVP	3	04	10	G 1 1/2	G 1 1/2	1,50	IE3	11	50	19,1	25	55	IP55	16	48278536	131,65
MVP	3	04	11	G 1 1/2	G 1 1/2	2,20 (2,00)	IE3	11	30	19,1	25	55	IP55	16	48281548	146,31
MVP	3	04	12	G 1 1/2	G 1 1/2	2,20 (2,00)	IE3	11	30	19,1	25	55	IP55	16	48281549	147,61
MVP	3	06	02	G 2	G 2	0,37	IE-	4,5	50	7,8	25	60	IP55	16	48278537	93,27
MVP	3	06	03	G 2	G 2	0,75	IE3	7	180	13	25	55	IP55	16	48278538	106,27
MVP	3	06	04	G 2	G 2	1,10	IE3	7	180	13	25	55	IP55	16	48281550	114,65
MVP	3	06	05	G 2	G 2	1,10	IE3	7	180	13	25	55	IP55	16	48278539	116,12
MVP	3	06	06	G 2	G 2	1,50	IE3	11	50	19,1	25	55	IP55	16	48281551	132,18
MVP	3	06	07	G 2	G 2	1,50	IE3	11	50	19,1	25	55	IP55	16	48278540	133,72
MVP	3	06	08	G 2	G 2	2,20 (2,00)	IE3	11	30	19,1	25	55	IP55	16	48281552	148,1
MVP	3	06	09	G 2	G 2	2,20 (2,00)	IE3	11	30	19,1	25	55	IP55	16	48281553	149,56
MVP	3	10	01	G 2	G 2	0,75	IE3	7	180	13	25	55	IP55	16	48281554	139,01
MVP	3	10	02	G 2	G 2	0,75	IE3	7	180	13	25	55	IP55	16	48278542	139,78
MVP	3	10	03	G 2	G 2	1,10	IE3	7	180	13	25	55	IP55	16	48278543	149,86
MVP	3	10	04	G 2	G 2	1,50	IE3	11	50	19,1	25	55	IP55	16	48278544	166,83
MVP	3	10	05	G 2	G 2	2,20 (2,00)	IE3	11	30	19,1	25	55	IP55	16	48281555	182,46
MVP	3	15	01	DN 65	DN 65	1,10	IE3	7	180	13	25	55	IP55	16	48281556	156,59
MVP	3	15	02	DN 65	DN 65	2,20 (2,00)	IE3	11	30	19,1	25	55	IP55	16	48281557	185,39

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

KSB Delta Basic SVP

SVP = variable speed pressure booster system with KSB SuPremE motor

3 × 400 V ± 10 %

Dry running protection = pressure sensor

50 Hz

KSB Delta Basic	Number of pumps	Movitec	Number of stages	DN1	DN2	P_N [kW]	Efficiency class	I_N [A]	Frequency of starts [x/h]	$I_{min\ Overcurrent\ protection}$ [A]	$I_{max\ Overcurrent\ protection}$ [A]	Sound pressure level [dB(A)]	Enclosure	PN	Mat. No.	[kg]
SVP	2	02	02	G 1 1/2	G 1 1/2	0,37	IE-	1,3	-	3,8	25	70	IP55	16	48281330	72,46
SVP	2	02	03	G 1 1/2	G 1 1/2	0,37	IE-	1,3	-	3,8	25	70	IP55	16	48281331	73,35
SVP	2	02	04	G 1 1/2	G 1 1/2	0,37	IE-	1,3	-	3,8	25	70	IP55	16	48281332	74,28
SVP	2	02	05	G 1 1/2	G 1 1/2	0,55	IE5	1,8	-	5	25	70	IP55	16	48278545	75,21
SVP	2	02	06	G 1 1/2	G 1 1/2	0,55	IE5	1,8	-	5	25	70	IP55	16	48281333	76,14
SVP	2	02	07	G 1 1/2	G 1 1/2	0,55	IE5	1,8	-	5	25	70	IP55	16	48281334	77,02
SVP	2	02	08	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	6,4	25	70	IP55	16	48278546	78,44
SVP	2	02	09	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	6,4	25	70	IP55	16	48281335	82,56
SVP	2	02	10	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	6,4	25	70	IP55	16	48278547	83,52
SVP	2	02	11	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	8,4	25	70	IP55	16	48281336	88,45
SVP	2	02	12	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	8,4	25	70	IP55	16	48281337	89,4
SVP	2	02	14	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	8,4	25	70	IP55	16	48278548	91,73
SVP	2	02	16	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	8,9	25	70	IP55	16	48281338	100,47
SVP	2	02	18	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	8,9	25	70	IP55	16	48281339	102,33
SVP	2	02	20	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	8,9	25	70	IP55	16	48281340	107,77
SVP	2	04	02	G 1 1/2	G 1 1/2	0,37	IE-	1,3	-	3,8	25	70	IP55	16	48278549	72,3
SVP	2	04	03	G 1 1/2	G 1 1/2	0,55	IE5	1,8	-	5	25	70	IP55	16	48281341	73,11
SVP	2	04	04	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	6,4	25	70	IP55	16	48278550	73,96
SVP	2	04	05	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	6,4	25	70	IP55	16	48278551	77,96
SVP	2	04	06	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	8,4	25	70	IP55	16	48281342	82,82
SVP	2	04	07	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	8,4	25	70	IP55	16	48278552	84,11
SVP	2	04	08	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	8,9	25	70	IP55	16	48281343	91,82
SVP	2	04	09	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	8,9	25	70	IP55	16	48281344	92,72
SVP	2	04	10	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	8,9	25	70	IP55	16	48278553	93,6
SVP	2	04	11	G 1 1/2	G 1 1/2	2,20	IE5	6	-	12,8	25	70	IP55	16	48281345	103,93
SVP	2	04	12	G 1 1/2	G 1 1/2	2,20	IE5	6	-	12,8	25	70	IP55	16	48281346	104,8
SVP	2	04	14	G 1 1/2	G 1 1/2	2,20	IE5	6	-	12,8	25	70	IP55	16	48278554	106,49
SVP	2	04	16	G 1 1/2	G 1 1/2	3,00	IE5	8	-	16,3	25	71	IP55	16	48281347	121,33
SVP	2	06	02	G 1 1/2	G 1 1/2	0,55	IE5	1,8	-	5	25	70	IP55	16	48278555	74,8
SVP	2	06	03	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	6,4	25	70	IP55	16	48278556	78,89
SVP	2	06	04	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	8,4	25	70	IP55	16	48281348	83,87
SVP	2	06	05	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	8,4	25	70	IP55	16	48278557	84,85
SVP	2	06	06	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	8,9	25	70	IP55	16	48281349	93,13
SVP	2	06	07	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	8,9	25	70	IP55	16	48278558	94,15
SVP	2	06	08	G 1 1/2	G 1 1/2	2,20	IE5	6	-	12,8	25	70	IP55	16	48281350	104,14
SVP	2	06	09	G 1 1/2	G 1 1/2	2,20	IE5	6	-	12,8	25	70	IP55	16	48281351	105,11
SVP	2	06	10	G 1 1/2	G 1 1/2	2,20	IE5	6	-	12,8	25	70	IP55	16	48278559	106,61
SVP	2	06	11	G 1 1/2	G 1 1/2	3,00	IE5	8	-	16,3	25	71	IP55	16	48281352	120,7
SVP	2	06	12	G 1 1/2	G 1 1/2	3,00	IE5	8	-	16,3	25	71	IP55	16	48281353	121,69
SVP	2	06	14	G 1 1/2	G 1 1/2	3,00	IE5	8	-	16,3	25	71	IP55	16	48278560	123,65
SVP	2	06	16	G 1 1/2	G 1 1/2	4,00	IE5	10	-	16,6	25	71	IP55	16	48281354	150,8
SVP	2	10	01	G 2	G 2	0,75	IE5	2,5	-	6,4	25	70	IP55	16	48281355	101,19
SVP	2	10	02	G 2	G 2	0,75	IE5	2,5	-	6,4	25	70	IP55	16	48278561	101,71
SVP	2	10	03	G 2	G 2	1,10	IE5	3,5	-	8,4	25	70	IP55	16	48278562	107,99
SVP	2	10	04	G 2	G 2	1,50	IE5	4,9	-	8,9	25	70	IP55	16	48278563	116,71
SVP	2	10	05	G 2	G 2	2,20	IE5	6	-	12,8	25	70	IP55	16	48281356	127,53
SVP	2	10	06	G 2	G 2	2,20	IE5	6	-	12,8	25	70	IP55	16	48278564	129,34

KSB Delta Basic	Number of pumps	Movitec	Number of stages	DN1	DN2	P_N [kW]	Efficiency class	I_N [A]	Frequency of starts [x/h]	$I_{min\ Overcurrent\ protection}$ [A]	$I_{max\ Overcurrent\ protection}$ [A]	Sound pressure level [dB(A)]	Enclosure	PN	Mat. No.	[kg]
SVP	2	10	07	G 2	G 2	3,00	IE5	8	-	16,3	25	71	IP55	16	48281357	144,89
SVP	2	10	08	G 2	G 2	3,00	IE5	8	-	16,3	25	71	IP55	16	48278565	146,76
SVP	2	10	09	G 2	G 2	4,00	IE5	10	-	16,6	25	71	IP55	16	48281358	171,4
SVP	2	10	10	G 2	G 2	4,00	IE5	10	-	16,6	25	71	IP55	16	48281359	176,87
SVP	2	10	11	G 2	G 2	4,00	IE5	10	-	16,6	25	71	IP55	16	48278566	178,79
SVP	2	10	13	G 2	G 2	5,50	IE5	14	-	25,2	40	71	IP55	16	48281360	235,66
SVP	2	15	01	DN 65	DN 65	1,10	IE5	3,5	-	8,4	25	70	IP55	16	48281361	112,94
SVP	2	15	02	DN 65	DN 65	2,20	IE5	6	-	12,8	25	70	IP55	16	48278567	130,11
SVP	2	15	03	DN 65	DN 65	3,00	IE5	8	-	16,3	25	71	IP55	16	48278568	145,45
SVP	2	15	04	DN 65	DN 65	4,00	IE5	10	-	16,6	25	71	IP55	16	48278569	169,21
SVP	2	15	05	DN 65	DN 65	5,50	IE5	14	-	25,2	40	71	IP55	16	48281362	207,81
SVP	2	15	06	DN 65	DN 65	5,50	IE5	14	-	25,2	40	71	IP55	16	48278570	209,94
SVP	2	15	07	DN 65	DN 65	7,50	IE5	18	-	31,8	40	71	IP55	16	48281363	244,01
SVP	2	15	08	DN 65	DN 65	7,50	IE5	18	-	31,8	40	71	IP55	16	48278571	246,09
SVP	3	02	02	G 1 1/2	G 1 1/2	0,37	IE-	1,3	-	5,2	25	70	IP55	16	48281558	101,07
SVP	3	02	03	G 1 1/2	G 1 1/2	0,37	IE-	1,3	-	5,2	25	70	IP55	16	48281559	102,41
SVP	3	02	04	G 1 1/2	G 1 1/2	0,37	IE-	1,3	-	5,2	25	70	IP55	16	48281560	103,8
SVP	3	02	05	G 1 1/2	G 1 1/2	0,55	IE5	1,8	-	7	25	70	IP55	16	48278572	105,19
SVP	3	02	06	G 1 1/2	G 1 1/2	0,55	IE5	1,8	-	7	25	70	IP55	16	48281561	106,59
SVP	3	02	07	G 1 1/2	G 1 1/2	0,55	IE5	1,8	-	7	25	70	IP55	16	48281562	107,92
SVP	3	02	08	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	9,1	25	70	IP55	16	48278573	109,8
SVP	3	02	09	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	9,1	25	70	IP55	16	48281563	115,99
SVP	3	02	10	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	9,1	25	70	IP55	16	48278574	117,42
SVP	3	02	11	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	12,1	25	70	IP55	16	48281564	124,83
SVP	3	02	12	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	12,1	25	70	IP55	16	48281565	126,24
SVP	3	02	14	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	12,1	25	70	IP55	16	48278575	129,49
SVP	3	02	16	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	12,8	25	70	IP55	16	48281566	142,61
SVP	3	02	18	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	12,8	25	70	IP55	16	48281567	145,4
SVP	3	02	20	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	12,8	25	70	IP55	16	48281568	151,78
SVP	3	04	02	G 1 1/2	G 1 1/2	0,37	IE-	1,3	-	5,2	25	70	IP55	16	48278576	100,83
SVP	3	04	03	G 1 1/2	G 1 1/2	0,55	IE5	1,8	-	7	25	70	IP55	16	48281569	102,05
SVP	3	04	04	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	9,1	25	70	IP55	16	48278577	103,33
SVP	3	04	05	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	9,1	25	70	IP55	16	48278578	109,33
SVP	3	04	06	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	12,1	25	70	IP55	16	48281570	116,61
SVP	3	04	07	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	12,1	25	70	IP55	16	48278579	118,3
SVP	3	04	08	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	12,8	25	70	IP55	16	48281571	129,87
SVP	3	04	09	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	12,8	25	70	IP55	16	48281572	131,22
SVP	3	04	10	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	12,8	25	70	IP55	16	48278580	132,54
SVP	3	04	11	G 1 1/2	G 1 1/2	2,20	IE5	6	-	18,6	25	70	IP55	16	48281573	147,8
SVP	3	04	12	G 1 1/2	G 1 1/2	2,20	IE5	6	-	18,6	25	70	IP55	16	48281574	149,1
SVP	3	04	14	G 1 1/2	G 1 1/2	2,20	IE5	6	-	18,6	25	70	IP55	16	48278581	151,64
SVP	3	04	16	G 1 1/2	G 1 1/2	3,00	IE5	8	-	24	25	71	IP55	16	48281575	173,9
SVP	3	06	02	G 2	G 2	0,55	IE5	1,8	-	7	25	70	IP55	16	48278582	105,82
SVP	3	06	03	G 2	G 2	0,75	IE5	2,5	-	9,1	25	70	IP55	16	48278583	111,95
SVP	3	06	04	G 2	G 2	1,10	IE5	3,5	-	12,1	25	70	IP55	16	48281576	119,43
SVP	3	06	05	G 2	G 2	1,10	IE5	3,5	-	12,1	25	70	IP55	16	48278584	120,9
SVP	3	06	06	G 2	G 2	1,50	IE5	4,9	-	12,8	25	70	IP55	16	48281577	133,08
SVP	3	06	07	G 2	G 2	1,50	IE5	4,9	-	12,8	25	70	IP55	16	48278585	134,61
SVP	3	06	08	G 2	G 2	2,20	IE5	6	-	18,6	25	70	IP55	16	48281578	149,59
SVP	3	06	09	G 2	G 2	2,20	IE5	6	-	18,6	25	70	IP55	16	48281579	151,05
SVP	3	06	10	G 2	G 2	2,20	IE5	6	-	18,6	25	70	IP55	16	48278586	153,05
SVP	3	06	11	G 2	G 2	3,00	IE5	8	-	24	25	71	IP55	16	48281580	174,19

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

KSB Delta Basic	Number of pumps	Movitec	Number of stages	DN1	DN2	P_N [kW]	Efficiency class	I_N [A]	Frequency of starts [x/h]	$I_{min\ Overcurrent\ protection}$ [A]	$I_{max\ Overcurrent\ protection}$ [A]	Sound pressure level [dB(A)]	Enclosure	PN	Mat. No.	[kg]
SVP	3	06	12	G 2	G 2	3,00	IE5	8	-	24	25	71	IP55	16	48281581	175,67
SVP	3	06	14	G 2	G 2	3,00	IE5	8	-	24	25	71	IP55	16	48278587	178,62
SVP	3	06	16	G 2	G 2	4,00	IE5	10	-	24,4	25	71	IP55	16	48281582	217,57
SVP	3	10	01	G 2	G 2	0,75	IE5	2,5	-	9,1	25	70	IP55	16	48281583	144,69
SVP	3	10	02	G 2	G 2	0,75	IE5	2,5	-	9,1	25	70	IP55	16	48278588	145,46
SVP	3	10	03	G 2	G 2	1,10	IE5	3,5	-	12,1	25	70	IP55	16	48278589	154,64
SVP	3	10	04	G 2	G 2	1,50	IE5	4,9	-	12,8	25	70	IP55	16	48278590	167,72
SVP	3	10	05	G 2	G 2	2,20	IE5	6	-	18,6	25	70	IP55	16	48281584	183,95
SVP	3	10	06	G 2	G 2	2,20	IE5	6	-	18,6	25	70	IP55	16	48278591	186,67
SVP	3	10	07	G 2	G 2	3,00	IE5	8	-	24	25	71	IP55	16	48281585	209,76
SVP	3	10	08	G 2	G 2	3,00	IE5	8	-	24	25	71	IP55	16	48278592	212,56
SVP	3	10	09	G 2	G 2	4,00	IE5	10	-	24,4	25	71	IP55	16	48281586	249,52
SVP	3	10	10	G 2	G 2	4,00	IE5	10	-	24,4	25	71	IP55	16	48281587	255,95
SVP	3	10	11	G 2	G 2	4,00	IE5	10	-	24,4	25	71	IP55	16	48278593	258,83
SVP	3	10	13	G 2	G 2	5,50	IE5	14	-	37,3	40	71	IP55	16	48281588	344,13
SVP	3	15	01	DN 65	DN 65	1,10	IE5	3,5	-	12,1	25	70	IP55	16	48281589	161,37
SVP	3	15	02	DN 65	DN 65	2,20	IE5	6	-	18,6	25	70	IP55	16	48278594	186,88
SVP	3	15	03	DN 65	DN 65	3,00	IE5	8	-	24	25	71	IP55	16	48278595	209,89
SVP	3	15	04	DN 65	DN 65	4,00	IE5	10	-	24,4	25	71	IP55	16	48278596	245,54
SVP	3	15	05	DN 65	DN 65	5,50	IE5	14	-	37,3	40	71	IP55	16	48281590	301,42
SVP	3	15	06	DN 65	DN 65	5,50	IE5	14	-	37,3	40	71	IP55	16	48278597	304,61
SVP	3	15	07	DN 65	DN 65	7,50	IE5	18	-	47,1	50	71	IP55	16	48281591	355,72
SVP	3	15	08	DN 65	DN 65	7,50	IE5	18	-	47,1	50	71	IP55	16	48278598	358,85
SVP	4	02	02	G 1 1/2	G 1 1/2	0,37	IE-	1,3	-	6,6	25	70	IP55	16	48281760	132,68
SVP	4	02	03	G 1 1/2	G 1 1/2	0,37	IE-	1,3	-	6,6	25	70	IP55	16	48281761	134,46
SVP	4	02	04	G 1 1/2	G 1 1/2	0,37	IE-	1,3	-	6,6	25	70	IP55	16	48281762	136,32
SVP	4	02	05	G 1 1/2	G 1 1/2	0,55	IE5	1,8	-	9	25	70	IP55	16	48276279	138,17
SVP	4	02	06	G 1 1/2	G 1 1/2	0,55	IE5	1,8	-	9	25	70	IP55	16	48281763	140,04
SVP	4	02	07	G 1 1/2	G 1 1/2	0,55	IE5	1,8	-	9	25	70	IP55	16	48281764	141,81
SVP	4	02	08	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	11,8	25	70	IP55	16	48276280	144,15
SVP	4	02	09	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	11,8	25	70	IP55	16	48281765	152,41
SVP	4	02	10	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	11,8	25	70	IP55	16	48276281	154,32
SVP	4	02	11	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	15,8	25	70	IP55	16	48281766	164,19
SVP	4	02	12	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	15,8	25	70	IP55	16	48281767	166,07
SVP	4	02	14	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	15,8	25	70	IP55	16	48276282	170,25
SVP	4	02	16	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	16,7	25	70	IP55	16	48281768	187,74
SVP	4	02	18	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	16,7	25	70	IP55	16	48281769	191,46
SVP	4	02	20	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	16,7	25	70	IP55	16	48281770	198,79
SVP	4	04	02	G 1 1/2	G 1 1/2	0,37	IE-	1,3	-	6,6	25	70	IP55	16	48276283	132,36
SVP	4	04	03	G 1 1/2	G 1 1/2	0,55	IE5	1,8	-	9	25	70	IP55	16	48281771	133,98
SVP	4	04	04	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	11,8	25	70	IP55	16	48276284	135,69
SVP	4	04	05	G 1 1/2	G 1 1/2	0,75	IE5	2,5	-	11,8	25	70	IP55	16	48276285	143,69
SVP	4	04	06	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	15,8	25	70	IP55	16	48281772	153,4
SVP	4	04	07	G 1 1/2	G 1 1/2	1,10	IE5	3,5	-	15,8	25	70	IP55	16	48276286	155,49
SVP	4	04	08	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	16,7	25	70	IP55	16	48281773	170,92
SVP	4	04	09	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	16,7	25	70	IP55	16	48281774	172,72
SVP	4	04	10	G 1 1/2	G 1 1/2	1,50	IE5	4,9	-	16,7	25	70	IP55	16	48276287	174,47
SVP	4	04	11	G 1 1/2	G 1 1/2	2,20	IE5	6	-	24,5	25	70	IP55	16	48281775	194,66
SVP	4	04	12	G 1 1/2	G 1 1/2	2,20	IE5	6	-	24,5	25	70	IP55	16	48281776	196,39
SVP	4	04	14	G 1 1/2	G 1 1/2	2,20	IE5	6	-	24,5	25	70	IP55	16	48276288	199,78
SVP	4	04	16	G 1 1/2	G 1 1/2	3,00	IE5	8	-	31,7	40	71	IP55	16	48281777	229,46
SVP	4	06	02	G 2	G 2	0,55	IE5	1,8	-	9	25	70	IP55	16	48276289	138,9

KSB Delta Basic	Number of pumps	Movitec	Number of stages	DN1	DN2	P_N [kW]	Efficiency class	I_N [A]	Frequency of starts [x/h]	$I_{min\ Overcurrent\ protection}$ [A]	$I_{max\ Overcurrent\ protection}$ [A]	Sound pressure level [dB(A)]	Enclosure	PN	Mat. No.	[kg]
SVP	4	06	03	G 2	G 2	0,75	IE5	2,5	-	11,8	25	70	IP55	16	48276290	147,08
SVP	4	06	04	G 2	G 2	1,10	IE5	3,5	-	15,8	25	70	IP55	16	48281778	157,05
SVP	4	06	05	G 2	G 2	1,10	IE5	3,5	-	15,8	25	70	IP55	16	48276291	159,01
SVP	4	06	06	G 2	G 2	1,50	IE5	4,9	-	16,7	25	70	IP55	16	48281779	175,08
SVP	4	06	07	G 2	G 2	1,50	IE5	4,9	-	16,7	25	70	IP55	16	48276292	177,14
SVP	4	06	08	G 2	G 2	2,20	IE5	6	-	24,5	25	70	IP55	16	48281780	197,11
SVP	4	06	09	G 2	G 2	2,20	IE5	6	-	24,5	25	70	IP55	16	48281781	199,06
SVP	4	06	10	G 2	G 2	2,20	IE5	6	-	24,5	25	70	IP55	16	48276293	201,56
SVP	4	06	11	G 2	G 2	3,00	IE5	8	-	31,7	40	71	IP55	16	48281782	229,75
SVP	4	06	12	G 2	G 2	3,00	IE5	8	-	31,7	40	71	IP55	16	48281783	231,72
SVP	4	06	14	G 2	G 2	3,00	IE5	8	-	31,7	40	71	IP55	16	48276294	235,65
SVP	4	06	16	G 2	G 2	4,00	IE5	10	-	32,2	40	71	IP55	16	48281784	286,4
SVP	4	10	01	DN 65	DN 65	0,75	IE5	2,5	-	11,8	25	70	IP55	16	48281785	194,18
SVP	4	10	02	DN 65	DN 65	0,75	IE5	2,5	-	11,8	25	70	IP55	16	48276295	195,21
SVP	4	10	03	DN 65	DN 65	1,10	IE5	3,5	-	15,8	25	70	IP55	16	48276296	207,3
SVP	4	10	04	DN 65	DN 65	1,50	IE5	4,9	-	16,7	25	70	IP55	16	48276297	224,74
SVP	4	10	05	DN 65	DN 65	2,20	IE5	6	-	24,5	25	70	IP55	16	48281786	246,37
SVP	4	10	06	DN 65	DN 65	2,20	IE5	6	-	24,5	25	70	IP55	16	48276298	250
SVP	4	10	07	DN 65	DN 65	3,00	IE5	8	-	31,7	40	71	IP55	16	48281787	280,62
SVP	4	10	08	DN 65	DN 65	3,00	IE5	8	-	31,7	40	71	IP55	16	48276299	284,36
SVP	4	10	09	DN 65	DN 65	4,00	IE5	10	-	32,2	40	71	IP55	16	48281788	333,64
SVP	4	10	10	DN 65	DN 65	4,00	IE5	10	-	32,2	40	71	IP55	16	48281789	341,03
SVP	4	10	11	DN 65	DN 65	4,00	IE5	10	-	32,2	40	71	IP55	16	48276300	344,87
SVP	4	10	13	DN 65	DN 65	5,50	IE5	14	-	49,4	50	71	IP55	16	48281790	458,6
SVP	4	15	01	DN 100	DN 100	1,10	IE5	3,5	-	15,8	25	70	IP55	16	48281791	215,56
SVP	4	15	02	DN 100	DN 100	2,20	IE5	6	-	24,5	25	70	IP55	16	48276301	249,42
SVP	4	15	03	DN 100	DN 100	3,00	IE5	8	-	31,7	40	71	IP55	16	48276302	280,09
SVP	4	15	04	DN 100	DN 100	4,00	IE5	10	-	32,2	40	71	IP55	16	48276303	327,63
SVP	4	15	05	DN 100	DN 100	5,50	IE5	14	-	49,4	50	71	IP55	16	48281792	400,79
SVP	4	15	06	DN 100	DN 100	5,50	IE5	14	-	49,4	50	71	IP55	16	48276304	405,04
SVP	4	15	07	DN 100	DN 100	7,50	IE5	18	-	62,5	63	71	IP55	16	48281793	473,19
SVP	4	15	08	DN 100	DN 100	7,50	IE5	18	-	62,5	63	71	IP55	16	48276305	477,36

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Characteristic curves

KSB Delta Basic MVP, Movitec 02, n = 2900 rpm

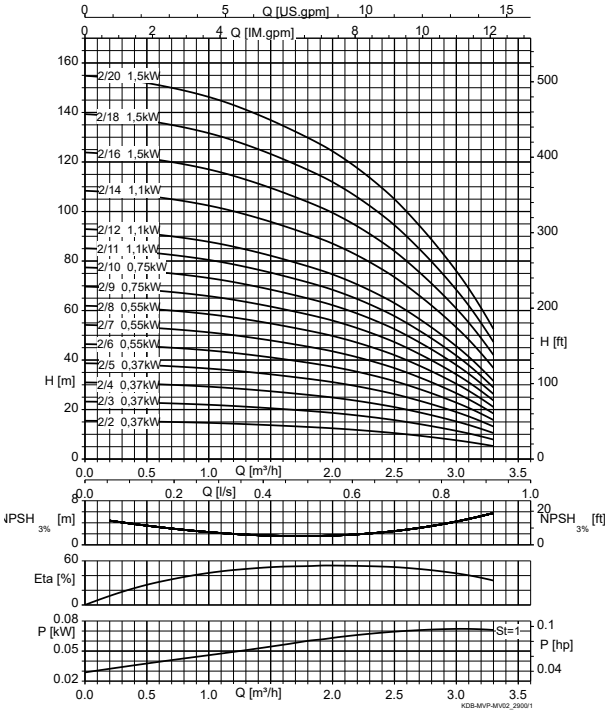


Fig. 147: St = 1: P per stage

KSB Delta Basic MVP, Movitec 04, n = 2900 rpm

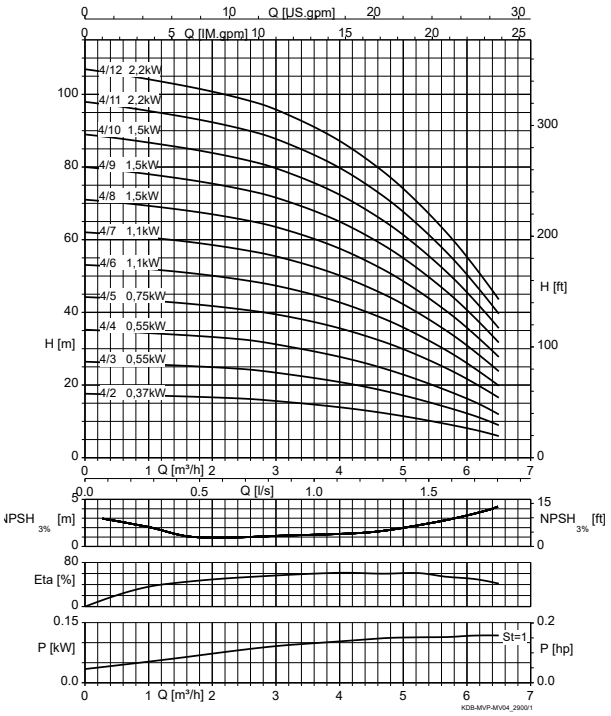


Fig. 148: St = 1: P per stage

KSB Delta Basic MVP, Movitec 06, n = 2900 rpm

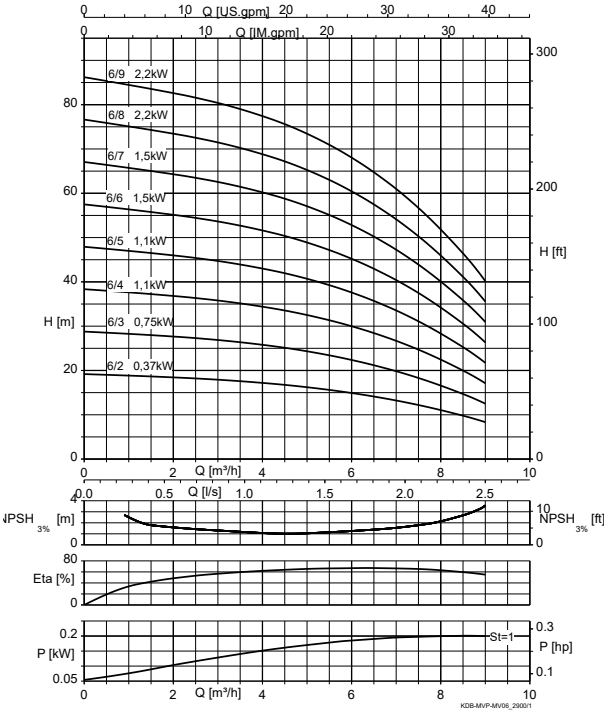


Fig. 149: St = 1: P per stage

KSB Delta Basic MVP, Movitec 10, n = 2900 rpm

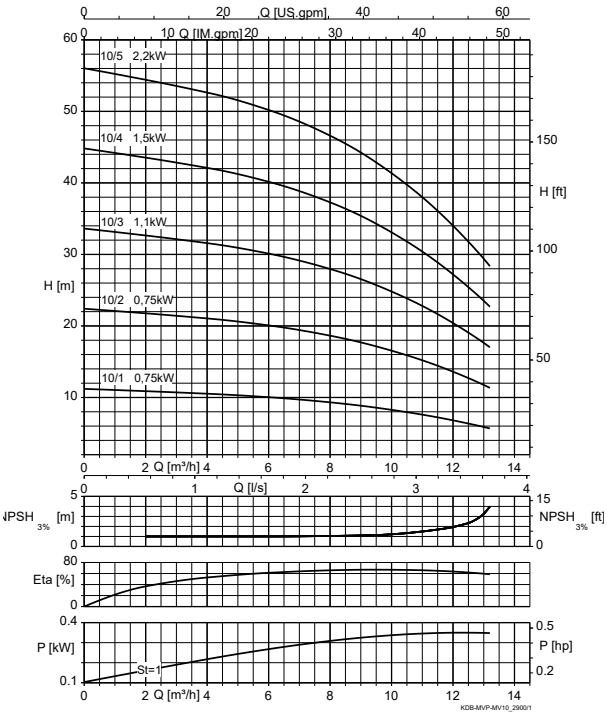


Fig. 150: St = 1: P per stage

KSB Delta Basic MVP, Movitec 15, n = 2900 rpm

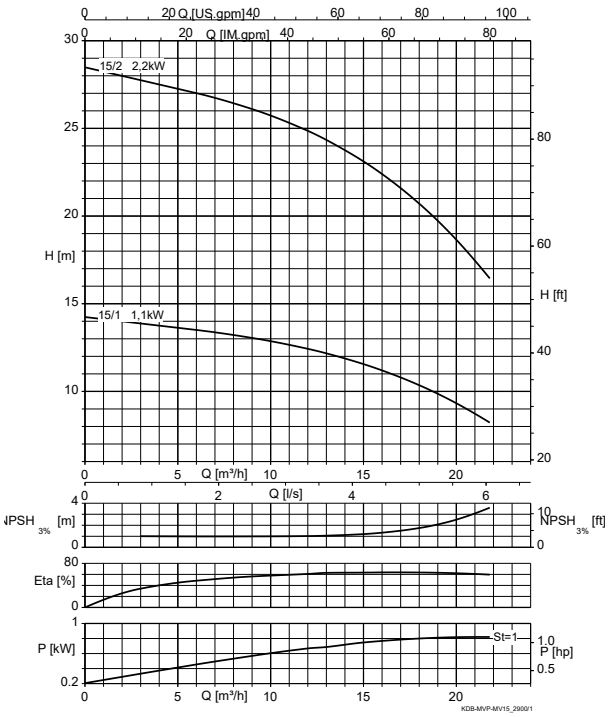


Fig. 151: St = 1: P per stage

KSB Delta Basic SVP, Movitec 02, n = 2900 rpm

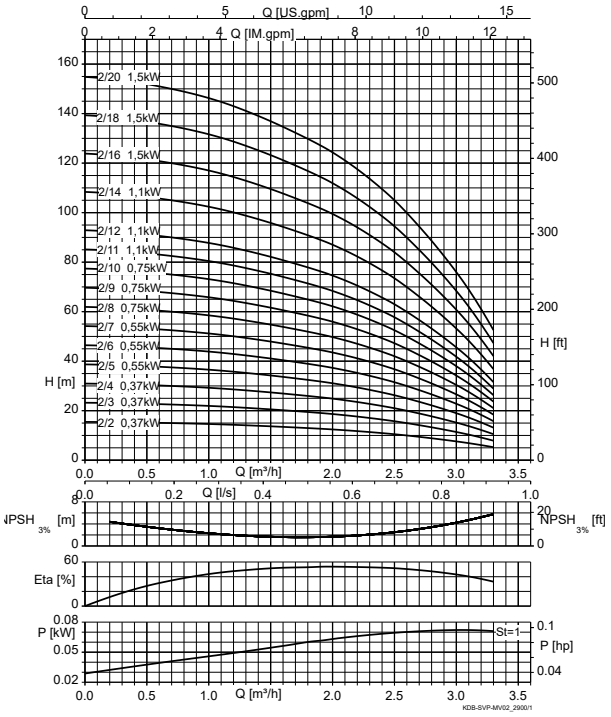


Fig. 152: St = 1: P per stage

KSB Delta Basic SVP, Movitec 04, n = 2900 rpm

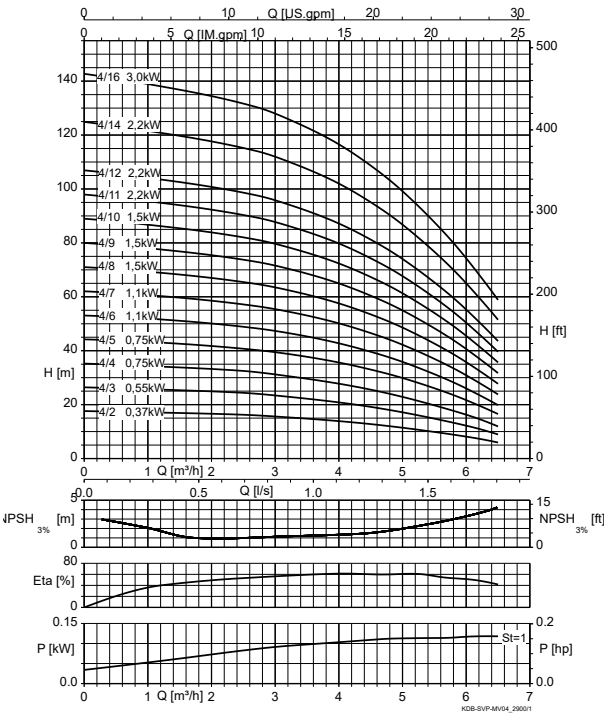


Fig. 153: St = 1: P per stage

KSB Delta Basic SVP, Movitec 06, n = 2900 rpm

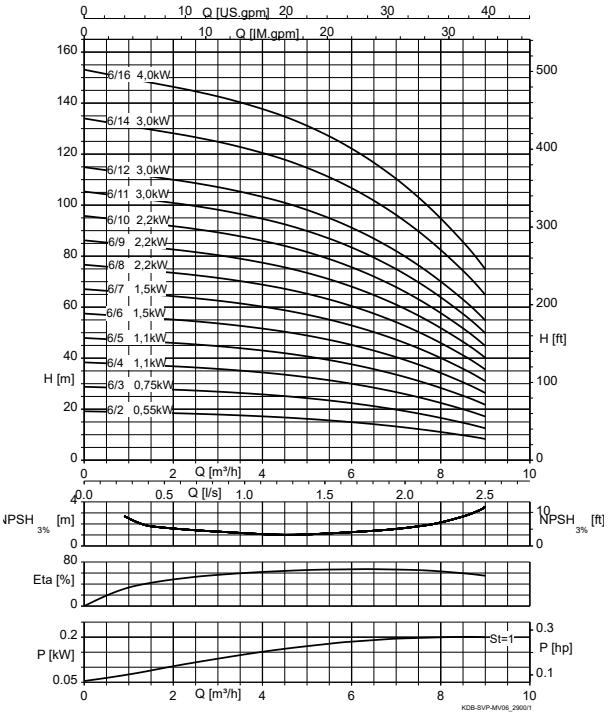


Fig. 154: St = 1: P per stage

KSB Delta Basic SVP, Movitec 10, n = 2900 rpm

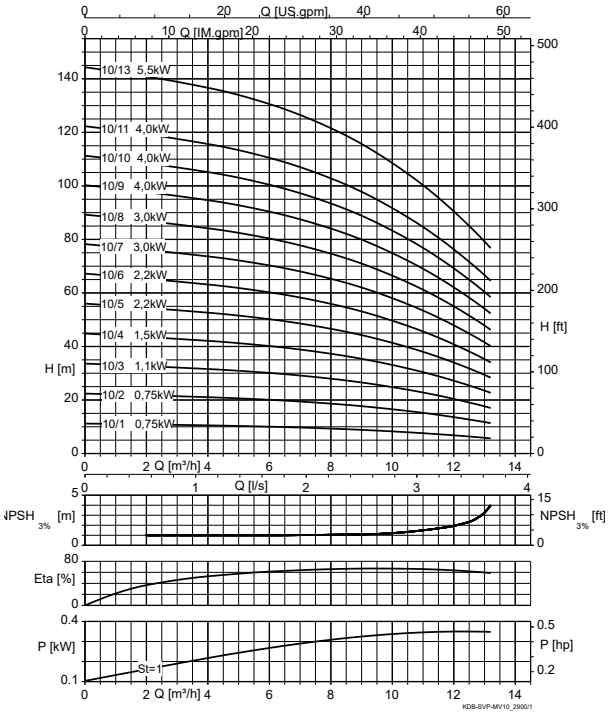


Fig. 155: St = 1: P per stage

KSB Delta Basic SVP, Movitec 15, n = 2900 rpm

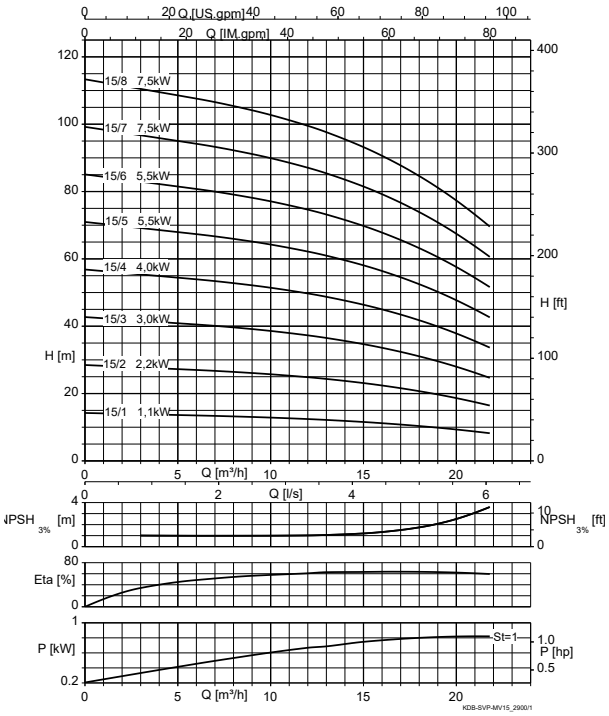


Fig. 156: St = 1: P per stage

Dimensions and connections

KSB Delta Basic MVP 2, Movitec 02 / 04 / 06 / 10 / 15

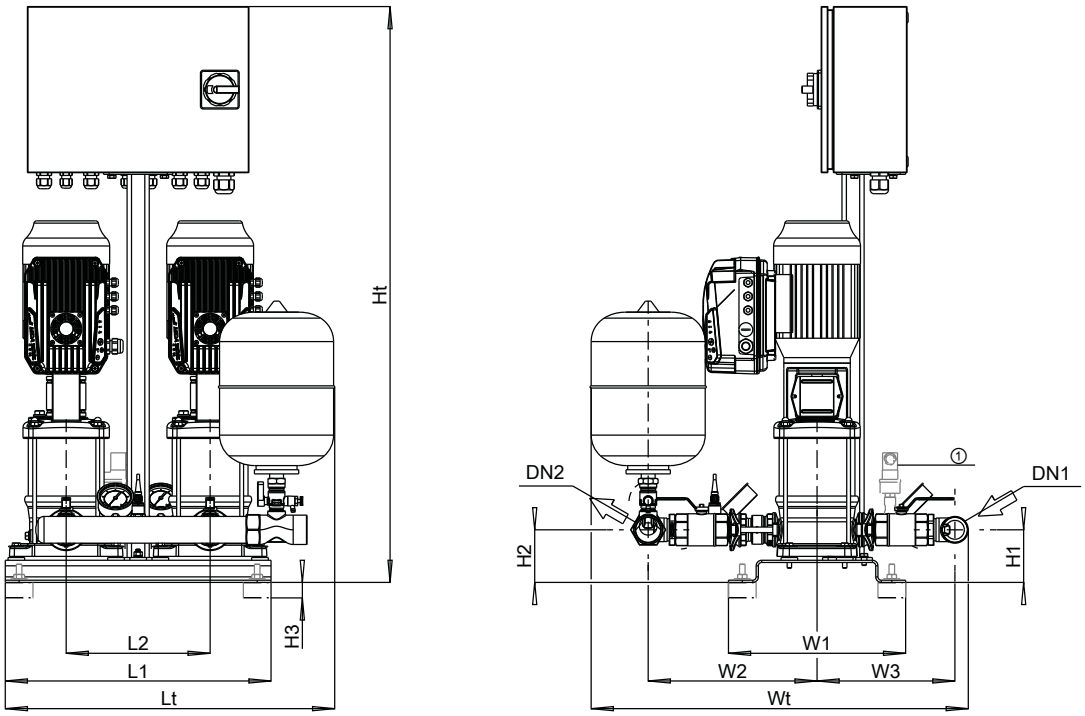


Fig. 157: Dimensions

①	Pressure switch for dry running protection

Dimensions [mm] and connections

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	Lt	H1	H2	H3	Ht	W1	W2	W3	Wt
2	02	02	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	02	03	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	02	04	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	02	05	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	02	06	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	02	07	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	02	08	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	02	09	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	02	10	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	02	11	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	02	12	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	02	14	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	291	235	653
2	02	18	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	291	235	653
2	02	20	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1590	320	291	235	653
2	04	02	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	04	03	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	04	04	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	04	05	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	04	06	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	04	07	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	04	08	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	04	09	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	04	10	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	04	11	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	291	235	653
2	04	12	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	291	235	653
2	06	02	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	305	249	681

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	Lt	H1	H2	H3	Ht	W1	W2	W3	Wt
2	06	03	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	305	249	681
2	06	04	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	305	249	681
2	06	05	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	305	249	681
2	06	06	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	305	249	681
2	06	07	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	305	249	681
2	06	08	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	305	249	681
2	06	09	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	305	249	681
2	10	01	G 2	G 2	640	340	739	125	125	28	1040	360	373	297	803
2	10	02	G 2	G 2	640	340	739	125	125	28	1040	360	373	297	803
2	10	03	G 2	G 2	640	340	739	125	125	28	1190	360	373	297	803
2	10	04	G 2	G 2	640	340	739	125	125	28	1190	360	373	297	803
2	10	05	G 2	G 2	640	340	739	125	125	28	1190	360	373	297	803
2	15	01	DN 65	DN 65	640	340	715	125	125	28	1040	360	408	332	936
2	15	02	DN 65	DN 65	640	340	715	125	125	28	1190	360	408	332	936

KSB Delta Basic MVP 3, Movitec 02 / 04 / 06 / 10 / 15

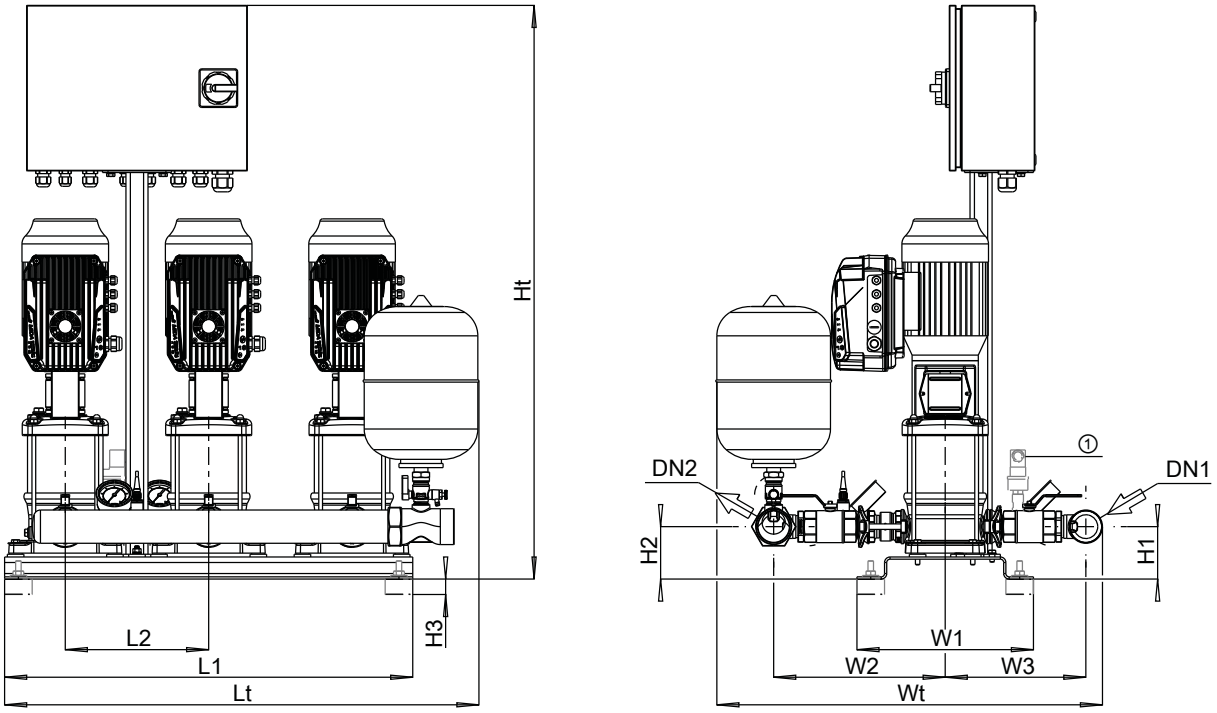


Fig. 158: Dimensions

①	Pressure switch for dry running protection

Dimensions [mm] and connections

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	Lt	H1	H2	H3	Ht	W1	W2	W3	Wt
3	02	02	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	02	03	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	02	04	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	02	05	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	02	06	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	02	07	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	02	08	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	02	09	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	02	10	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	02	11	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	02	12	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	02	14	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1340	320	291	235	653
3	02	16	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1340	320	291	235	653
3	02	18	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1340	320	291	235	653
3	02	20	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1590	320	291	235	653
3	04	02	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	04	03	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	04	04	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	04	05	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	04	06	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	04	07	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	04	08	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	04	09	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	04	10	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	04	11	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1340	320	291	235	653
3	04	12	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1340	320	291	235	653
3	06	02	G 2	G 2	740	260	989	95	95	28	1040	320	311	255	699
3	06	03	G 2	G 2	740	260	989	95	95	28	1040	320	311	255	699

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	Lt	H1	H2	H3	Ht	W1	W2	W3	Wt
3	06	04	G 2	G 2	740	260	989	95	95	28	1040	320	311	255	699
3	06	05	G 2	G 2	740	260	989	95	95	28	1040	320	311	255	699
3	06	06	G 2	G 2	740	260	989	95	95	28	1190	320	311	255	699
3	06	07	G 2	G 2	740	260	989	95	95	28	1190	320	311	255	699
3	06	08	G 2	G 2	740	260	989	95	95	28	1190	320	311	255	699
3	06	09	G 2	G 2	740	260	989	95	95	28	1190	320	311	255	699
3	10	01	G 2	G 2	980	340	1079	125	125	28	1040	360	373	297	803
3	10	02	G 2	G 2	980	340	1079	125	125	28	1040	360	373	297	803
3	10	03	G 2	G 2	980	340	1079	125	125	28	1190	360	373	297	803
3	10	04	G 2	G 2	980	340	1079	125	125	28	1190	360	373	297	803
3	10	05	G 2	G 2	980	340	1079	125	125	28	1190	360	373	297	803
3	15	01	DN 65	DN 65	980	340	1055	125	125	28	1040	360	408	332	936
3	15	02	DN 65	DN 65	980	340	1055	125	125	28	1190	360	408	332	936

KSB Delta Basic SVP 2, Movitec 02 / 04 / 06 / 10 / 15

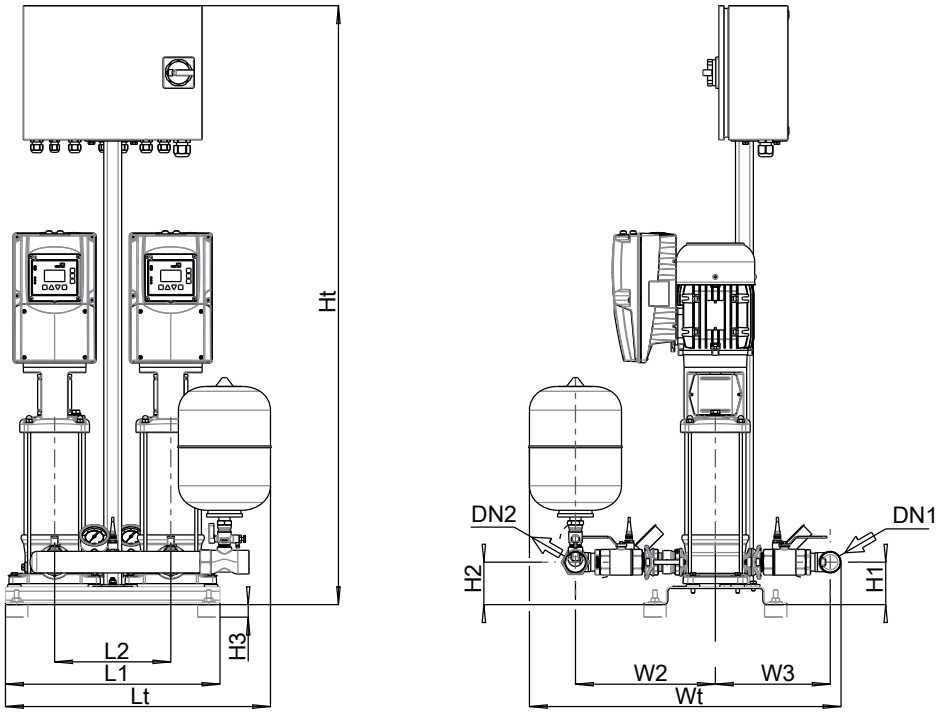


Fig. 159: Dimensions

Dimensions [mm] and connections

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	Lt	H1	H2	H3	Ht	W1	W2	W3	Wt
2	02	02	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	02	03	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	02	04	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	02	05	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	02	06	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	02	07	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	02	08	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	02	09	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	02	10	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	02	11	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	02	12	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	02	14	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	291	235	653
2	02	16	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	291	235	653
2	02	18	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	291	235	653
2	02	20	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1590	320	291	235	653
2	04	02	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	04	03	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	04	04	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	04	05	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	04	06	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	291	235	653
2	04	07	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	04	08	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	04	09	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	04	10	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	291	235	653
2	04	11	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	291	235	653
2	04	12	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	291	235	653
2	04	14	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	291	235	653
2	04	16	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	291	235	653
2	06	02	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	305	249	681

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	Lt	H1	H2	H3	Ht	W1	W2	W3	Wt
2	06	03	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	305	249	681
2	06	04	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	305	249	681
2	06	05	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1040	320	305	249	681
2	06	06	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	305	249	681
2	06	07	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	305	249	681
2	06	08	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	305	249	681
2	06	09	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1190	320	305	249	681
2	06	10	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	305	249	681
2	06	11	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	305	249	681
2	06	12	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	305	249	681
2	06	14	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1340	320	305	249	681
2	06	16	G 1 1/2	G 1 1/2	480	260	724	95	95	28	1590	320	305	249	681
2	10	01	G 2	G 2	640	340	739	125	125	28	1040	360	373	297	803
2	10	02	G 2	G 2	640	340	739	125	125	28	1040	360	373	297	803
2	10	03	G 2	G 2	640	340	739	125	125	28	1190	360	373	297	803
2	10	04	G 2	G 2	640	340	739	125	125	28	1190	360	373	297	803
2	10	05	G 2	G 2	640	340	739	125	125	28	1190	360	373	297	803
2	10	06	G 2	G 2	640	340	739	125	125	28	1190	360	373	297	803
2	10	07	G 2	G 2	640	340	739	125	125	28	1340	360	373	297	803
2	10	08	G 2	G 2	640	340	739	125	125	28	1340	360	373	297	803
2	10	09	G 2	G 2	640	340	739	125	125	28	1340	360	373	297	803
2	10	10	G 2	G 2	640	340	739	125	125	28	1590	360	373	297	803
2	10	11	G 2	G 2	640	340	739	125	125	28	1590	360	373	297	803
2	10	13	G 2	G 2	640	340	739	125	125	28	1590	360	373	297	803
2	15	01	DN 65	DN 65	640	340	715	125	125	28	1040	360	408	332	936
2	15	02	DN 65	DN 65	640	340	715	125	125	28	1190	360	408	332	936
2	15	03	DN 65	DN 65	640	340	715	125	125	28	1190	360	408	332	936
2	15	04	DN 65	DN 65	640	340	715	125	125	28	1190	360	408	332	936
2	15	05	DN 65	DN 65	640	340	715	125	125	28	1590	360	408	332	936
2	15	06	DN 65	DN 65	640	340	715	125	125	28	1590	360	408	332	936
2	15	07	DN 65	DN 65	640	340	715	125	125	28	1590	360	408	332	936
2	15	08	DN 65	DN 65	640	340	715	125	125	28	1590	360	408	332	936

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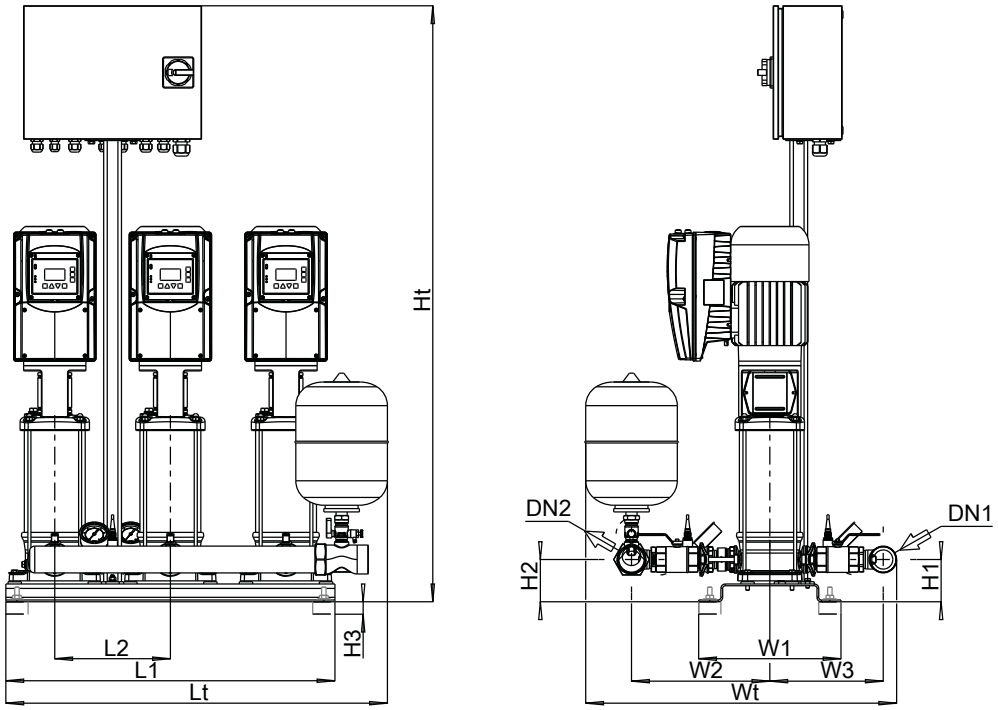

Fig. 160: Dimensions

Dimensions [mm] and connections

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	Lt	H1	H2	H3	Ht	W1	W2	W3	Wt
3	02	02	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	02	03	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	02	04	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	02	05	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	02	06	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	02	07	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	02	08	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	02	09	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	02	10	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	02	11	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	02	12	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	02	14	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1340	320	291	235	653
3	02	16	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1340	320	291	235	653
3	02	18	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1340	320	291	235	653
3	02	20	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1590	320	291	235	653
3	04	02	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	04	03	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	04	04	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	04	05	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	04	06	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1040	320	291	235	653
3	04	07	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	04	08	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	04	09	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	04	10	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1190	320	291	235	653
3	04	11	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1340	320	291	235	653
3	04	12	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1340	320	291	235	653
3	04	14	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1340	320	291	235	653
3	04	16	G 1 1/2	G 1 1/2	740	260	984	95	95	28	1340	320	291	235	653
3	06	02	G 2	G 2	740	260	989	95	95	28	1040	320	311	255	699

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	Lt	H1	H2	H3	Ht	W1	W2	W3	Wt
3	06	03	G 2	G 2	740	260	989	95	95	28	1040	320	311	255	699
3	06	04	G 2	G 2	740	260	989	95	95	28	1040	320	311	255	699
3	06	05	G 2	G 2	740	260	989	95	95	28	1040	320	311	255	699
3	06	06	G 2	G 2	740	260	989	95	95	28	1190	320	311	255	699
3	06	07	G 2	G 2	740	260	989	95	95	28	1190	320	311	255	699
3	06	08	G 2	G 2	740	260	989	95	95	28	1190	320	311	255	699
3	06	09	G 2	G 2	740	260	989	95	95	28	1190	320	311	255	699
3	06	10	G 2	G 2	740	260	989	95	95	28	1340	320	311	255	699
3	06	11	G 2	G 2	740	260	989	95	95	28	1340	320	311	255	699
3	06	12	G 2	G 2	740	260	989	95	95	28	1340	320	311	255	699
3	06	14	G 2	G 2	740	260	989	95	95	28	1340	320	311	255	699
3	06	16	G 2	G 2	740	260	989	95	95	28	1590	320	311	255	699
3	10	01	G 2	G 2	980	340	1079	125	125	28	1040	360	373	297	803
3	10	02	G 2	G 2	980	340	1079	125	125	28	1040	360	373	297	803
3	10	03	G 2	G 2	980	340	1079	125	125	28	1190	360	373	297	803
3	10	04	G 2	G 2	980	340	1079	125	125	28	1190	360	373	297	803
3	10	05	G 2	G 2	980	340	1079	125	125	28	1190	360	373	297	803
3	10	06	G 2	G 2	980	340	1079	125	125	28	1190	360	373	297	803
3	10	07	G 2	G 2	980	340	1079	125	125	28	1340	360	373	297	803
3	10	08	G 2	G 2	980	340	1079	125	125	28	1340	360	373	297	803
3	10	09	G 2	G 2	980	340	1079	125	125	28	1340	360	373	297	803
3	10	10	G 2	G 2	980	340	1079	125	125	28	1590	360	373	297	803
3	10	11	G 2	G 2	980	340	1079	125	125	28	1590	360	373	297	803
3	10	13	G 2	G 2	980	340	1079	125	125	28	1590	360	373	297	803
3	15	01	DN 65	DN 65	980	340	1055	125	125	28	1040	360	408	332	936
3	15	02	DN 65	DN 65	980	340	1055	125	125	28	1190	360	408	332	936
3	15	03	DN 65	DN 65	980	340	1055	125	125	28	1190	360	408	332	936
3	15	04	DN 65	DN 65	980	340	1055	125	125	28	1190	360	408	332	936
3	15	05	DN 65	DN 65	980	340	1055	125	125	28	1590	360	408	332	936
3	15	06	DN 65	DN 65	980	340	1055	125	125	28	1590	360	408	332	936
3	15	07	DN 65	DN 65	980	340	1055	125	125	28	1590	360	408	332	936
3	15	08	DN 65	DN 65	980	340	1055	125	125	28	1590	360	408	332	936

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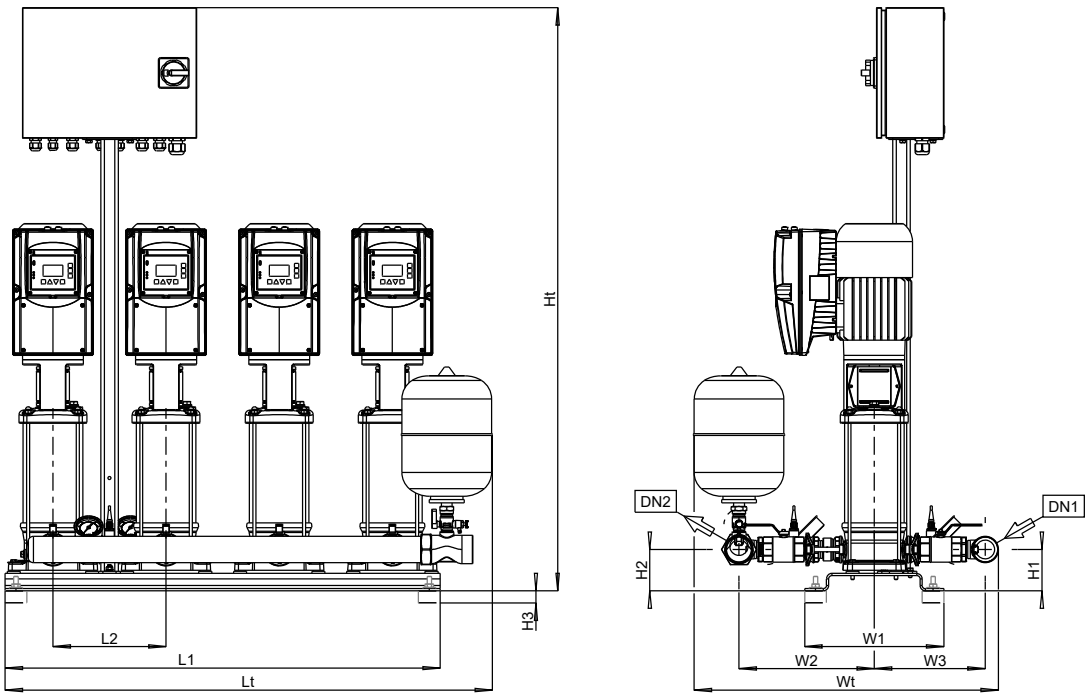

Fig. 161: Dimensions

Dimensions [mm] and connections

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	Lt	H1	H2	H3	Ht	W1	W2	W3	Wt
4	02	02	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1040	320	291	235	653
4	02	03	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1040	320	291	235	653
4	02	04	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1040	320	291	235	653
4	02	05	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1040	320	291	235	653
4	02	06	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1040	320	291	235	653
4	02	07	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1040	320	291	235	653
4	02	08	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1190	320	291	235	653
4	02	09	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1190	320	291	235	653
4	02	10	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1190	320	291	235	653
4	02	11	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1190	320	291	235	653
4	02	12	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1190	320	291	235	653
4	02	14	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1340	320	291	235	653
4	02	16	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1340	320	291	235	653
4	02	18	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1340	320	291	235	653
4	02	20	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1590	320	291	235	653
4	04	02	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1040	320	291	235	653
4	04	03	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1040	320	291	235	653
4	04	04	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1040	320	291	235	653
4	04	05	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1040	320	291	235	653
4	04	06	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1040	320	291	235	653
4	04	07	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1190	320	291	235	653
4	04	08	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1190	320	291	235	653
4	04	09	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1190	320	291	235	653
4	04	10	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1190	320	291	235	653
4	04	11	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1340	320	291	235	653
4	04	12	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1340	320	291	235	653
4	04	14	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1340	320	291	235	653
4	04	16	G 1 1/2	G 1 1/2	1000	260	1244	95	95	28	1340	320	291	235	653
4	06	02	G 2	G 2	1000	260	1249	95	95	28	1040	320	311	255	699

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	Lt	H1	H2	H3	Ht	W1	W2	W3	Wt
4	06	03	G 2	G 2	1000	260	1249	95	95	28	1040	320	311	255	699
4	06	04	G 2	G 2	1000	260	1249	95	95	28	1040	320	311	255	699
4	06	05	G 2	G 2	1000	260	1249	95	95	28	1040	320	311	255	699
4	06	06	G 2	G 2	1000	260	1249	95	95	28	1190	320	311	255	699
4	06	07	G 2	G 2	1000	260	1249	95	95	28	1190	320	311	255	699
4	06	08	G 2	G 2	1000	260	1249	95	95	28	1190	320	311	255	699
4	06	09	G 2	G 2	1000	260	1249	95	95	28	1190	320	311	255	699
4	06	10	G 2	G 2	1000	260	1249	95	95	28	1340	320	311	255	699
4	06	11	G 2	G 2	1000	260	1249	95	95	28	1340	320	311	255	699
4	06	12	G 2	G 2	1000	260	1249	95	95	28	1340	320	311	255	699
4	06	14	G 2	G 2	1000	260	1249	95	95	28	1340	320	311	255	699
4	06	16	G 2	G 2	1000	260	1249	95	95	28	1590	320	311	255	699

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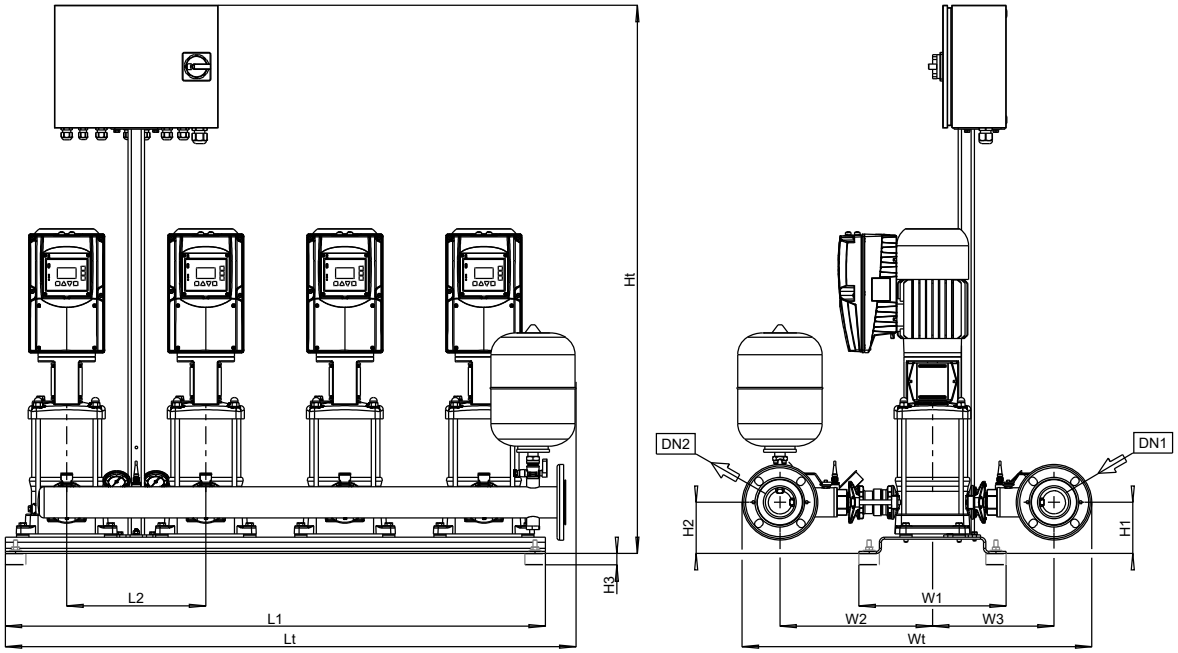


Fig. 162: Dimensions

Dimensions [mm] and connections

Number of pumps	Movitec	Number of stages	DN1	DN2	L1	L2	Lt	H1	H2	H3	Ht	W1	W2	W3	Wt
4	10	01	DN 65	DN 65	1320	340	1395	125	125	28	1040	360	381	305	882
4	10	02	DN 65	DN 65	1320	340	1395	125	125	28	1040	360	381	305	882
4	10	03	DN 65	DN 65	1320	340	1395	125	125	28	1190	360	381	305	882
4	10	04	DN 65	DN 65	1320	340	1395	125	125	28	1190	360	381	305	882
4	10	05	DN 65	DN 65	1320	340	1395	125	125	28	1190	360	381	305	882
4	10	06	DN 65	DN 65	1320	340	1395	125	125	28	1190	360	381	305	882
4	10	07	DN 65	DN 65	1320	340	1395	125	125	28	1340	360	381	305	882
4	10	08	DN 65	DN 65	1320	340	1395	125	125	28	1340	360	381	305	882
4	10	09	DN 65	DN 65	1320	340	1395	125	125	28	1340	360	381	305	882
4	10	10	DN 65	DN 65	1320	340	1395	125	125	28	1590	360	381	305	882
4	10	11	DN 65	DN 65	1320	340	1395	125	125	28	1590	360	381	305	882
4	10	13	DN 65	DN 65	1320	340	1395	125	125	28	1590	360	381	305	882
4	15	01	DN 100	DN 100	1320	340	1395	125	125	28	1040	360	427	351	998
4	15	02	DN 100	DN 100	1320	340	1395	125	125	28	1190	360	427	351	998
4	15	03	DN 100	DN 100	1320	340	1395	125	125	28	1190	360	427	351	998
4	15	04	DN 100	DN 100	1320	340	1395	125	125	28	1190	360	427	351	998
4	15	05	DN 100	DN 100	1320	340	1395	125	125	28	1590	360	427	351	998
4	15	06	DN 100	DN 100	1320	340	1395	125	125	28	1590	360	427	351	998
4	15	07	DN 100	DN 100	1320	340	1395	125	125	28	1590	360	427	351	998
4	15	08	DN 100	DN 100	1320	340	1395	125	125	28	1590	360	427	351	998

High-pressure In-line Pumps

Movitec

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000854

Product benefits

- Reliable: product-lubricated plain bearings made of tungsten carbide, cast pump foot, torsion-resistant pump shroud and confined O-rings
- Long service life: corrosion-resistant hydraulic components made of stainless steel
- Easy to service: can be fitted with any standardised mechanical seal (to EN 12756)
- Flexible: various materials and connection options, extended temperature range and pressure range

Further information

Prices on request

Selection charts 377
Characteristic curves 378

Further information

	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[130)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for water pumps with a maximum nominal shaft power of 150 kW as per Regulation (EU) No. 547/2012.

130 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Certifications

Overview

Label	Effective in:	Comment
WRAS APPROVED PRODUCT	United Kingdom	Approved in accordance with the UK drinking water regulation

Main applications

- Spray irrigation systems
- General irrigation systems
- Washing plants
- Fire-fighting systems
- Pressure boosting
- Industrial plants
- Water supply systems
- Heating, ventilation and air-conditioning systems
- Marine applications

Fluids handled

- High-temperature hot water
- Clear water
- Condensate
- Cooling water
- Fire-fighting water
- Oil
- Cleaning agents
- And others

Operating data

Operating properties

Characteristic		Value	
		Movitec A	Movitec B
Flow rate	Q [m³/h]	≤ 8,6	≤ 160
	Q [l/s]	≤ 2,4	≤ 44,4
Head	H [m]	≤ 401	≤ 249
Fluid temperature	T [°C]	≥ -15	≥ -20
		≤ +120	≤ +140 [131]
Operating pressure	p [bar]	≤ 40 [132]	≤ 40 [132]

Design details

Design

- High-pressure in-line pump
- Maximum pressure class PN 40
- Centrifugal pump
- Single-stage or multistage

Installation

Standard:

- Vertical installation

Optional:

- Horizontal installation

Drive

- Surface-cooled KSB squirrel-cage motor
- 3~230/400 V up to 2.2 kW
- 3~400/690 V from 3.0 kW
- Thermal class F to IEC 34-1
- Efficiency class IE3 to IEC 60034-30 (for three-phase motors ≥ 0.75 kW)
- Enclosure IP55
- Frequency 50 Hz

For VM version and motor designs V18 and V1 ≥ 3 kW:

- PTC thermistors

Shaft seal

- Uncooled maintenance-free mechanical seal
- To EN 12756
- Fixed mechanical seal
  - Mechanical seal in standard design
  - Unbalanced bellows-type seal
  - ≤ 25 bar
  - Fitted as standard for Movitec V 2B, 4B, 6B
- Easy Access mechanical seal
  - Easy to replace
  - Unbalanced bellows-type seal
  - ≤ 25 bar
  - Drive lantern need not be removed to replace the seal.
  - Motor rating 5.5 kW and above: Motor need not be removed.
  - Fitted as standard for Movitec 10B, 15B, 25B, 40B, 60B, 90B and Movitec VS 2B, 4B, 6B
- Cartridge seal
  - Unbalanced bellows-type design (PN 25) or special balanced design (PN 40)
  - Drive lantern need not be removed to replace the seal.
  - Motor rating 5.5 kW and above: Motor need not be removed.
  - Optionally available for all sizes except Movitec LHS 6
  - Fitted as standard for Movitec 125B

Bearings

- Tungsten carbide plain bearings at the hydraulic rotor

131 For fluid temperatures > 120 °C the pressure class must not exceed PN 25.
132 The sum of inlet pressure and shut-off head must not exceed the value indicated.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Designation

Designation example

Position																												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
M	o	v	i	t	e	c	V	-	F	0	0	6	/	0	6	1	B	3	D	1	3	E	S	1	1	2	B	7	D	A	X
See name plate and data sheet																		See data sheet													

Designation key

Position	Code	Description	
1-7	Type series		
	Movitec		
8-9	Design		
	LH	Stainless steel	1.4404
	V	Stainless steel	1.4301
	VC	Stainless steel / grey cast iron	1.4301 / EN-GJL-250
	VM	Stainless steel	1.4301
	VS	Stainless steel	1.4404
10	Connection type		
	-[133]	Oval flange	
	E[134]	External thread	
	F	Round flange	
	I	Internal thread	
	T	Tri-Clamp fitting	
	V	Victaulic coupling	
11-13	Size		
	002	2	
	...	...	
	125	125	
15-16	Number of stages		
	01	1	
	...	...	
	30	30	
17	Number of stages with special impeller		
	-	No stage with a special impeller	
	1	One stage with a special impeller	
	2	Two stages with a special impeller	
	L	One stage with a special impeller for lower NPSH values	
18	Product generation		
	A	Movitec up to 2009	
	B	Movitec from 2010	
19	Connection standard		
	0	Victaulic coupling	No standard
	1	Round flange	EN 1092
	2	Round flange	ASME B16.1
	3	Round flange	JIS B2238
	4	Oval flange	EN ISO 228-1
	5	Oval flange	ASME B16.5
	6	Tri-Clamp fitting	DIN 32676
	7	External thread	EN ISO 228-1
	8	Oval flange	ISO 7-1
	9	Round flange	ASME B16.5
20	Material variant		
	D	1.4308 - EN-GJS-400-15 - EN-GJL-250	
	E	1.4308 - EN-GJS-400-15 - 1.4308	
	F	1.4308 - 1.4308 - EN-GJL-250	
	G	1.4308 - 1.4308 - EN-GJS-400-15	

133 Blank

134 Pumps with external thread are supplied with an integrated swing check valve as standard.

Position	Code	Description
20	H	1.4308 - 1.4308 - 1.4308
	K	1.4308 - 1.4408 - EN-GJS-400-15
	L	1.4308 - 1.4408 - EN-GJL-250
	M	1.4308 - 1.4408 - 1.4308
	N	1.4308 - EN-GJS-400-15 - EN-GJL-250
	O	1.4408 - EN-GJS-400-15 - 1.4308
	P	1.4408 - 1.4308 - EN-GJL-250
	Q	1.4408 - 1.4308 - 1.4308
	R	1.4408 - 1.4408 - EN-GJL-250
	S	1.4408 - 1.4408 - EN-GJS-400-15
	T	1.4408 - 1.4408 - 1.4308
	U	EN-GJL-250 -EN-GJL-250 -EN-GJL-250
	V	EN-GJS-400-15 - EN-GJS-400-15 - EN-GJS-400-15
	W	EN-GJS-400-15 - 1.4308 - EN-GJS-400-15
	X	1.4308 - EN-GJS-400-15 - EN-GJS-400-15
	Y	1.4408 - EN-GJS-400-15 - EN-GJS-400-15
	Z	1.4408 - 1.4308 - EN-GJS-400-15
21-22	Seal code	
	11	BQ1EGG
	12	BQ1VGG
	13	Q1BEGG
	14	Q1BVGG
	15	U3U3X4GG
	16	U3U3VGG
	17	U3BVGG[135)]
	18	U3BEGG
	19	U3BEGG[135)]
	20	Q1AEGG
	21	Q1AVGG
	22	Q1AX4GG
	23	Q1BEGG
	24	Q1Q1VGG
	28	Q1Q1X4GG
	29	Q1Q1EGG
	35	eCarb-B eSic-Q7EGG
	36	eCarb-B eSic-Q7VGG
	39	eCarb-B eSic-Q7EGG
23	Mechanical seal design	
	F	Fixed mechanical seal
	E	Easy Access mechanical seal
	C	Cartridge seal
24	Drive	
	0	Without motor
	2	With PumpDrive 2
	A	ATEX IEC
	E	With PumpDrive 2 Eco
	N	Standard NEMA
	P	With PumpDrive
	S	Standard IEC
25-27	Motor size	
	056	NEMA 56C
	071	IEC 071
	080	IEC 080
	090	IEC 090
	100	IEC 100
	112	IEC 112
	132	IEC 132

135 For Movitec LHS 6 only

Position	Code	Description
25-27	143	NEMA 143TC
	145	NEMA 145TC
	160	IEC 160
	180	IEC 180
	182	NEMA 182TC
	184	NEMA 184TC
	200	IEC 200
	215	NEMA 215TC
	225	IEC 225
	256	NEMA 256TC
	284	NEMA 284TC
	286	NEMA 286TC
	324	NEMA 324TC
	326	NEMA 326TC
	364	NEMA 364TC
28	Pressure class	
	A	PN16 / PN25
	B	PN25
	C	PN25 / PN40
	D	PN40
29	Number of motor poles	
	5	2-pole, 50 Hz
	6	2-pole, 60 Hz
	7	4-pole, 50 Hz
	8	4-pole, 60 Hz
30	Motor specification	
	F	EXM IEC - TBH
	G	EXM NEMA
	K	EXM IEC - Movitec
	M	230 V, single-phase AC motor
	O	0.37/0.55 kW - without IE classification
	U	230 / 400 V - IE3
	V	400 / 690 V - IE3
	W	230 / 400 V - IE4/IE5 (KSB SuPremE)
	X	400 / 690 V - IE4/IE5 (KSB SuPremE)
31	PumpMeter	
	A	With PumpMeter
	W	Without PumpMeter
32	Design	
	-[133)]	Standard
	X	Non-standard (BT3D, BT3)

Materials

Overview of available materials

Part No.	Description	Design			
		V	VC	VS	LHS 6
10-6	Pump shroud	1.4301		1.4404	
101	Pump casing	1.4308	EN-GJL-250[136)] / EN-GJS-400-15[137)]	1.4408	
108	Stage casing	1.4301[138)] / 1.4308[139)]		1.4404[138)] / 1.4408[139)]	
160	Discharge cover	1.4301[138)] / 1.4308[139)]		1.4404[138)] / 1.4408[139)]	
210	Shaft	1.4057		1.4460 / 1.4401[140)]	

136 Movitec 2B, 4B, 6B, 10B, 15B, 25B, 40B, 60B, 125B
137 Movitec 90B
138 Movitec 2B, 4B, 6B, 10B, 15B, 25B, 40B, 60B
139 Movitec 90B, 125B
140 Movitec VS 2B, 4B up to 14 stages, 6B up to 12 stages, 10B, 15B up to 10 stages

Part No.	Description	Design			
		V	VC	VS	LHS 6
230	Impeller[141)]	1.4301[138)] / 1.4308[139)]		1.4404[138)] / 1.4408[139)]	
341	Drive lantern	EN-GJL-250[142)] / EN-GJS-400-15[143)]			
412	O-ring	EPDM-WRc / ACS / ACS	EPDM	FPM / HNBR	
525	Spacer sleeve	1.4301		1.4401	
529	Bearing sleeve	Tungsten carbide / aluminium oxide			
890	Baseplate	EN-GJS-400-15 / EN-GJL-250 / 1.4308[144)]	-	EN-GJS-400-15 / EN-GJL-250 / 1.4308[144)]	
905	Tie bolt	1.4057			
920	Nut	1.4301		1.4404	
932	Circlip	1.4571			

Key to materials of pump components

Material designation / material number	ASTM
EN-GJL-250	A48 Class 35 B
EN-GJS-400-15	A5369 Grade 60-40-18
1.4057	SS 431
1.4301	SS 304
1.4308	Grade CF8M
1.4401	SS 316
1.4404	SS 316L
1.4408	Grade CF8M
1.4460	SS 329
1.4571	SS 316Ti

Prices on request

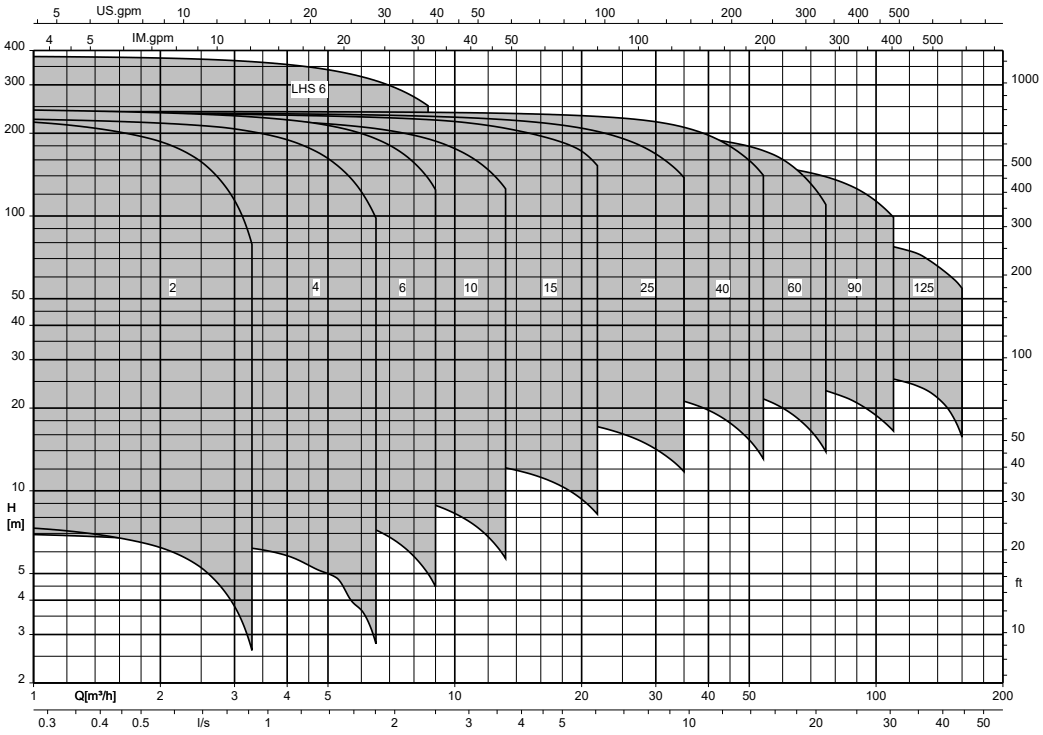
Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

141 The impellers of Movitec 125 are made of sheet metal and cast material.
142 Movitec 2B, 4B, 6B, 10B, 15B, 25B (≤ 4 kW) and Movitec 90B
143 Movitec 2B, 4B, 6B, 10B, 15B, 25B (≥ 5.5 kW) and Movitec 40B, 60B, 125B
144 Optional for: Movitec 2B, 4B, 6B, 10B, 15B

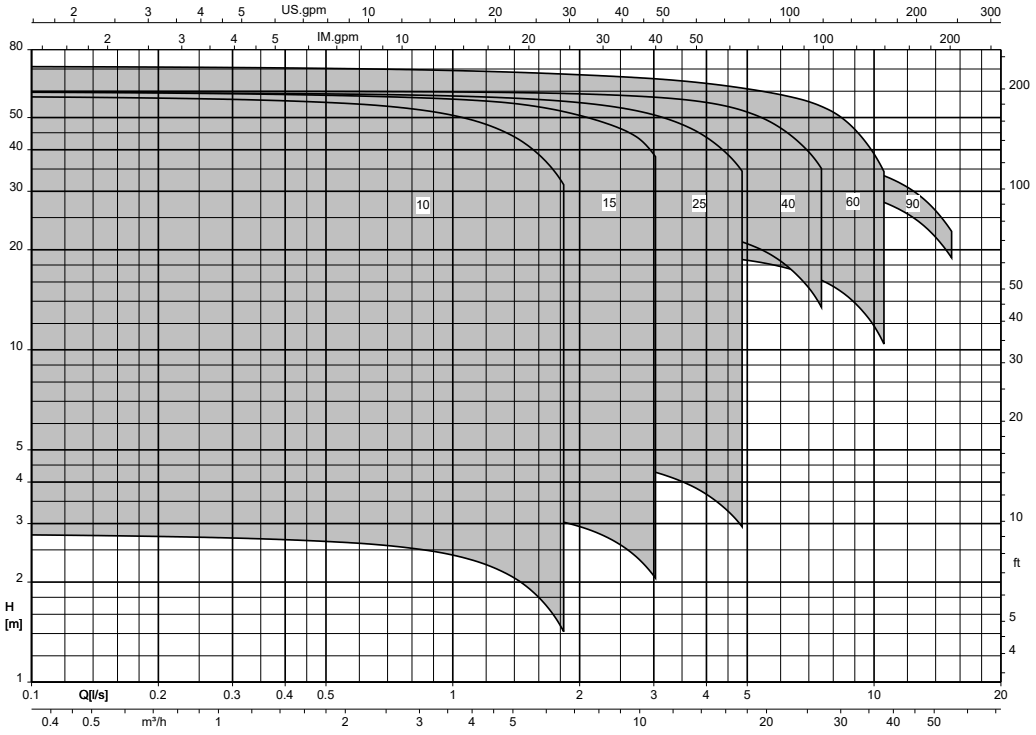
Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Selection charts

Movitec, n = 2900 rpm



Movitec, n = 1450 rpm



Characteristic curves

The characteristic curves are based on the following principles:

- Tolerances to ISO 9906:2012 Grade 3B

The characteristic curves were measured under the following conditions:

- Motor used:
  - Standardised KSB motor with integrated frequency inverter
- Fluid properties:
  - Deaerated water
  - Fluid temperature: +20 °C
  - Density: 1.0 kg/dm³
  - Kinematic viscosity: 1 mm²/s

Movitec; 2B; n = 2900 rpm

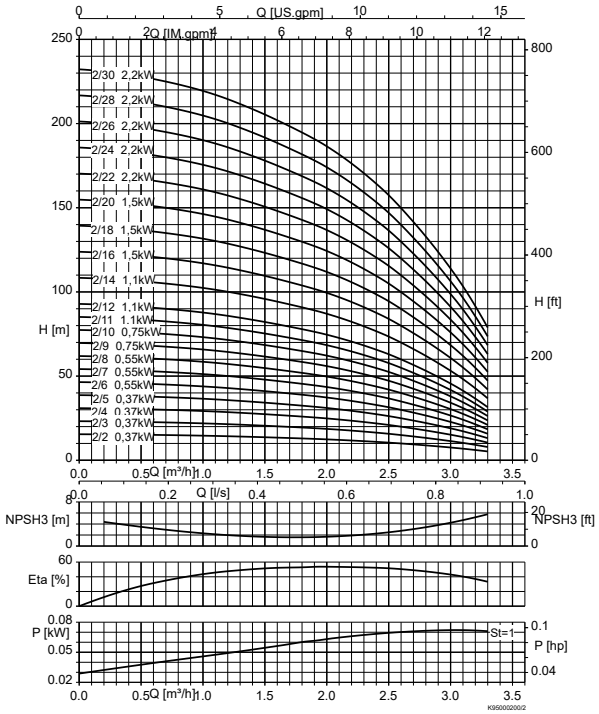


Fig. 163: St = number of stages
The power input P is indicated per stage.

Movitec; 4B; n = 2900 rpm

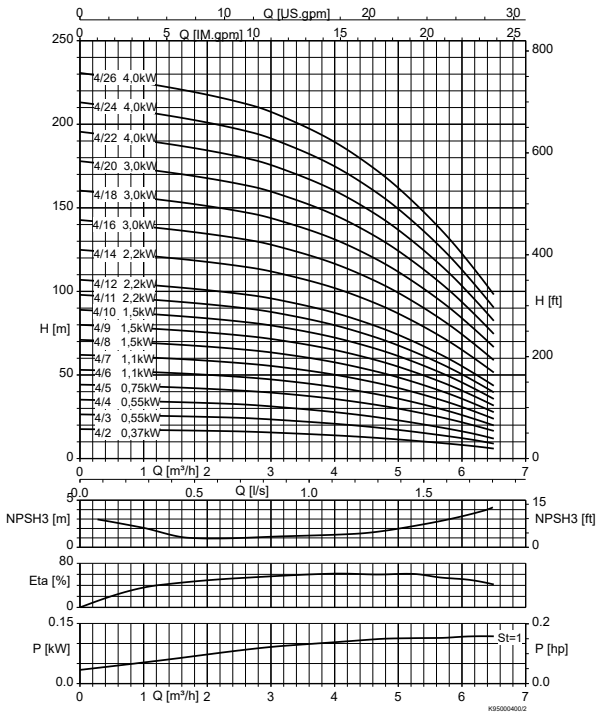


Fig. 164: St = number of stages
The power input P is indicated per stage.

Movitec; 6B; n = 2900 rpm

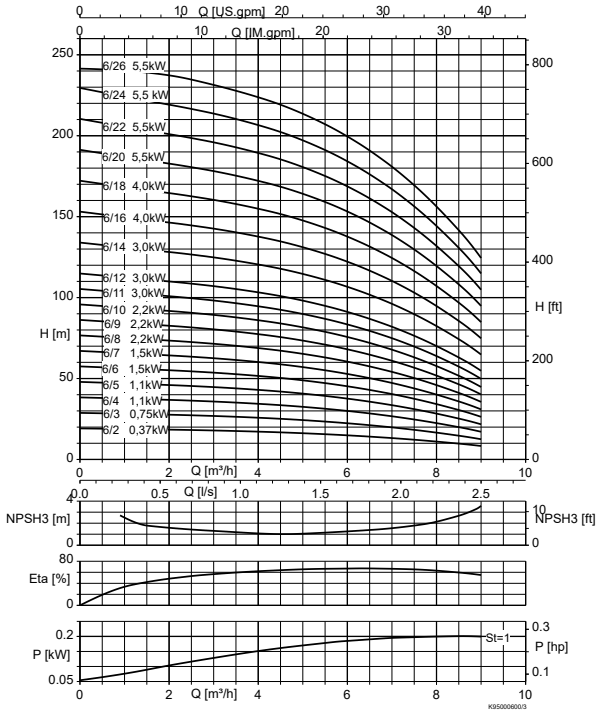


Fig. 165: St = number of stages
The power input P is indicated per stage.

Movitec; 10B; n = 2900 rpm

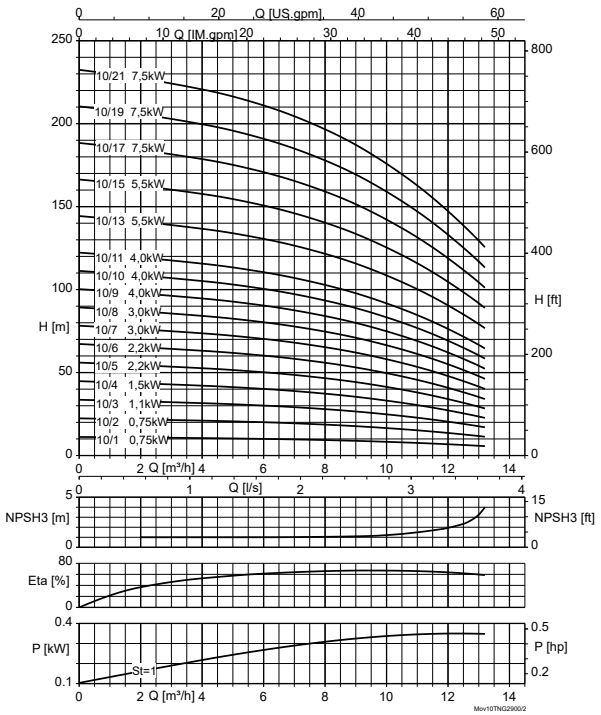


Fig. 166: St = number of stages
The power input P is indicated per stage.

Movitec; 15B; n = 2900 rpm

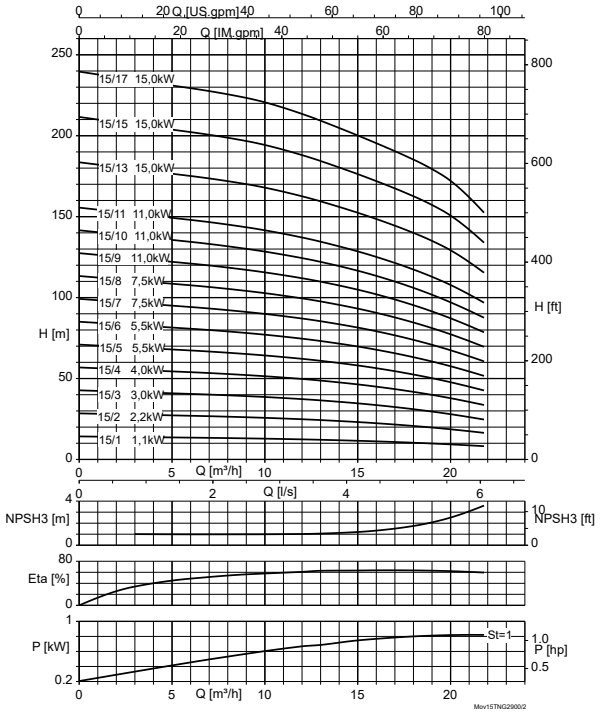


Fig. 167: St = number of stages
The power input P is indicated per stage.

Movitec; 25B, n = 2900 rpm

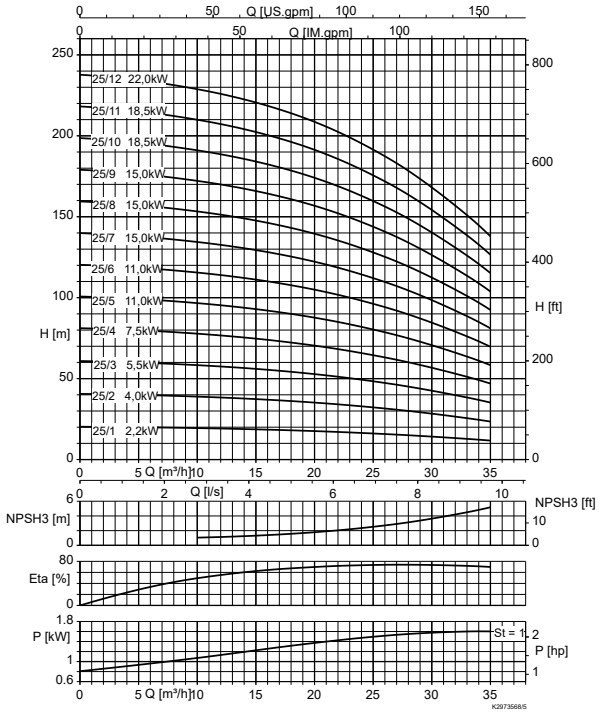


Fig. 168: St = number of stages
The power input P is indicated per stage.

Movitec; 40B; n = 2900 rpm

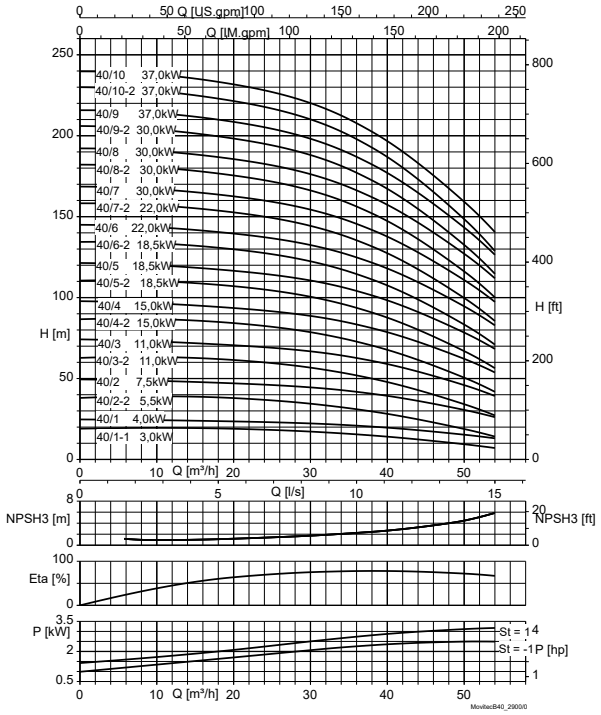


Fig. 169: St = number of stages
The power input P is indicated per stage.

Movitec; 60B; n = 2900 rpm

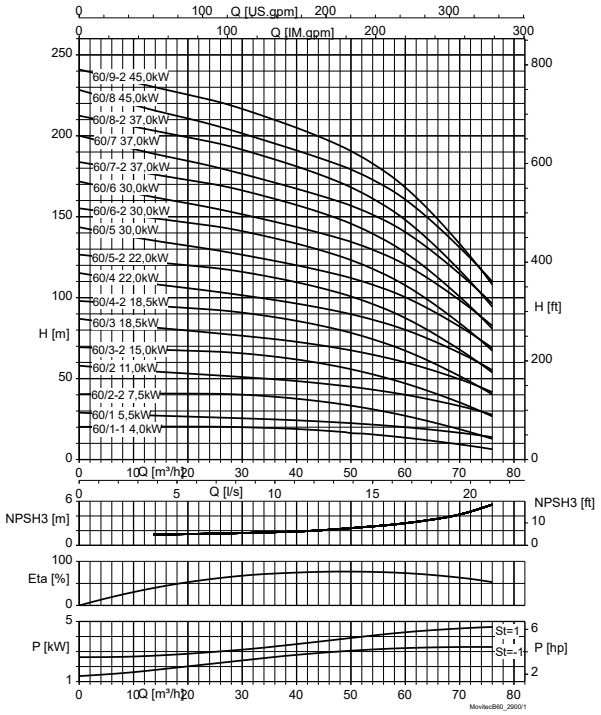


Fig. 170: St = number of stages
The power input P is indicated per stage.

Movitec; 90B; n = 2900 rpm

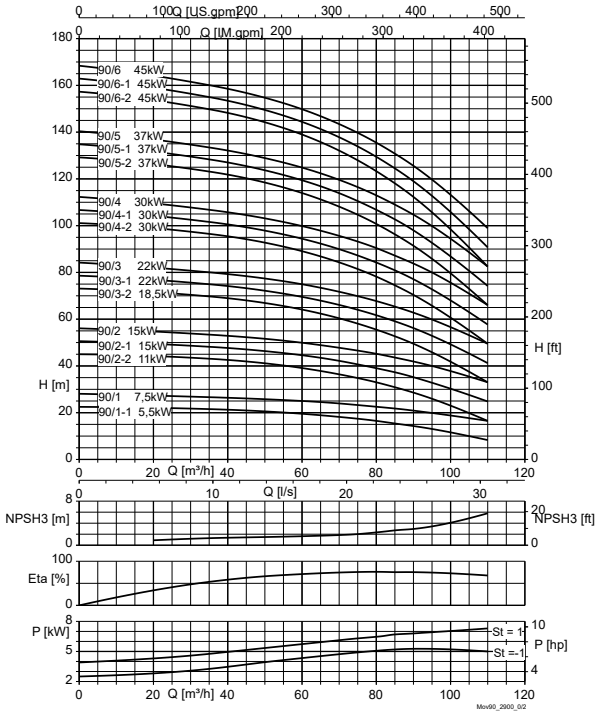


Fig. 171: St = number of stages
The power input P is indicated per stage.

Movitec; 125B; n = 2900 rpm

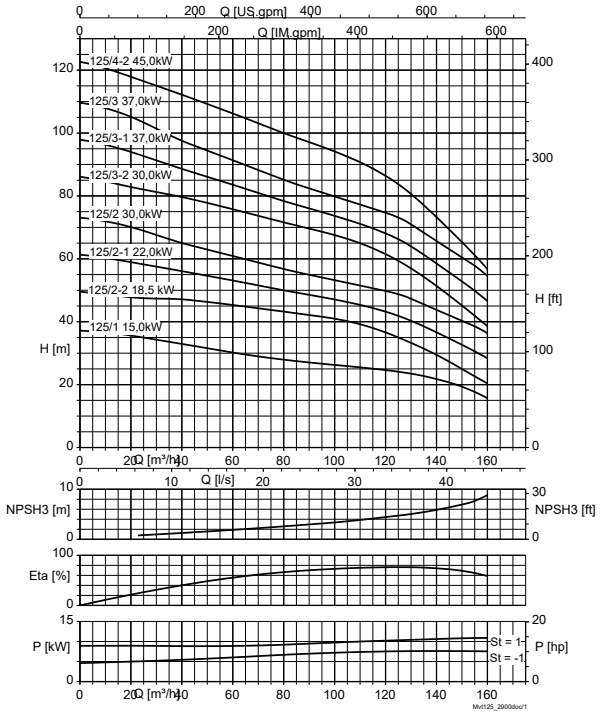


Fig. 172: St = number of stages
The power input P is indicated per stage.

Movitec; LHS 6; n = 2900 rpm

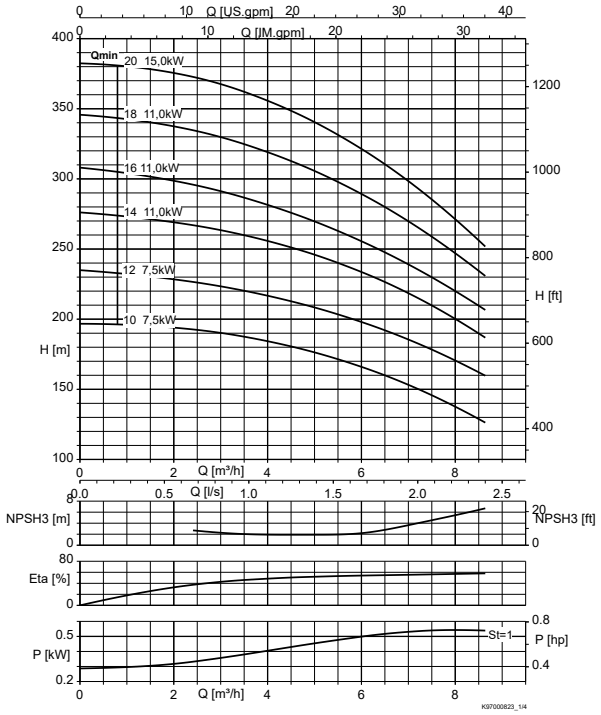


Fig. 173: St = number of stages
The power input P is indicated per stage.

Movitec; 10B; n = 1450 rpm

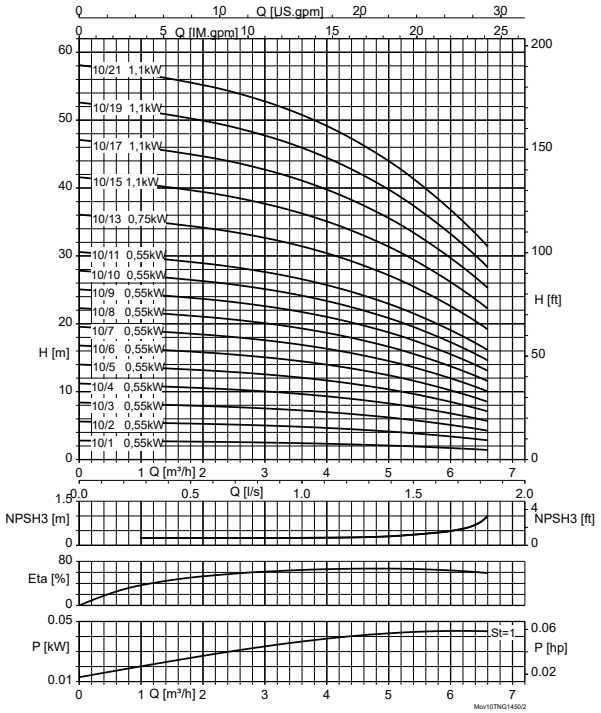


Fig. 174: St = number of stages
The power input P is indicated per stage.

Movitec; 15B; n = 1450 rpm

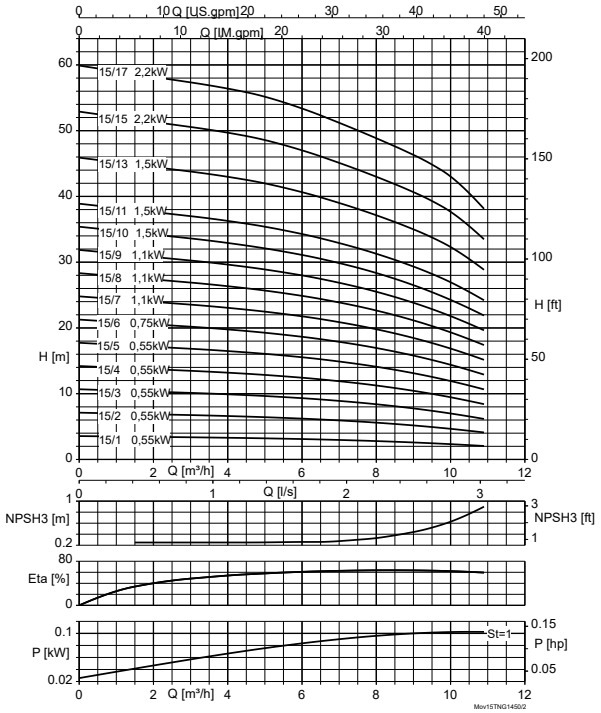


Fig. 175: St = number of stages
The power input P is indicated per stage.

Movitec; 25B, n = 1450 rpm

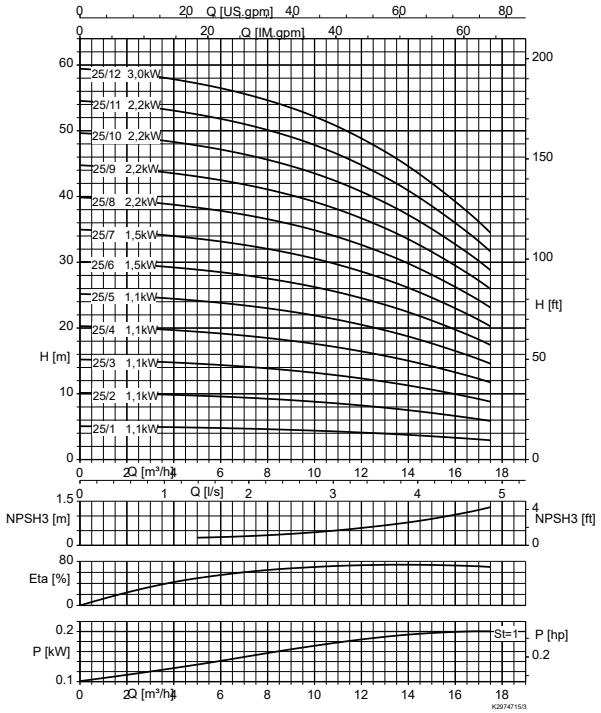


Fig. 176: St = number of stages
The power input P is indicated per stage.

Movitec; 40B; n = 1450 rpm

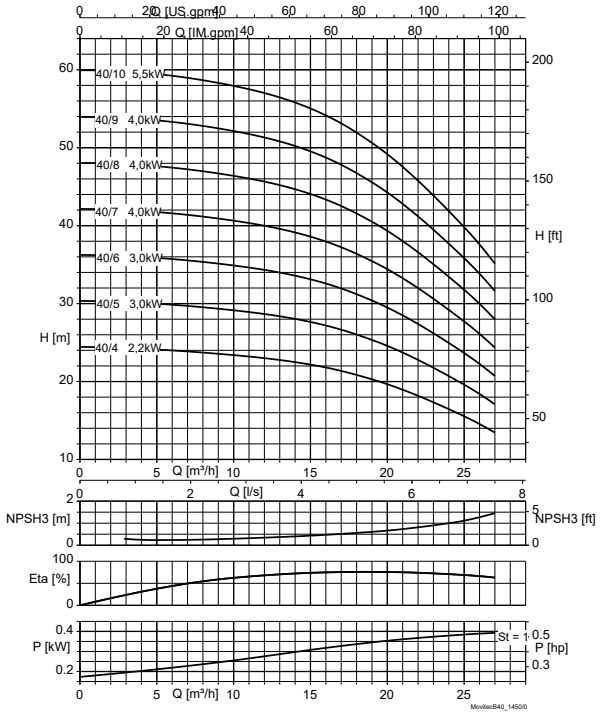


Fig. 177: St = number of stages
The power input P is indicated per stage.

Movitec; 60B; n = 1450 rpm

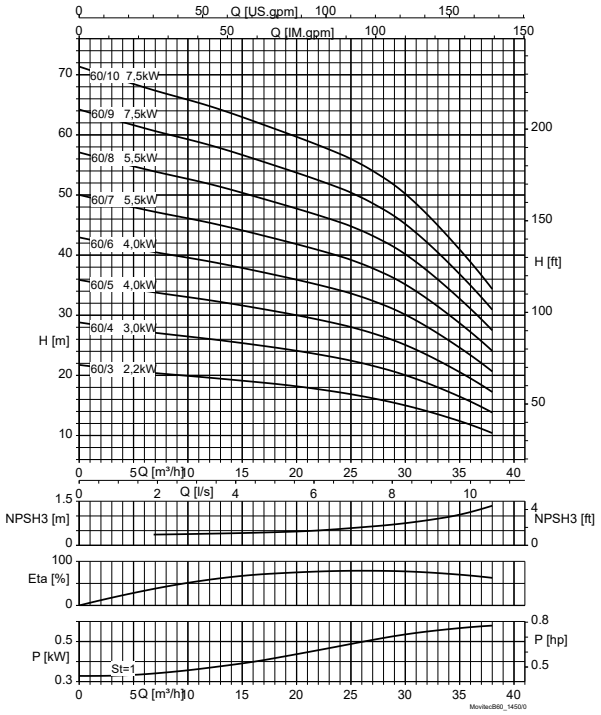


Fig. 178: St = number of stages
The power input P is indicated per stage.

Movitec; 90B; n = 1450 rpm

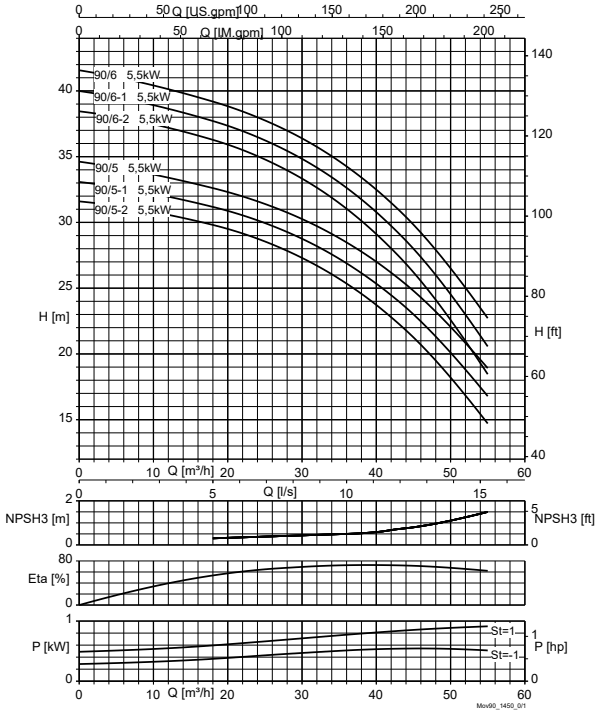


Fig. 179: St = number of stages
The power input P is indicated per stage.

Multistage High-pressure Centrifugal Pumps

Multitec / Multitec-RO

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000214

Product benefits

- Flexible, best matching adaptation to system condition by variety of installation types and variable nozzle position
- Low NPSH value, improved suction behaviour and operating reliability for suction lift operation by special suction stage impeller
- Optimised efficiencies and reduced operating costs by newly developed hydraulic system
- Versatile use by broad range of installation types, materials and shaft seals

Further information

Prices on request

Further information

	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[145)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

145 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Description / design

Horizontal or vertical multistage centrifugal pump in ring-section design. Axial or radial suction nozzle. Discharge nozzle can be turned in steps of 90°. Closed radial impellers. Made of duplex or super duplex stainless steel.

Main applications

- Water supply systems
- Drinking water supply
- Pressure boosting
- General irrigation systems
- Fossil-fuelled power stations
- Hot-water supply
- Condensate transport
- Boiler feed applications
- Heating systems
- Filtering systems
- Fire-fighting systems
- Snow-making systems
- Washing plants
- Industrial plants
- Desalination plants
- Geothermal plants
- Heat recovery systems

Operating data

Operating properties

Characteristic		Value
Size	DN	32 - 250
Flow rate	Q [m³/h]	≤ 1500
	Q [l/s]	≤ 417
Head	H [m]	≤ 1000 [146)]
Fluid temperature	T [°C]	≥ -10
		≤ +200 [146)]
Operating pressure	p_2 [bar][147)]	≤ 100 [146)]

Designation

Example: Multitec[148)] A 32/8E-2.1 12.167 (SP)

Designation key

Code	Description
Multitec	Type series
A	Installation type
32	Nominal discharge nozzle diameter [mm]
8E	No. of stages / impeller combination
2.1	Hydraulic system
12	Material code
167	Seal code
SP	Code for special variants (optional)

Example: Multitec-RO[149)] A 100/5-8.1 31.80

Designation key

Code	Description
Multitec-RO	Type series
A	Installation type
100	Nominal discharge nozzle diameter [mm]
5	Number of stages
8.1	Hydraulic system
31	Casing material (duplex steel)
80	Seal code

Prices on request

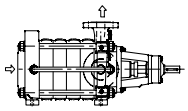
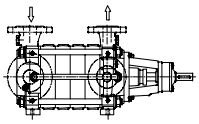
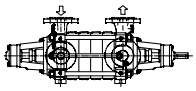
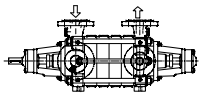
Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

146 Only for individual sizes/designs
147 The sum of inlet pressure and shut-off head must not exceed the value indicated.
148 Code: MTC
149 Code: MTC-RO

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

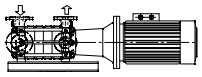
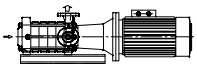
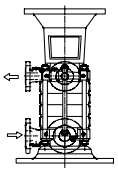
Technical description

Installation types A / B / C / D

Designation	Installation type			
	A[150]	B[150]	C[150]	D[151]
				
	Horizontal design, long-coupled	Horizontal design, long-coupled	Horizontal design, long-coupled	Horizontal design, long-coupled
	1 shaft passage (drive end)	1 shaft passage (drive end)	2 shaft passages	2 shaft passages
	Rolling element bearing at the drive end / plain bearing on the suction side	Rolling element bearing at the drive end / plain bearing on the suction side	Rolling element bearing at the drive end / rolling element bearing on the suction side	Rolling element bearing at the drive end / rolling element bearing on the discharge side
	Axial suction nozzle (block flange up to size 50)	Radial suction nozzle	Drive on discharge side	Drive on suction side
	Drive on discharge side	Drive on discharge side	DN 200, DN 250: installation types C and D only	
Drive	Electric motor, diesel engine, turbine			
Axial thrust balancing	By balance drum[152]			
Q_{max} (50 Hz)[153]	850 m³/h		1500 m³/h	
H_{max}	630 m (1000 m[154])			
p_{2max}	63 bar (100 bar[154])			
T_{max}	-10 °C to +45 °C (Multitec-RO) / +200 °C (Multitec)			
Shaft seal	Uncooled gland packing, cooled or uncooled mechanical seal; single or double cartridge seal			
Casing material	Grey cast iron, steel, stainless steel, duplex, superduplex stainless steel		Grey cast iron, nodular cast iron[155], steel, stainless steel, duplex	
Hydraulic system material	Grey cast iron, bronze, stainless steel, duplex, superduplex stainless steel		Grey cast iron, bronze, steel, stainless steel, duplex	

150 The direction of rotation is clockwise, seen from the motor end.
151 The direction of rotation is counter-clockwise, seen from the motor end.
152 For small numbers of stages without balance drum: The thrust bearing absorbs the axial thrust.
153 For 60 Hz values refer to the individual characteristic curves.
154 Only for individual sizes/designs
155 For DN 200 and DN 250 only

Installation types E / F / V

Designation	Installation type			
	E[150]	F[150]	V[150]	
				
	Horizontal close-coupled pump	Horizontal close-coupled pump	Vertical close-coupled pump	
	Common bearing for pump and motor	Common bearing for pump and motor		
	Rigid coupling	Rigid coupling		
	Radial suction nozzle	Axial suction nozzle		
	Plain bearing on the suction side	Plain bearing on the suction side		
H/Q range[153]	100 m³/h, 250 m, up to nominal diameter 65	100 m³/h, 250 m, up to nominal diameter 65	Up to 400 kW	
Drive	Standardised motor		Standardised motor, fixed bearing at the drive end[156]	Standardised motor
Fixed bearing	Motor[156]		Motor[156]: DN 32, DN 50, DN 65	In lantern: DN 100, DN 125, DN 150, DN 200
Axial thrust balancing	By balance drum[152]		By balance drum	By balance drum[152]
Q_{max}[153]	100 m³/h		850 m³/h	
H_{max}	250 m		630 m	
$p_{2\ max}$	40 bar		63 bar	
T_{max}	-10 °C to +140 °C		-10 °C to +140 °C	
Shaft seal	Uncooled gland packing, uncooled mechanical seal, single		Uncooled gland packing, uncooled mechanical seal, single	
Casing material	Grey cast iron		Grey cast iron, nodular cast iron[157], steel, stainless steel, duplex	
Hydraulic system material	Grey cast iron, bronze		Grey cast iron, bronze, stainless steel, duplex	

156 On Multitec 32, Multitec 50 and Multitec 65 the motor bearings on the coupling side are fixed bearings.
157 For Multitec 200 only

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Multistage Horizontal Centrifugal Pumps

Comeo

Product benefits

- Top quality pump thanks to advanced high-precision production technology and durable high-grade materials
- An energy-saving, state-of-the-art pump solution characterised by high efficiency levels, optimum flow passage, the use of high-efficiency motors, and precision engineering of all hydraulic components
- High energy efficiency as well as low investment and maintenance costs make for low life cycle costs.
- Very compact, space-saving design

Further information

Prices on request

Characteristic curves 393
Dimensions and connections..... 394

http://shop.ksb.com/catalog/k0/en/product/ES000912

Further information

	Cervomatic EDP.2 (⇨ Page 1034)	Single-pump control unit, pressure-dependent, non-ATEX-compliant
	Controlmatic E (⇨ Page 1032)	Single-pump control unit, pressure-dependent, non-ATEX-compliant
	Controlmatic E.2 (⇨ Page 1033)	Single-pump control unit, pressure-dependent, non-ATEX-compliant

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certifications

Overview

Label	Effective in:	Comment
WRAS APPROVED PRODUCT	United Kingdom	Approved in accordance with the UK drinking water regulation

Main applications

- Cold water pressure booster system
- Cold water systems
- General irrigation systems
- Light industrial applications

Fluids handled

- Clean water (without solids)
- Slightly aggressive fluid

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 10,8
Head	H [m]	≤ 79,5
Fluid temperature	T [°C]	≥ -10
		≤ +60
Ambient temperature	T [°C]	≥ -20
		≤ +40 [158)]
Pressure class	PN [bar]	≤ 10

Design details

Design

- Multistage
- Close-coupled design
- Extended motor shaft
- Maximum pressure class PN 10

Installation

- Horizontal installation

Drive

- AC motor / three-phase asynchronous motor
- To IEC 60034-7
- Efficiency class IE3 to IEC 60034-30 (for three-phase motors ≥ 0.75 kW)
- Frequency 50 Hz/60 Hz
- 2 poles
- Thermal class F
- Enclosure IP55
- Duty type: continuous duty S1
- Temperature protection switch with automatic reset for single-phase AC motor

Shaft seal

- Mechanical seal
- To EN 12756
- Uncooled
- Maintenance-free

Designation

Designation example

Position																													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
C	o	m	e	o			C		I	0	0	4	/	0	6	-	A	4	B	3	2	F	S	0	9	0	E	5	M	W	
See name plate and data sheet																See data sheet															

Designation key

Position	Code	Description	
1-7	Pump type		
	Comeo	Comeo	
8-9	Variant		
	C	Cast steel	1.4308 (casing)
		Stainless steel	1.4301 (hydraulic system)
	G	Grey cast iron	EN-GJL-250 (casing)
		Stainless steel	1.4301 (hydraulic system)
10	Connection type		
	I	Internal thread	
11-13	Size		
	002	2	
	...	...	
	006	6	
15-16	Number of stages		
	01	1	
	...	...	
	06	6	
17	Trimmed impellers		
	-	No trimmed impeller	
18	Product generation		
	A	Comeo from 2015	
19	Connection standard		
	4	Internal thread / EN ISO 228-1	
20	Material variant		
	A	Grey cast iron	EN-GJL-250 (casing)
		Stainless steel	1.4301 (hydraulic system)

158 Optional: ≤ +55 °C

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Position	Code	Description	
20	B	Cast steel	1.4308 (casing)
		Stainless steel	1.4301 (hydraulic system)
21-22	Seal code		
	31	BVPFF	
	32	BVEFF	
23	Mechanical seal design		
	F	Fixed design	
24	Drive		
	S	Standard IEC	
25-27	Motor size		
	071	IEC 071	
	080	IEC 080	
	090	IEC 090	
28	Pressure class		
	E	PN10	
29	Number of motor poles		
	5	50 Hz, 2 poles	
	6	60 Hz, 2 poles	
30	Motor specification		
	M	230 V, single-phase AC motor	
	O	0.37/0.55 [kW], without IE classification	
	U	230/400 V - IE3	
31	PumpMeter		
	W	Without PumpMeter	
32	Design		
	-[159)]	Standard	
	X	Non-standard (BT3D, BT3)	

159 Blank

Materials

Overview of materials depending on material variant

Part No.	Description	In contact with water	Comeo C	Comeo G
10-6	Pump shroud	✘	1.4301	
101	Pump casing	✘	1.4308	EN-GJL-250
108.01/.04/.05	Stage casing	✘	1.4301	
160	Cover	✘	1.4301	
-	Shaft	✘	1.4541	
230	Impeller	✘	1.4301	
341	Drive lantern	-	EN-GJL-250	
412	O-ring	✘	EPDM	
433	Mechanical seal	✘	BVEFF	BVPFF
525.01/.03/.05	Spacer sleeve	✘	1.4305	
903.05	Vent plug	✘	1.4301 / EPDM	PEHD / TPE
905	Tie bolt	-	1.4057	
920.02/.03	Nut	✘	1.4301	
930.02	Safety device	✘	1.4401	
932	Circlip	✘	1.4571	
950	Spring	✘	1.4401	

Comparison of materials

EN	General description	EN material code	EN standard	ASTM
EN-GJL-250	Cast iron	GJL-250	EN 1561	A48 - 40 B
1.4057	Chrome nickel steel	X17CrNi 16-2--QT800	EN 10088-3	A276 - 431
1.4301	Chrome nickel steel	X5CrNi 18-10	EN 10088	A276 - 304
1.4305	Chrome nickel steel	X8CrNiS 18-9	EN 10088	A276 - 303
1.4308	Chrome nickel steel	GX5CrNi19-10	EN 10213-4	A351 - Grade CF8
1.4401	Chrome nickel molybdenum steel	X5CrNiMo 17-12-2	EN 10088	A276 - 316
1.4541	Chrome nickel steel	X6CrNiMoTi 18-10	EN 10088	A276 - 321
1.4571	Chrome nickel molybdenum steel	X6CrNiMoTi 17-12-2	EN 10088	A276 - 316Ti

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Technical data

Comeo C, 1~ 230 V, 50 Hz

50 Hz

Comeo C	n	P_N	I_A/I_N	cos φ	U_N Tolerance	η	L_p	Cable gland	Maximum frequency of starts	I_N 1~230 V	Mat. No.	[kg]
	[rpm]	[kW]			[%]	[%]	[dB]		[h^{-1}]	[A]		
2/2	2750	0,37	3,70	0,92	+/-10	67,00	58,00	1 × M18 × 1,5	20	2,60	48229175	13,1
2/4	2750	0,37	3,70	0,92	+/-10	67,00	58,00	1 × M18 × 1,5	20	2,60	48229176	13,8
2/6	2760	0,55	3,90	0,92	+/-10	70,00	56,00	1 × M18 × 1,5	20	3,69	48229177	15,9
4/2	2750	0,37	3,70	0,92	+/-10	67,00	58,00	1 × M18 × 1,5	20	2,60	48229178	13,1
4/4	2760	0,55	3,90	0,92	+/-10	70,00	56,00	1 × M18 × 1,5	20	3,69	48229179	15,3
4/6	2790	1,10	4,30	0,95	+/-10	75,00	58,00	1 × M20 × 1,5	20	6,68	48229180	20
6/2	2750	0,37	3,70	0,92	+/-10	67,00	58,00	1 × M18 × 1,5	20	2,60	48239930	13,4
6/4	2790	1,10	4,30	0,95	+/-10	75,00	58,00	1 × M20 × 1,5	20	6,68	48239931	19,7
6/6	2800	1,50	4,80	0,95	+/-10	76,00	58,00	1 × M20 × 1,5	20	8,99	48239932	23,1

Comeo C, 230/400 V, 50 Hz

50 Hz

Comeo C	n	P_N	I_A/I_N	cos φ	U_N Tolerance	η	L_p	Cable gland	Maximum frequency of starts	I_N 230/400 V	Mat. No.	[kg]
	[rpm]	[kW]			[%]	[%]	[dB]		[h^{-1}]	[A]		
2/2	2750	0,37	4,60	0,78	+/-10	74,20	58,00	1 × M20 × 1,5	20	1,64/0,94	48239960	13,1
2/4	2750	0,37	4,60	0,78	+/-10	74,20	58,00	1 × M20 × 1,5	20	1,64/0,94	48239961	13,8
2/6	2790	0,55	5,20	0,75	+/-10	77,60	58,00	1 × M20 × 1,5	20	2,31/1,33	48239962	15,9
4/2	2750	0,37	4,60	0,78	+/-10	74,20	58,00	1 × M20 × 1,5	20	1,64/0,94	48239963	13,1
4/4	2790	0,55	5,20	0,75	+/-10	77,60	58,00	1 × M20 × 1,5	20	2,31/1,33	48239964	15,3
4/6	2855	1,10	7,00	0,80	+/-10	82,70	60,00	2 × M20 × 1,5	25	4,22/2,43	48256815	20
6/2	2750	0,37	4,60	0,78	+/-10	74,20	58,00	1 × M20 × 1,5	20	1,64/0,94	48239966	13,4
6/4	2855	1,10	7,00	0,80	+/-10	82,70	60,00	2 × M20 × 1,5	25	4,22/2,43	48256816	19,7
6/6	2900	1,50	7,70	0,88	+/-10	84,20	63,00	2 × M25 × 1,5	25	5,08/2,92	48256817	23,1

Comeo G, 1~ 230 V, 50 Hz

50 Hz

Comeo G	n	P_N	I_A/I_N	cos φ	U_N Tolerance	η	L_p	Cable gland	Maximum frequency of starts	I_N 1~230 V	Mat. No.	[kg]
	[rpm]	[kW]			[%]	[%]	[dB]		[h^{-1}]	[A]		
2/2	2750	0,37	3,70	0,92	+/-10	67,00	58,00	1 × M18 × 1,5	20	2,60	48229157	13,1
2/4	2750	0,37	3,70	0,92	+/-10	67,00	58,00	1 × M18 × 1,5	20	2,60	48229158	13,8
2/6	2760	0,55	3,90	0,92	+/-10	70,00	56,00	1 × M18 × 1,5	20	3,69	48229159	15,9
4/2	2750	0,37	3,70	0,92	+/-10	67,00	58,00	1 × M18 × 1,5	20	2,60	48229160	13,1
4/4	2760	0,55	3,90	0,92	+/-10	70,00	56,00	1 × M18 × 1,5	20	3,69	48229161	15,3
4/6	2790	1,10	4,30	0,95	+/-10	75,00	58,00	1 × M20 × 1,5	20	6,68	48229162	20
6/2	2750	0,37	3,70	0,92	+/-10	67,00	58,00	1 × M18 × 1,5	20	2,60	48229163	13,4
6/4	2790	1,10	4,30	0,95	+/-10	75,00	58,00	1 × M20 × 1,5	20	6,68	48229164	19,7
6/6	2800	1,50	4,80	0,95	+/-10	76,00	58,00	1 × M20 × 1,5	20	8,99	48229165	23,1

Comeo G, 230/400 V, 50 Hz

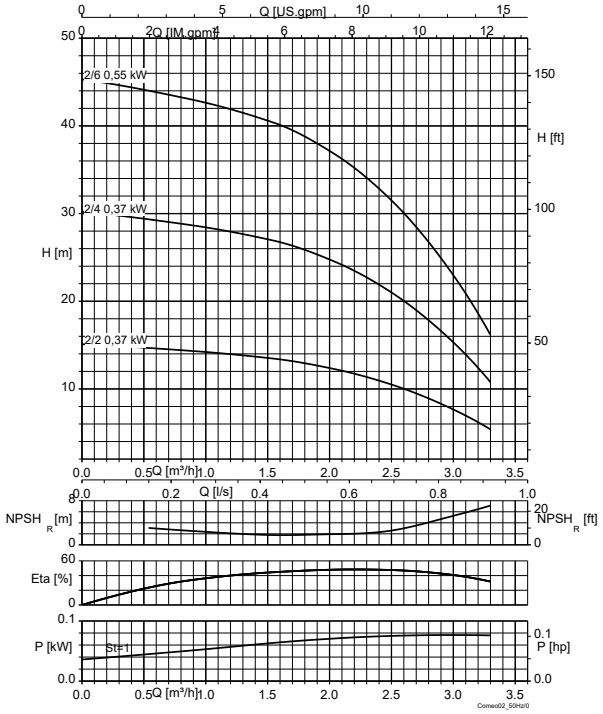
50 Hz

Comeo G	n	P_N	I_A/I_N	cos φ	U_N Tolerance	η	L_p	Cable gland	Maximum frequency of starts	I_N 230/400 V	Mat. No.	[kg]
	[rpm]	[kW]			[%]	[%]	[dB]		[h^{-1}]	[A]		
2/2	2750	0,37	4,60	0,78	+/-10	74,20	58,00	1 × M20 × 1,5	20	1,64/0,94	48239942	13,1
2/4	2750	0,37	4,60	0,78	+/-10	74,20	58,00	1 × M20 × 1,5	20	1,64/0,94	48239943	13,8
2/6	2790	0,55	5,20	0,75	+/-10	77,60	58,00	1 × M20 × 1,5	20	2,31/1,33	48239944	15,9
4/2	2750	0,37	4,60	0,78	+/-10	74,20	58,00	1 × M20 × 1,5	20	1,64/0,94	48239945	13,1
4/4	2790	0,55	5,20	0,75	+/-10	77,60	58,00	1 × M20 × 1,5	20	2,31/1,33	48239946	15,3
4/6	2855	1,10	7,00	0,80	+/-10	82,70	60,00	2 × M20 × 1,5	25	4,22/2,43	48256806	20
6/2	2750	0,37	4,60	0,78	+/-10	74,20	58,00	1 × M20 × 1,5	20	1,64/0,94	48239948	13,4
6/4	2855	1,10	7,00	0,80	+/-10	82,70	60,00	2 × M20 × 1,5	25	4,22/2,43	48256807	19,7
6/6	2900	1,50	7,70	0,88	+/-10	84,20	63,00	2 × M25 × 1,5	25	5,08/2,92	48256808	23,1

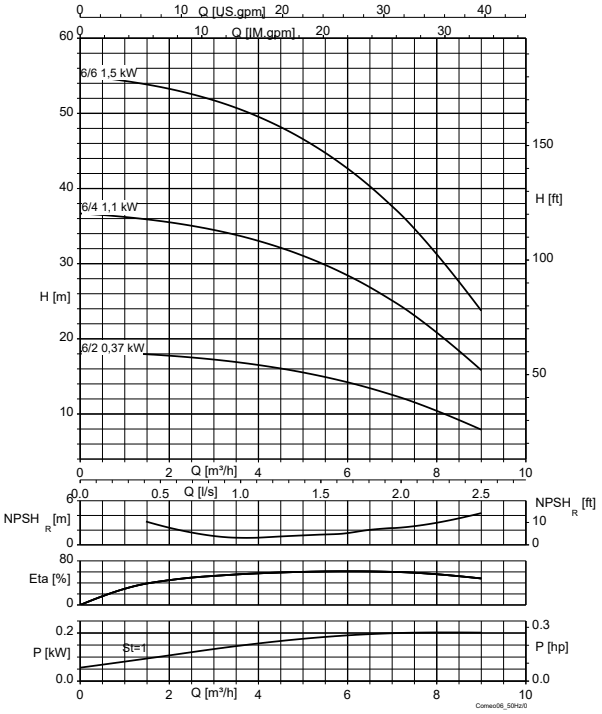
Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Characteristic curves

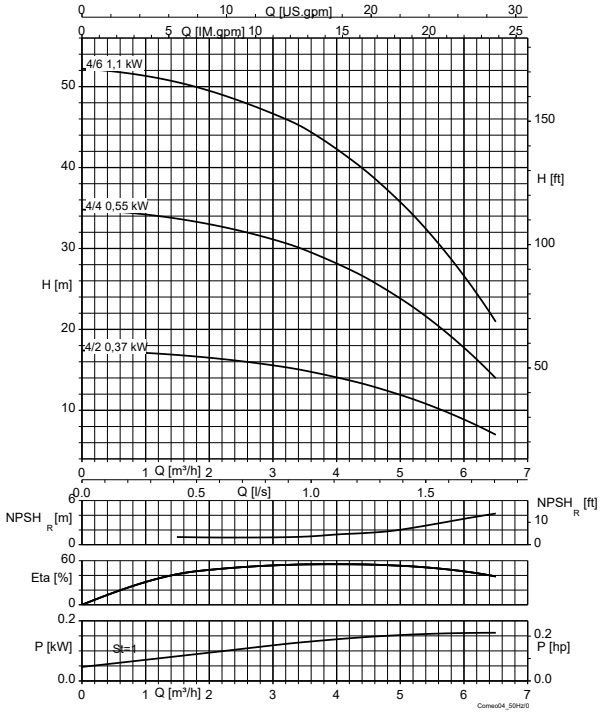
Comeo, 2, n ≈ 2900 rpm



Comeo, 6, n ≈ 2900 rpm



Comeo, 4, n ≈ 2900 rpm



Dimensions and connections

Dimensions

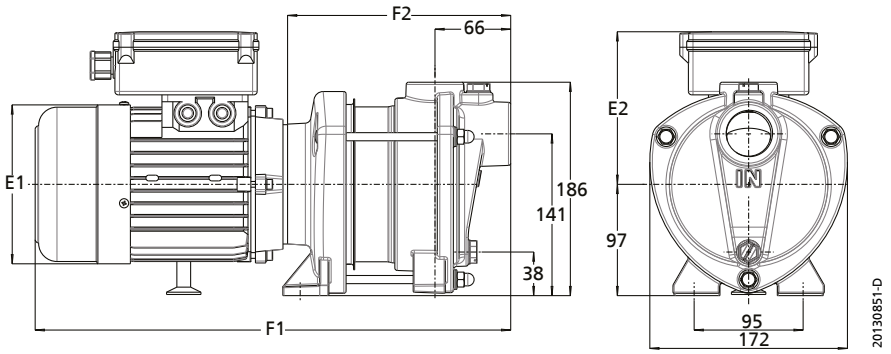


Fig. 180: Dimensions [mm]

Dimensions, 1~230 V, 50 Hz

Comeo	P_N	E1	E2	F1	F2
	[kW]	[mm]	[mm]	[mm]	[mm]
2/2	0,37	138,50	110,00	372,50	151,50
2/4	0,37	138,50	110,00	405,00	184,00
2/6	0,55	138,50	110,00	448,00	227,00
4/2	0,37	138,50	110,00	372,50	151,50
4/4	0,55	138,50	110,00	405,00	184,00
4/6	1,10	159,00	155,00	473,00	227,00
6/2	0,37	138,50	110,00	372,50	151,50
6/4	1,10	159,00	155,00	440,50	194,50
6/6	1,50	176,50	160,00	529,50	244,50

Dimensions, 230~400 V, 50 Hz

Comeo	P_N	E1	E2	F1	F2
	[kW]	[mm]	[mm]	[mm]	[mm]
2/2	0,37	138,00	109,00	372,50	151,50
2/4	0,37	138,00	109,00	405,00	184,00
2/6	0,55	138,00	109,00	448,00	227,00
4/2	0,37	138,00	109,00	372,50	151,50
4/4	0,55	138,00	109,00	405,00	184,00
4/6	1,10	157,00	133,00	487,00	227,00
6/2	0,37	138,00	109,00	372,50	151,50
6/4	1,10	157,00	133,00	454,50	194,50
6/6	1,50	180,00	145,00	497,50	244,50

Connections

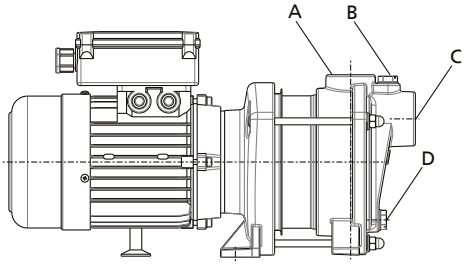


Fig. 181: Connections

A	Discharge nozzle (G 1), internal thread	C	Suction nozzle (G 1 1/4), internal thread
B	Screw filler plug (G 1/4)	D	Screw drain plug (G 1/4)

Multistage Horizontal Centrifugal Pumps

Movitec H(S)I

http://shop.ksb.com/catalog/k0/en/product/ES000927

Product benefits

- Reliable: product-lubricated plain bearings made of tungsten carbide, cast pump foot, torsion-resistant pump shroud and confined O-rings
- Long service life: corrosion-resistant hydraulic components made of stainless steel
- Easy to service: can be fitted with any standardised mechanical seal (to EN 12756)
- Easy to install underneath other machinery due to horizontal installation

Further information

Prices on request

Selection chart 399
Characteristic curves 401
Dimensions 403

Further information

	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[160)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for water pumps with a maximum nominal shaft power of 150 kW as per Regulation (EU) No. 547/2012.

Main applications

- Spray irrigation systems
- General irrigation systems
- Washing plants
- Fire-fighting systems
- Pressure boosting
- Industrial plants
- Water supply systems
- Heating, ventilation and air-conditioning systems
- Marine applications

160 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Fluids handled

- High-temperature hot water
- Clear water
- Condensate
- Cooling water
- Fire-fighting water
- Oil
- Cleaning agents
- And others

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 26,3
Head	H [m]	≤ 195
Fluid temperature	T [°C]	≥ -20
		≤ +140
Operating pressure	p [bar]	≤ 25

Design details

Design

- High-pressure pump
- Maximum pressure class PN 25
- Centrifugal pump
- Single-stage or multistage

Installation

- Horizontal installation

Drive

- Surface-cooled KSB squirrel-cage motor
- Thermal class F to IEC 34-1
- Efficiency class IE3 to IEC 60034-30 (≥ 0.75 kW)
- Enclosure IP55
- Frequency 50 Hz/60 Hz

Optional:

- Harting connector, type HAN 10E

Shaft seal

- Uncooled maintenance-free mechanical seal
  - Fixed mechanical seal
  - Easy Access mechanical seal
  - Cartridge seal

Bearings

- Tungsten carbide plain bearings at the hydraulic rotor

Designation

Designation example

Position																													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
M	o	v	i	t	e	c	H	S	I	0	1	5	/	0	4	-	B	4	S	1	3	E	S	1	1	2	B	7	U	A	X
See name plate and data sheet																		See data sheet													

Designation key

Position	Code	Description
1-7	Pump type	
	Movitec	Movitec
8-9	Variant	
	H	Cast steel (1.4308)
	HS	Cast steel (1.4408)
10	Connection type	
	I	Internal thread
11-13	Size	
	002	2
	...	...
	015	15
15-16	Number of stages	
	01	1
	...	...
	14	14
17	Number of stages with special impeller	
	_[161)]	No stage with a special impeller
	L	First stage with a special impeller for lower NPSH values
18	Product generation	

161 Blank

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Position	Code	Description
18	B	Movitec from 2010
19	Connection standard	
	4	Internal thread / EN ISO 228-1
20	Material variant	
	S	Cast steel (1.4408 - 1.4408 - EN-GJS-400-15)
21-22	Seal code	
	13	Q1BEGG
	14	Q1BVGG
	15	U3U3X4GG
	16	U3U3VGG
	18	U3BEGG
	23	Q1BEGG
	24	Q1Q1VGG
	28	Q1Q1X4GG
	29	Q1Q1EGG
23	Mechanical seal design	
	F	Fixed mechanical seal
	E	Easy Access mechanical seal
	C	Cartridge mechanical seal
24	Drive	
	0	Without motor
	2	With PumpDrive 2
	E	With PumpDrive 2 Eco
	S	Standard IEC
25-27	Motor size	
	071	IEC 071
	080	IEC 080
	090	IEC 090
	100	IEC 100
	112	IEC 112
	132	IEC 132
28	Pressure class	
	A	PN16 / PN25
	B	PN25
29	Frequency, number of motor poles	
	5	50 Hz, 2-pole
	6	60 Hz, 2-pole
	7	50 Hz, 4-pole
	8	60 Hz, 4-pole
30	Motor specification	
	M	230 V, single-phase AC motor
	O	0.37 / 0.55 kW, without IE classification
	U	230/400 V - IE3
	V	400/690 V - IE3
	W	230/400 V - IE4/IE5 (KSB SuPremE)
	X	400/690 V - IE4/IE5 (KSB SuPremE)
31	PumpMeter	
	A	Mit PumpMeter
	W	Without PumpMeter
32	Design	
	-[161)]	Standard
	X	Non-standard (BT3D, BT3)

Materials

Overview of materials depending on the design

Part No.	Description	Variant	
		H	HS
10-6	Pump shroud	1.4301	1.4404
101	Pump casing	1.4408	1.4408
108	Stage casing	1.4301	1.4404
160	Discharge cover	1.4301	1.4404
210	Shaft	1.4057	1.4460
230	Impeller	1.4301	1.4404
341	Drive lantern	EN-GJL-250[162] / EN-GJS-400-15[163]	
412	O-ring	EPDM-WRc / ACS	FPM / HNBR
525	Spacer sleeve	1.4301	1.4401
529	Bearing sleeve	Tungsten carbide / aluminium oxide	
89-11	Retaining bracket	1.4301	
890	Baseplate	EN-GJS-400-15	
905	Tie bolt	1.4057	
920	Nut	1.4301	1.4404
932	Circlip	1.4571	

Comparison of materials

EN	ASTM
EN-GJL-250	A48 Class 35 B
EN-GJS-400-15	A536 Gr. 60-40-18
1.4057	SS 431
1.4301	SS 304
1.4308	Gr. CF8
1.4404	SS 316L
1.4408	Gr. CF8M
1.4460	SS 329
1.4571	SS 316Ti

Prices on request

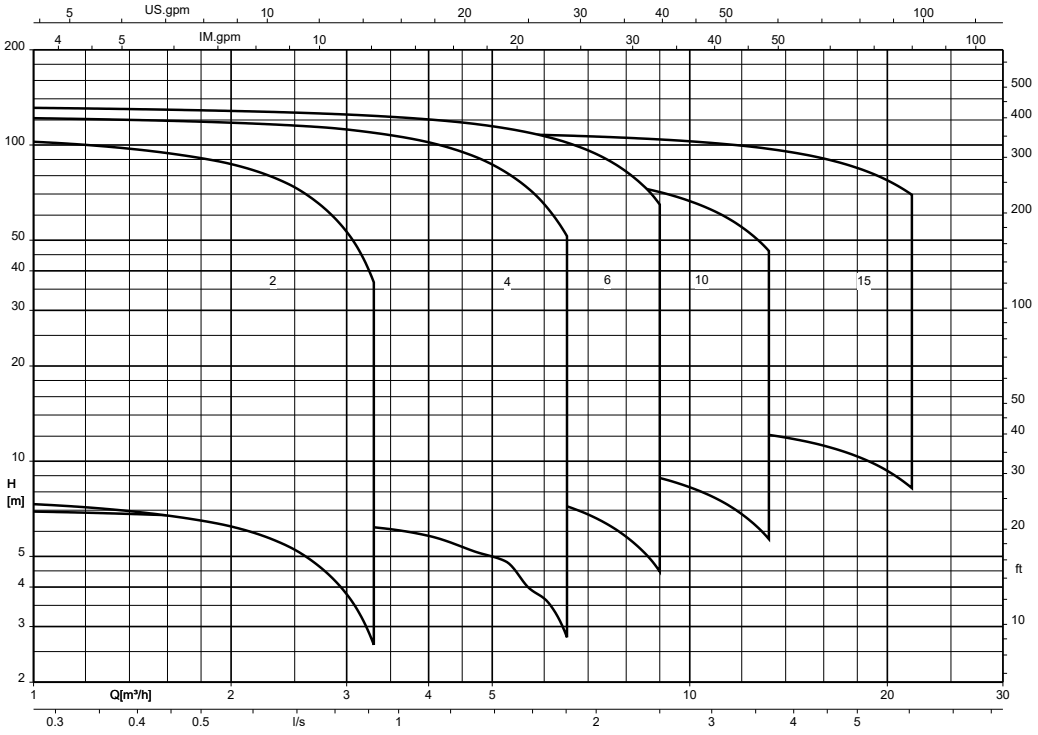
Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

162 Sizes 2B, 4B, 6B, 10B, 15B (≤ 4 kW)
163 Sizes 2B, 4B, 6B, 10B, 15B (≥ 5.5 kW)

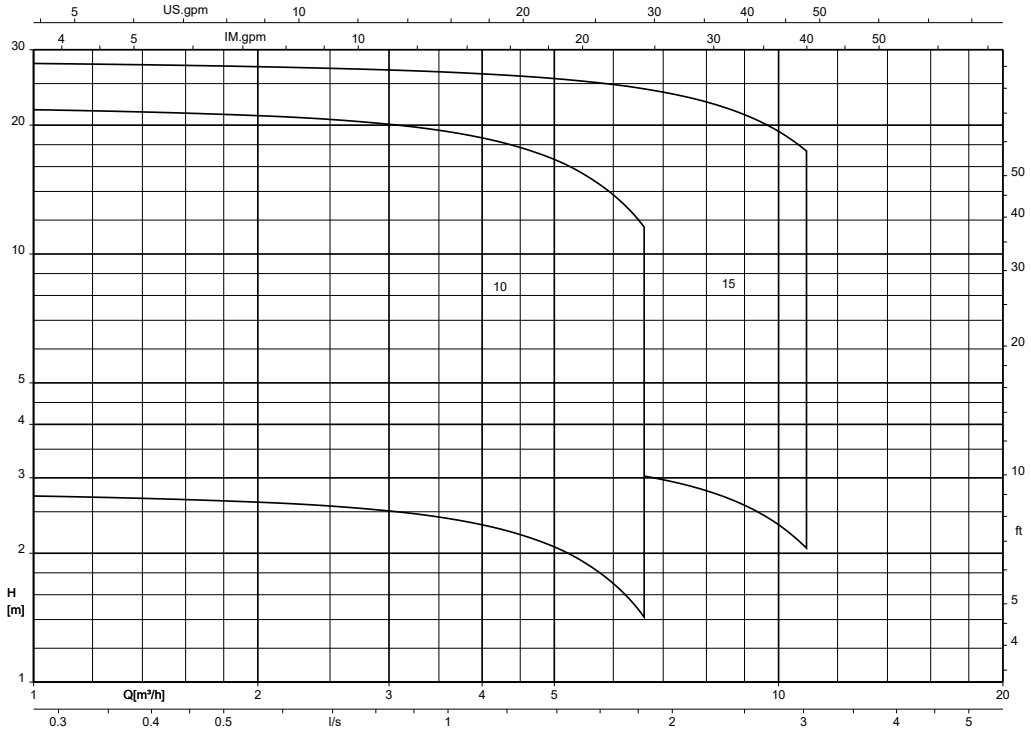
Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Selection chart

Movitec H(S)I, n = 2900 rpm



Movitec H(S)I, n = 1450 rpm



Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Characteristic curves

Movitec H(S)I, 2B, n = 2900 rpm

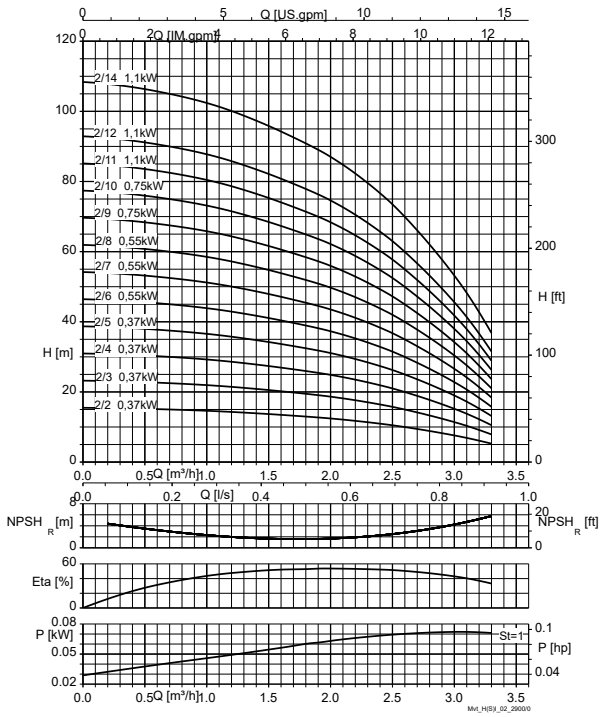


Fig. 182: St = number of stages
The power input P is indicated per stage.

Movitec H(S)I, 4B, n = 2900 rpm

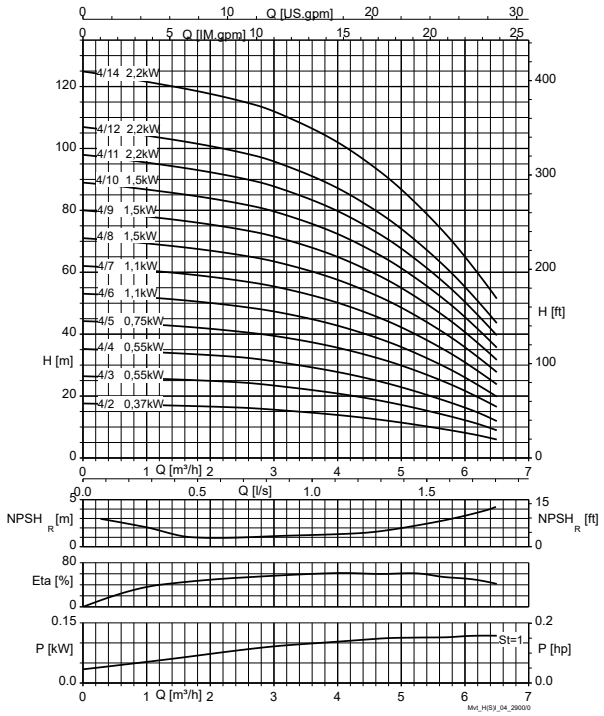


Fig. 183: St = number of stages
The power input P is indicated per stage.

Movitec H(S)I, 6B, n = 2900 rpm

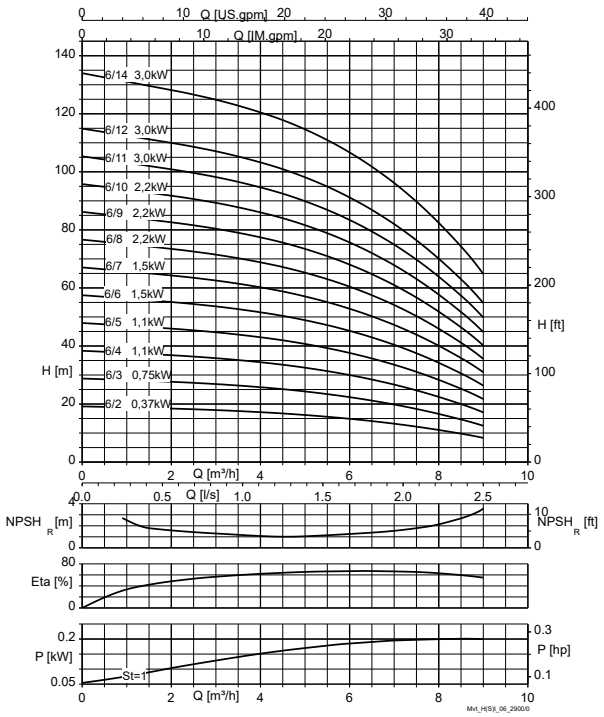


Fig. 184: St = number of stages
The power input P is indicated per stage.

Movitec H(S)I, 10B, n = 2900 rpm

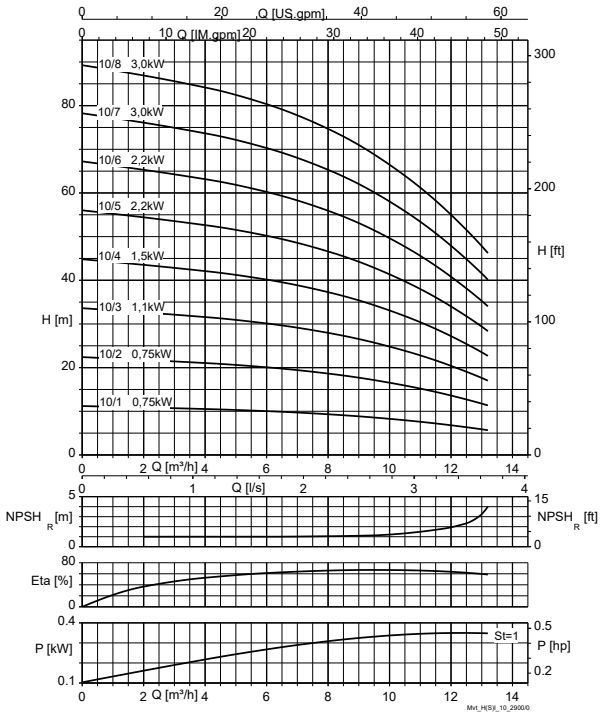


Fig. 185: St = number of stages
The power input P is indicated per stage.

Movitec H(S)I, 15B, n = 2900 rpm

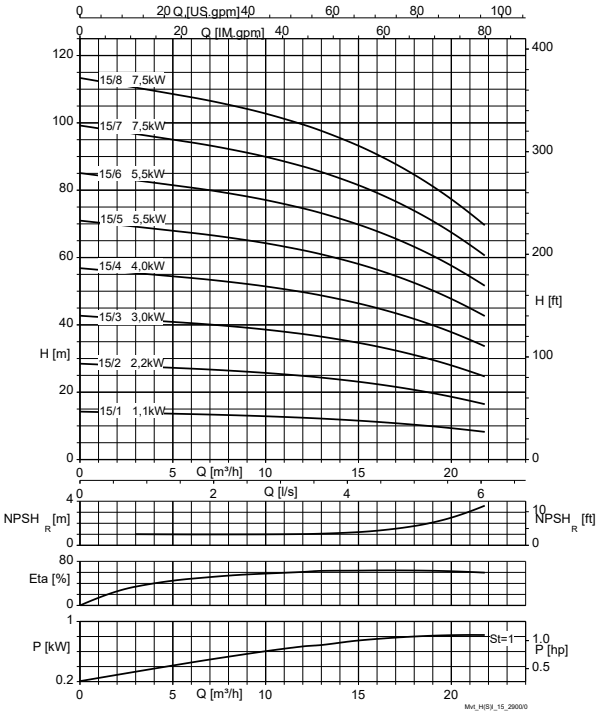


Fig. 186: St = number of stages
The power input P is indicated per stage.

Movitec H(S)I, 15B, n = 1450 rpm

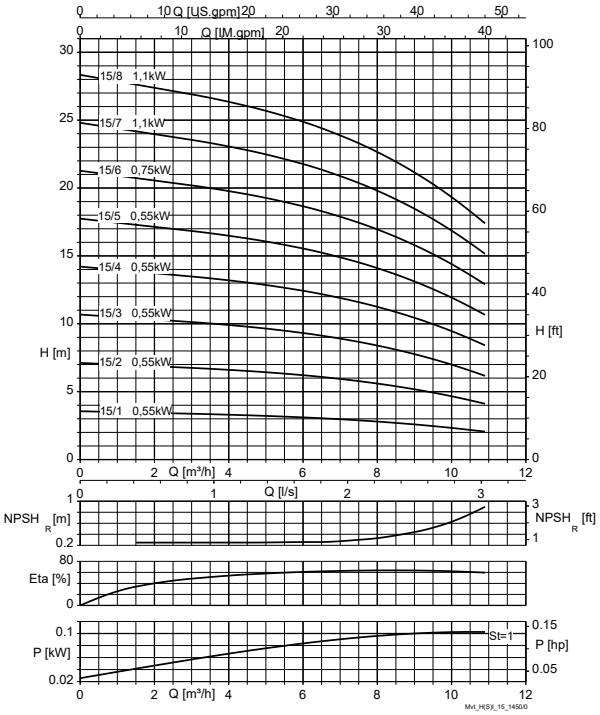


Fig. 188: St = number of stages
The power input P is indicated per stage.

Movitec H(S)I, 10B, n = 1450 rpm

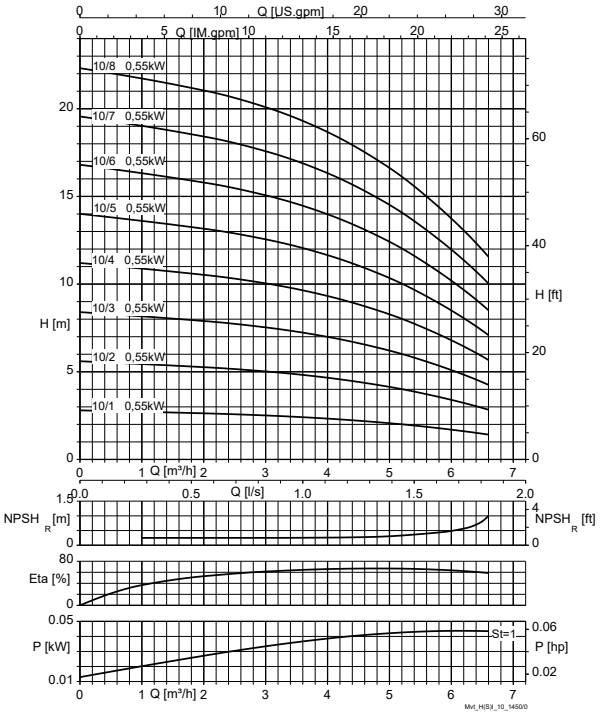


Fig. 187: St = number of stages
The power input P is indicated per stage.

Dimensions

Movitec H(S)I 2B, n = 2900 rpm

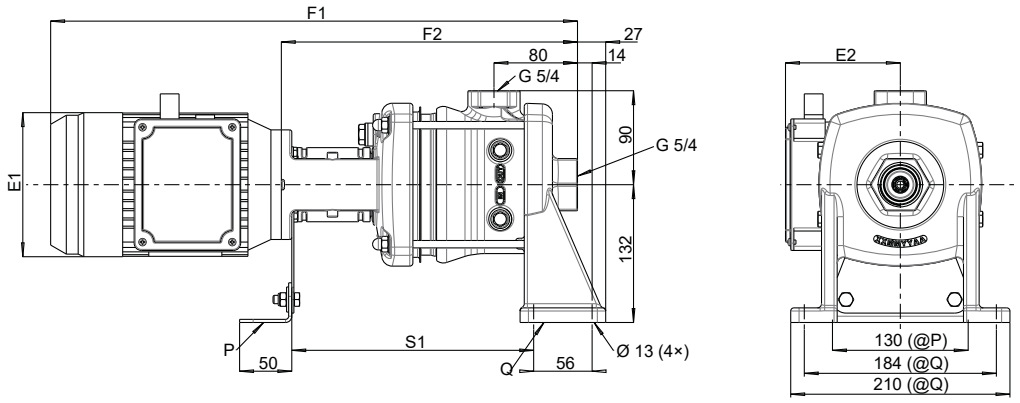


Fig. 189: Dimensions and connections of Movitec H(S)I 2 with V18 motor[164)]

Dimensions [mm]

Number of stages	Motor	E1	E2	F1	F2	S1
2	V18	138	109	502	289	236,5
3	V18	138	109	523	310	257,5
4	V18	138	109	545	332	279,5
5	V18	138	109	566	353	300,5
6	V18	138	109	588	375	322,5
7	V18	138	109	609	396	343,5
8	V18	138	109	631	418	365,5
9	V18	157	133	706	449	396,5
10	V18	157	133	728	471	418,5
11	V18	157	133	749	492	439,5
12	V18	157	133	771	514	461,5
14	V18	157	133	814	557	504,5

164 Optional: connection height 160 mm

Movitec H(S)I 4B, n = 2900 rpm

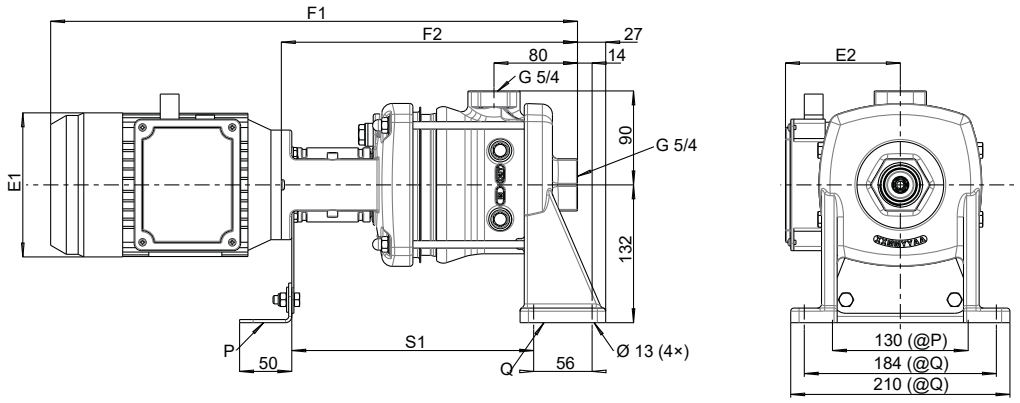


Fig. 190: Dimensions and connections of Movitec H(S)I 4 with V18 motor[165)]

Dimensions [mm]

Number of stages	Motor	E1	E2	F1	F2	S1
2	V18	138	109	502	289	236,5
3	V18	138	109	523	310	257,5
4	V18	138	109	545	332	279,5
5	V18	157	133	620	363	310,5
6	V18	157	133	642	385	332,5
7	V18	157	133	663	406	353,5
8	V18	180	145	691	438	383,5
9	V18	180	145	712	459	404,5
10	V18	180	145	734	481	426,5
11	V18	180	145	784	502	447,5
12	V18	180	145	806	524	469,5
14	V18	180	145	849	567	512,5

165 Optional: connection height 160 mm

Movitec H(S)I 6B, n = 2900 rpm

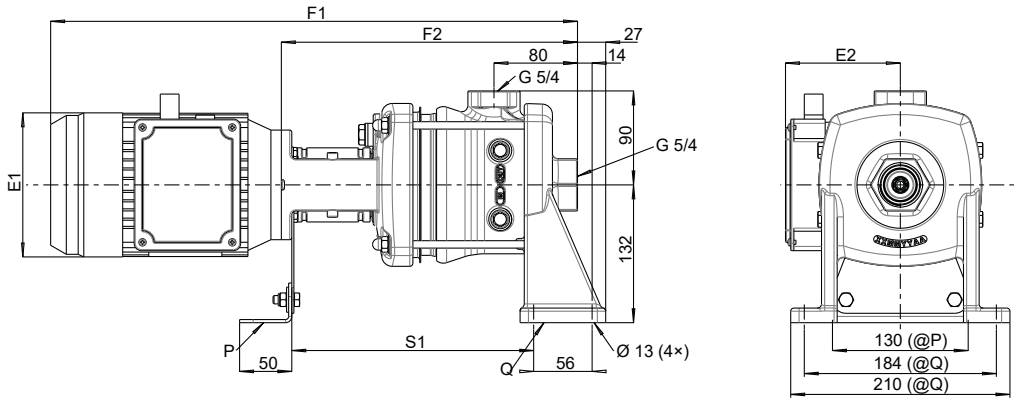


Fig. 191: Dimensions and connections of Movitec H(S)I 6 with V18 motor[166)]

Dimensions [mm]

Number of stages	Motor	E1	E2	F1	F2	S1
2	V18	138	109	509	296	243,5
3	V18	157	133	588	331	278,5
4	V18	157	133	613	356	303,5
5	V18	157	133	638	381	328,5
6	V18	180	145	669	416	361,5
7	V18	180	145	694	441	386,5
8	V18	180	145	748	466	411,5
9	V18	180	145	773	491	436,5
10	V18	180	145	798	516	461,5
11	V18	200	155	865	551	496,5
12	V18	200	155	890	576	521,5
14	V18	200	155	940	626	571,5

166 Optional: connection height 160 mm

Movitec H(S)I 10B, n = 1450 rpm

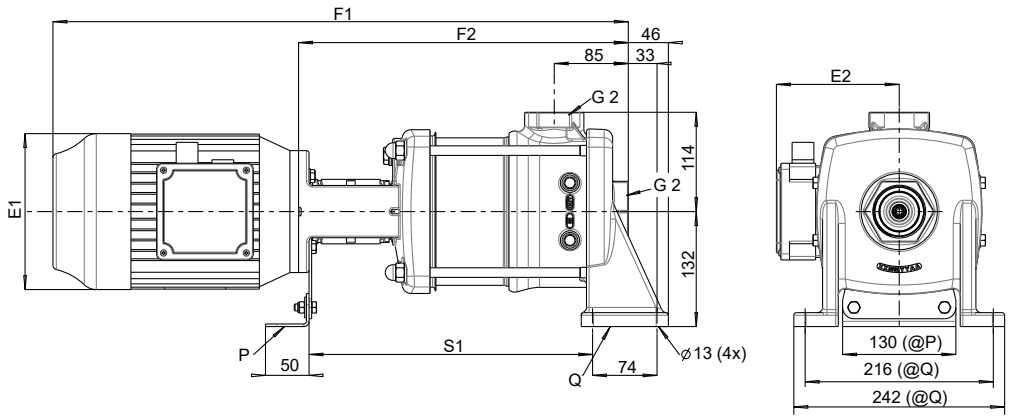


Fig. 192: Dimensions and connections of Movitec H(S)I 10 with V18 motor[167)]

Dimensions [mm]

Number of stages	Motor	E1	E2	F1	F2	S1
1	V18	157	112	597	351	280,5
2	V18	157	112	597	351	280,5
3	V18	157	112	623	377	306,5
4	V18	157	112	650	404	333,5
5	V18	157	112	676	430	359,5
6	V18	157	112	703	457	386,5
7	V18	157	112	729	483	412,5
8	V18	157	112	755	510	439,5

167 Optional: connection height 160 mm

Movitec H(S)I 10B, n = 2900 rpm

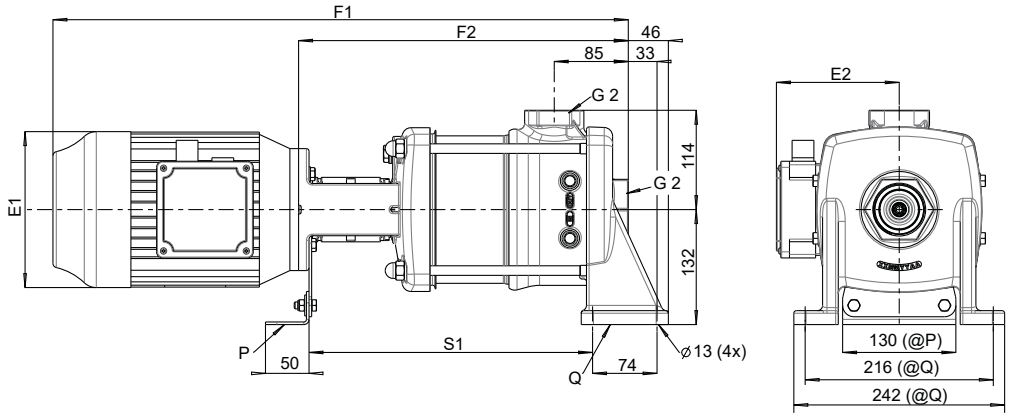


Fig. 193: Dimensions and connections of Movitec H(S)I 10 with V18 motor[168)]

Dimensions [mm]

Number of stages	Motor	E1	E2	F1	F2	S1
1	V18	157	133	626	351	280,5
2	V18	157	133	651	376	305,5
3	V18	157	133	677	402	331,5
4	V18	180	145	709	439	366,5
5	V18	180	145	750	465	392,5
6	V18	180	145	777	492	419,5
7	V18	200	155	858	528	455,5
8	V18	200	155	885	555	482,5

168 Optional: connection height 160 mm

Movitec H(S)I 15B, n = 1450 rpm

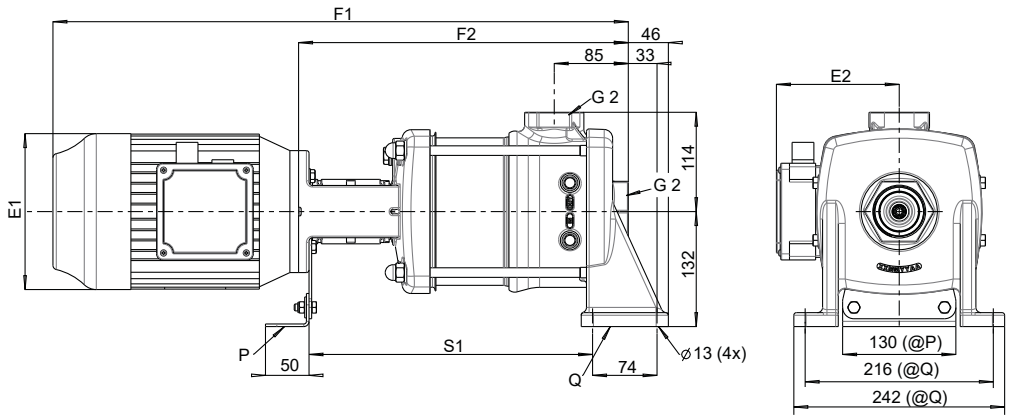


Fig. 194: Dimensions and connections of Movitec H(S)I 15 with V18 motor[169)]

Dimensions [mm]

Number of stages	Motor	E1	E2	F1	F2	S1
1	V18	157	112	597	351	280,5
2	V18	157	112	597	351	280,5
3	V18	157	112	623	377	306,5
4	V18	157	112	650	404	333,5
5	V18	157	112	676	430	359,5
6	V18	157	112	732	457	386,5
7	V18	180	145	763	493	420,5
8	V18	180	145	790	520	447,5

169 Optional: connection height 160 mm

Movitec H(S)I 15B, n = 2900 rpm

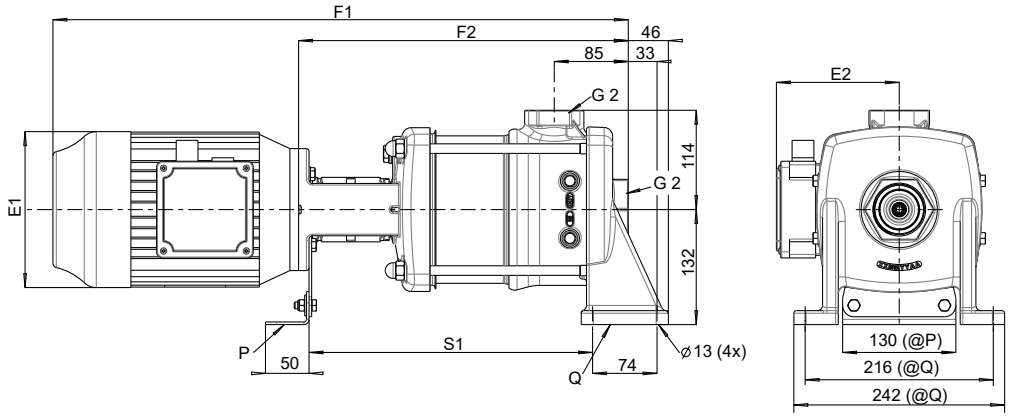


Fig. 195: Dimensions and connections of Movitec H(S)I 15 with V18 motor[170)]

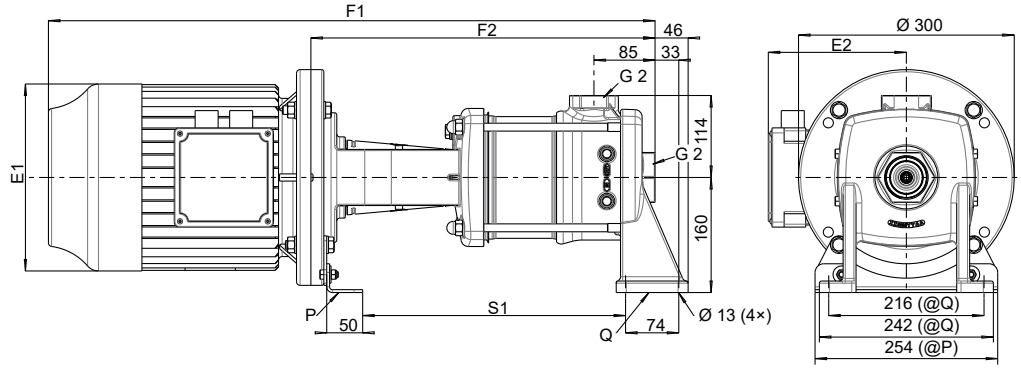


Fig. 196: Dimensions and connections of Movitec H(S)I 15 with V1 motor

Dimensions [mm]

Number of stages	Motor	E1	E2	F1	F2	S1
1	V18	157	133	626	351	280,5
2	V18	180	145	646	361	288,5
3	V18	200	155	727	397	324,5
4	V18	223	166	764	424	351,5
5	V1	260	190	895	530	405,5
6	V1	260	190	921	556	431,5
7	V1	260	190	948	583	458,5
8	V1	260	190	974	609	484,5

170 Optional: connection height 160 mm up to a maximum of 4 stages

Multistage High-pressure Immersion Centrifugal Pumps

Movitec VCI

http://shop.ksb.com/catalog/k0/en/product/ES000870

Product benefits

- Top quality pump thanks to advanced high-precision production technology and durable high-grade materials
- Excellent reliability, enabled by compact, easy-to-replace cartridge seal and automatic return of small amounts of leakage into the tank
- An energy-saving, state-of-the-art pump solution characterised by high efficiency levels, optimum flow passage, the use of high-efficiency motors, and precision engineering of all hydraulic components
- Flexible use due to modular design, optional blind stages and versatile seal materials for a wide variety of applications, as well as numerous motor options
- Easy replacement of competitor products due to comparable dimensions
- High energy efficiency as well as low investment and maintenance costs make for low life cycle costs.

Further information

Prices on request

Selection chart 413
Characteristic curves 414
Dimensions and connections 416

Further information

	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[171)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for water pumps with a maximum nominal shaft power of 150 kW as per Regulation (EU) No. 547/2012.

Main applications

- Machine tools
- Industrial washing machines
- Condensate transport

Fluids handled

- Condensate
- Cooling lubricants
- Emulsions
- Lyes
- Oil

171 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 22,5
Head	H [m]	≤ 249
Fluid temperature	T [°C]	≥ -10
		≤ +120
Operating pressure	p [bar]	≤ 25

Design details

Design

- Multistage high-pressure immersion centrifugal pump

Optional:

- Blind stages

Installation

- Vertical installation

Drive

- Surface-cooled KSB squirrel-cage motor
- Thermal class F to IEC 34-1
- Efficiency class IE3 to IEC 60034-30 (≥ 0.75 kW)
- Enclosure IP55
- Frequency 50 Hz/60 Hz

Optional:

- Harting connector, type HAN 10E

Bearings

- Plain bearings

Shaft seal

- Uncooled, maintenance-free mechanical seal in cartridge design

Designation

Designation example

Position																														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
M	o	v	i	t	e	c	V	C	I	0	6	/	1	2	-	1	8	A	A	1	3	C	S	0	7	1	A	5	C	A	
See name plate and data sheet																		See data sheet													

Designation key

Position	Code	Description	
1-7	Type series		
	Movitec	Movitec	
8-9	Design		
	VC	Grey cast iron	EN-GJL-250
	V-	Stainless steel	304 - 304
10	Connections		
	I	Internal thread	
11-12	Size		
	002	2	
	...	...	
	015	15	
14-15	Number of stages		
	01	1	
	...	...	
	30	30	
17-18	Number of blind stages		
	01	1	
	...	...	
	30	30	
19	Connection standard		
	A	Internal thread	EN ISO 228-1
20	Product generation		
	A	Movitec A VCI design	
21-22	Seal code		
	13	Q1BEGG	
	14	Q1BVGG	
	15	U3U3X4GG	
	16	U3U3VGG	
	18	U3BEGG	
	23	Q1BEGG	
	24	Q1Q1VGG	
	29	Q1Q1EGG	

Position	Code	Description
23	Mechanical seal design	
	C	Cartridge mechanical seal
24	Drive	
	0	Without motor
	2	With PumpDrive 2
	E	With PumpDrive 2 Eco
	S	Standard IEC
25-27	Motor size	
	071	IEC 071
	080	IEC 080
	090	IEC 090
	100	IEC 100
	112	IEC 112
	132	IEC 132
	160	IEC 160
28	Pressure class	
	A	PN 16 / PN 25
	B	PN 25
29	Number of motor poles	
	5	2-pole, 50Hz
	6	2-pole, 60 Hz
	7	4-pole, 50Hz
	8	4-pole, 60 Hz
30	Motor specification	
	K	EXM IEC, Movitec
	M	230 V, single-phase AC motor
	O	0.37/0.55 [kW], without IE classification
	U	230/400 V IE3
	V	400/690 V IE3
	W	230/400 V - IE4/IE5 (KSB SuPremE)
	X	400/690 V - IE4/IE5 (KSB SuPremE)
31	PumpMeter	
	A	Mit PumpMeter
	W	Without PumpMeter
32	Design	
	-[172)]	Standard
	X	Non-standard (BT3D, BT3)

Materials

Overview of materials available for pump components

Part No.	Description	Material
106	Suction casing	EN-GJL-250
108	Stage casing	1.4301
160	Discharge cover	1.4301
210	Shaft	1.4057
230	Impeller	1.4301
341	Drive lantern	EN-GJL-250
412	O-ring	EPDM
525	Spacer sleeve	1.4301
529	Bearing sleeve	Tungsten carbide / aluminium oxide
905	Tie bolt	1.4057
920	Nut	1.4301
932	Circlip	1.4571

172 Blank

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Shaft seal materials as a function of pressure and temperature

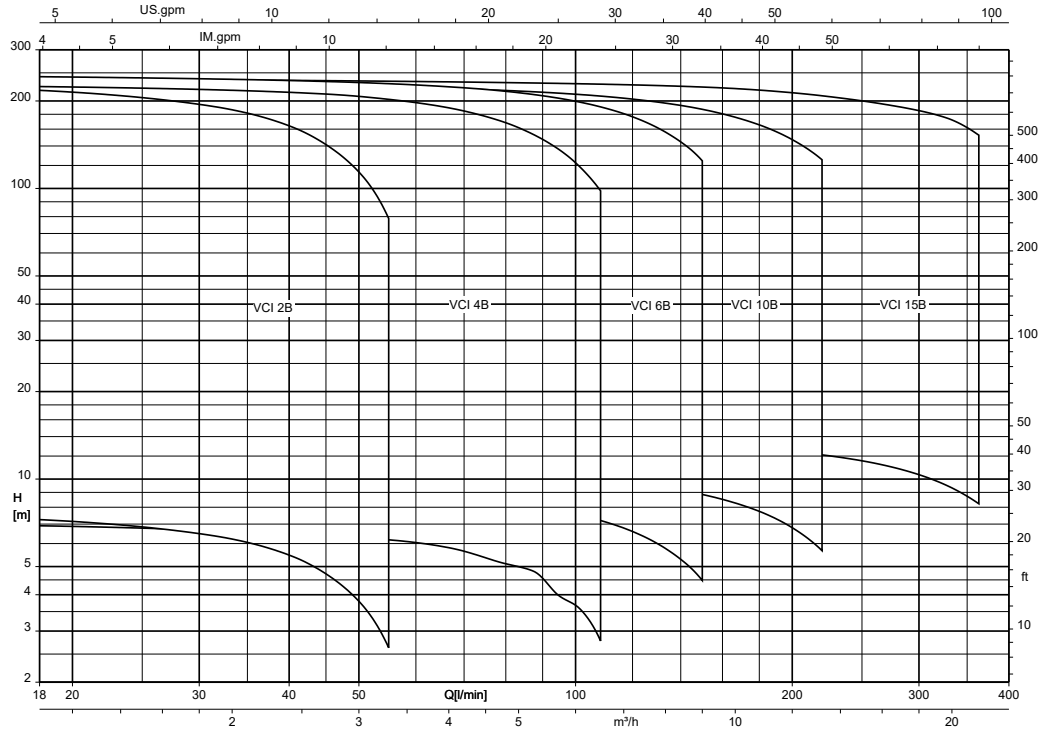
Seal type	Designation to EN 12756	Seal code	Material		T		p
			Mechanical seal	Pump elastomer	MIN	Max.	Max.
					[°C]	[°C]	[bar]
RMG12-G606	Q1BEGG-WRAS[173)]	13	Sic / Ca / EPDM	EPDM WRAS / ACS	- 20	+ 100	25
RMG12-G606	Q1BVGG[173)]	14	Sic / Ca / FPM	FPM	- 20	+ 120	25
RMG12-G606	U3U3X4GG	15	TuC / TuC / HNBR	HNBR	- 20	+ 120	25
RMG12-G606	U3U3VGG	16	TuC / TuC / FPM	FPM	- 20	+ 120	25
RMG12-G606	U3BEGG	18	TuC / Ca / EPDM	EPDM 559236	- 20	+ 120	25
RMG12-G606	Q1BEGG[173)]	23	SiC / Ca / EPDM	EPDM	- 20	+ 100	25
MG12-G60	Q1Q1VGG	24	SiC / SiC / FPM	FPM	- 20	+ 100	10
MG12-G60	Q1Q1EGG	29	SiC / SiC / EPDM	EPDM	- 20	+ 100	10

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Selection chart

Movitec VCI B; n = 2900 rpm



173 Not suitable for fluids containing solids. This also applies to fluids which may contain particles developing as a result of salt crystallisation at low fluid temperatures.

Characteristic curves

Movitec VCI, 2B, n = 2900 rpm

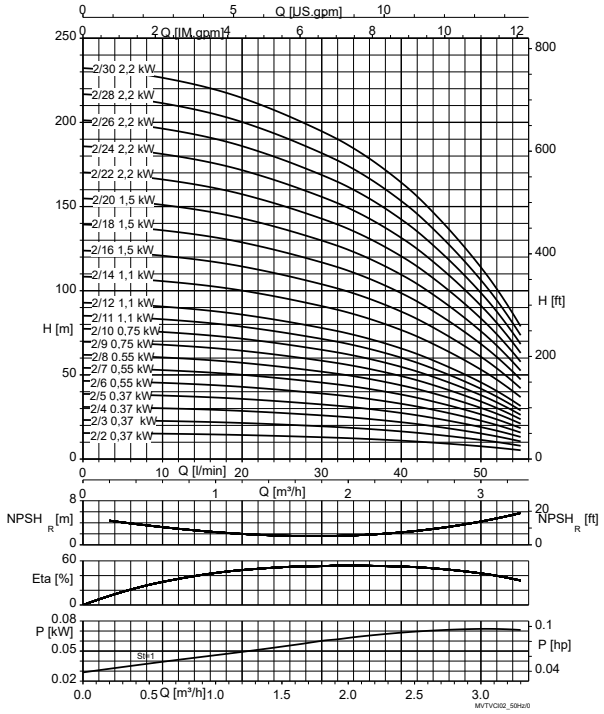


Fig. 197: ρ = 1000 kg/m³
St = number of stages (The power input P is indicated per stage.)

Movitec VCI, 6B, n = 2900 rpm

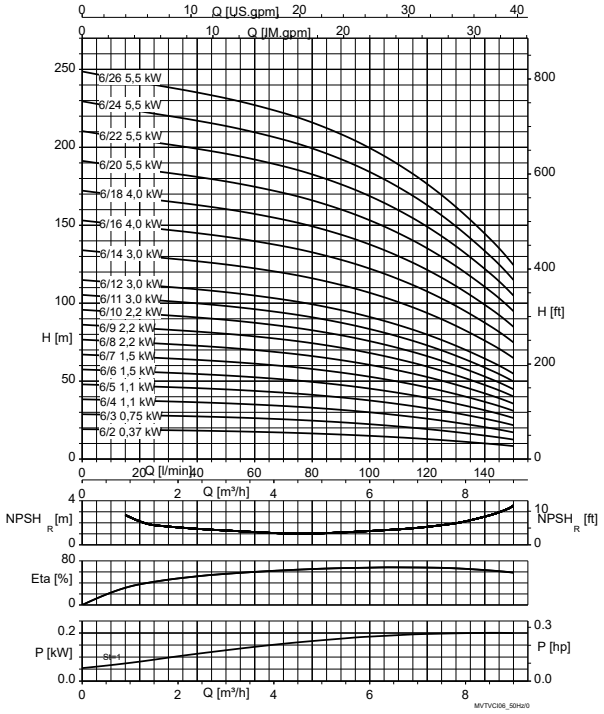


Fig. 199: ρ = 1000 kg/m³
St = number of stages (The power input P is indicated per stage.)

Movitec VCI, 4B, n = 2900 rpm

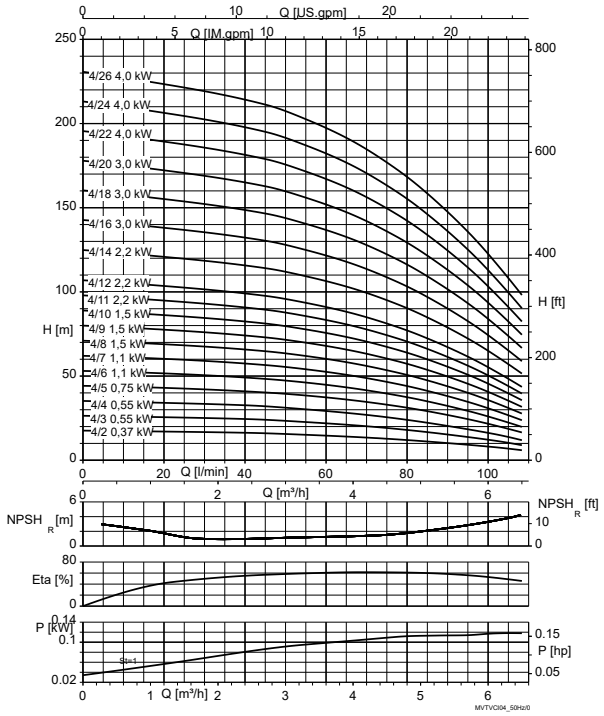


Fig. 198: ρ = 1000 kg/m³
St = number of stages (The power input P is indicated per stage.)

Movitec VCI, 10B, n = 2900 rpm

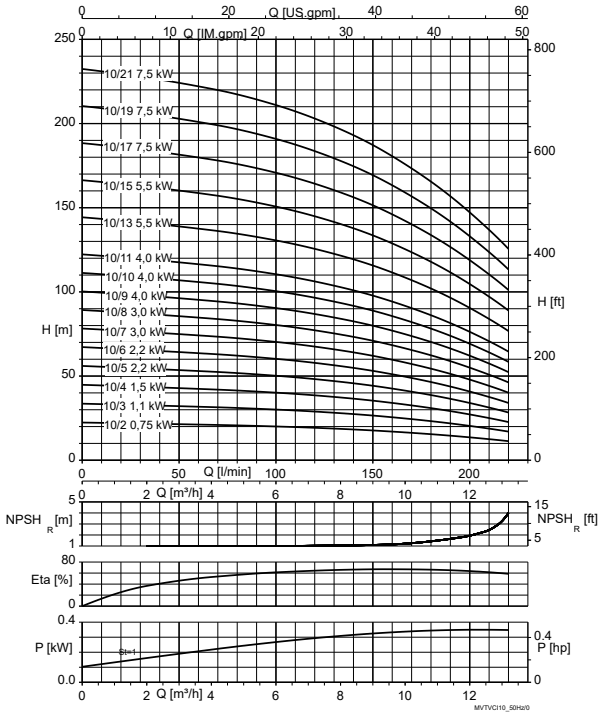


Fig. 200: ρ = 1000 kg/m³
St = number of stages (The power input P is indicated per stage.)

Movitec VCI, 15B, n = 2900 rpm

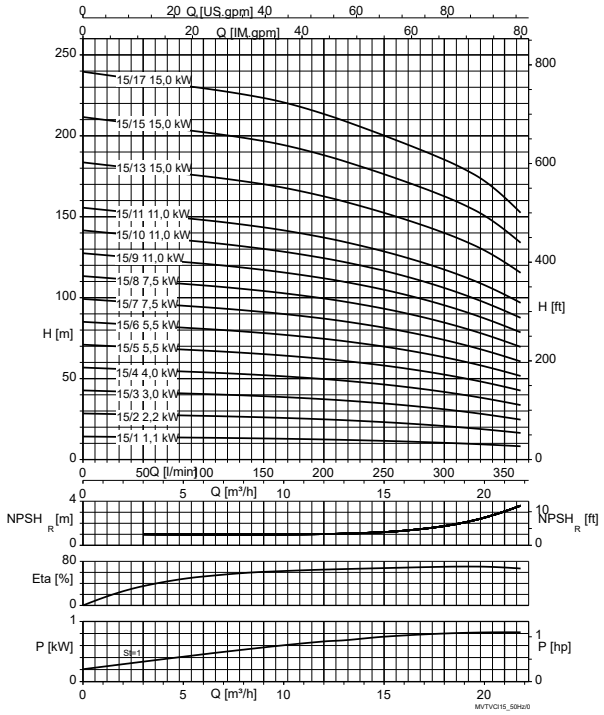


Fig. 201: ρ = 1000 kg/m³
St = number of stages (The power input P is indicated per stage.)

Dimensions and connections

Movitec VCI 2B, n = 2900 rpm

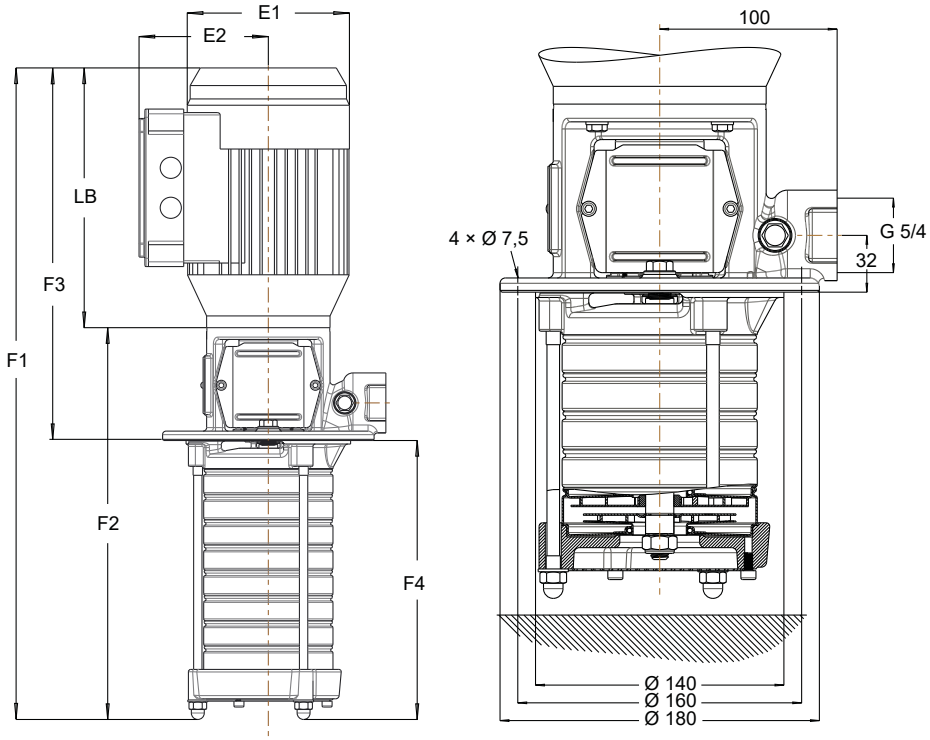


Fig. 202: Dimensions / connections Movitec VCI 2B

Calculation of pump (set) length

Feature	Pump length	Pump set length
Pump without blind stage	F1	F2
Pump with blind stage	F3 + F4	F3 + F4 - LB

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

Example: Movitec VCI 2/16-22: F3 = 373 mm, F4 = 560 mm

Dimensions [mm]

Movitec VCI	E1	E2	LB	F1	F2	F3	F4
02/02-02 B	138	109	221	447	226	317	130
02/03-03 B	138	109	221	468	247	317	151
02/04-04 B	138	109	221	490	269	317	173
02/05-05 B	138	109	221	511	290	317	194
02/06-06 B	138	109	221	533	312	317	216
02/07-07 B	138	109	221	554	333	317	237
02/08-08 B	138	109	221	576	355	317	259
02/09-09 B	157	133	257	643	386	363	280
02/10-10 B	157	133	257	665	408	363	302
02/11-11 B	157	133	257	686	429	363	323
02/12-12 B	157	133	257	708	451	363	345
02/14-14 B	157	133	257	751	494	363	388
02/16-16 B	180	145	257	804	547	373	431
02/18-18 B	180	145	257	847	590	373	474
02/20-20 B	180	145	257	890	633	373	517
02/22-22 B	180	145	310	986	676	426	560
02/24-24 B	180	145	310	1029	719	426	603
02/26-26 B	180	145	310	1072	762	426	646
02/28-28 B	180	145	310	1115	805	426	689
02/30-30 B	180	145	310	1158	848	426	732

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Movitec VCI 4B, n = 2900 rpm

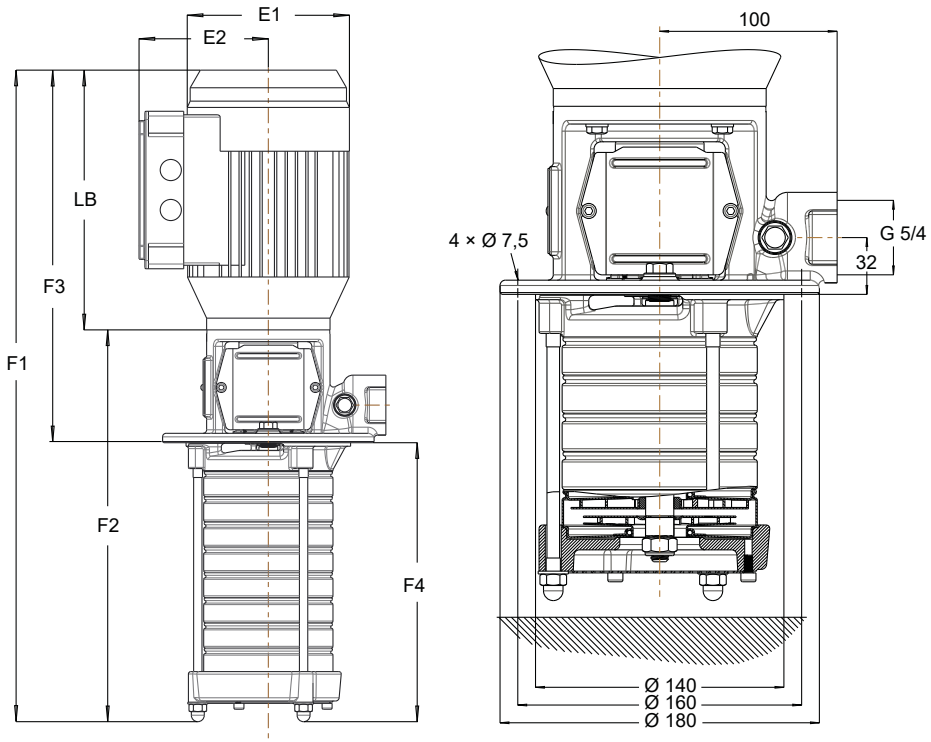


Fig. 203: Dimensions / connections Movitec VCI 4B

Calculation of pump (set) length

Feature	Pump length	Pump set length
Pump without blind stage	F1	F2
Pump with blind stage	F3 + F4	F3 + F4 - LB

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

Example: Movitec VCI 4/16-22: F3 = 444 mm, F4 = 560 mm

Dimensions [mm]

Movitec VCI	E1	E2	LB	F1	F2	F3	F4
04/02-02 B	138	109	221	447	226	317	130
04/03-03 B	138	109	221	468	247	317	151
04/04-04 B	138	109	221	490	269	317	173
04/05-05 B	157	133	257	557	300	363	194
04/06-06 B	157	133	257	579	322	363	216
04/07-07 B	157	133	257	600	343	363	237
04/08-08 B	180	145	257	632	375	373	259
04/09-09 B	180	145	257	653	396	373	280
04/10-10 B	180	145	257	675	418	373	302
04/11-11 B	180	145	310	749	439	426	323
04/12-12 B	180	145	310	771	461	426	345
04/14-14 B	180	145	310	814	504	426	388
04/16-16 B	200	155	318	875	557	444	431
04/18-18 B	200	155	318	918	600	444	474
04/20-20 B	200	155	318	961	643	444	517
04/22-22 B	223	166	325	1011	686	451	560
04/24-24 B	223	166	325	1054	729	451	603
04/26-26 B	223	166	325	1097	772	451	646
04/26-28 B	223	166	325	1140	815	451	689
04/26-30 B	223	166	325	1183	858	451	732

Movitec VCI 6B, n = 2900 rpm

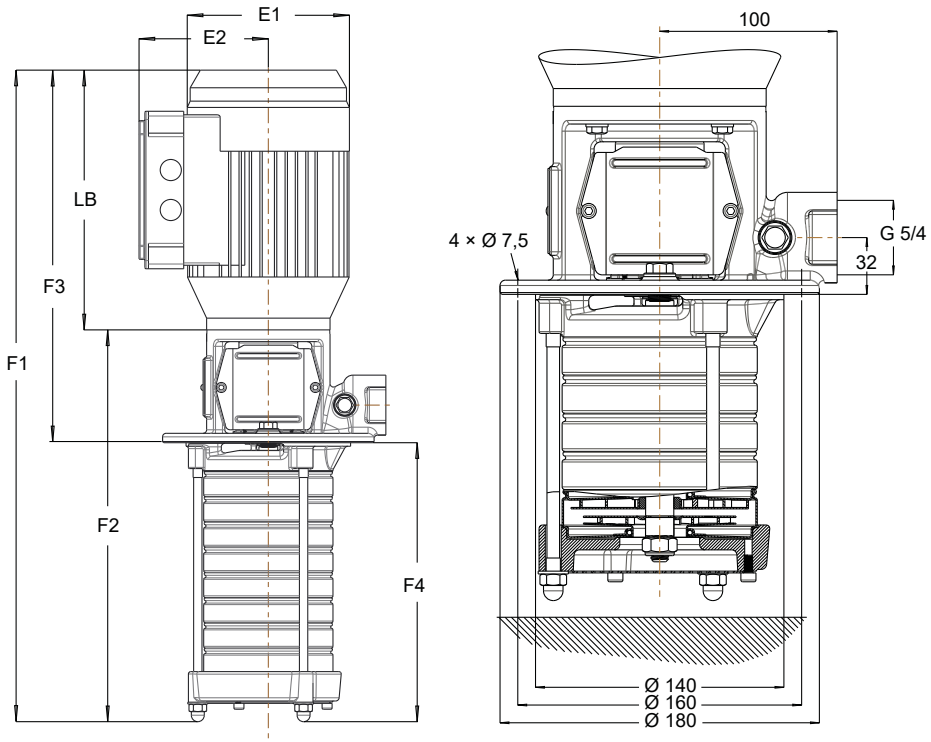


Fig. 204: Dimensions / connections Movitec VCI 6B

Calculation of pump (set) length

Feature	Pump length	Pump set length
Pump without blind stage	F1	F2
Pump with blind stage	F3 + F4	F3 + F4 - LB

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

Example: Movitec VCI 6/16-22: F3 = 451 mm, F4 = 640 mm

Dimensions [mm]

Movitec VCI	E1	E2	LB	F1	F2	F3	F4
06/02-02 B	138	109	221	457	236	317	140
06/03-03 B	157	133	257	528	271	363	165
06/04-04 B	157	133	257	553	296	363	190
06/05-05 B	157	133	257	578	321	363	215
06/06-06 B	180	145	257	613	356	373	240
06/07-07 B	180	145	257	638	381	373	265
06/08-08 B	180	145	310	716	406	426	290
06/09-09 B	180	145	310	741	431	426	315
06/10-10 B	180	145	310	766	456	426	340
06/11-11 B	200	155	318	809	491	444	365
06/12-12 B	200	155	318	834	516	444	390
06/14-14 B	200	155	318	884	566	444	440
06/16-16 B	223	166	325	941	616	451	490
06/18-18 B	223	166	325	991	666	451	540
06/20-20 B	260	190	350	1142	792	552	590
06/22-22 B	260	190	350	1192	842	552	640
06/24-24 B	260	190	350	1242	892	552	690
06/26-26 B	260	190	350	1292	942	552	740
06/28-28 B	260	190	350	1342	992	552	790
06/26-30 B	260	190	350	1392	1042	552	840

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Movitec VCI 10B, n = 2900 rpm

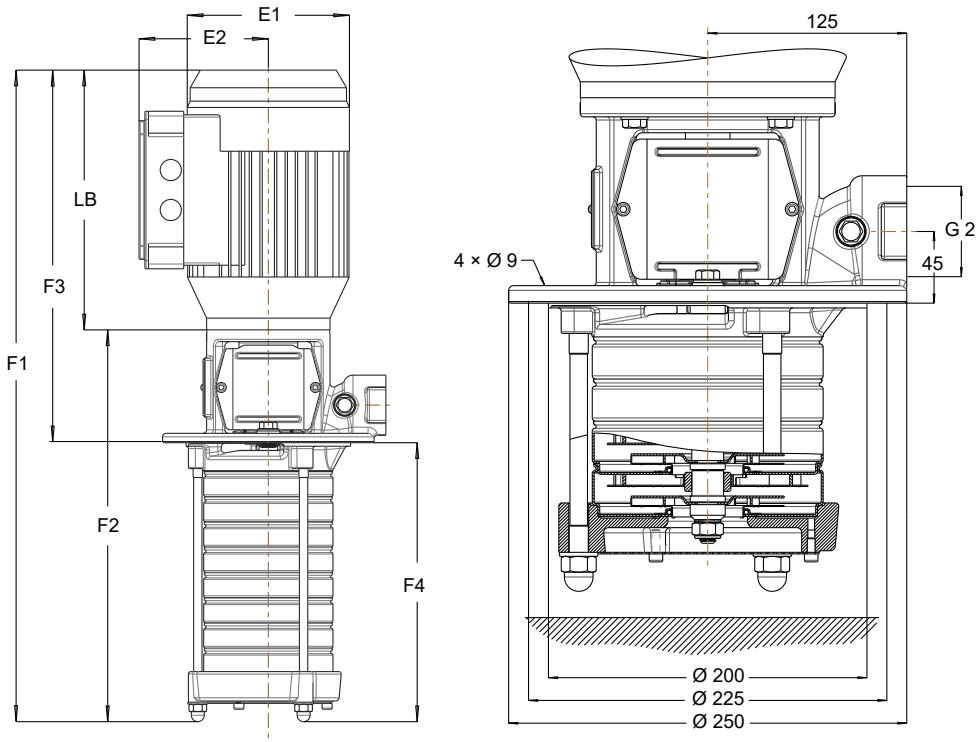


Fig. 205: Dimensions / connections Movitec VCI 10B

Calculation of pump (set) length

Feature	Pump length	Pump set length
Pump without blind stage	F1	F2
Pump with blind stage	F3 + F4	F3 + F4 - LB

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

Example: Movitec VCI 10/15-21: F3 = 597 mm, F4 = 657 mm

Dimensions [mm]

Movitec VCI	E1	E2	LB	F1	F2	F3	F4
10/01-02 B	157	133	257	520	263	366	154
10/02-02 B	157	133	257	520	263	366	154
10/03-03 B	157	133	257	547	290	366	181
10/04-04 B	180	145	257	583	326	376	207
10/05-05 B	180	145	310	663	353	429	234
10/06-06 B	180	145	310	716	406	429	260
10/07-07 B	200	155	318	734	416	447	287
10/08-08 B	200	155	318	760	442	447	313
10/09-09 B	223	166	325	793	468	454	339
10/10-10 B	223	166	325	820	495	454	366
10/11-11 B	223	166	325	846	521	454	392
10/13-13 B	260	190	350	1005	655	560	445
10/15-15 B	260	190	350	1058	708	560	498
10/17-17 B	260	190	387	1148	761	597	551
10/19-19 B	260	190	387	1201	814	597	604
10/21-21 B	260	190	387	1254	867	597	657

Movitec VCI 15B, n = 2900 rpm

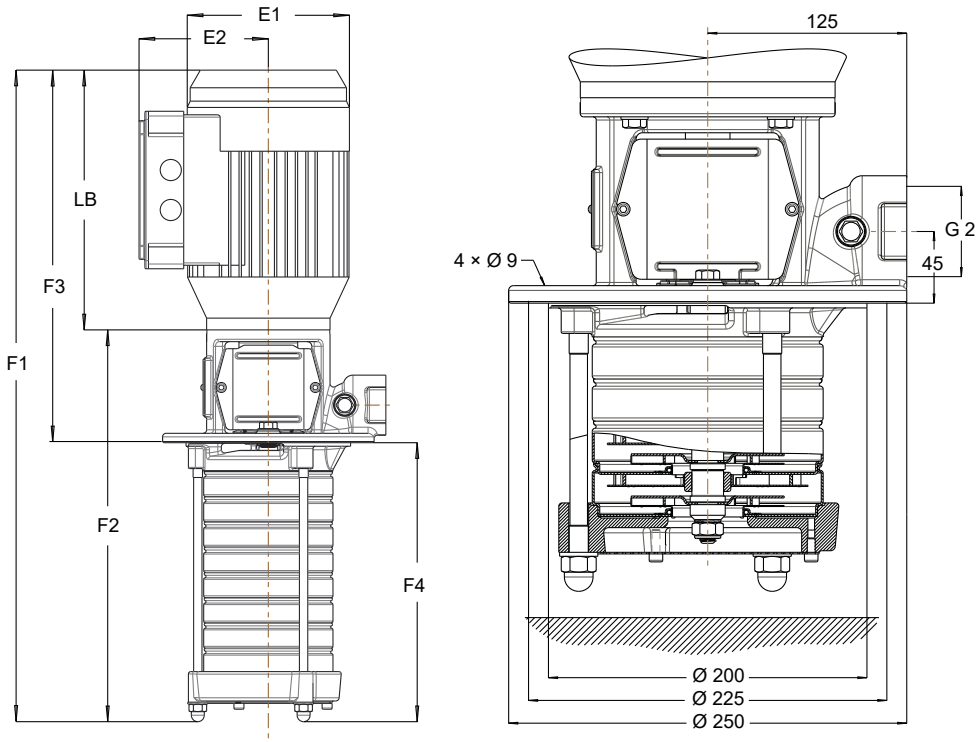


Fig. 206: Dimensions / connections Movitec VCI 15B

Calculation of pump (set) length

Feature	Pump length	Pump set length
Pump without blind stage	F1	F2
Pump with blind stage	F3 + F4	F3 + F4 - LB

- F3 [mm]: depends on number of impellers
- F4 [mm]: depends on the number of stages (incl. blind stages)

Example: Movitec VCI 15/17-21: F3 = 744 mm, F4 = 657 mm

Dimensions [mm]

Movitec VCI	E1	E2	LB	F1	F2	F3	F4
15/01-02 B	157	133	257	527	263	366	154
15/02-02 B	180	145	310	553	273	429	154
15/03-03 B	200	155	318	626	310	447	181
15/04-04 B	223	166	325	660	336	454	207
15/05-05 B	260	190	350	773	444	560	234
15/06-06 B	260	190	350	799	470	560	260
15/07-07 B	260	190	387	874	497	597	287
15/08-08 B	260	190	387	900	523	597	313
15/09-09 B	315	260	504	1077	579	744	339
15/10-10 B	315	260	504	1104	606	744	366
15/11-11 B	315	260	504	1130	632	744	392
15/13-13 B	315	260	504	1183	685	744	445
15/15-15 B	315	260	504	1236	738	744	498
15/17-17 B	315	260	504	1289	791	744	551
15/17-19 B	315	260	504	1342	844	744	604
15/17-21 B	315	260	504	1395	897	744	657

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Automation / Drive 1028

Testing and Inspection / Service / General 1078

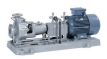
Pumps for Heating / Air-conditioning / Ventilation

Design / Application

Type series		Free passage	Q	H	T[174]		Waste water	Spray irrigation	General irrigation	Brackish water	Fire protection	Service water (industry)	Pressure boosting	Water containing faeces	Heating	Industry / process engineering	Air conditioning	Food processing / pharmaceutical industry	Seawater	Grey water	Swimming pools	Drinking water	Water supply
		max.	max.	max.	min.	max.																	
		[mm]	[m³/h]	[m]	[°C]	[°C]																	
High-efficiency Circulator Pumps with Continuously Variable Differential Pressure Control																							
	Calio S (⇨ Page 425)	-	≤ 3,5	≤ 8	≥ +2	≤ +95	-	-	-	-	-	✗	-	-	✗	-	✗	-	-	-	-	-	-
	Calio (screw-ended pumps) (⇨ Page 434)	-	≤ 15	≤ 12	≥ -10	≤ +110	-	-	-	-	-	✗	-	-	✗	-	✗	-	-	-	-	-	-
	Calio (flanged pumps) (⇨ Page 434)	-	≤ 51	≤ 18	≥ -10	≤ +110	-	-	-	-	-	✗	-	-	✗	-	✗	-	-	-	-	-	-
	Calio Z (screw-ended pumps) (⇨ Page 458)	-	≤ 18	≤ 10	≥ -10	≤ +110	-	-	-	-	-	✗	-	-	✗	-	✗	-	-	-	-	-	-
	Calio Z (flanged pumps) (⇨ Page 458)	-	≤ 70	≤ 18	≥ -10	≤ +110	-	-	-	-	-	✗	-	-	✗	-	✗	-	-	-	-	-	-
Drinking Water Circulator Pumps																							
	Calio-Therm S (⇨ Page 474)	-	≤ 3,5	≤ 6	≥ +2	≤ +65	-	-	-	-	-	✗	-	-	✗	-	✗	-	-	-	-	✗	-
	Calio-Therm S NC/NCV (⇨ Page 481)	-	≤ 0,7	≤ 1	≥ +5	≤ +60	-	-	-	-	-	✗	-	-	✗	-	✗	-	-	-	-	✗	-
	Calio-Therm NC (screw-ended pumps, heating water) (⇨ Page 486)	-	≤ 9	≤ 7	≥ +2	≤ +110	-	-	-	-	-	✗	-	-	✗	-	✗	-	-	-	-	✗	-
	Calio-Therm NC (flanged pumps, drinking water) (⇨ Page 486)	-	≤ 40	≤ 8	≥ -10	≤ +110	-	-	-	-	-	✗	-	-	✗	-	✗	-	-	-	-	✗	-
Variable Speed Drinking Water Pumps																							
	Calio-Therm (screw-ended pumps, drinking water) (⇨ Page 493)	-	≤ 15	≤ 12	≥ +2	≤ +70	-	-	-	-	-	✗	-	-	-	-	-	-	-	-	-	✗	-
	Calio-Therm NC (flanged pumps, drinking water) (⇨ Page 493)	-	≤ 24	≤ 10	≥ +2	≤ +70	-	-	-	-	-	✗	-	-	-	-	-	-	-	-	-	✗	-
In-line Pumps																							

174 T = fluid temperature

Type series		Free passage	Q	H	T[174]		Waste water	Spray irrigation	General irrigation	Brackish water	Fire protection	Service water (industry)	Pressure boosting	Water containing faeces	Heating	Industry / process engineering	Air conditioning	Food processing / pharmaceutical industry	Seawater	Grey water	Swimming pools	Drinking water	Water supply
		max.	max.	max.	min.	max.																	
		[mm]	[m³/h]	[m]	[°C]	[°C]																	
	Etaline L (⇨ Page 505)	-	≤ 95	≤ 21	≥ -15	≤ +120	-	-	-	-	-	-	-	-	✗	-	✗	-	-	-	-	-	-
	Etaline (⇨ Page 528)	-	≤ 700	≤ 95	≥ -10	≤ +140	-	-	-	-	-	-	-	-	✗	-	✗	-	-	-	-	-	-
	Etaline-R (⇨ Page 569)	-	≤ 1900	≤ 93	≥ -30	≤ +140	-	-	-	-	-	-	-	-	✗	-	✗	-	-	-	-	-	-
In-line Twin Pumps																							
	Etaline DL (for parallel operation) (⇨ Page 588)	-	≤ 150	≤ 21	≥ -15	≤ +120	-	-	-	-	-	-	-	-	✗	-	✗	-	-	-	-	-	-
	Etaline Z (for parallel operation) (⇨ Page 610)	-	≤ 1095	≤ 38,5	≥ -30	≤ +140	-	-	-	-	-	-	-	-	✗	-	✗	-	-	-	-	-	-
Standardised Pumps to EN 733																							
	Etanorm (⇨ Page 641)	-	≤ 640	≤ 160	≥ -30	≤ +140	-	✗	✗	-	-	✗	-	-	-	-	✗	-	-	-	✗	✗	✗
	Etachrom L (⇨ Page 675)	-	≤ 250	≤ 105	≥ -30	≤ +110	-	✗	✗	-	-	✗	-	-	-	✗	✗	-	-	-	✗	✗	✗
Vertical Low-pressure Pumps																							
	Etanorm V (⇨ Page 687)	-	≤ 625	≤ 100	≥ -15	≤ +95	-	-	✗	-	-	-	-	-	-	✗	-	-	-	-	-	✗	✗
Volute Casing Pumps																							
	Etanorm-R (⇨ Page 706)	-	≤ 1900	≤ 101	≥ -30	≤ +140	-	✗	✗	-	-	✗	-	-	-	-	✗	-	-	-	✗	✗	✗
	Etaprime B (⇨ Page 724)	-	≤ 130	≤ 70	≥ -30	≤ +90	-	✗	✗	-	-	✗	-	-	-	-	✗	-	-	-	✗	-	✗
	Etaprime L (⇨ Page 738)	-	≤ 180	≤ 85	≥ -30	≤ +90	-	✗	✗	-	-	✗	-	-	-	-	✗	-	-	-	✗	-	✗
Close-coupled Pumps																							
	Etabloc (⇨ Page 750)	-	≤ 660	≤ 140	≥ -30	≤ +140	-	✗	✗	-	-	✗	-	-	-	-	✗	-	-	-	✗	✗	✗
	Etachrom B (⇨ Page 852)	-	≤ 250	≤ 105	≥ -30	≤ +110	-	✗	✗	-	-	✗	-	-	-	✗	✗	-	-	-	✗	✗	✗

Type series		Free passage	Q	H	T[174]		Waste water	Spray irrigation	General irrigation	Brackish water	Fire protection	Service water (industry)	Pressure boosting	Water containing faeces	Heating	Industry / process engineering	Air conditioning	Food processing / pharmaceutical industry	Seawater	Grey water	Swimming pools	Drinking water	Water supply
		max.	max.	max.	min.	max.																	
		[mm]	[m³/h]	[m]	[°C]	[°C]																	
Standardised Water Pumps																							
	Etaseco (⇨ Page 868)	-	≤ 250	≤ 100	≥ -40	≤ +140	-	-	-	-	-	✗	-	-	✗	-	✗	-	-	-	-	✗	✗
Thermal Oil Pumps / Hot Water Pumps																							
	Etanorm SYT (⇨ Page 869)	-	≤ 625	≤ 102	≥ -30	≤ +350	-	-	-	-	-	-	-	-	✗	-	-	-	-	-	-	-	-
	Etabloc SYT (⇨ Page 882)	-	≤ 280	≤ 68	≥ -30	≤ +350	-	-	-	-	-	-	-	-	✗	-	-	-	-	-	-	-	-
	Etaline SYT (⇨ Page 899)	-	≤ 316	≤ 69	≥ -30	≤ +350	-	-	-	-	-	-	-	-	✗	-	-	-	-	-	-	-	-
	Etanorm-RSY (⇨ Page 915)	-	≤ 1900	≤ 101	≥ -30	≤ +350	-	-	-	-	-	-	-	-	✗	-	-	-	-	-	-	-	-
Recirculation Pumps																							
	HPK-L (⇨ Page 917)	-	≤ 1160	≤ 162	≥ -40	≤ +400	-	-	-	-	-	-	-	-	✗	-	-	-	-	-	-	-	-
	HPK (⇨ Page 919)	-	≤ 4150	≤ 185	≥ 0	≤ +400	-	-	-	-	-	-	-	-	✗	-	-	-	-	-	-	-	-

High-efficiency Circulator Pumps with Continuously Variable Differential Pressure Control

Calio S / Calio S BMS

http://shop.ksb.com/catalog/k0/en/product/ES000910

Product benefits

- Maximum savings of operating costs by high-efficiency technology combined with speed control
- Future-proof by maximum energy efficiency, exceeding current energy efficiency regulations such as ErP 2015.
- Easy-to-use combination of controls, integrated display and symbols to show the operating status

Calio S:

- High availability due to manual and integrated protective functions
- Compact dimensions and plug-type connector make the pumps easy to install.

Calio S BMS:

- Integrated 0 – 10 V DC, remote ON/OFF and general fault message functions
- New Eco Mode enables additional savings of more than 40 % compared to proportional-pressure control.

Further information

Prices on request

Selection chart 430
Characteristic curves 431
Dimensions 433

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
ErP 2015	Europe	EEI ≤ 0,20

Main applications

- Heating systems
- Ventilation systems
- Air-conditioning systems
- Circulation systems
- One-pipe systems and two-pipe systems
- Underfloor heating systems
- Boiler circuits or primary circuits
- Storage tank circuits
- Solar power systems
- Heat pumps

Fluids handled

- Heating water to VDI 2035. If the glycol content equals or exceeds 20 %, check and verify the operating data.
- Pure, thin, non-aggressive, non-explosive and non-gaseous fluids not containing any mineral oil, solids or long fibres
- Fluids with a viscosity of max. 10 mm^2/s

Operating data

Operating properties

Characteristic		Value	
		Calio S	Calio S BMS
Flow rate	Q [m³/h]	≤ 3,5	≤ 7
	Q [l/s]	≤ 1,0	≤ 1,9
Head	H [m]	≤ 8	≤ 6
Fluid temperature[175)]	T [°C]	≥ +2	≥ -10
		≤ +95	≤ +110
Ambient temperature	T [°C]	≥ 0	
		≤ +40	
Operating pressure	p [bar]	≤ 10	
Sound pressure level	[dB (A)]	≤ 30	≤ 45
Piping connection	Rp	1/2 - 1 1/4	1 - 1 1/4

Design details

Design

- Maintenance-free high-efficiency wet rotor pump (glandless)

Drive

- High-efficiency permanent magnet synchronous motor, brushless, self-cooling, with continuously variable differential pressure control
- 1~230 V AC +/- 10%
- Frequency 50 Hz/60 Hz
- Thermal class F
- Energy efficiency index EEI ≤ 0.20

Calio S:

- IP42 enclosure
- Temperature class TF 95
- Interference emissions EN 55014-1
- Interference immunity EN 55014-2
- Interference immunity EN 60335-2-51

Calio S BMS:

- Enclosure IPX4D
- Temperature class TF 110
- Interference emissions EN 61000-6-3
- Interference immunity EN 61000-6-1

Bearings

Calio S:

- Ceramic bearings

Calio S BMS:

- Product-lubricated special plain bearing

Connections

- Screw-ended

Operating modes

Calio S:

- Automatic mode with constant-pressure control or proportional-pressure control
- Open-loop control via setpoint setting

Calio S BMS:

- Automatic mode with constant-pressure control or proportional-pressure control
- Open-loop control via setpoint setting
- Eco Mode

Automatic functions

Calio S:

- Continuously variable speed adjustment depending on the mode of operation
- Soft start (limitation of starting current)
- Full motor protection with integrated trip electronics
- Setback operation
- Dynamic Control in Proportional-pressure Control operating mode dp-v

Calio S BMS:

- Continuously variable speed adjustment depending on the mode of operation
- Soft start (limitation of starting current)
- Full motor protection with integrated trip electronics
- Setback operation
- 0 - 10 V with external differential pressure/speed setpoint
- Remote ON/OFF
- General fault message
- Self-venting function

Manual functions

Calio S:

- Setting the operating mode
- Setting the differential pressure setpoint
- Setting the speed level
- Vent function
- Deblocking the rotor

Calio S BMS:

- Setting the operating mode
- Setting the differential pressure setpoint
- Setting the speed level

Signalling functions and display functions

- Alternating display of flow rate, head and electrical input power
- Error messages on the display

175 To prevent condensation in the terminal box and stator, the fluid temperature must always be equal to or higher than the ambient temperature.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Designation

Example: Calio S 25-40-130

Designation key

Code	Description	
Calio S	Type series	
25	Connection	
	15	Rp 1/2
	25	Rp 1
	30	Rp 1 1/4
40	Head H[176] [m] × 10	
	40	Head H × 10 Example: 4 m × 10 = 40
130	Overall length	
	130	130 mm
	-[177]	See dimensions (⇨ Page 433)
BMS	Building Management System function	

Materials

Overview of available materials

Part No.	Description	Material	
		Calio S	Calio S BMS
102	Volute casing	Grey cast iron (EN-GJL-200) with cathodic electrocoating	
210	Shaft	Ceramics	Stainless steel 1.4034
230	Impeller	Polyether sulphone (PES)	Plastic with glass fibre content (PSU-GF30)
310	Bearing	Ceramics	Ceramics/carbon
360	Bearing plate	Stainless steel 1.4301	
689	Thermal insulation shell	Polypropylene	
817	Can	Stainless steel 1.4301	

Casing parts which are in contact with the atmosphere and with the fluid handled are free from paint-wetting impairment materials.

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

176 At flow rate Q = 0 m³/h
177 Blank

Technical data

Calio S / Calio S BMS

Technical data

Size	Connection		PN	n		P_1	Motor protection[178]	Signalling contacts[179]	I_N	Mat. No.	[kg]
	Piping	Pump	[bar]	Min. [rpm]	Max. [rpm]	[W]			1~230 V AC, 50 / 60 Hz [A]		
Calio S											
15-40-130	Rp 1/2	G 1	10	1400	2850	6 - 30	✘	-	0,06 - 0,26	29134987	2,7
15-60-130	Rp 1/2	G 1	10	1400	3400	6 - 50	✘	-	0,06 - 0,43	29134988	2,7
25-40-130	Rp 1	G 1 1/2	10	1400	2850	6 - 30	✘	-	0,06 - 0,26	29134989	2,7
25-60-130	Rp 1	G 1 1/2	10	1400	3400	6 - 50	✘	-	0,06 - 0,43	29134990	2,7
25-40	Rp 1	G 1 1/2	10	1400	2850	6 - 30	✘	-	0,06 - 0,26	29134991	2,8
25-60	Rp 1	G 1 1/2	10	1400	3400	6 - 50	✘	-	0,06 - 0,43	29134992	2,8
25-80	Rp 1	G 1 1/2	10	1400	3900	6 - 60	✘	-	0,06 - 0,55	29134985	2,7
30-40	Rp 1 1/4	G 2	10	1400	2850	6 - 30	✘	-	0,06 - 0,26	29134993	2,9
30-60	Rp 1 1/4	G 2	10	1400	3400	6 - 50	✘	-	0,06 - 0,43	29134994	2,9
30-80	Rp 1 1/4	G 2	10	1400	3900	6 - 60	✘	-	0,06 - 0,55	29134986	2,7
Calio S BMS											
25-60	Rp 1	G 1 1/2	10	1000	3500	3,5 - 180	✘	✘	0,15 - 0,78	29134981	5,3
30-60	Rp 1 1/4	G 2	10	1000	3500	3,5 - 140	✘	✘	0,15 - 0,61	29134982	5,5

Selection information

Minimum inlet pressure

The minimum inlet pressure p_{min} at the pump suction nozzle serves to avoid cavitation noises at an ambient temperature of +40 °C and the indicated fluid temperature T_{max}.

The indicated values are applicable up to 300 m above sea level. For installation at altitudes > 300 m, an allowance of 0.01 bar / 100 m must be added.

Calio S

Minimum inlet pressure p_{min} specified for the fluid temperature T_{max}.

Fluid temperature	Minimum inlet pressure
[°C]	[bar]
5 to 75	0,05
76 to 110	0,4

Calio S BMS

Minimum inlet pressure p_{min} specified for the fluid temperature T_{max}.

Fluid temperature	Minimum inlet pressure
[°C]	[bar]
≤ 80	0,5
81 to 95	1,5
96 to 110	2,5

178 Integrated motor protection
179 General fault message relay and terminal pairs for 0 - 10 V input and external start/stop

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Description of the characteristic curve

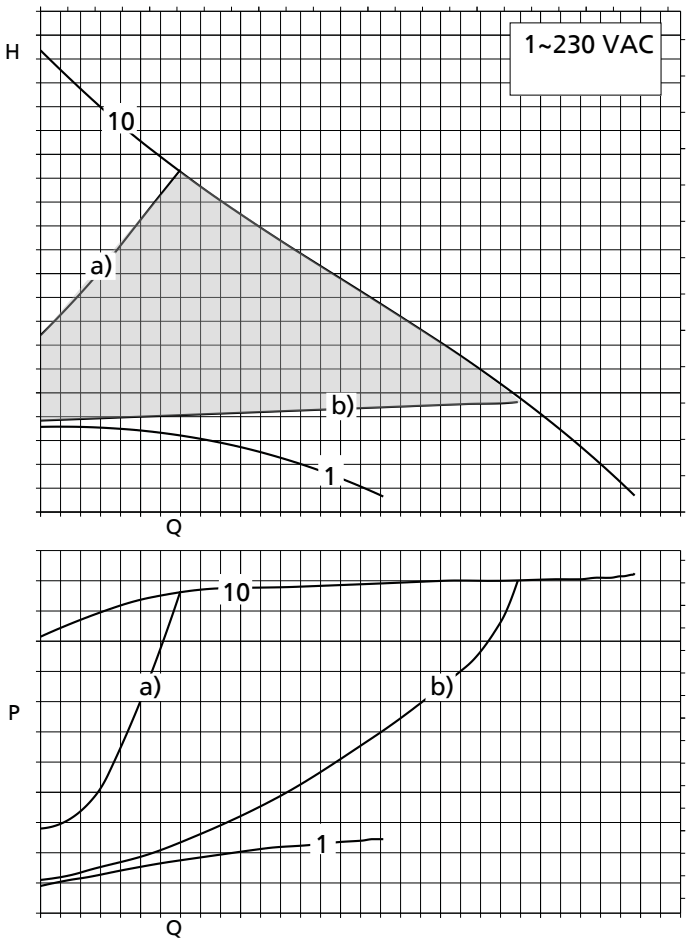


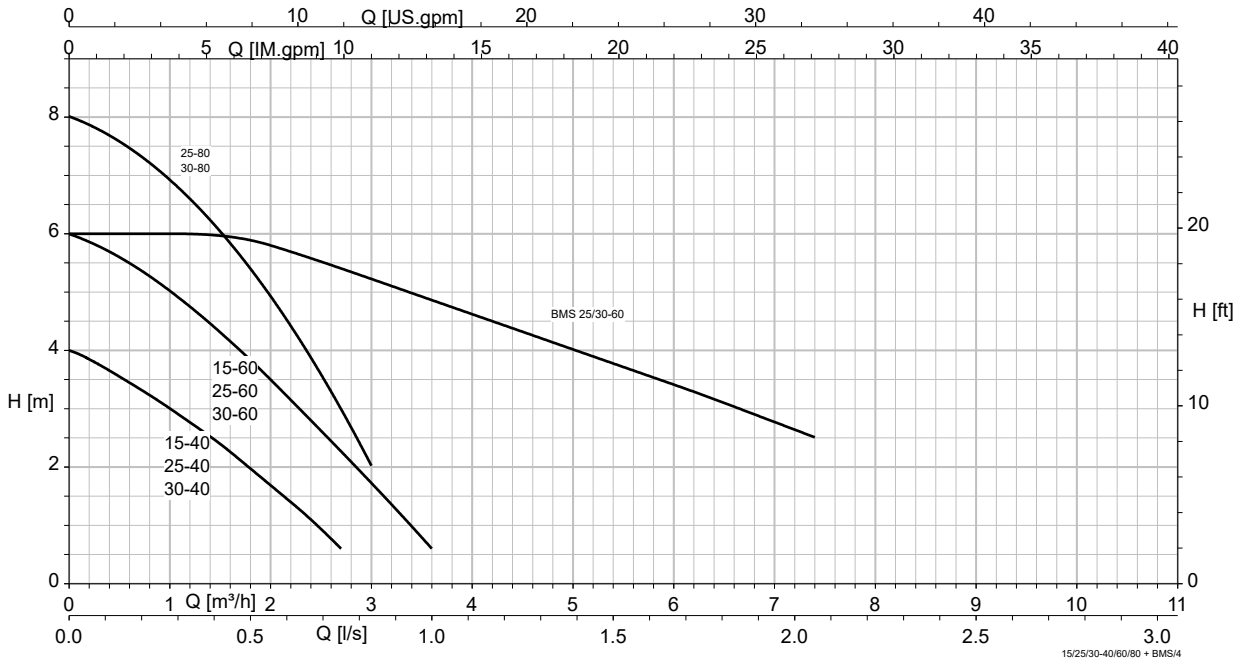
Fig. 207: Selection example

The characteristic curve can be adjusted between a) and b) in increments of 0.1 m by pressing the control keys.

1	Minimum fixed speed operation
10	Maximum fixed speed operation
	Control range
a)	Control curve, maximum head
b)	Control curve, minimum head

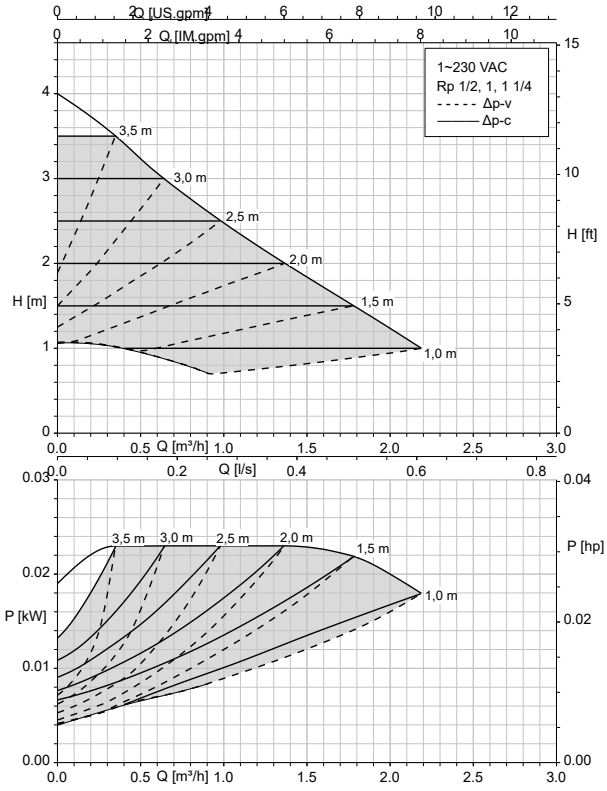
Selection chart

Calio S / Calio S BMS

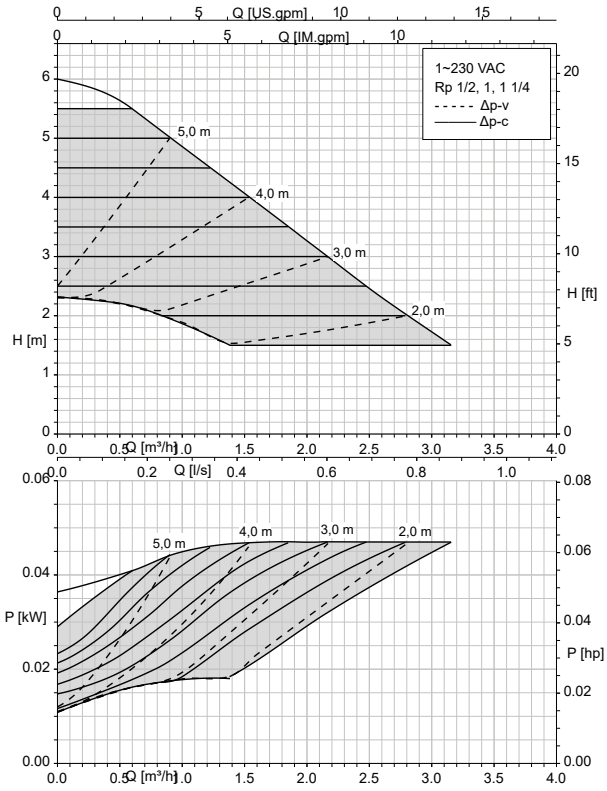


Characteristic curves

Calio S 15/25/30-40 Δpv, Δpc



Calio S 15/25/30-60 Δpv, Δpc



Calio S 15/25/30-40 open-loop control

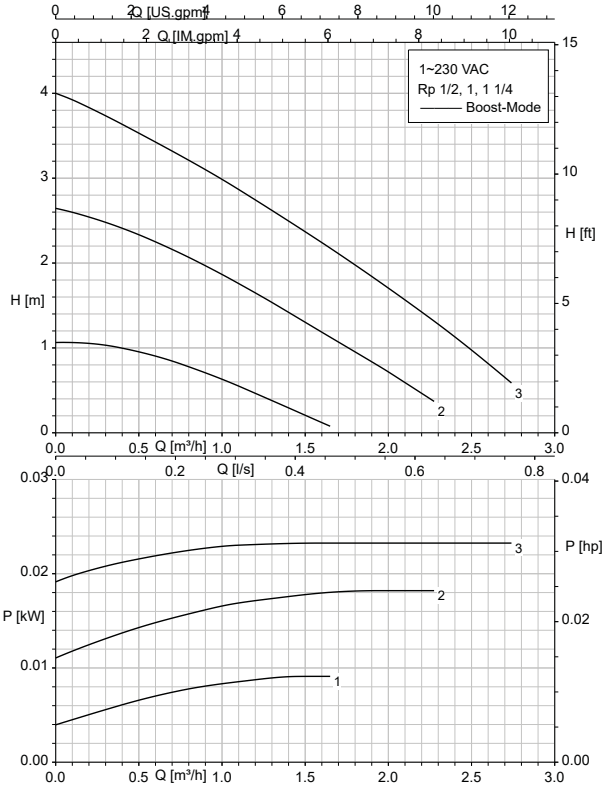


Fig. 208: 1, 2, 3 = speed level 1, 2, 3

Calio S 15/25/30-60 open-loop control

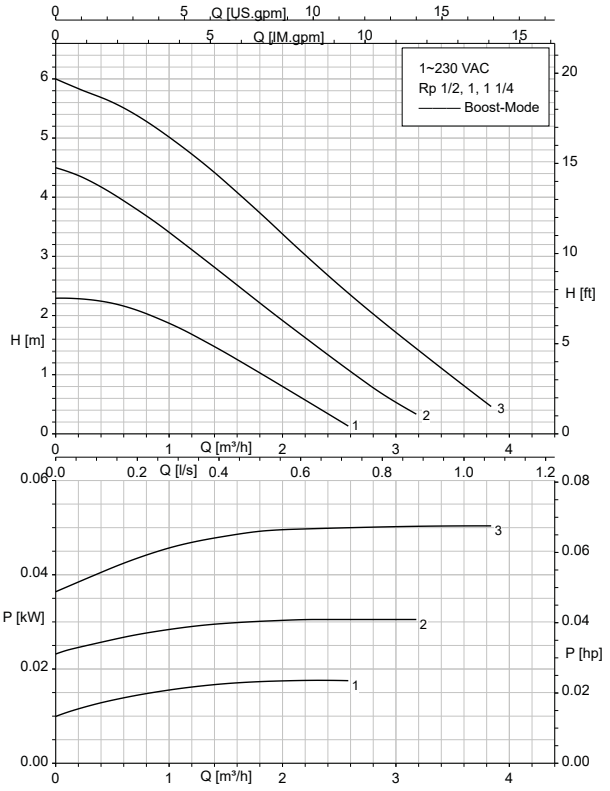
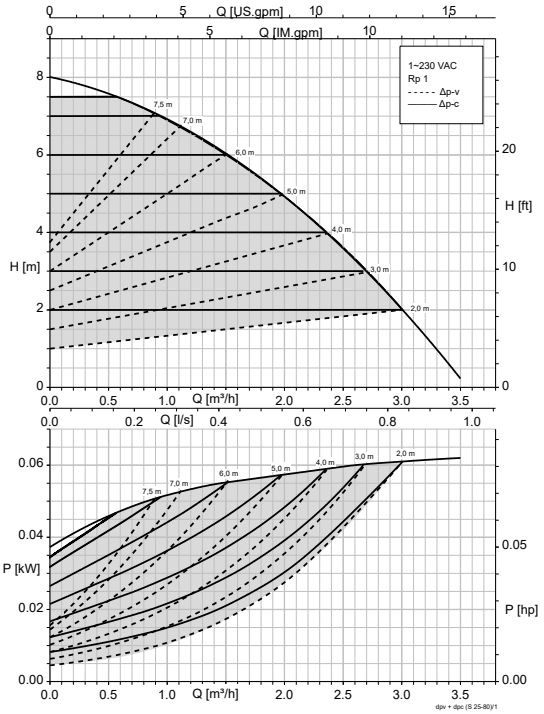


Fig. 209: 1, 2, 3 = speed level 1, 2, 3

Calio S 25/30-80 Δpv, Δpc



Calio S 25/30-80 open-loop control

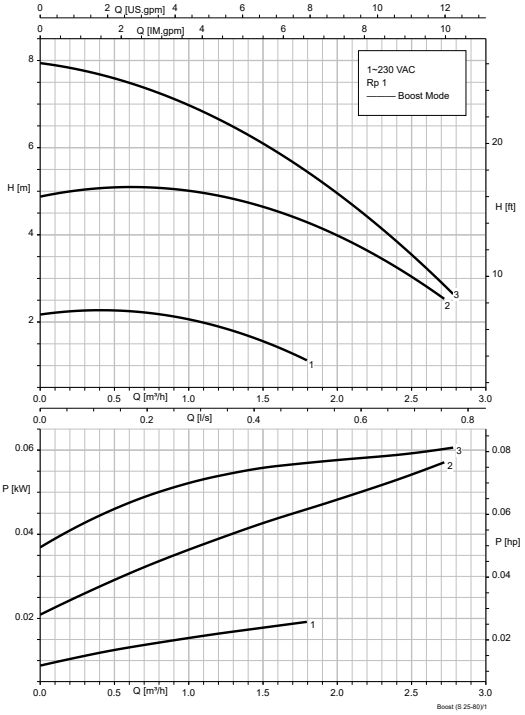
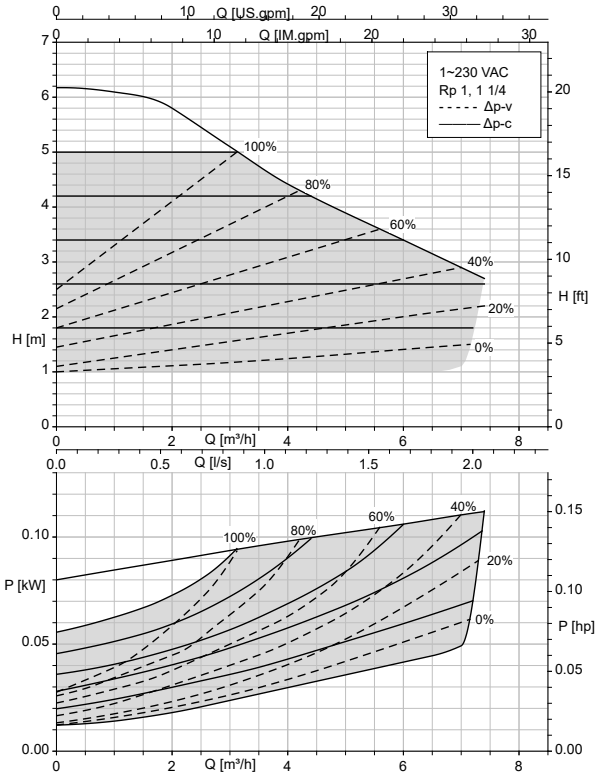
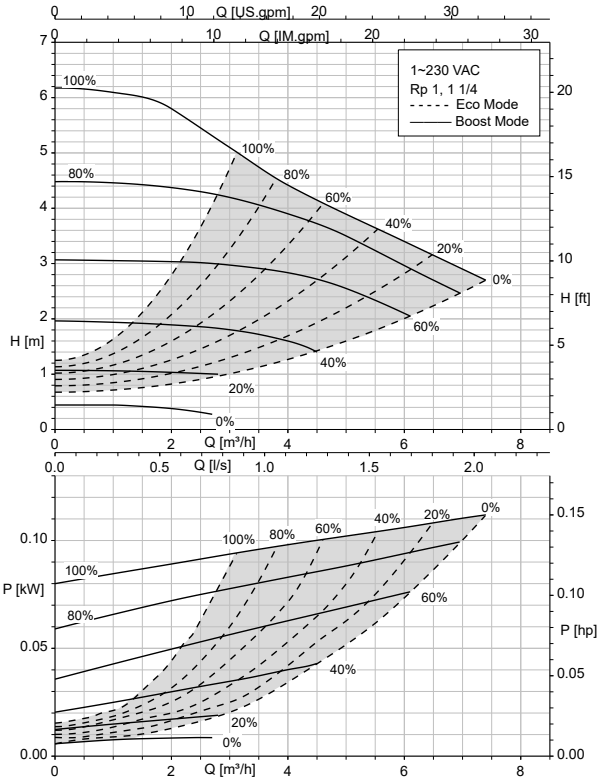


Fig. 210: 1, 2, 3 = speed level 1, 2, 3

Calio S BMS 25/30-60 Δpv, Δpc



Calio S BMS 25/30-60 (open-loop control, Eco Mode)



Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Dimensions

Calio S / Calio S BMS

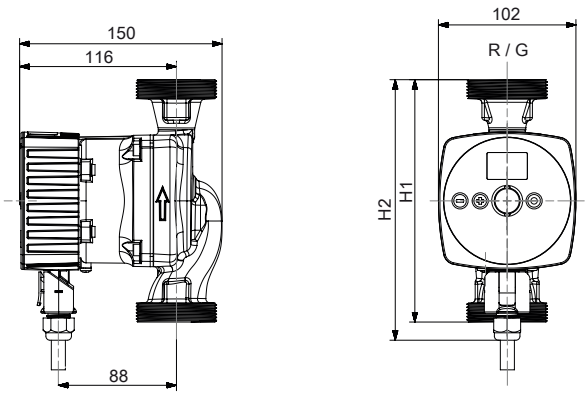


Fig. 211: Calio S dimensions [mm]

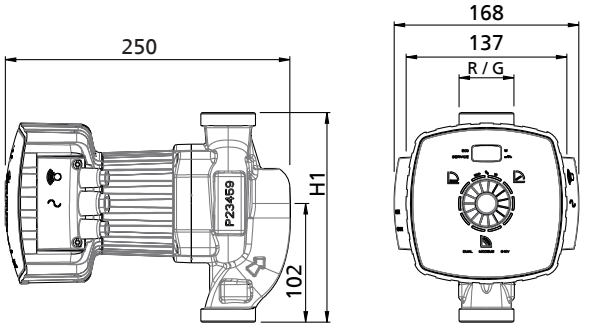


Fig. 212: Calio S BMS dimensions [mm]

Dimensions

Size	Connection		H1	H2
	Rp	G	[mm]	[mm]
Calio S				
15-40-130	1/2	1	130	170
15-60-130	1/2	1	130	170
25-40-130	1	1 1/2	130	170
25-60-130	1	1 1/2	130	170
25-40	1	1 1/2	180	200
25-60	1	1 1/2	180	200
25-80	1	1 1/2	180	200
30-40	1 1/4	2	180	200
30-60	1 1/4	2	180	200
30-80	1 1/4	2	180	200
Calio S BMS				
25-60	1	1 1/2	180	-
30-60	1 1/4	2	180	-

Installation information

Permissible installation positions

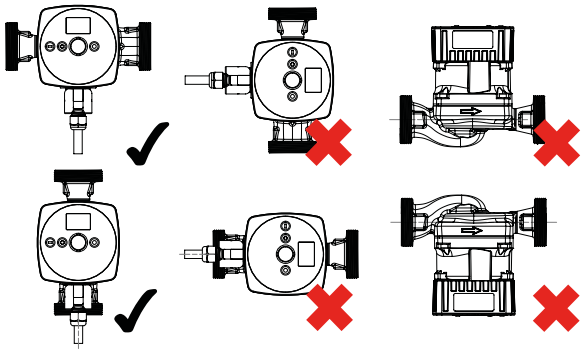


Fig. 213: Permissible installation positions

Scope of supply

Depending on the model, the following items are included in the scope of supply:

- Pump set
- Sealing elements
- Plug-type connector to power supply
- Two-piece thermal insulation shell (only for overall length ≥ 180 mm)
- Installation/operating manual

High-efficiency Circulator Pumps with Continuously Variable Differential Pressure Control

Calio

http://shop.ksb.com/catalog/k0/en/product/ES000881

Product benefits

- Maximum savings of operating costs by high-efficiency technology combined with speed control
- Future-proof by maximum energy efficiency, exceeding current energy efficiency regulations such as ErP 2015.
- All-in concept saves investment costs and commissioning costs.
- Easy-to-use combination of controls, integrated display and symbols to show the operating status
- High availability by dual-pump operation and integrated protective functions
- New Eco Mode enables additional savings of more than 40 % compared to proportional-pressure control. (⇨ Page 439)

Further information

Prices on request

Selection chart 440
Characteristic curves 441
Dimensions 455

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
ErP 2015	Europe	EEI ≤ 0,20[180)]

Main applications

Heating, ventilation, air-conditioning, cooling and circulation systems

- One-pipe systems and two-pipe systems
- Underfloor heating systems
- Boiler circuits or primary circuits
- Storage tank circuits
- Solar power systems
- Heat pumps

Fluids handled

- Heating water to VDI 2035
- Higher-viscosity fluids (water/glycol mixture up to a mixing ratio of 1:1)

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 51
	Q [l/s]	≤ 14,2
Head	H [m]	≤ 18
Fluid temperature	T [°C]	≥ -10
		≤ +110
Ambient temperature	T [°C]	≥ 0
		≤ +40[181)]
Operating pressure	p [bar]	≤ 16
Pressure class	PN [bar]	6/10/16
Average sound pressure level	[dB (A)]	< 45[182)]
Screw-ended	Rp	1 - 1 1/4
Flanged connection	DN	32 - 100

180 At 50-90: EEI = 0.21 and 40-90: EEI = 0.22
181 Ambient temperature ≤ + 30 °C at a fluid temperature> 90 °C
182 Calio 100-60: < 49 dB (A)

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Design details

Design

- Maintenance-free high-efficiency wet rotor pump (glandless)

Drive

- High-efficiency permanent magnet synchronous motor, brushless, self-cooling, with continuously variable differential pressure control
- Integrated motor protection
- 1~230 V AC +/- 10%
- Frequency 50 Hz/60 Hz
- Enclosure IPX4D
- Thermal class F
- Temperature class TF 110
- Energy efficiency index EEI ≤ 0.20[183)]
- Interference emissions EN 61000-6-3
- Interference immunity EN 61000-6-1

Bearings

- Product-lubricated special plain bearing

Connections

- Screw-ended or flanged

Operating modes

- Constant-pressure control
- Proportional-pressure control
- Temperature-governed differential pressure control (can only be activated with KSB ServiceTool)
- Open-loop control via setpoint setting
- Eco Mode

Automatic functions

- Continuously variable speed adjustment depending on the mode of operation
- 0 - 10 V with external differential pressure/speed setpoint
- 0 - 10 V as input of the actual value of the temperature or actual value of the differential pressure
- Dual-pump operation
- Peak load operation
- Setback operation
- Dynamic Control
- Remote ON/OFF
- Deblocking function
- Self-venting function
- Soft start
- Full motor protection with integrated trip electronics

Manual functions

- Setting the operating mode
- Setting the differential pressure setpoint
- Setting the speed level
- Locking the control panel

Signalling functions and display functions

- Periodically alternating display of flow rate, head and electrical input power
- Operating status shown on the display
- Error codes indicated on the display
- Configurable general fault message and "in operation" message (volt-free changeover contacts)
- Serial digital Modbus RTU interface
- Service interface for KSB ServiceTool

183 Calio 40-90: EEI = 0.22 and Calio 50-90: EEI = 0.21

Designation

Example: Calio 40-180

Designation key

Code	Description	
Calio	Type series	
40	Connection	
	25	Rp 1
	30	Rp 1 1/4
	32	DN 32
	40	DN 40
	50	DN 50
	65	DN 65
	80	DN 80
	100	DN 100
180	Head H[184)] [m]	
	180	Head × 10 Example: 18 m × 10 = 180

Materials

Overview of available materials

Part No.	Description	Material
102	Volute casing	Grey cast iron with cathodic electrocoating (EN-GJL-200)
210	Shaft	Stainless steel 1.4034
230	Impeller	Plastic with glass fibre content (PSU-GF30)
310	Bearing	Ceramics/carbon
689	Thermal insulation shells	Polypropylene
817	Can	Stainless steel 1.4301

Casing parts which are in contact with the atmosphere and with the fluid handled are free from paint-wetting impairment materials.

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

184 At flow rate Q = 0 m^3/h

Technical data

Calio PN6/10/16

Technical data

Size	Connection		PN	n		P_1	I_N	Mat. No.	[kg]
	Piping	Pump	[bar]	Min.	Max.	[W]	1~230 V AC, 50 Hz/60 Hz		
				[rpm]	[rpm]		[A]		
25-40	Rp 1	G 1 1/2	6/10/16	1000	2900	3,5 - 95	0,15 - 0,41	29134911	5,3
25-60	Rp 1	G 1 1/2	6/10/16	1000	3500	3,5 - 180	0,15 - 0,78	29134912	5,3
25-80	Rp 1	G 1 1/2	6/10/16	1000	4000	3,5 - 200	0,15 - 0,87	29134913	5,3
25-100	Rp 1	G 1 1/2	6/10/16	1000	4500	3,5 - 210	0,15 - 0,91	29134914	5,3
30-40	Rp 1 1/4	G 2	6/10/16	1000	2900	3,5 - 70	0,15 - 0,30	29134915	5,5
30-60	Rp 1 1/4	G 2	6/10/16	1000	3500	3,5 - 140	0,15 - 0,61	29134916	5,5
30-80	Rp 1 1/4	G 2	6/10/16	1000	4000	3,5 - 180	0,15 - 0,78	29134917	5,5
30-100	Rp 1 1/4	G 2	6/10/16	1000	4500	3,5 - 210	0,15 - 0,91	29134918	5,5
30-120	Rp 1 1/4	G 2	6/10/16	1000	4000	3,5 - 370	0,15 - 1,61	29134919	6,46
32-120	DN 32	DN 32	6/10/16	1000	4000	3,5 - 360	0,15 - 1,57	29134920	9,62
40-60	DN 40	DN 40	6/10/16	1000	3700	3,5 - 120	0,15 - 0,52	29134921	8,68
40-70	DN 40	DN 40	6/10/16	1000	3900	3,5 - 150	0,15 - 0,65	29134922	8,68
40-80	DN 40	DN 40	6/10/16	1000	3600	3,5 - 300	0,15 - 1,30	29134923	11,49
40-90	DN 40	DN 40	6/10/16	1000	4500	3,5 - 190	0,15 - 0,83	29134924	8,68
40-100	DN 40	DN 40	6/10/16	1000	4000	3,5 - 400	0,15 - 1,74	29134925	11,49
40-120	DN 40	DN 40	6/10/16	1000	2900	5 - 500	0,32 - 2,17	29134862	20,5
40-180	DN 40	DN 40	6/10/16	1000	3500	5 - 700	0,32 - 3,00	29134863	20,5
50-40	DN 50	DN 50	6/10/16	1000	3200	3,5 - 140	0,15 - 0,61	29134926	9,9
50-60	DN 50	DN 50	6/10/16	1000	3300	3,5 - 300	0,15 - 1,30	29134927	12,87
50-80	DN 50	DN 50	6/10/16	1000	3500	3,5 - 370	0,15 - 1,61	29134928	12,87
50-90	DN 50	DN 50	6/10/16	1000	4500	3,5 - 200	0,15 - 0,87	29134929	9,9
50-100	DN 50	DN 50	6/10/16	1000	2750	5 - 450	0,32 - 1,96	29134864	21,6
50-120	DN 50	DN 50	6/10/16	1000	2930	5 - 500	0,32 - 2,17	29134865	21,6
50-150	DN 50	DN 50	6/10/16	1000	3260	5 - 630	0,32 - 2,74	29134866	21,6
50-180	DN 50	DN 50	6/10/16	1000	3600	5 - 710	0,32 - 3,10	29134867	21,6
65-60	DN 65	DN 65	6/10/16	1000	3100	3,5 - 380	0,15 - 1,65	29134930	17,56
65-120	DN 65	DN 65	6/10/16	1000	3200	5 - 820	0,32 - 3,60	29134868	29,7
80-80	DN 80	DN 80	6	1000	2400	5 - 670	0,32 - 2,91	29134869	31,4
80-80	DN 80	DN 80	10/16	1000	2400	5 - 670	0,32 - 2,91	29134870	31,4
100-60	DN 100	DN 100	6	1000	2100	5 - 770	0,32 - 3,40	29134871	39,4
100-60	DN 100	DN 100	10/16	1000	2100	5 - 790	0,32 - 3,40	29134872	39,4

Selection information

Minimum inlet pressure

The minimum inlet pressure p_{min} at the pump suction nozzle serves to avoid cavitation noises at an ambient temperature of +40 °C and the indicated fluid temperature T_{max}.

The indicated values are applicable up to 300 m above sea level. For installation at altitudes > 300 m, an allowance of 0.01 bar / 100 m must be added.

Minimum inlet pressure p_{min} specified for the fluid temperature T_{max}.

Fluid temperature	Minimum inlet pressure
[°C]	[bar]
≤ 80	0,5
81 to 95	1,5
96 to 110	2,5

Permissible fluid temperature

Temperature limits of the fluid handled

Permissible fluid temperature	Value
Maximum	110 °C
Minimum	-10 °C

Permissible ambient temperature

Permissible ambient temperatures specified for the fluid temperature

Fluid temperature	Permissible ambient temperature
[°C]	[°C]
≤ +90	+40
> +90	+30

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Description of the characteristic curve

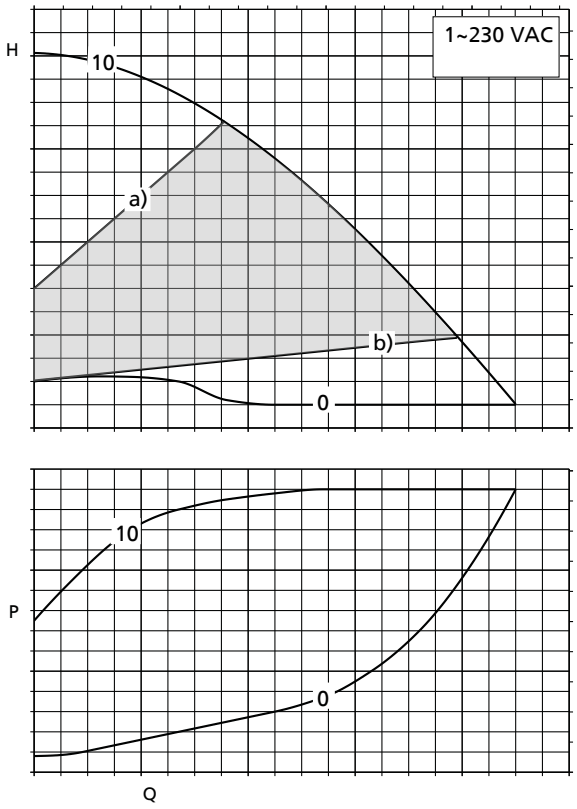


Fig. 214: Selection example

The pump characteristic curve can be adjusted between a) and b) in increments of 1 % by turning the control element.

0	Level 0 = open-loop control, minimum speed (corresponds to a setting of 0 %)
10	Level 10 = open-loop control, maximum speed (corresponds to a setting of 100 %)
	Control range
a)	Control curve, maximum head
b)	Control curve, minimum head

Description of the Eco Mode

In Eco Mode, the pump characteristic curve (1) is quadratic. Starting at the discharge head setpoint H_S , the characteristic curve intersects the discharge head axis at H_0 = 1/4 x H_S.
By changing the differential pressure setpoint this pump characteristic curve can be adjusted to higher or lower differential pressures or discharge heads.
Compared with the Proportional-pressure Control operating mode the Eco Mode can save more than 40 % in electrical input power.
An example of a characteristic curve of a pump in Eco Mode is shown below.

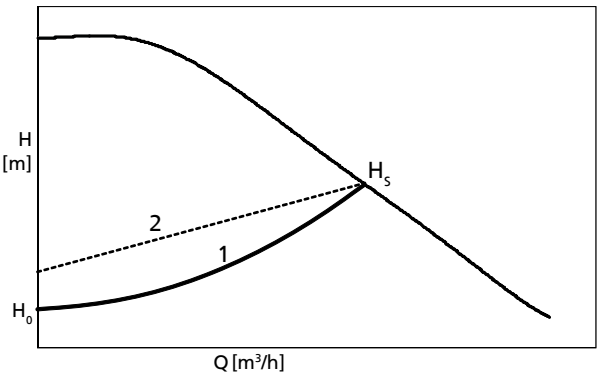


Fig. 215: Eco Mode function

1	Eco Mode characteristic curve
2	Proportional-pressure Control characteristic curve for comparison

Description of the Modbus interface

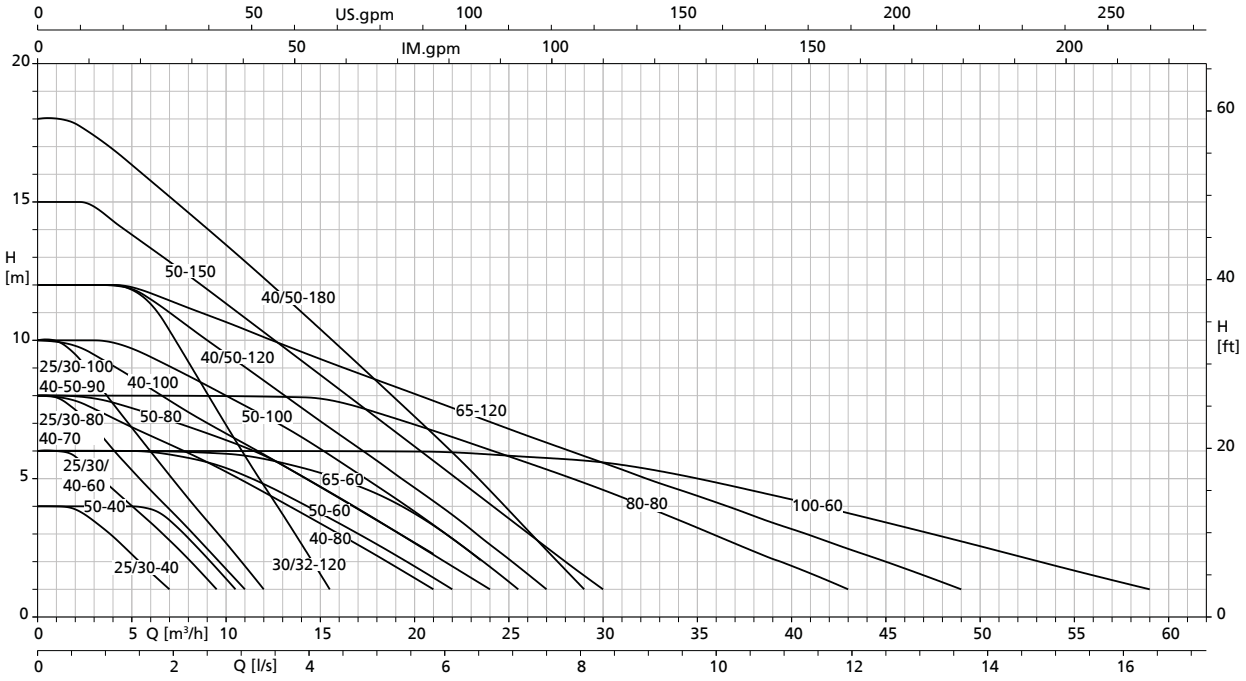
Technical data of the Modbus interface

Parameter	Description/value
Terminal cross-section	1,5 mm²
Interface	RS485 (TIA-485-A) optically isolated
Bus connection	0.5 mm², shielded twisted pair bus cable
Cable length	▪ 1000 m max. ▪ Stub line impermissible ▪ For cable lengths > 30 m take suitable measures to ensure overvoltage protection.
Wave impedance	120 Ω (cable type B to TIA-485-A)
Data rates [baud]	4800, 9600, 38,400, 57,600, 115,200 (19,200 = factory setting)
Protocol	Modbus RTU standard
Data format	▪ 8 data bits ▪ Parity EVEN / ODD / NONE ▪ 1 stop bit
Modbus address	ID #1 to #247 selectable (ID #17 = factory setting)

Further description see operating manual of the pump set.

Selection chart

Calio



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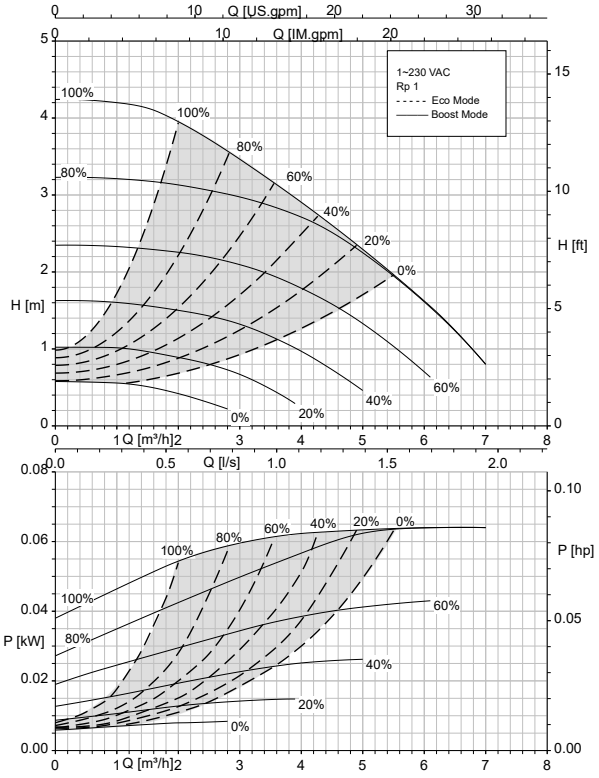
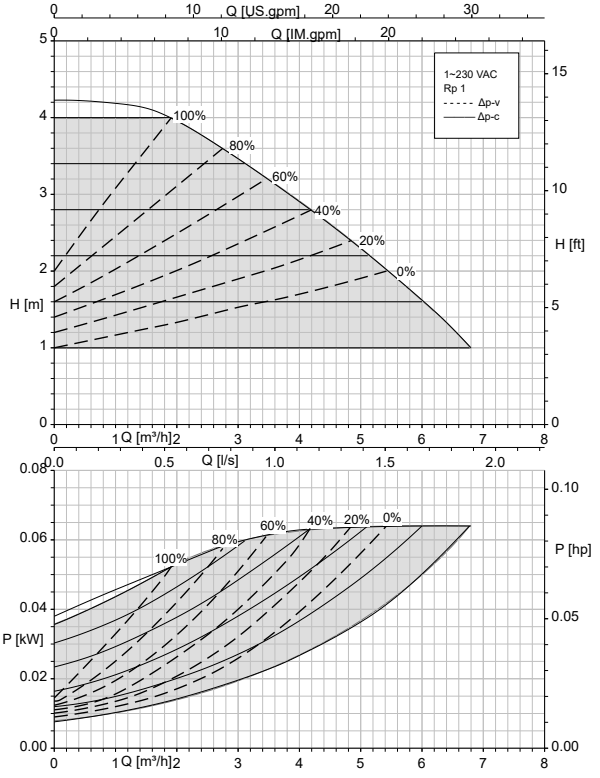
Price basis United Kingdom

Characteristic curves

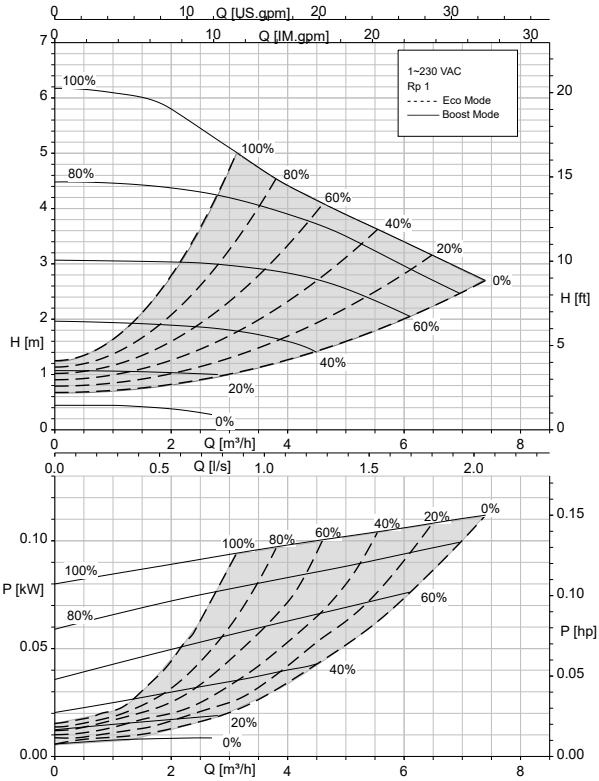
Calio 25-40 Open-loop Control, Eco Mode



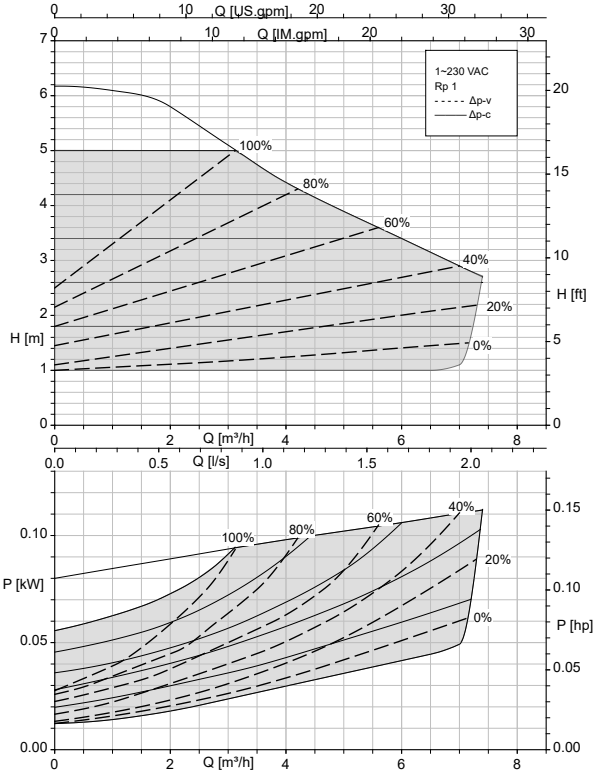
Calio 25-40 Δpv, Δpc



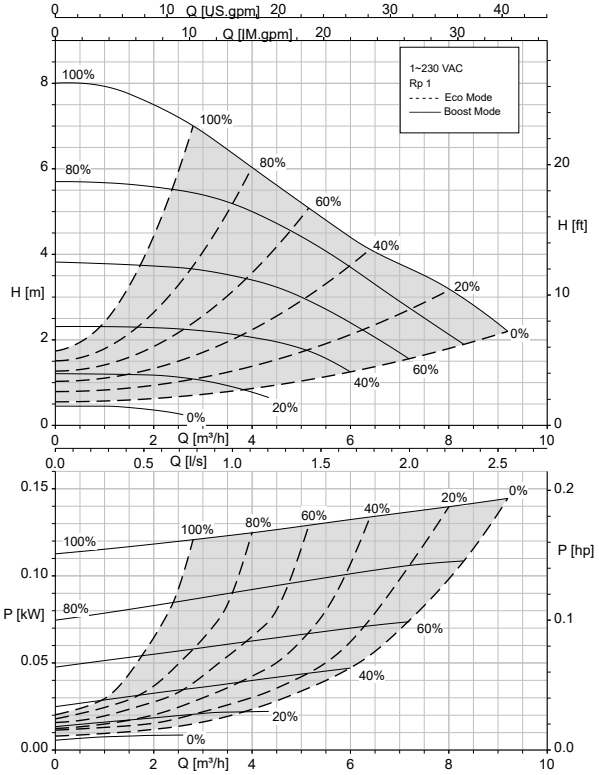
Calio 25-60 Open-loop Control, Eco Mode



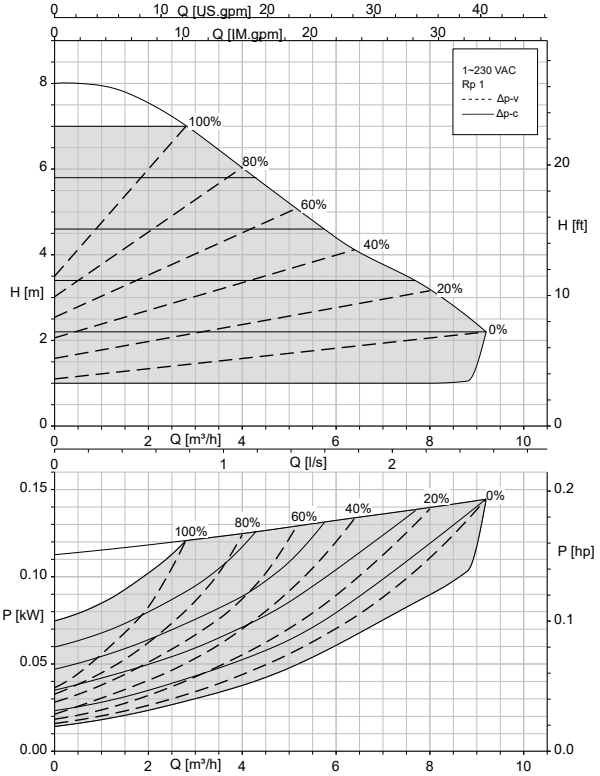
Calio 25-60 Δpv, Δpc



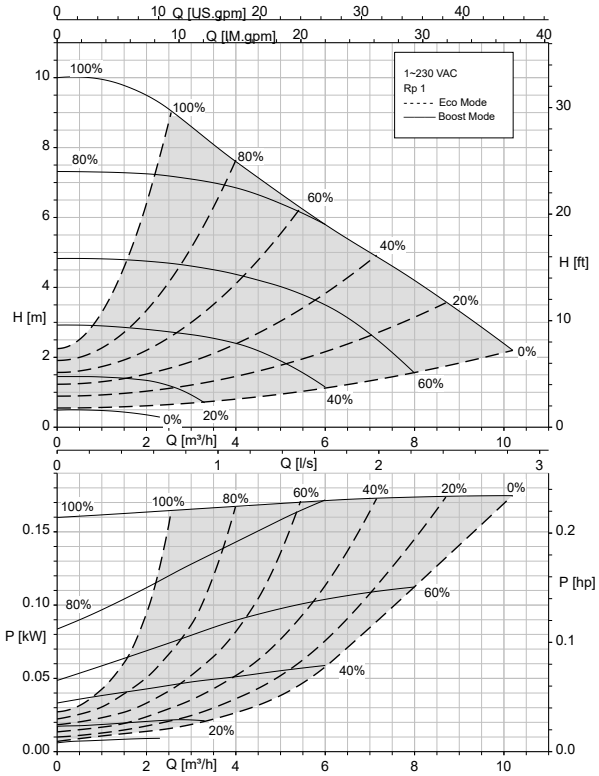
Calio 25-80 Open-loop Control, Eco Mode



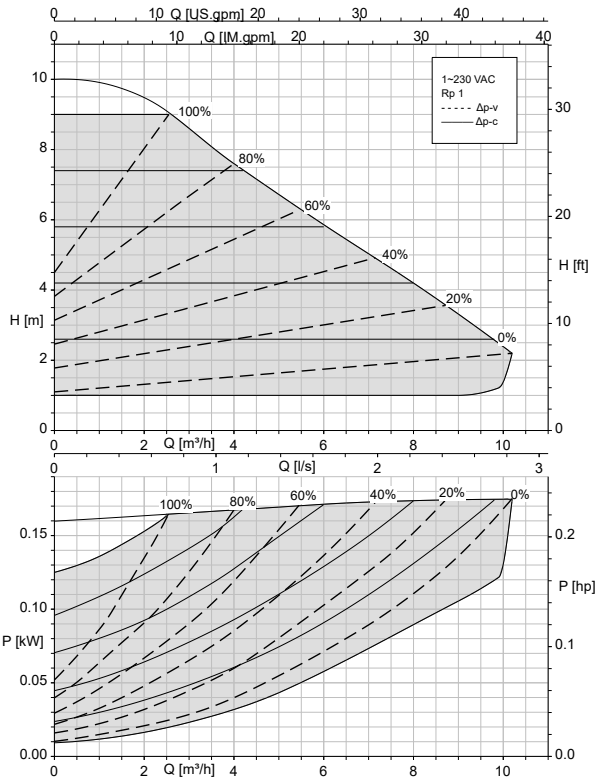
Calio 25-80 Δpv, Δpc



Calio 25-100 Open-loop Control, Eco Mode



Calio 25-100 Δpv, Δpc



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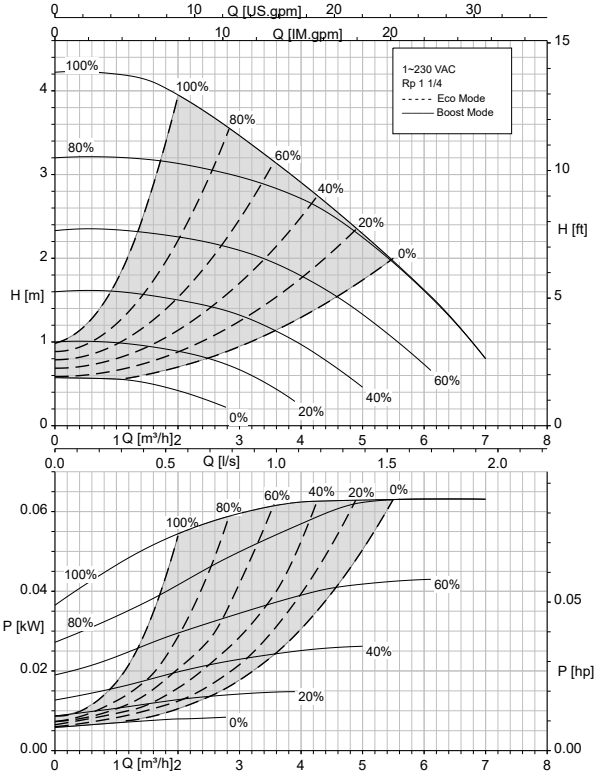
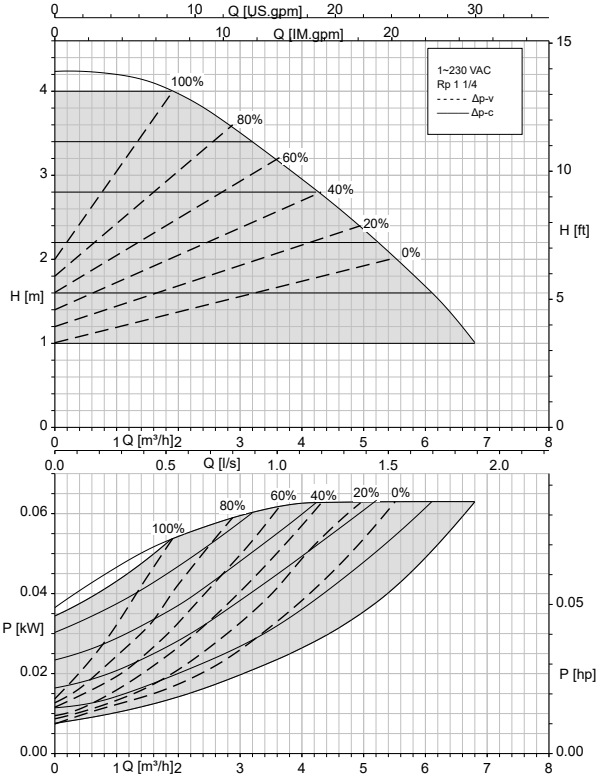
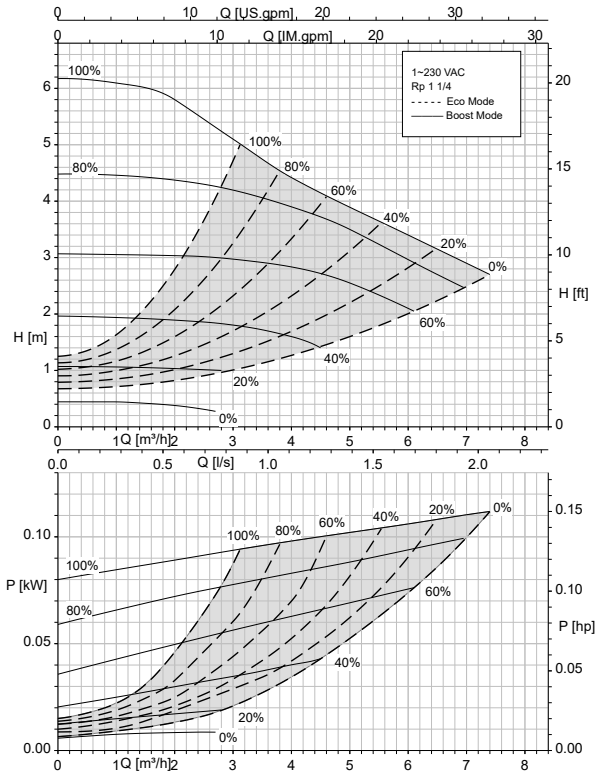
Calio 30-40 Open-loop Control, Eco Mode



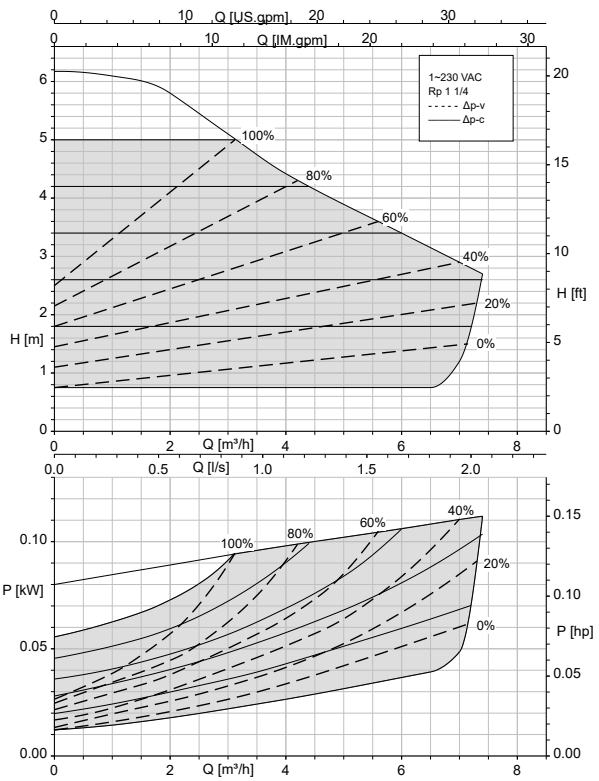
Calio 30-40 Δpv, Δpc



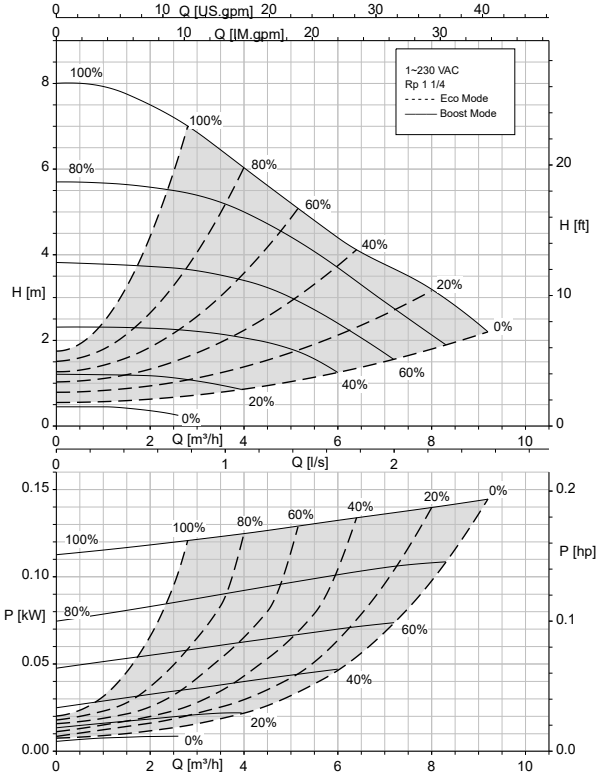
Calio 30-60 Open-loop Control, Eco Mode



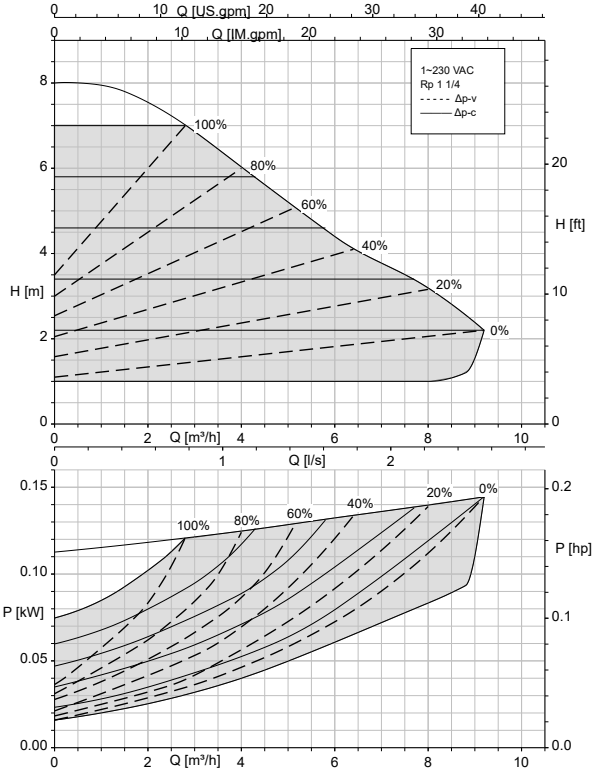
Calio 30-60 Δpv, Δpc



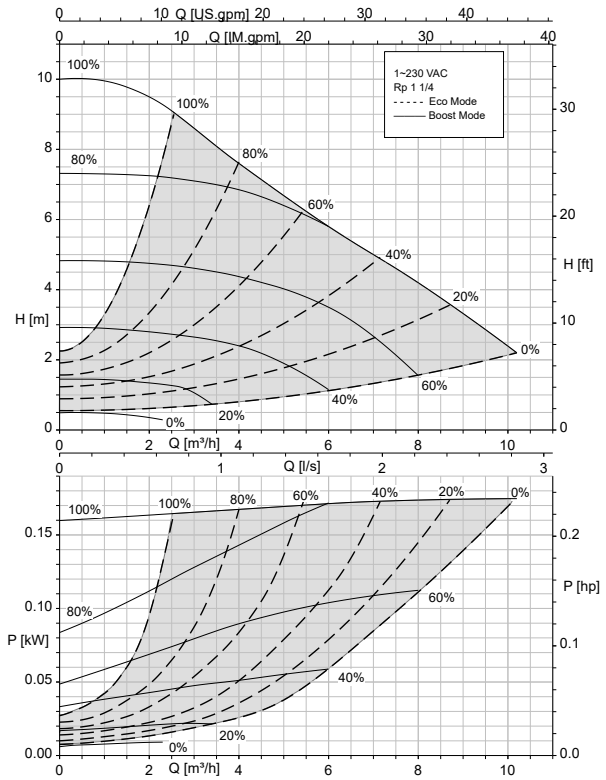
Calio 30-80 Open-loop Control, Eco Mode



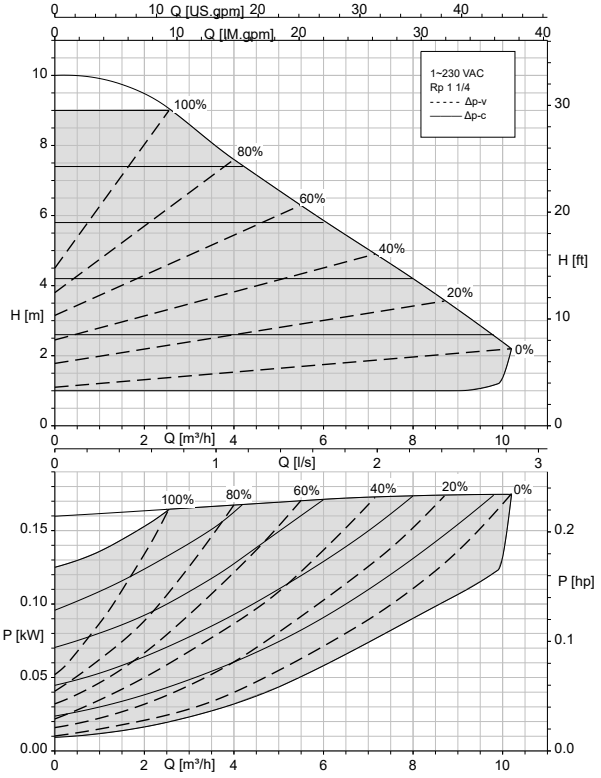
Calio 30-80 Δpv, Δpc



Calio 30-100 Open-loop Control, Eco Mode



Calio 30-100 Δpv, Δpc



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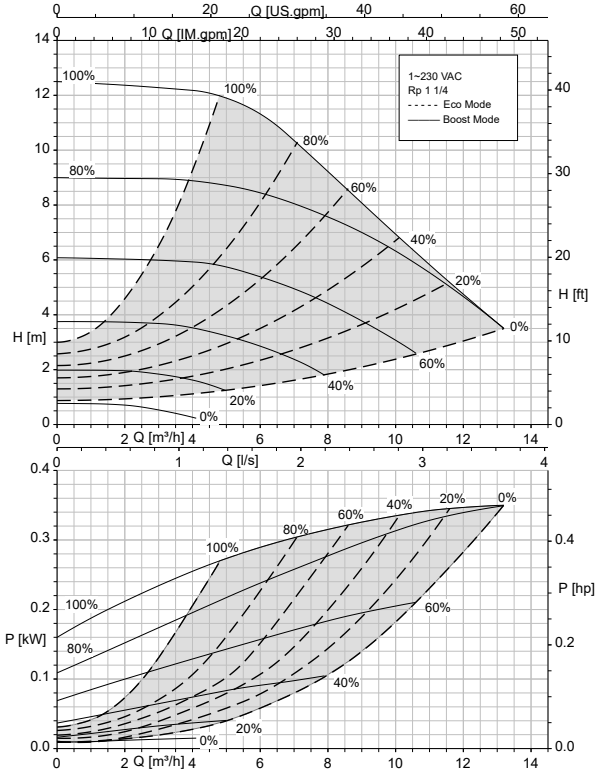
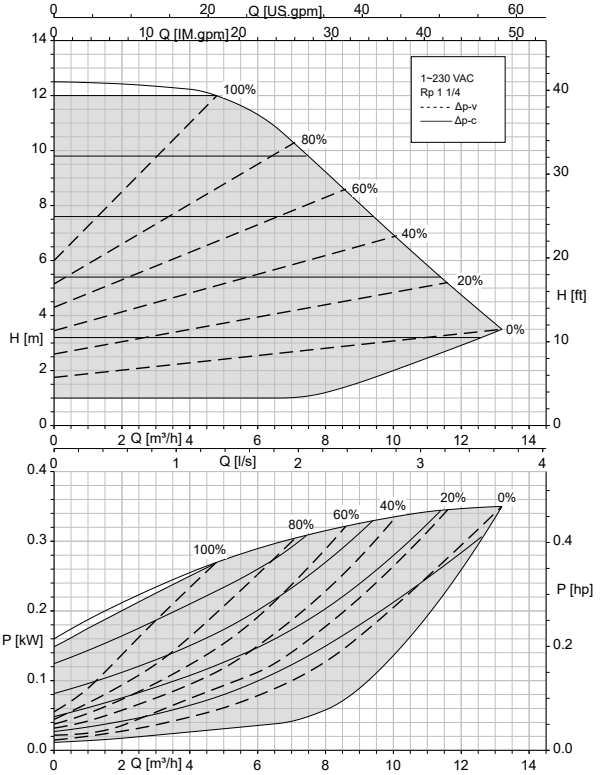
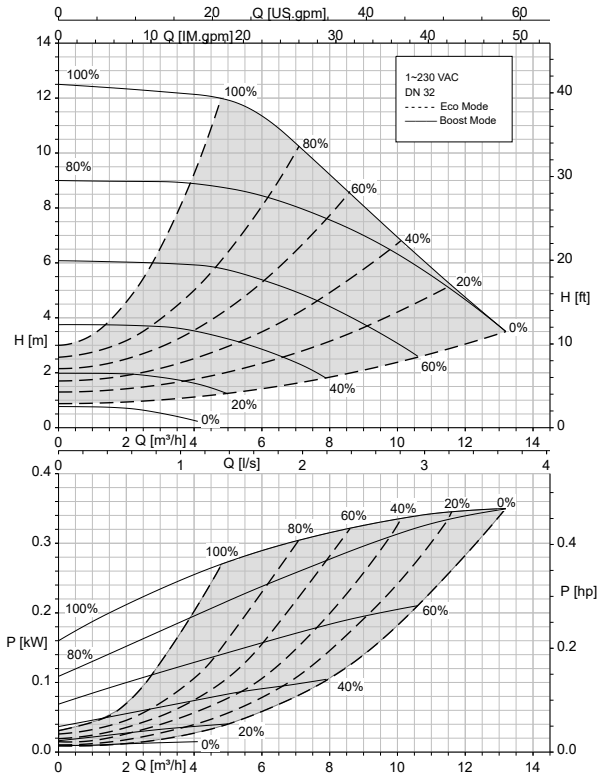
Calio 30-120 Open-loop Control, Eco Mode



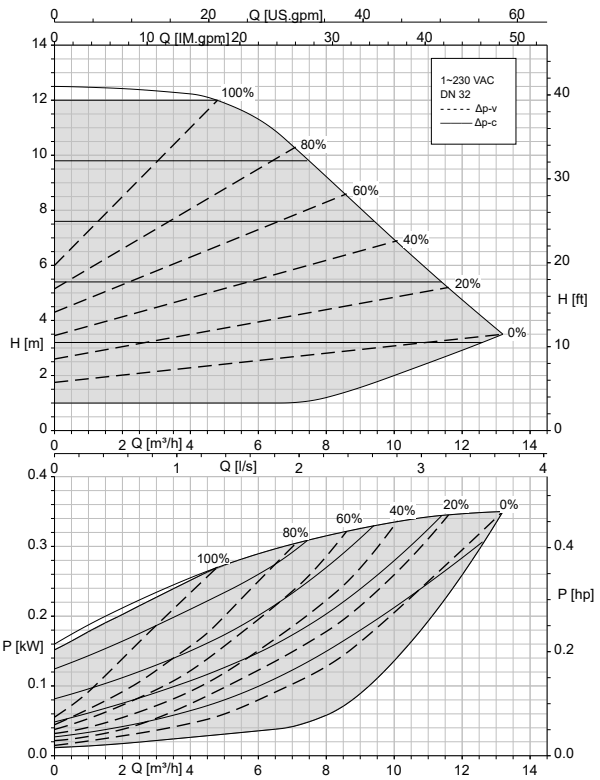
Calio 30-120 Δpv, Δpc



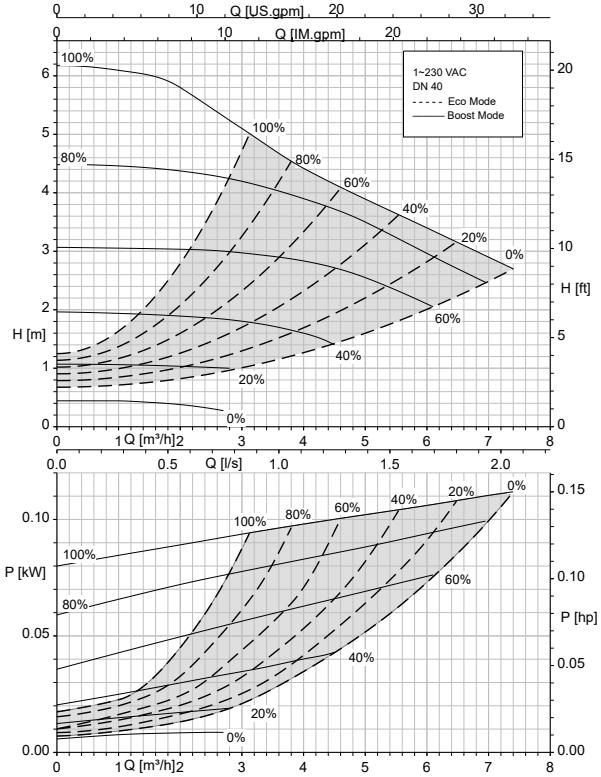
Calio 32-120 Open-loop Control, Eco Mode



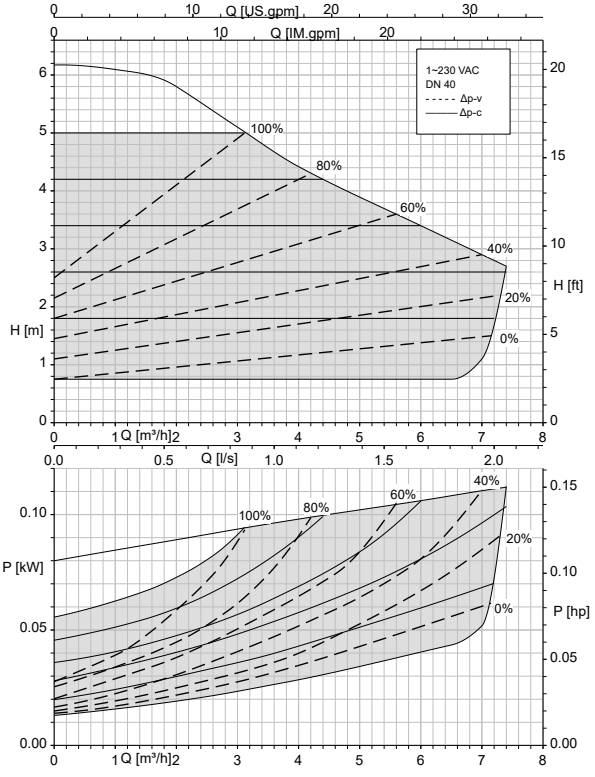
Calio 32-120 Δpv, Δpc



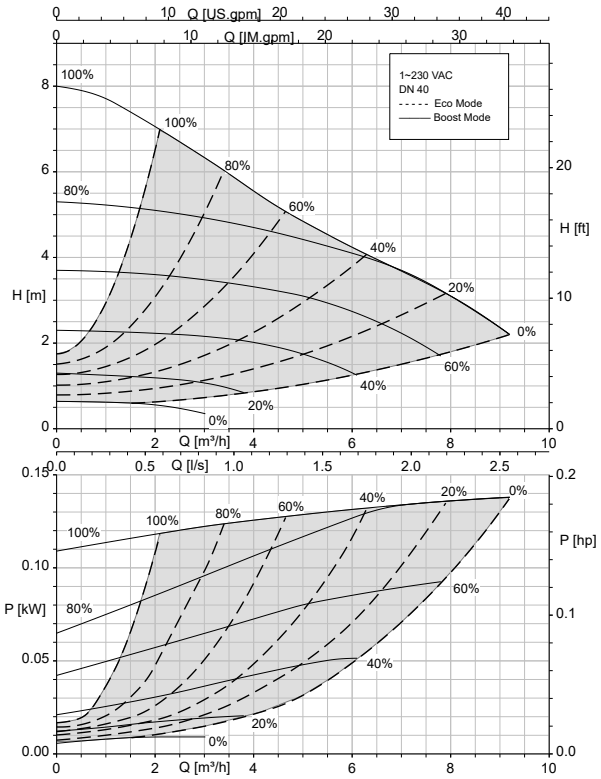
Calio 40-60 Open-loop Control, Eco Mode



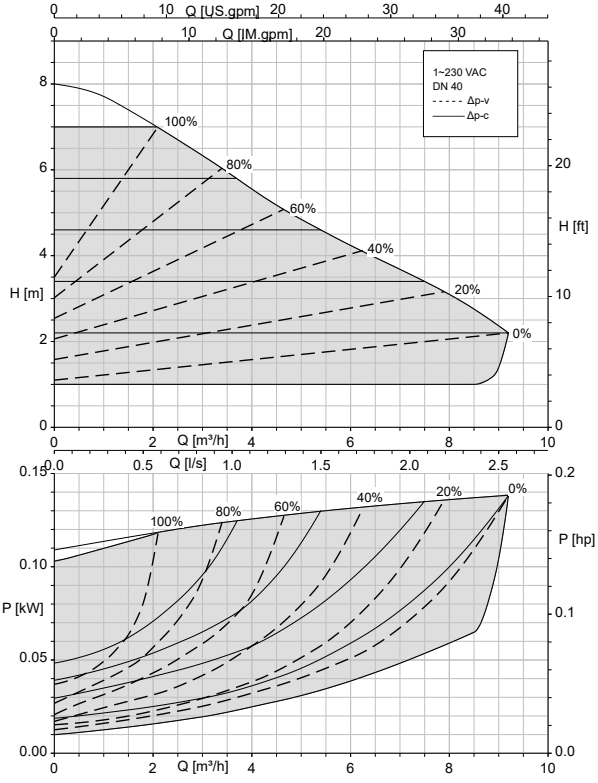
Calio 40-60 Δpv, Δpc



Calio 40-70 Open-loop Control, Eco Mode



Calio 40-70 Δpv, Δpc



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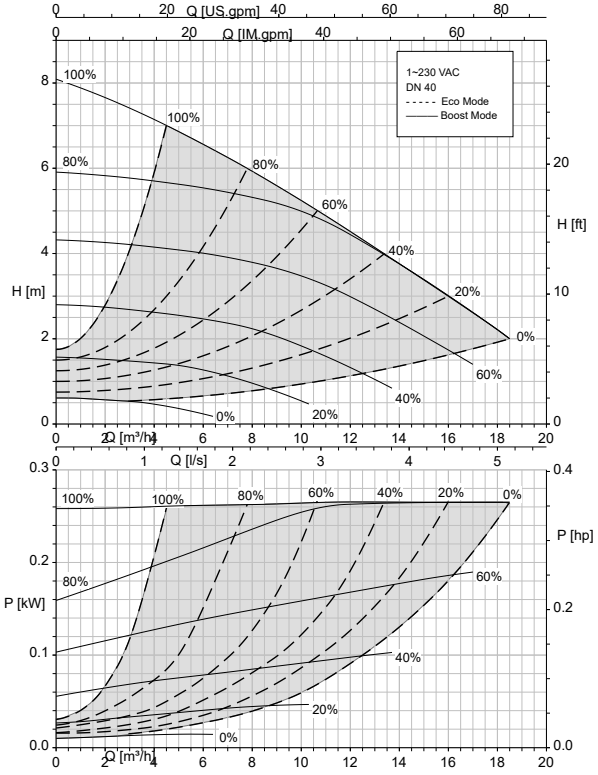
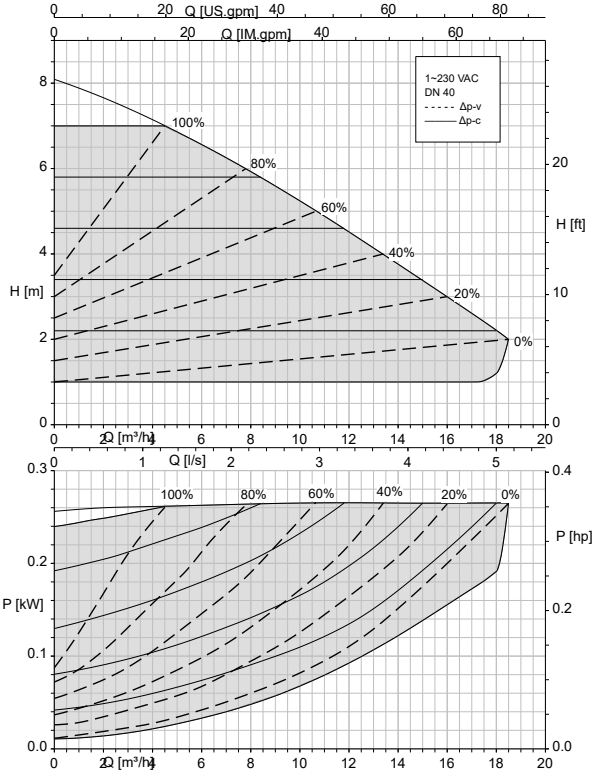
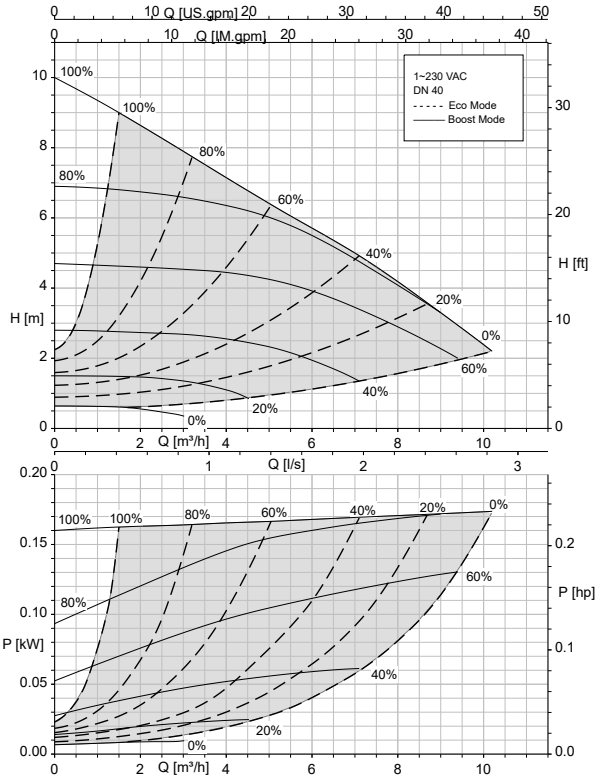
Calio 40-80 Open-loop Control, Eco Mode



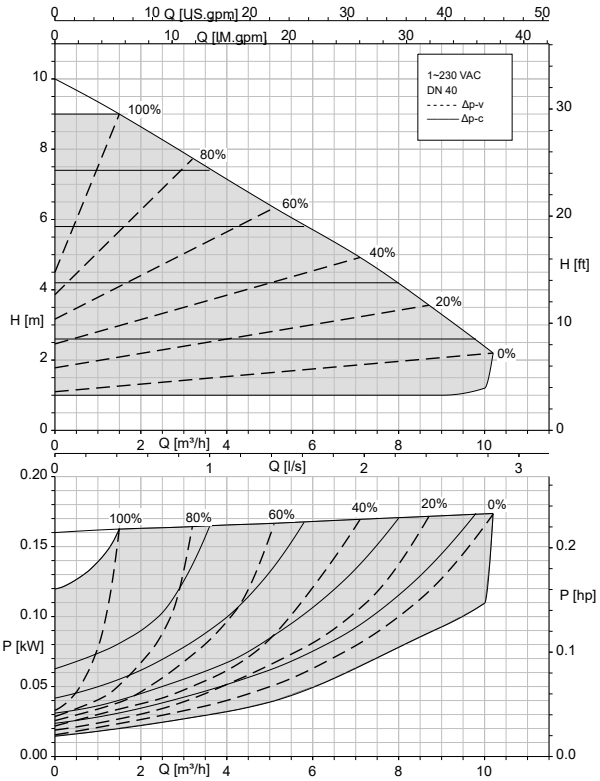
Calio 40-80 Δpv, Δpc



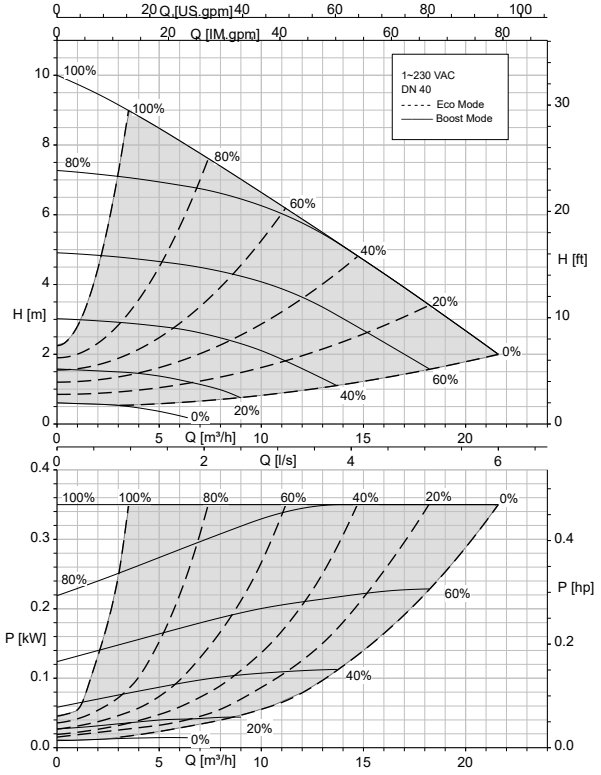
Calio 40-90 Open-loop Control, Eco Mode



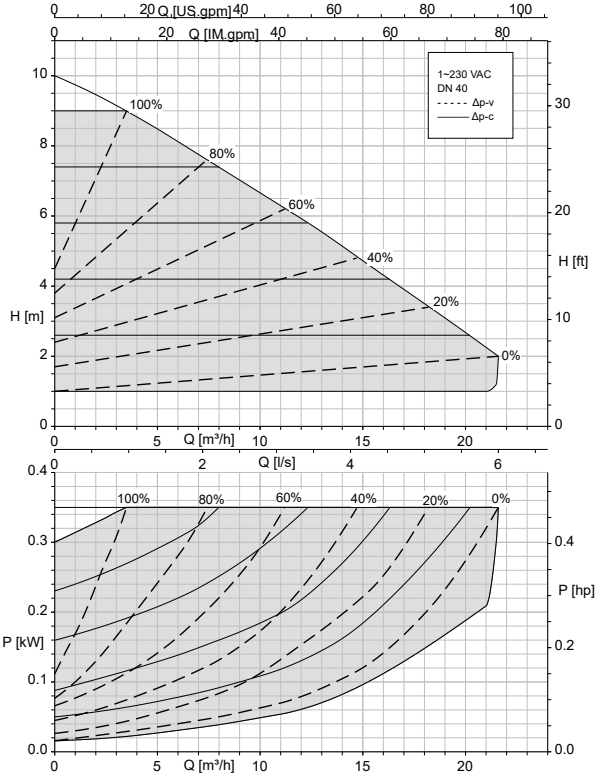
Calio 40-90 Δpv, Δpc



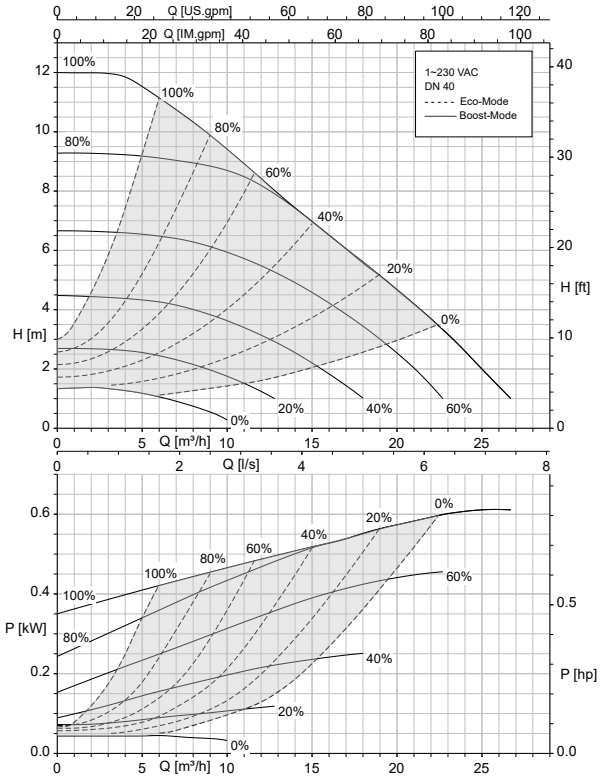
Calio 40-100 Open-loop Control, Eco Mode



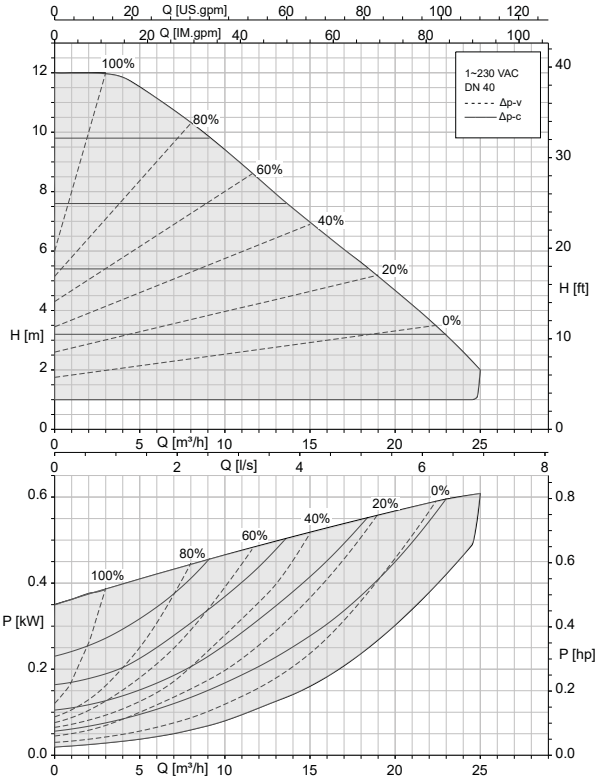
Calio 40-100 Δpv, Δpc



Calio 40-120 Open-loop Control, Eco Mode

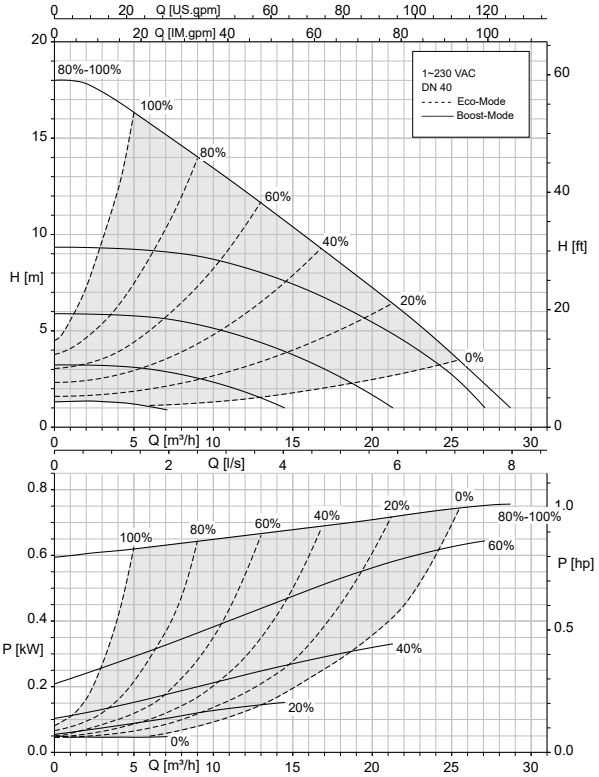


Calio 40-120 Δp-v, Δp-c

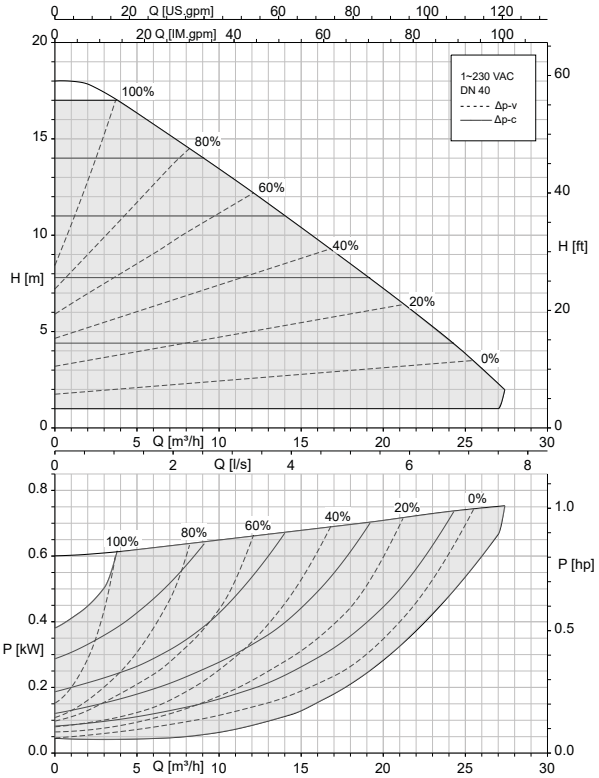


Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

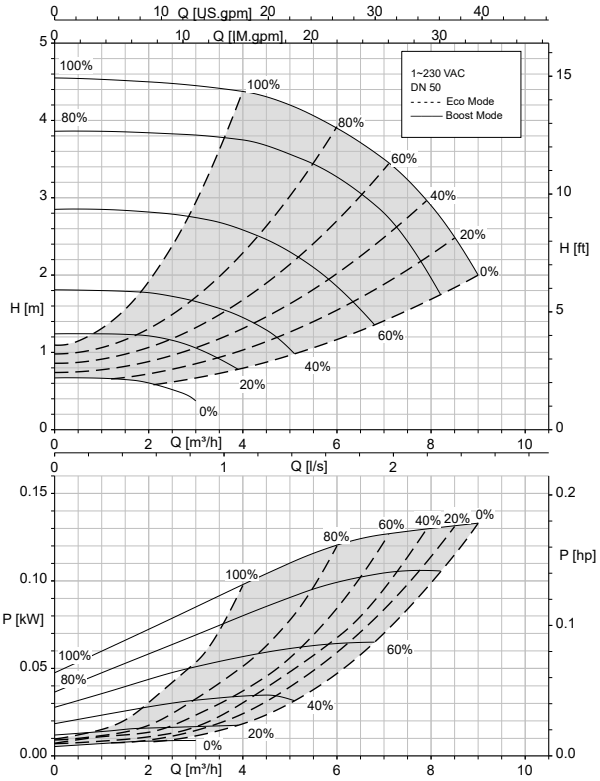
Calio 40-180 Open-loop Control, Eco Mode



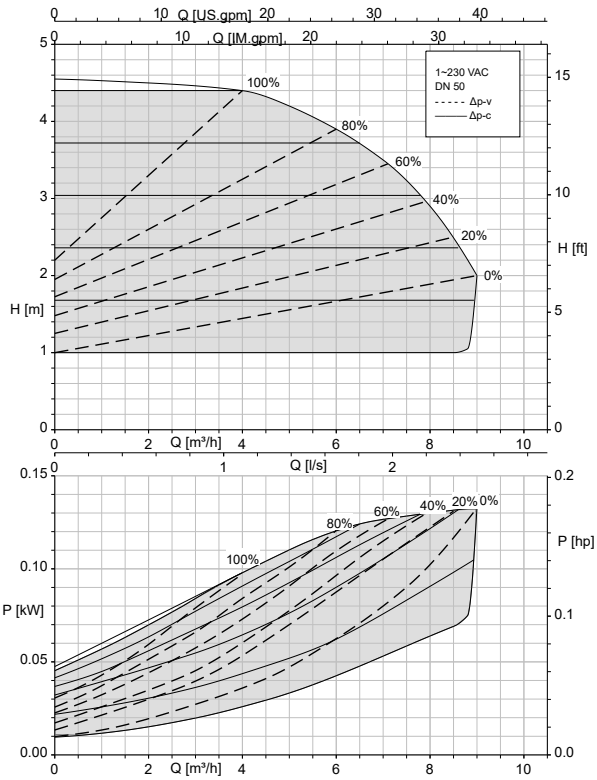
Calio 40-180 Δp-v, Δp-c



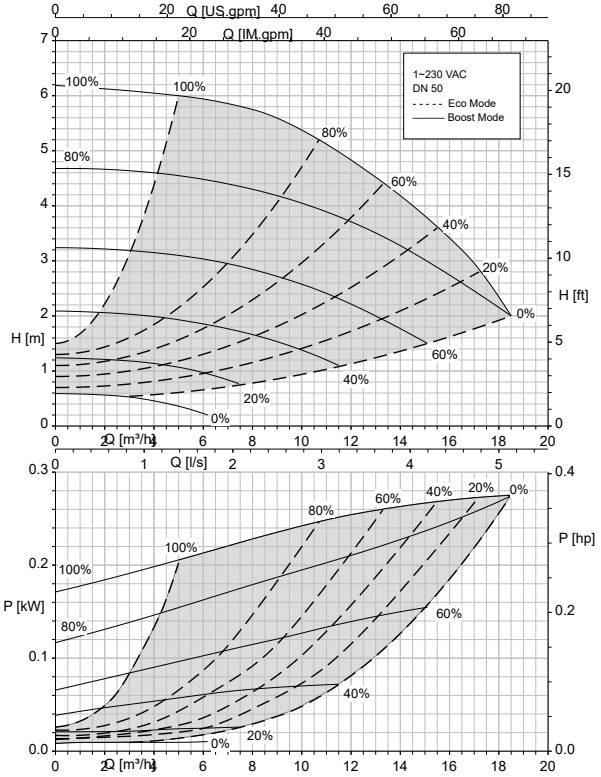
Calio 50-40 Open-loop Control, Eco Mode



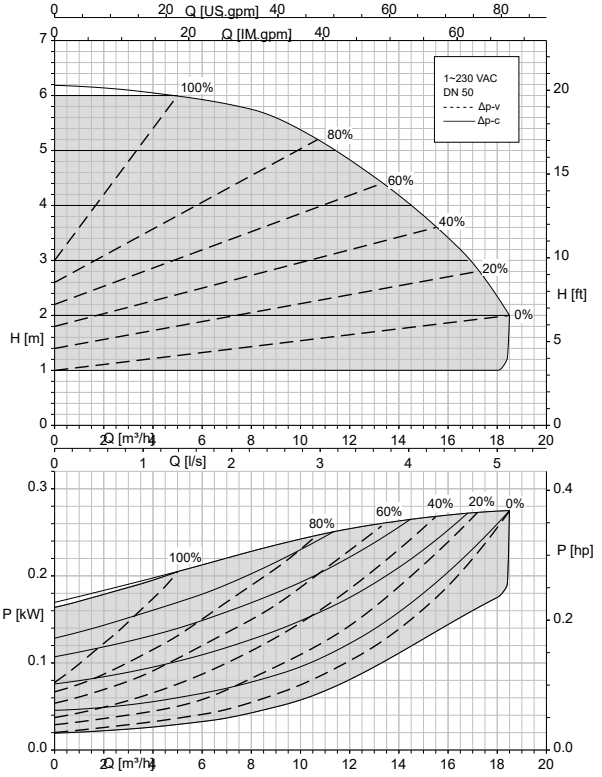
Calio 50-40 Δpv, Δpc



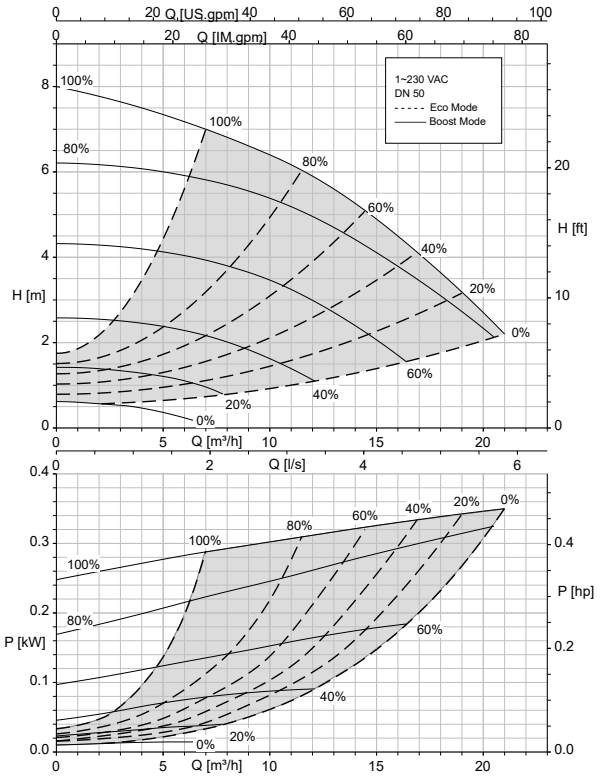
Calio 50-60 Open-loop Control, Eco Mode



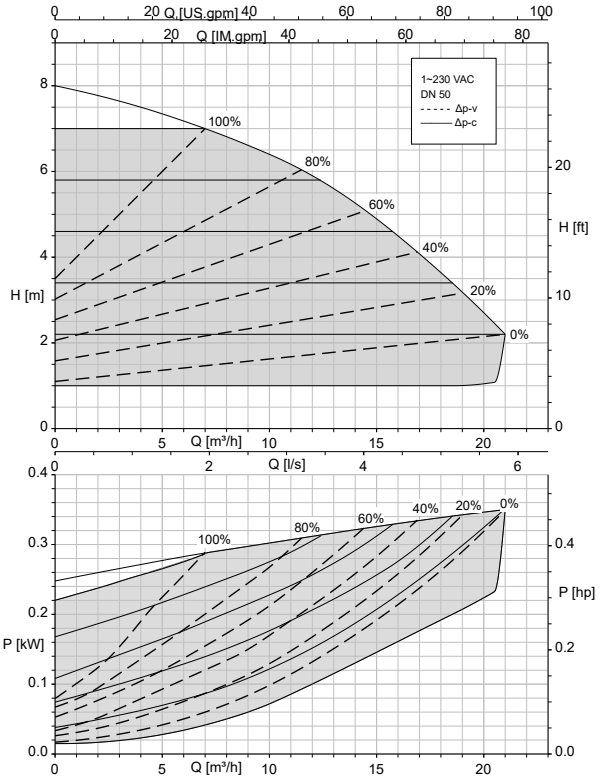
Calio 50-60 Δpv, Δpc



Calio 50-80 Open-loop Control, Eco Mode

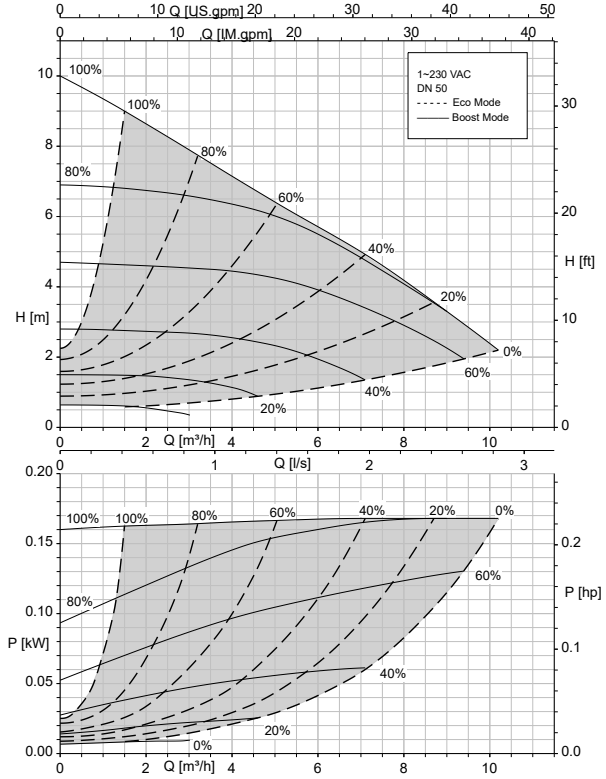


Calio 50-80 Δpv, Δpc

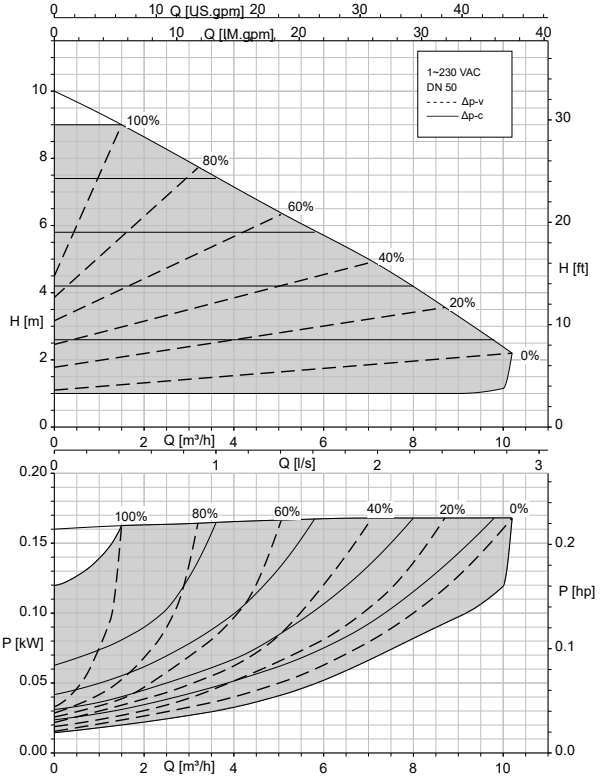


Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

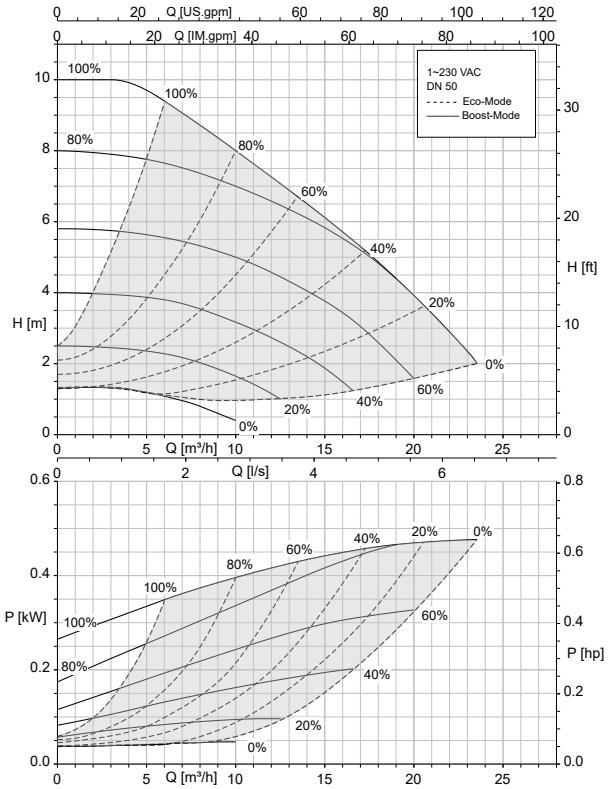
Calio 50-90 Open-loop Control, Eco Mode



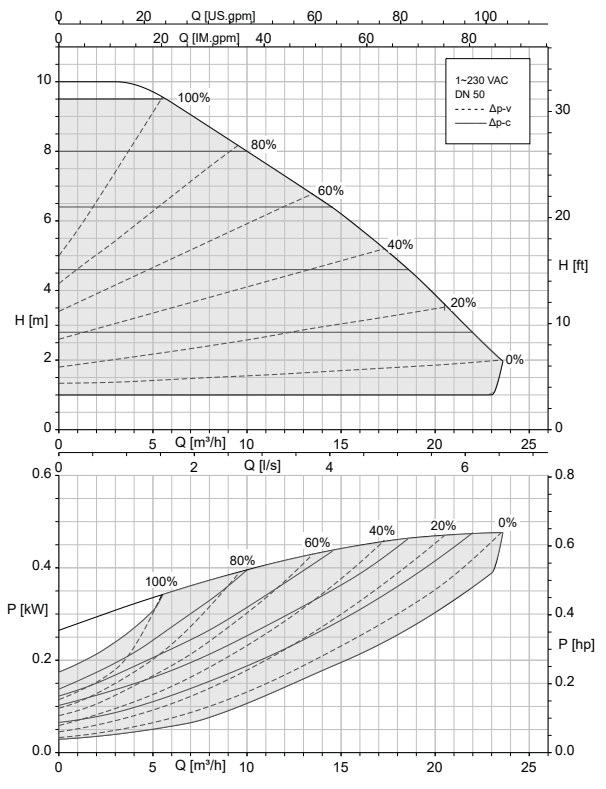
Calio 50-90 Δpv, Δpc



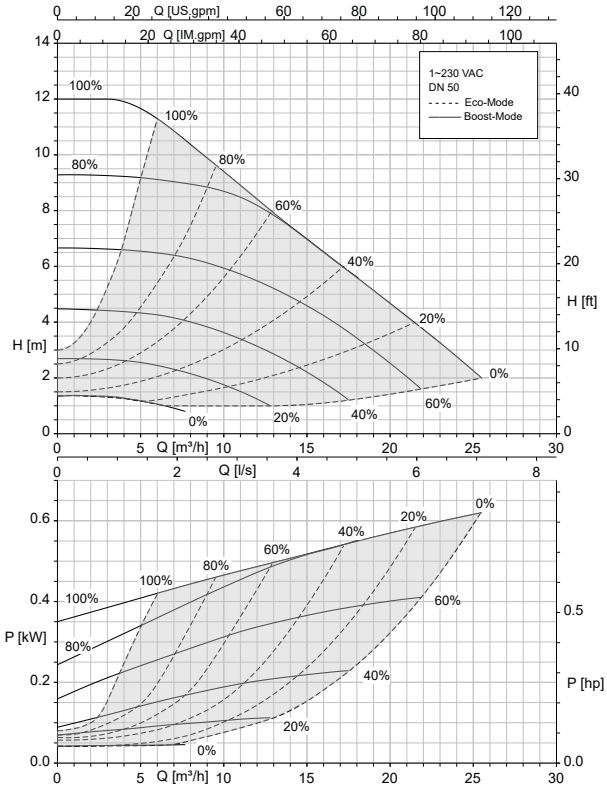
Calio 50-100 Open-loop Control, Eco Mode



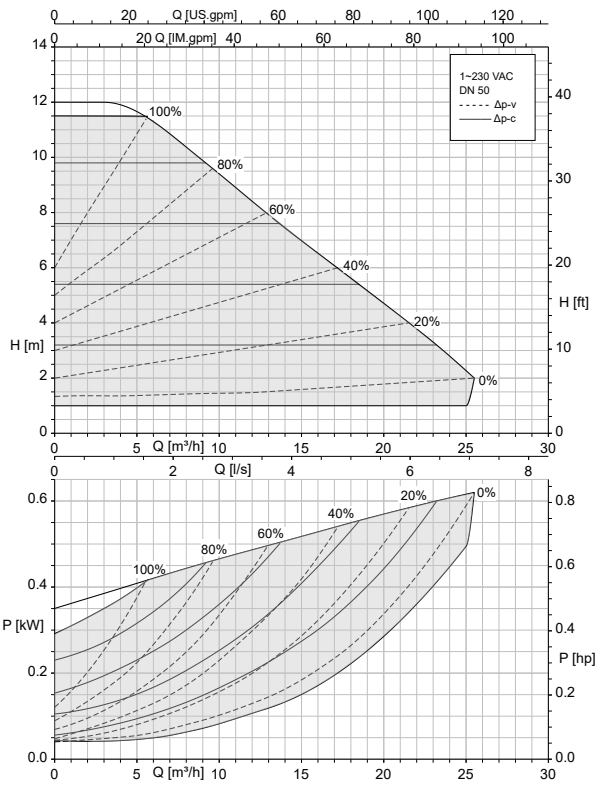
Calio 50-100 Δp-v, Δp-c



Calio 50-120 Open-loop Control, Eco Mode



Calio 50-120 Δp-v, Δp-c



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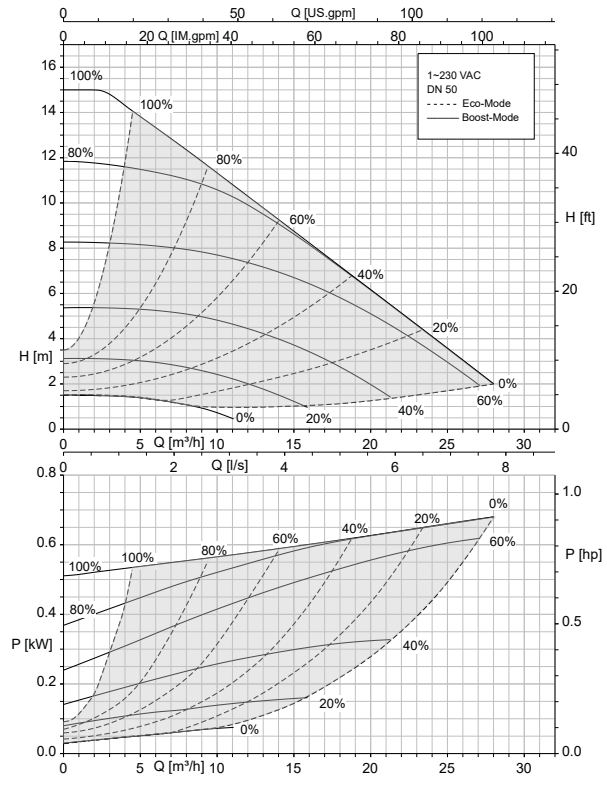
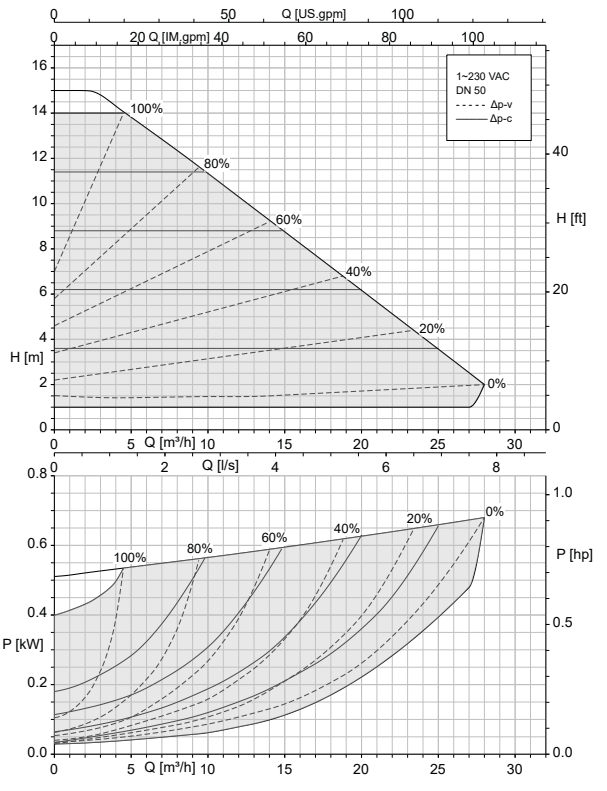
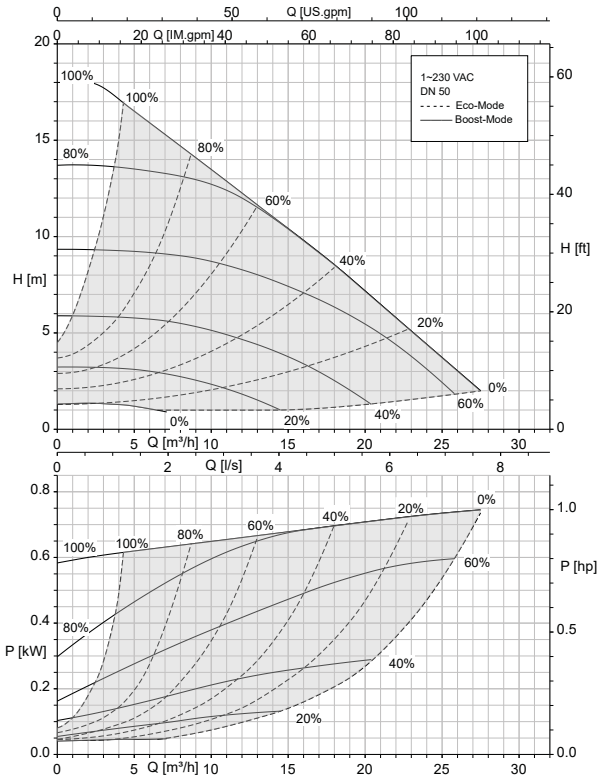


Calio 50-150 Δp-v, Δp-c

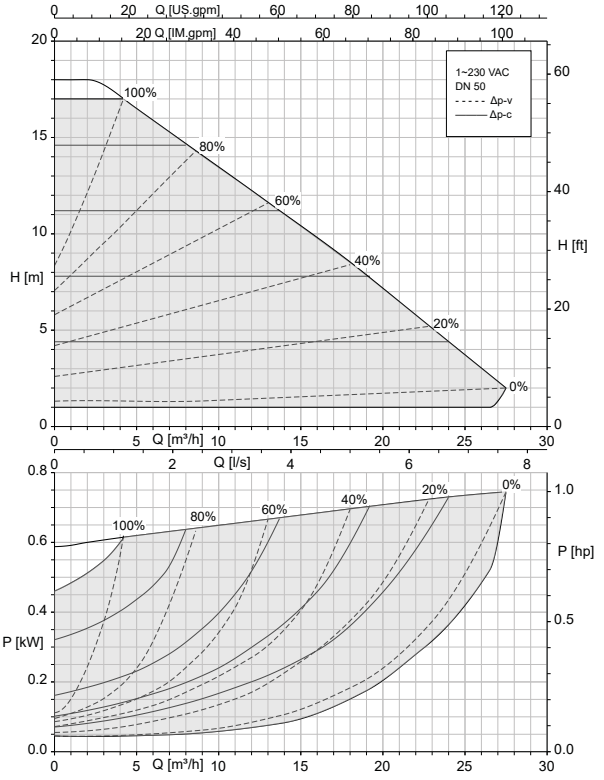


Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

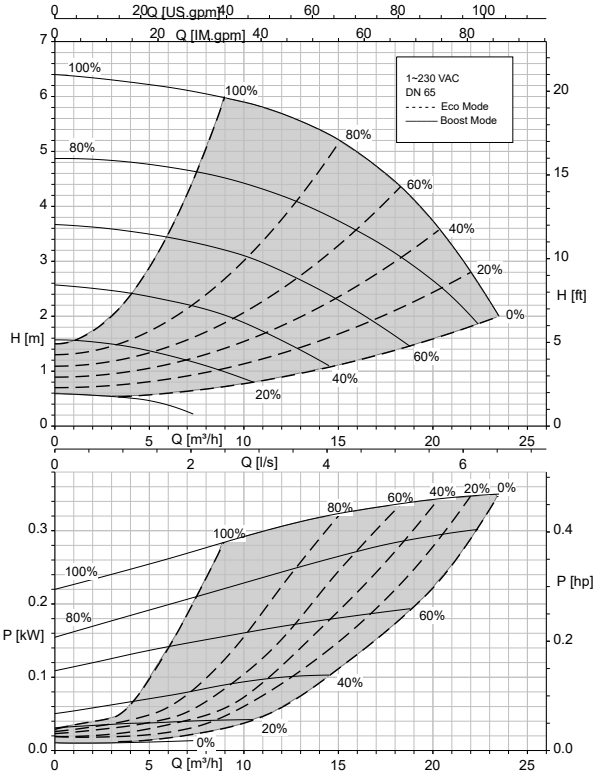
Calio 50-180 Open-loop Control, Eco Mode



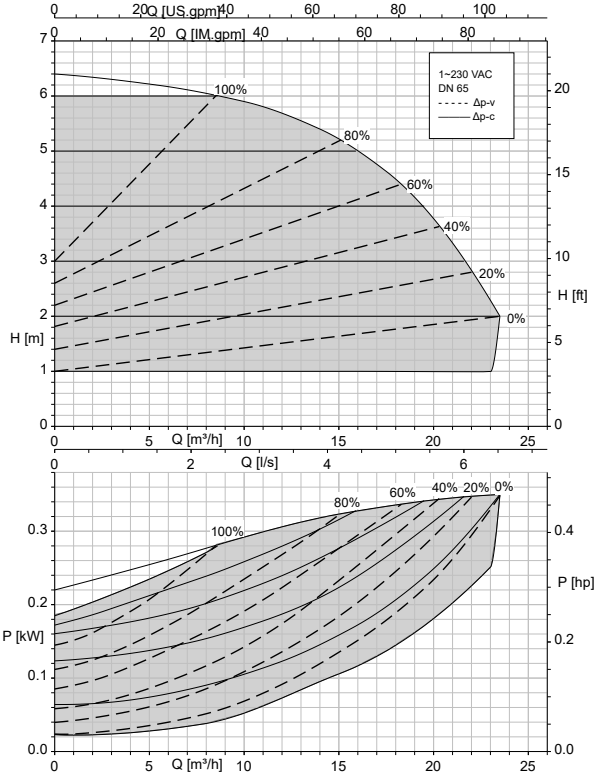
Calio 50-180 Δp-v, Δp-c



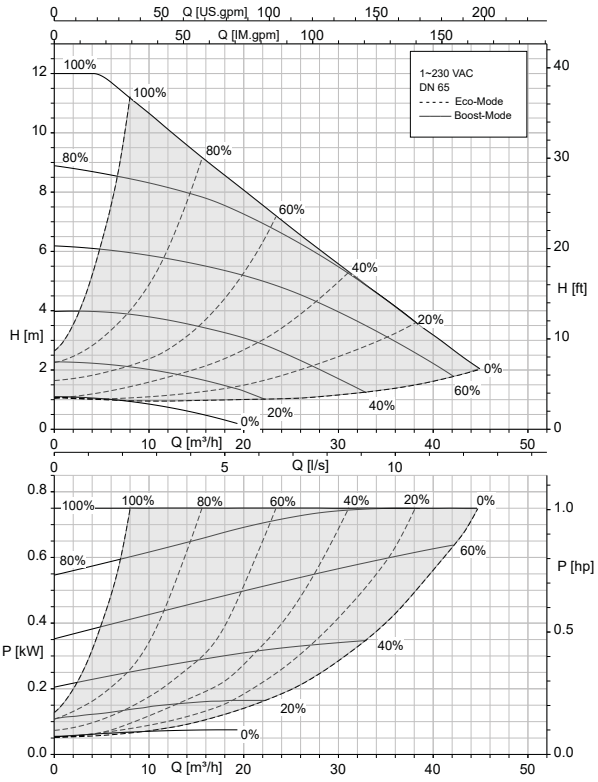
Calio 65-60 Open-loop Control, Eco Mode



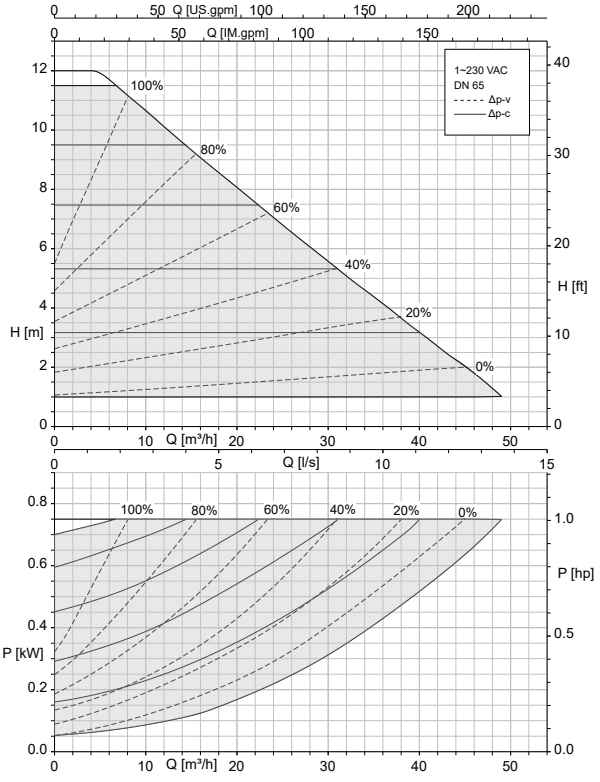
Calio 65-60 Δpv, Δpc



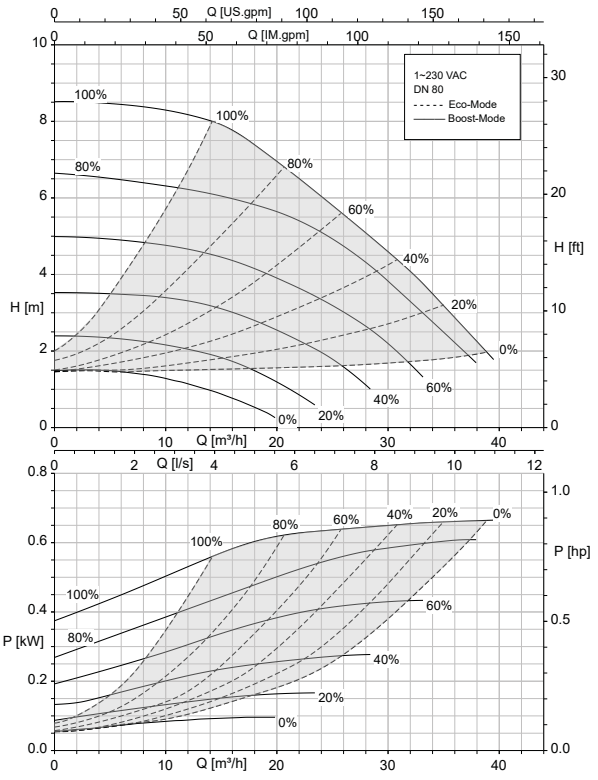
Calio 65-120 Open-loop Control, Eco Mode



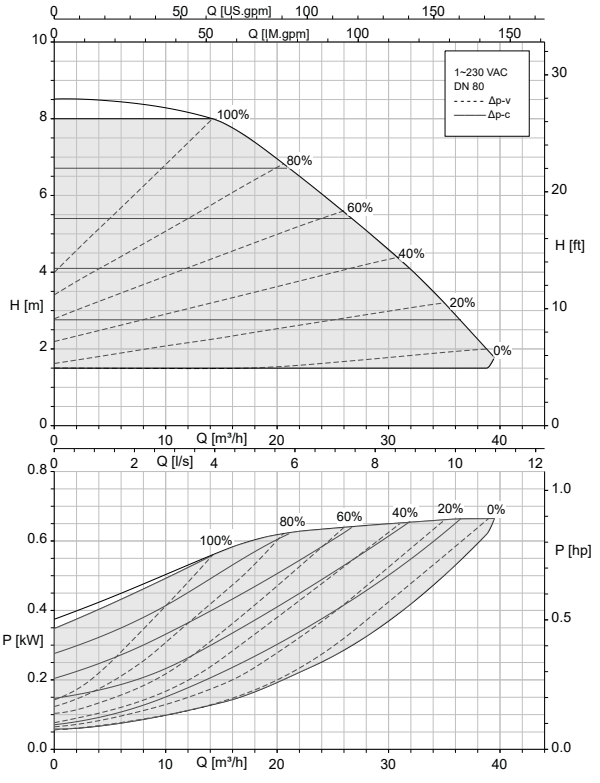
Calio 65-120 Δp-v, Δp-c



Calio 80-80 Open-loop Control, Eco Mode

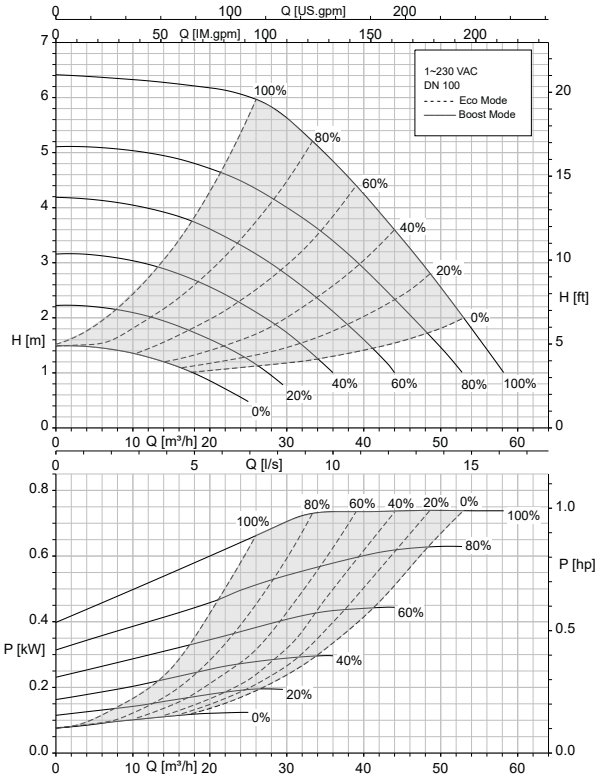


Calio 80-80 Δp-v, Δp-c

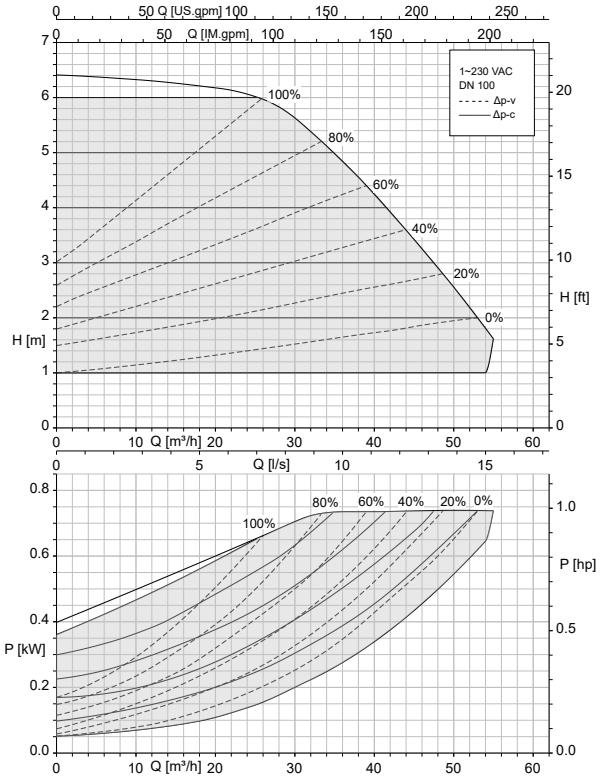


Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Calio 100-60 Open-loop Control, Eco Mode



Calio 100-60 Δp-v, Δp-c



Dimensions

Pump set dimensions

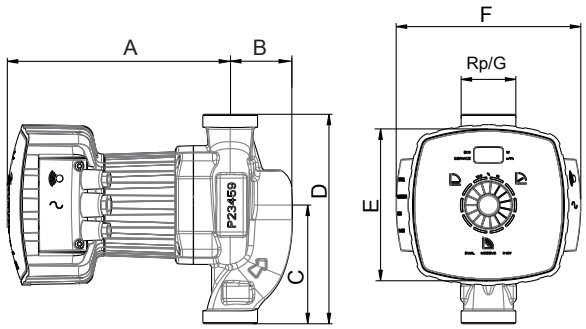


Fig. 216: Screw-ended pump set

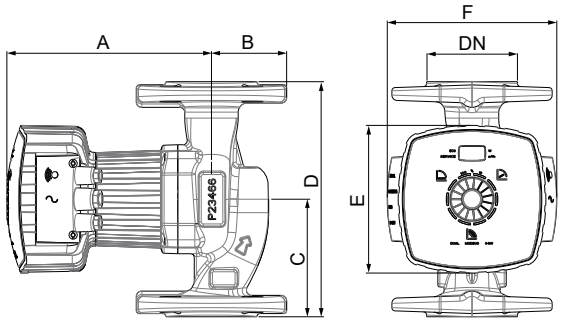


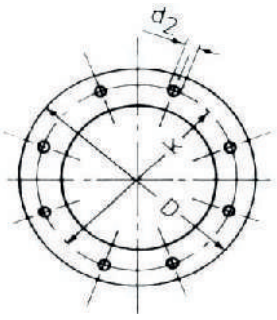
Fig. 217: Flanged pump set

Pump set dimensions

Size	Connection			A	B	C	D	E	F
	Rp	G	DN	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
25-40	1	1 1/2	-	197	53	102	180	137	168
25-60	1	1 1/2	-	197	53	102	180	137	168
25-80	1	1 1/2	-	197	53	102	180	137	168
25-100	1	1 1/2	-	197	53	102	180	137	168
30-40	1 1/4	2	-	197	53	102	180	137	168
30-60	1 1/4	2	-	197	53	102	180	137	168
30-80	1 1/4	2	-	197	53	102	180	137	168
30-100	1 1/4	2	-	197	53	102	180	137	168
30-120	1 1/4	2	-	232	53	98	180	137	168
32-120	-	-	32	232	65	110	220	137	168
40-60	-	-	40	179	70	110	220	137	168
40-70	-	-	40	179	70	110	220	137	168
40-80	-	-	40	242	70	120	220	137	168
40-90	-	-	40	179	70	110	220	137	168
40-100	-	-	40	242	70	120	220	137	168
40-120	-	-	40	390	75	135	250	206	240
40-180	-	-	40	390	75	135	250	206	240
50-40	-	-	50	179	78	120	240	137	168
50-60	-	-	50	243	78	130	240	137	168
50-80	-	-	50	243	78	130	240	137	168
50-90	-	-	50	179	78	120	240	137	168
50-100	-	-	50	390	77	140	280	206	240
50-120	-	-	50	390	77	140	280	206	240
50-150	-	-	50	390	77	140	280	206	240
50-180	-	-	50	390	77	140	280	206	240
65-60	-	-	65	244	89	170	340	137	168
65-120	-	-	65	395	95	170	340	206	240
80-80	-	-	80	395	105	170	360	206	240
100-60	-	-	100	395	110	210	450	206	240

Flange dimensions

Flange dimensions [mm]

Size	PN 6			PN 10, PN 16			Outline drawing
	Ø D	Ø k	n × Ø d_2	Ø D	Ø k	n × Ø d_2	
DN 32	120	90	4 × Ø 14	140	100	4 × Ø 19	
DN 40	130	100	4 × Ø 14	150	110	4 × Ø 19	
DN 50	140	110	4 × Ø 14	165	125	4 × Ø 19	
DN 65	160	130	4 × Ø 14	185	145	4 × Ø 19	
DN 80	190	150	4 × Ø 19	200	160	8 × Ø 19	
DN 100	210	170	4 × Ø 19	220	180	8 × Ø 19	

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Installation information

Calio

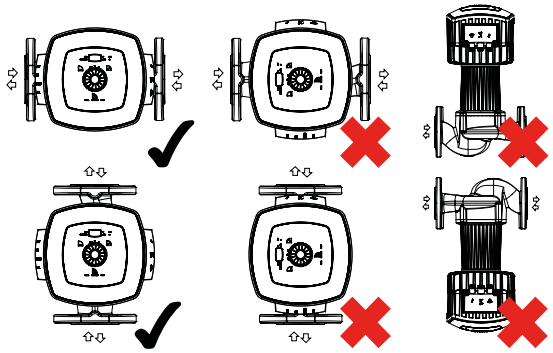


Fig. 218: Permissible installation positions

Scope of supply

Depending on the model, the following items are included in the scope of supply:

- Pump set
- Two-piece thermal insulation shell (single pump)
- 2 gaskets
- Installation/operating manual

High-efficiency Circulator Pumps with Continuously Variable Differential Pressure Control

Calio Z

http://shop.ksb.com/catalog/k0/en/product/ES000913

Product benefits

- Maximum savings of operating costs by high-efficiency technology combined with speed control
- Future-proof by maximum energy efficiency, exceeding current energy efficiency regulations such as ErP 2015.
- All-in concept saves investment costs and commissioning costs.
- Easy-to-use combination of controls, integrated display and symbols to show the operating status
- High availability by dual-pump operation and integrated protective functions
- New Eco Mode enables additional savings of more than 40 % compared to proportional-pressure control. (⇨ Page 463)

Further information

Prices on request

Selection chart 464
Characteristic curves 465
Dimensions 472

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
ErP 2015	Europe	EEI ≤ 0,23

Main applications

Heating, ventilation, air-conditioning, cooling and circulation systems

- One-pipe systems and two-pipe systems
- Underfloor heating systems
- Boiler circuits or primary circuits
- Storage tank circuits
- Solar power systems
- Heat pumps

Fluids handled

- Heating water to VDI 2035
- Higher-viscosity fluids (water/glycol mixture up to a mixing ratio of 1:1)

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 70
	Q [l/s]	≤ 19,4
Head	H [m]	≤ 18
Fluid temperature	T [°C]	≥ -10
		≤ +110
Ambient temperature	T [°C]	≥ 0
		≤ +40 [185)]
Operating pressure	p [bar]	≤ 16
Pressure class	PN [bar]	6/10/16
Average sound pressure level	[dB (A)]	≤ 45
Screw-ended	Rp	1 1/4
Flanged	DN	32 - 65

185 Ambient temperature ≤ + 30 °C at a fluid temperature> 90 °C

Design details

Design
- Maintenance-free high-efficiency wet rotor pump (glandless)
- Twin pump

Drive
- High-efficiency permanent magnet synchronous motor, brushless, self-cooling, with continuously variable differential pressure control
- Integrated motor protection
- 1~230 V AC +/- 10%
- Frequency 50 Hz/60 Hz
- Enclosure IPX4D
- Thermal class F
- Temperature class TF 110
- Energy efficiency index EEI ≤ 0.23
- Interference emissions EN 61000-6-3
- Interference immunity EN 61000-6-1

Bearings
- Product-lubricated special plain bearing

Connections
- Screw-ended or flanged

Operating modes
- Constant-pressure control
- Proportional-pressure control
- Temperature-governed differential pressure control (can only be activated with KSB ServiceTool)
- Open-loop control via setpoint setting
- Eco Mode

Automatic functions
- Continuously variable speed adjustment depending on the mode of operation
- 0 - 10 V with external differential pressure/speed setpoint
- 0 - 10 V as input of the actual value of the temperature or actual value of the differential pressure
- Pump changeover after 24 hours runtime of a pump
- Redundancy by automatic start-up of the stand-by pump in the event of a duty pump failure
- Dual-pump operation
- Peak load operation
- Setback operation
- Dynamic Control
- Remote ON/OFF
- Deblocking function
- Self-venting function
- Soft start
- Full motor protection with integrated trip electronics

Manual functions
- Setting the operating mode
- Setting the differential pressure setpoint
- Setting the speed level
- Locking the control panel

Signalling functions and display functions
- Periodically alternating display of flow rate, head and electrical input power
- Operating status shown on the display
- Error codes indicated on the display
- Configurable general fault messages and "in operation" messages (volt-free changeover contacts)
- Serial digital Modbus RTU interface
- Service interface for KSB ServiceTool

Designation

Example: Calio Z 40-180

Designation key

Code	Description	
Calio Z	Type series	
40	Connection	
	30	Rp 1 1/4
	32	DN 32
	40	DN 40
	50	DN 50
	65	DN 65
180	Head H[186] [m]	
	180	Head × 10 Example: 18 m × 10 = 180

Materials

Overview of available materials

Part No.	Description	Material
102	Volute casing	Grey cast iron with cathodic electrocoating (EN-GJL-200)
210	Shaft	Stainless steel 1.4034
230	Impeller	Plastic with glass fibre content (PSU-GF30)
310	Bearing	Ceramics/carbon
746	Change-over flap	Plastic with glass fibre content/EPDM
817	Can	Stainless steel 1.4301

Casing parts which are in contact with the atmosphere and with the fluid handled are free from paint-wetting impairment materials.

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

186 At flow rate Q = 0 m^3/h

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Calio Z PN6/10/16

Technical data

Size	Connection		PN	Speed		P_1 [187]	I_N [187]	Mat. No.	[kg]
	Piping	Pump	[bar]	Min.	Max.	[W]	1~230 VAC, 50/60 Hz		
				[rpm]	[rpm]		[A]		
30-60	Rp 1 1/4	G 2	6/10/16	1000	3500	3,5 - 170 (320)	0,15 - 0,74 (1,40)	29134897	10,75
30-100	Rp 1 1/4	G 2	6/10/16	1000	4500	3,5 - 210 (410)	0,15 - 0,91 (1,80)	29134898	10,75
32-80	DN 32	DN 32	6/10/16	1000	4000	3,5 - 170 (340)	0,15 - 0,74 (1,50)	29134899	15,1
32-120	DN 32	DN 32	6/10/16	1000	4000	3,5 - 430 (780)	0,15 - 1,87 (3,40)	29134900	16,06
40-80	DN 40	DN 40	6/10/16	1000	3600	3,5 - 340 (700)	0,15 - 1,48 (3,00)	29134901	17,42
40-100	DN 40	DN 40	6/10/16	1000	4000	3,5 - 420 (850)	0,15 - 1,83 (3,70)	29134902	17,42
40-120	DN 40	DN 40	6/10/16	1000	2900	5 - 840 (1680)	0,32 - 3,65 (7,30)	29134873	28,61
40-180	DN 40	DN 40	6/10/16	1000	3500	5 - 770 (1460)	0,32 - 3,35 (6,40)	29134874	28,61
50-80	DN 50	DN 50	6/10/16	1000	3500	3,5 - 390 (660)	0,15 - 1,70 (2,90)	29134903	23,56
50-100	DN 50	DN 50	6/10/16	1000	2750	5 - 490 (960)	0,32 - 2,13 (4,20)	29134875	31,71
50-120	DN 50	DN 50	6/10/16	1000	2930	5 - 570 (1080)	0,32 - 2,48 (4,70)	29134876	31,71
65-80	DN 65	DN 65	6/10/16	1000	2850	3,5 - 590 (1100)	0,15 - 2,57 (4,80)	29134877	39,39
65-120	DN 65	DN 65	6/10/16	1000	3200	5 - 840 (1680)	0,32 - 3,65 (7,30)	29134878	39,39

187 The value in parentheses applies to operation of both pump sets.

Selection information

Minimum inlet pressure

The minimum inlet pressure p_{min} at the pump suction nozzle serves to avoid cavitation noises at an ambient temperature of +40 °C and the indicated fluid temperature T_{max}.

The indicated values are applicable up to 300 m above sea level. For installation at altitudes > 300 m, an allowance of 0.01 bar / 100 m must be added.

Minimum inlet pressure p_{min} specified for the fluid temperature T_{max}.

Fluid temperature	Minimum inlet pressure
[°C]	[bar]
≤ 80	0,5
81 to 95	1,5
96 to 110	2,5

Permissible fluid temperature

Temperature limits of the fluid handled

Permissible fluid temperature	Value
Maximum	110 °C
Minimum	-10 °C

Permissible ambient temperature

Permissible ambient temperatures specified for the fluid temperature

Fluid temperature	Permissible ambient temperature
[°C]	[°C]
≤ +90	+40
> +90	+30

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Description of the characteristic curve

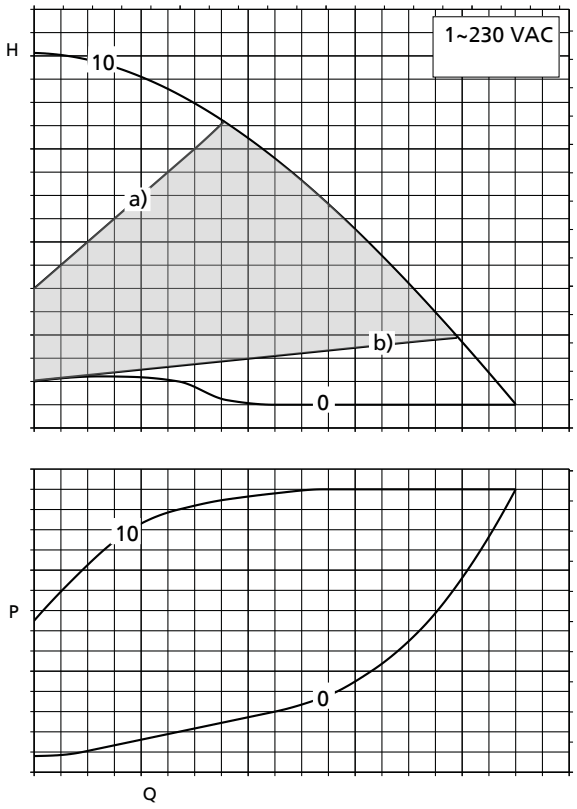


Fig. 219: Selection example

The pump characteristic curve can be adjusted between a) and b) in increments of 1 % by turning the control element.

0	Level 0 = open-loop control, minimum speed (corresponds to a setting of 0 %)
10	Level 10 = open-loop control, maximum speed (corresponds to a setting of 100 %)
	Control range
a)	Control curve, maximum head
b)	Control curve, minimum head

Description of the Eco Mode

In Eco Mode, the pump characteristic curve (1) is quadratic. Starting at the discharge head setpoint H_S , the characteristic curve intersects the discharge head axis at H_0 = 1/4 x H_S.
By changing the differential pressure setpoint this pump characteristic curve can be adjusted to higher or lower differential pressures or discharge heads.
Compared with the Proportional-pressure Control operating mode the Eco Mode can save more than 40 % in electrical input power.
An example of a characteristic curve of a pump in Eco Mode is shown below.

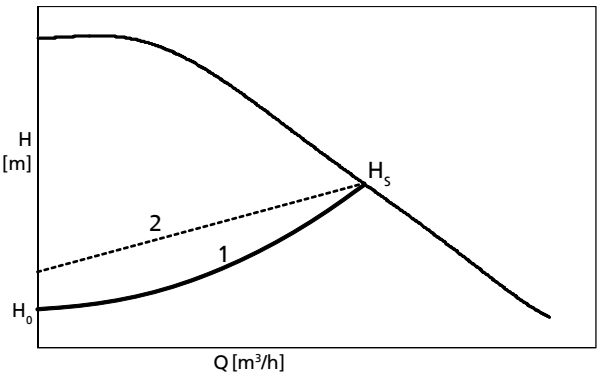


Fig. 220: Eco Mode function

1	Eco Mode characteristic curve
2	Proportional-pressure Control characteristic curve for comparison

Description of the Modbus interface

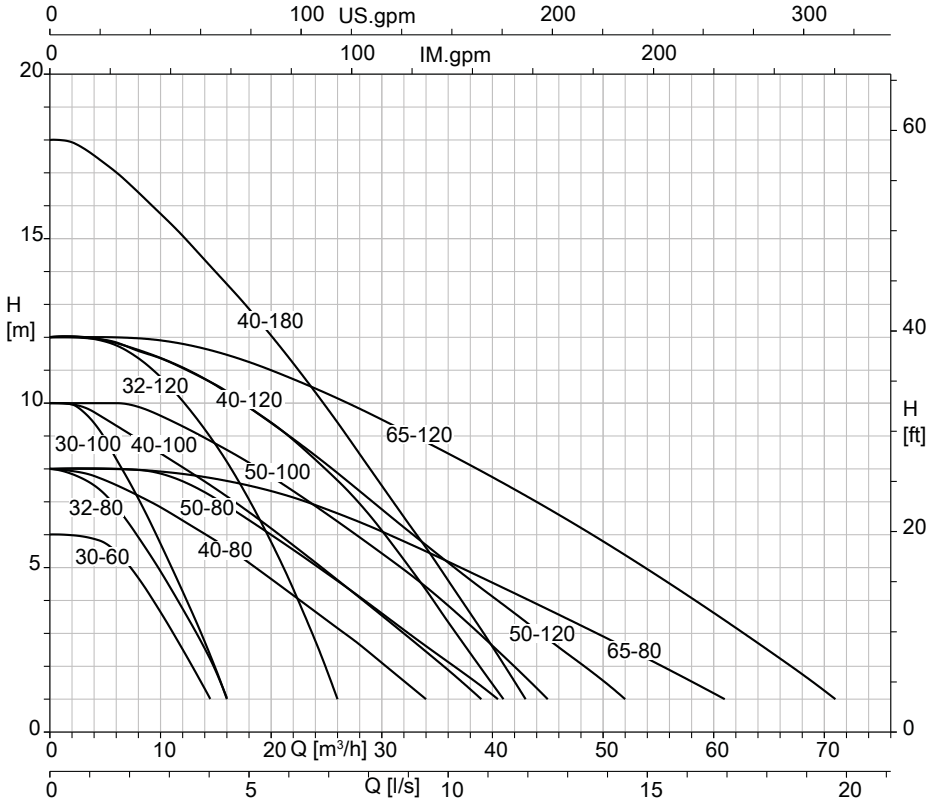
Technical data of the Modbus interface

Parameter	Description/value
Terminal cross-section	1,5 mm²
Interface	RS485 (TIA-485-A) optically isolated
Bus connection	0.5 mm², shielded twisted pair bus cable
Cable length	▪ 1000 m max. ▪ Stub line impermissible ▪ For cable lengths > 30 m take suitable measures to ensure overvoltage protection.
Wave impedance	120 Ω (cable type B to TIA-485-A)
Data rates [baud]	4800, 9600, 38,400, 57,600, 115,200 (19,200 = factory setting)
Protocol	Modbus RTU standard
Data format	▪ 8 data bits ▪ Parity EVEN / ODD / NONE ▪ 1 stop bit
Modbus address	ID #1 to #247 selectable (ID #17 = factory setting)

Further description see operating manual of the pump set.

Selection chart

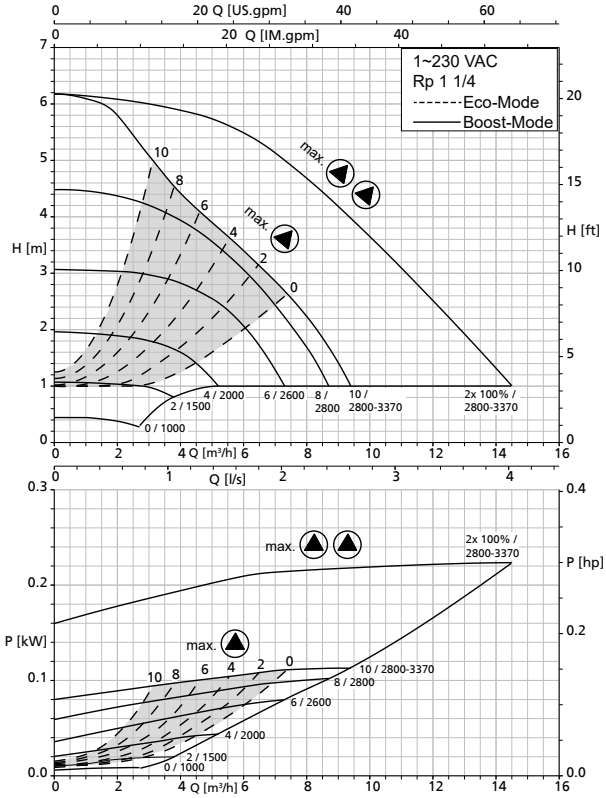
Calio Z (parallel operation)



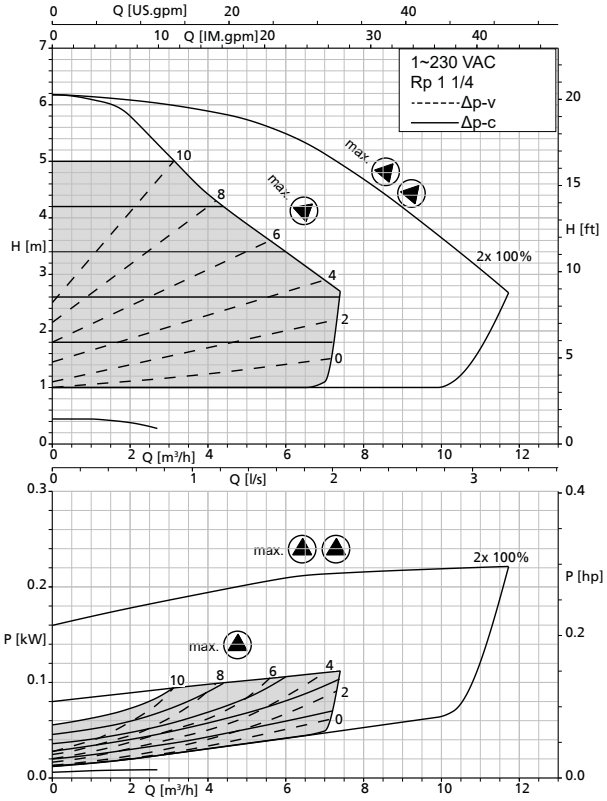
Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Characteristic curves

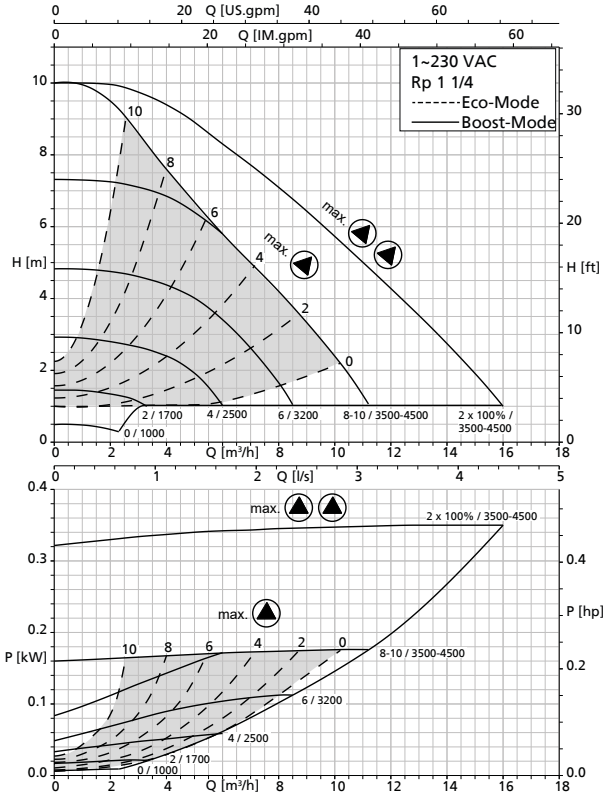
Calio Z 30-60 Open-loop Control, Eco Mode



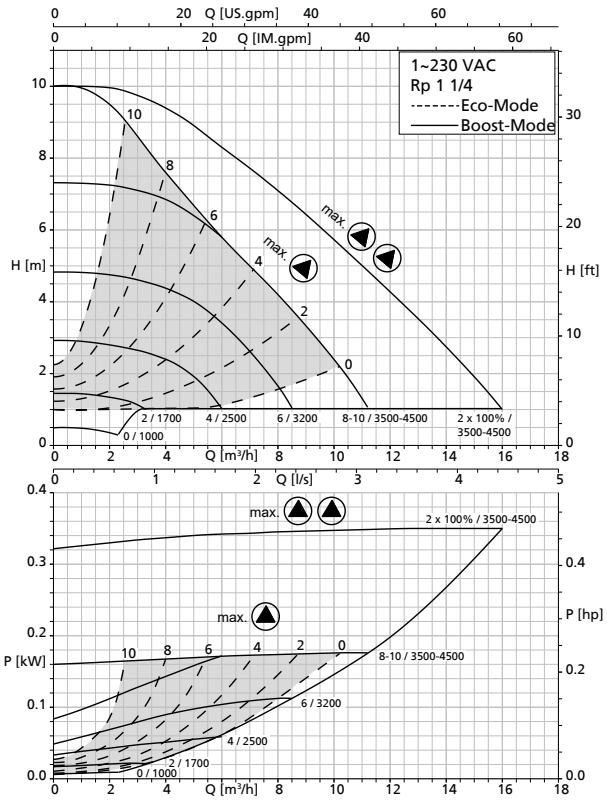
Calio Z 30-60 Δpv + Δpc



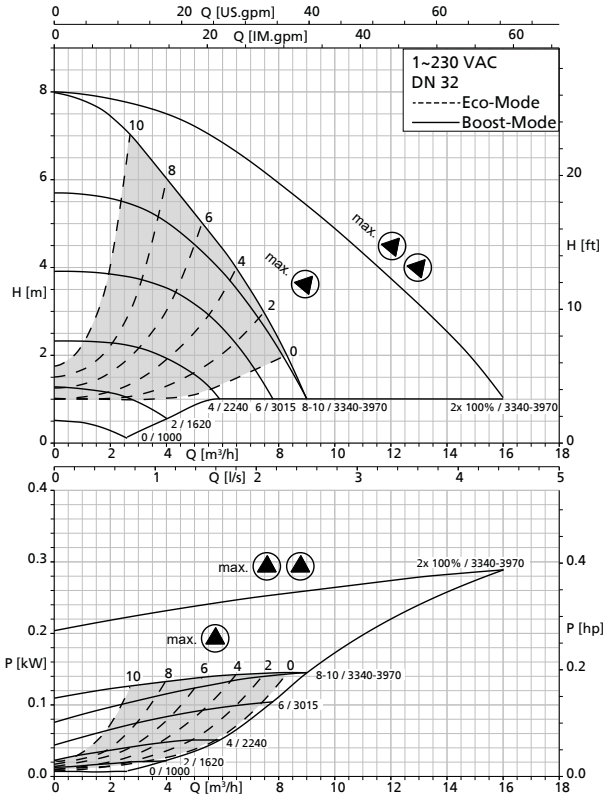
Calio Z 30-100 Open-loop Control, Eco Mode



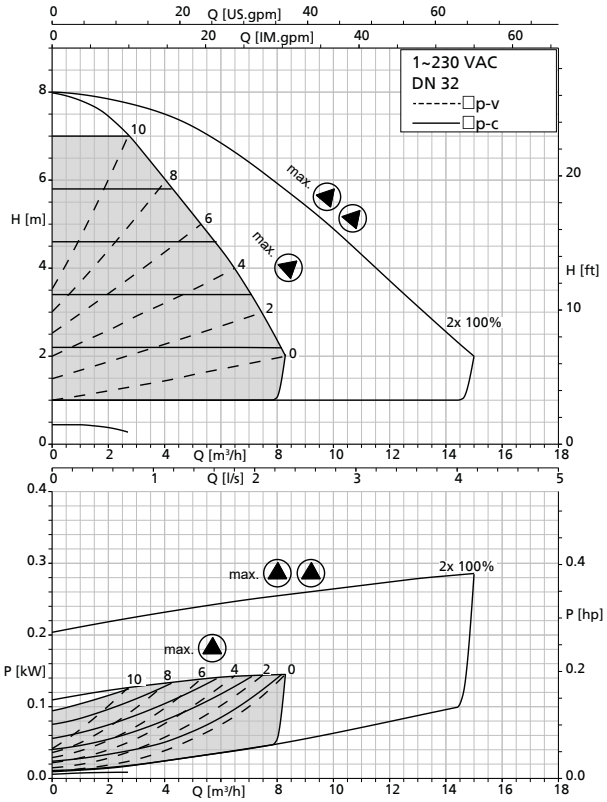
Calio Z 30-100 Δpv + Δpc



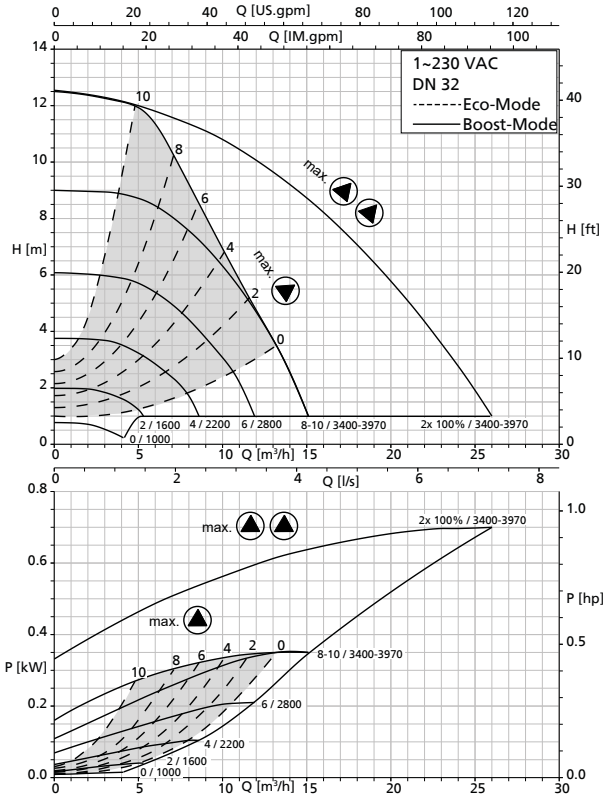
Calio Z 32-80 Open-loop Control, Eco Mode



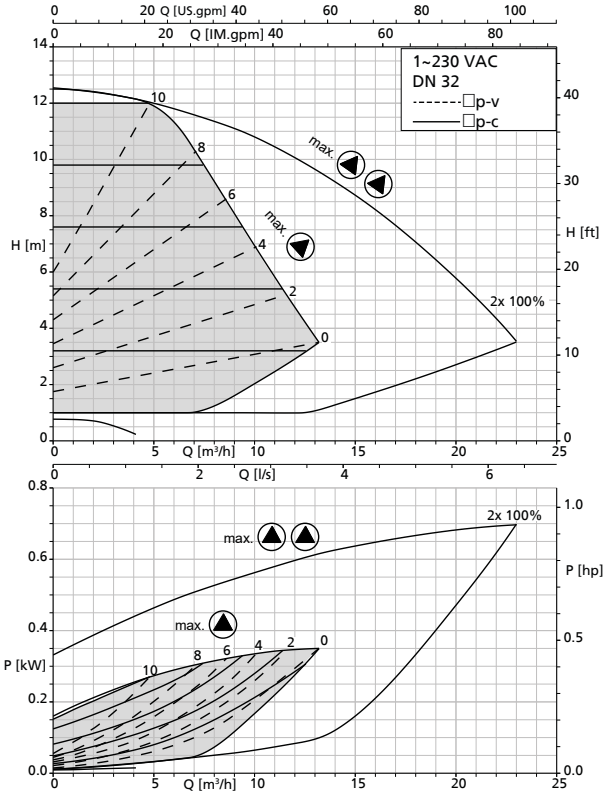
Calio Z 32-80 Δpv + Δpc



Calio Z 32-120 Open-loop Control, Eco Mode

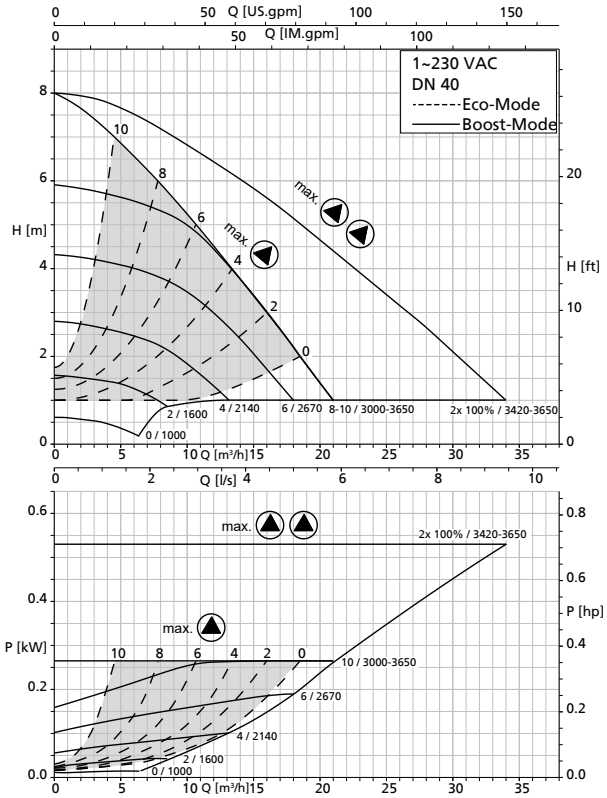


Calio Z 32-120 Δpv + Δpc

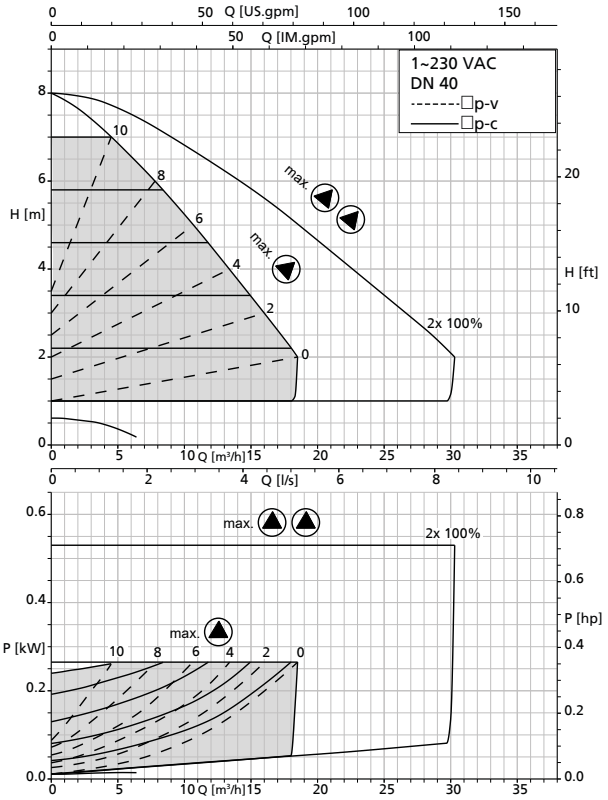


Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

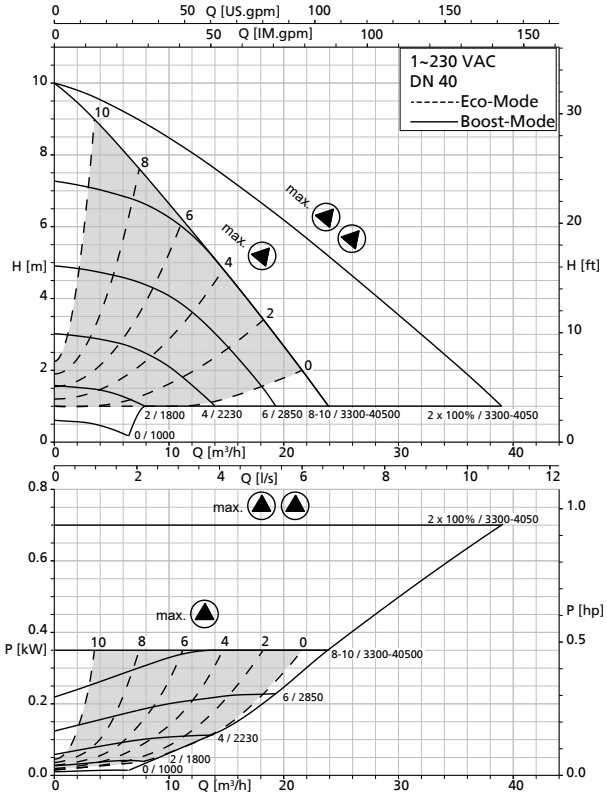
Calio Z 40-80 Open-loop Control, Eco Mode



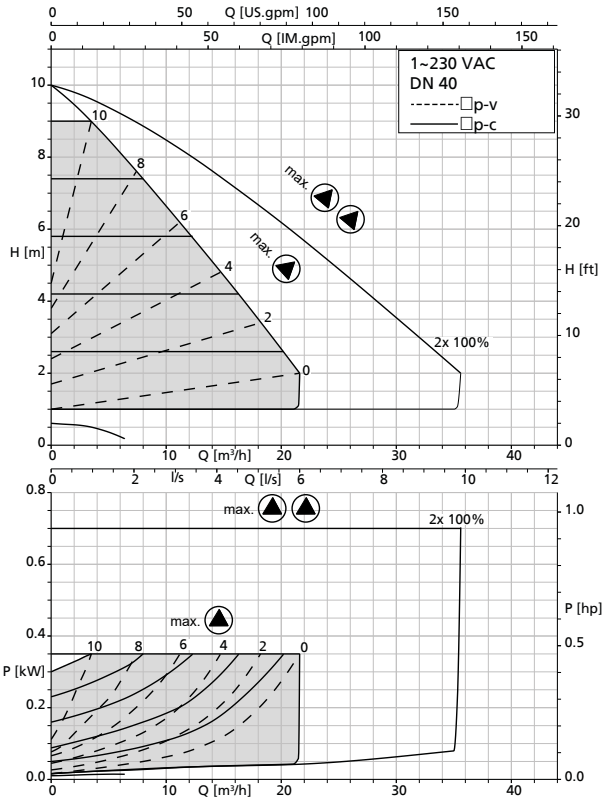
Calio Z 40-80 Δpv + Δpc



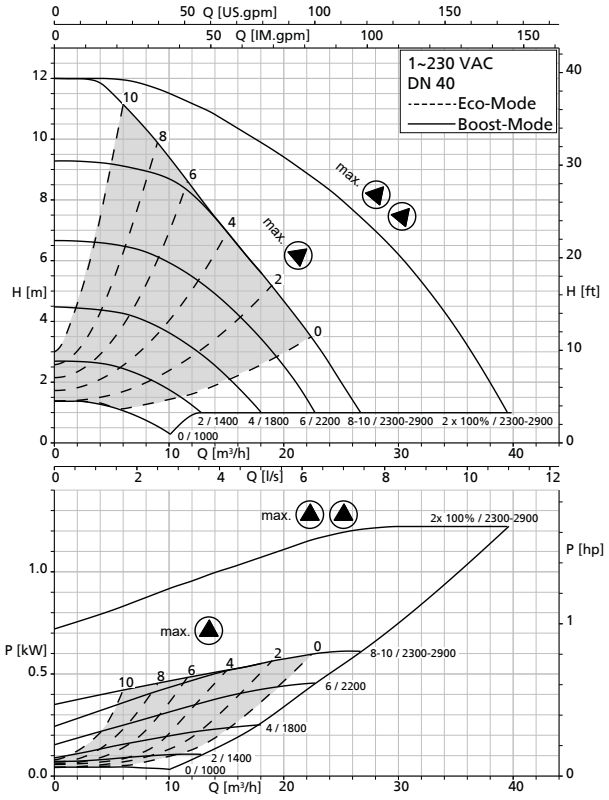
Calio Z 40-100 Open-loop Control, Eco Mode



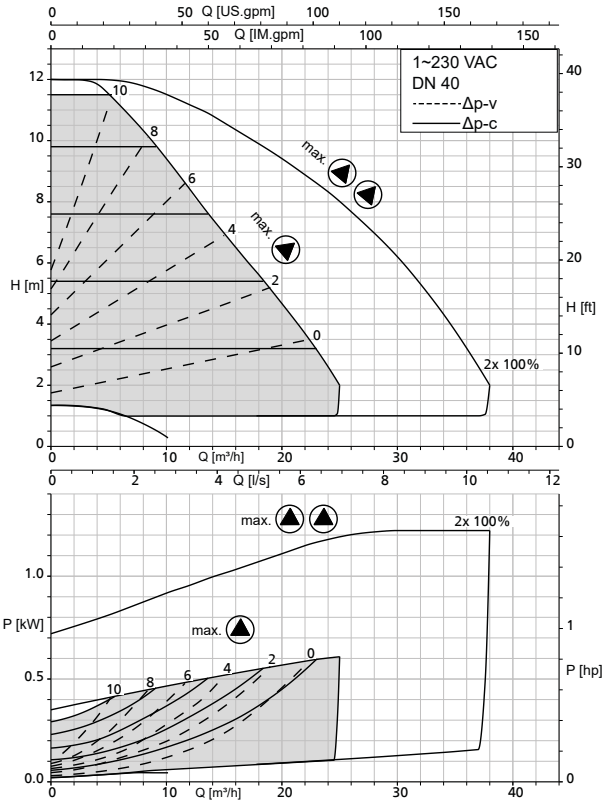
Calio Z 40-100 Δpv + Δpc



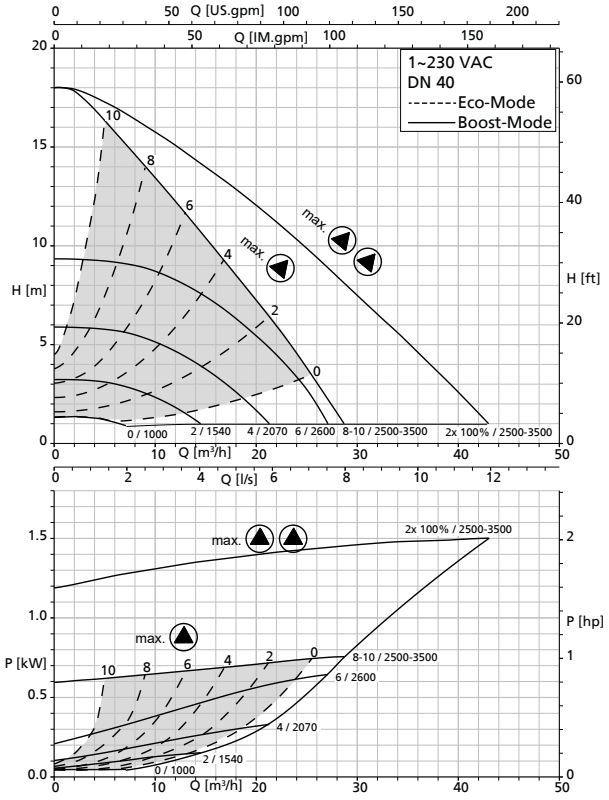
Calio Z 40-120 Open-loop Control, Eco Mode



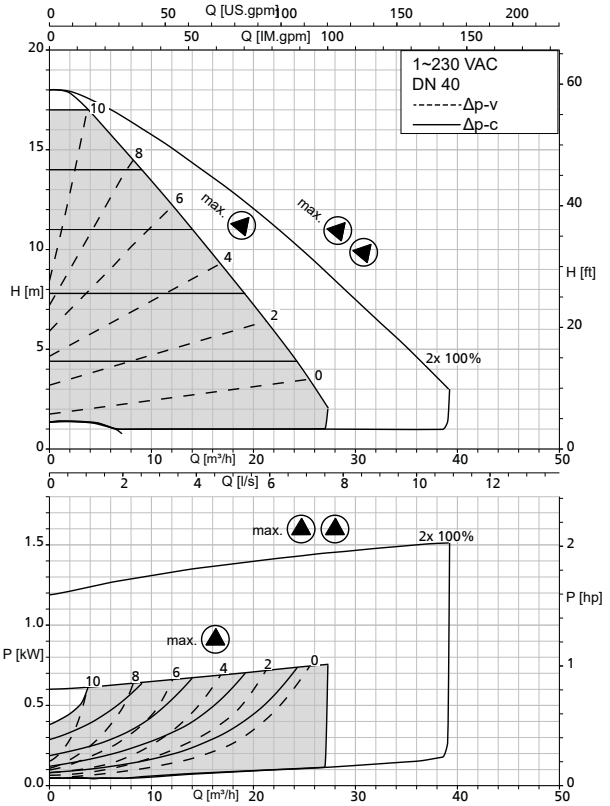
Calio Z 40-120 Δpv + Δpc



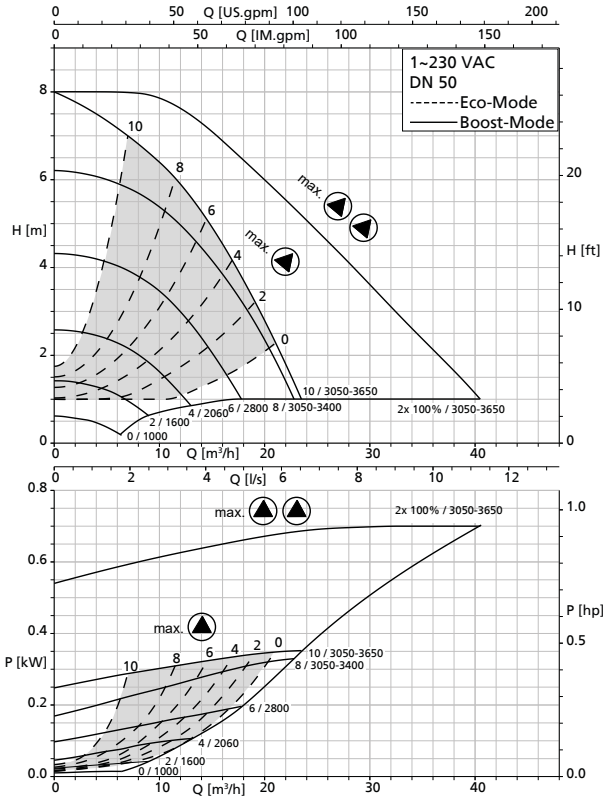
Calio Z 40-180 Open-loop Control, Eco Mode



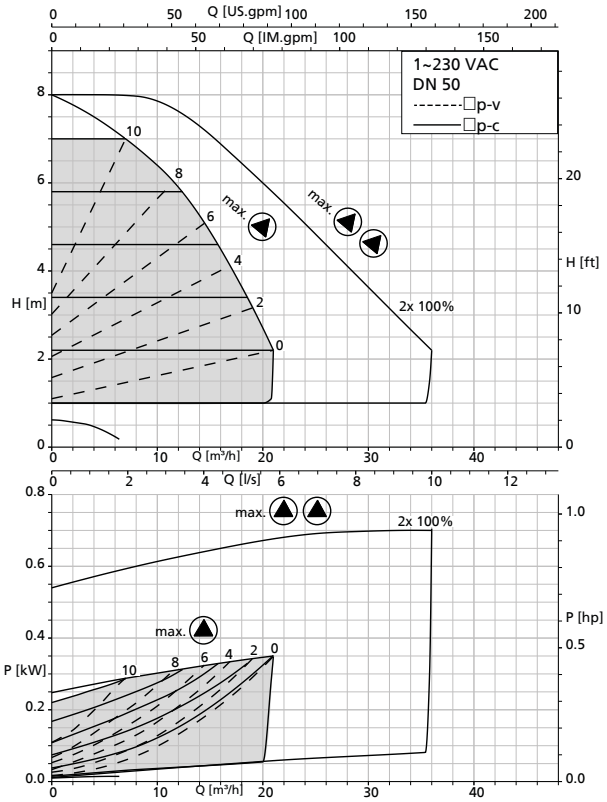
Calio Z 40-180 Δpv + Δpc



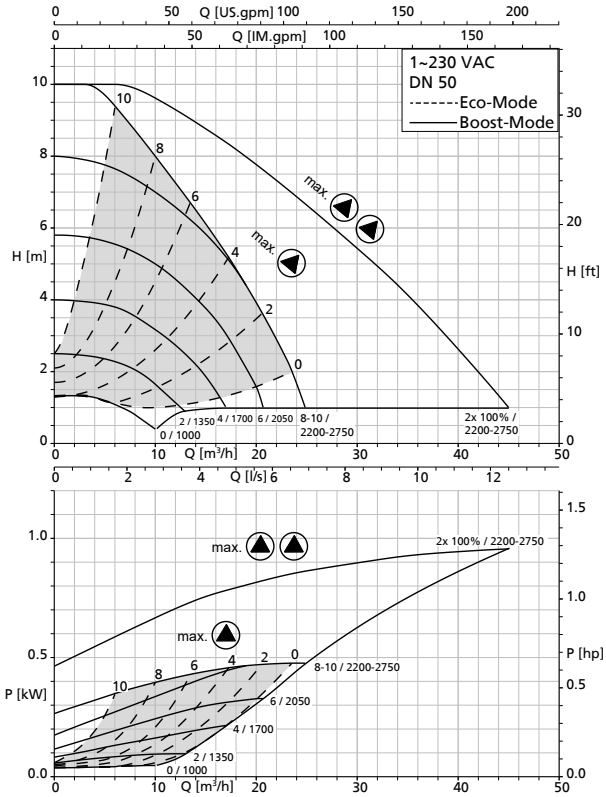
Calio Z 50-80 Open-loop Control, Eco Mode



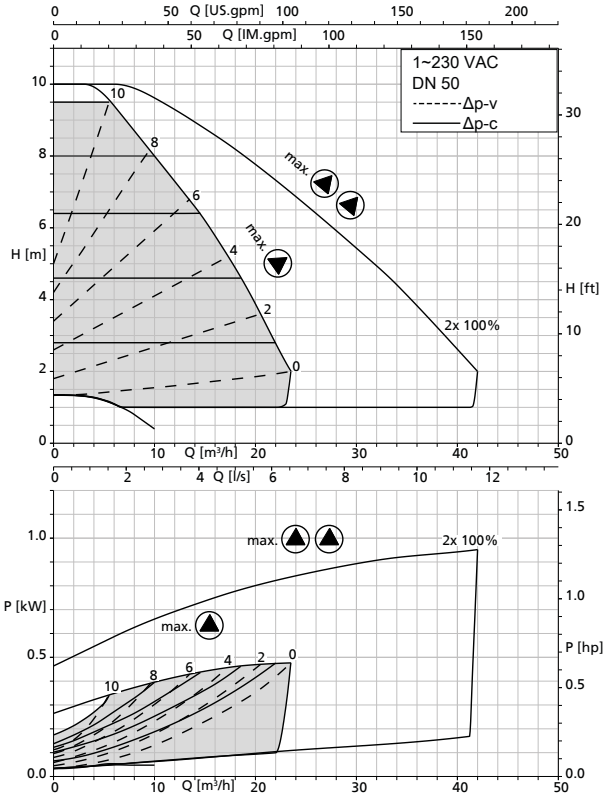
Calio Z 50-80 Δpv + Δpc



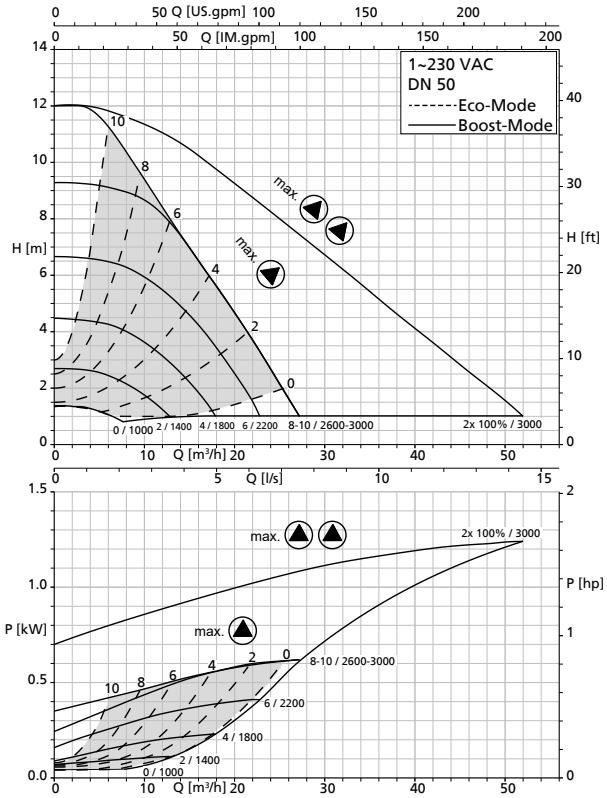
Calio Z 50-100 Open-loop Control, Eco Mode



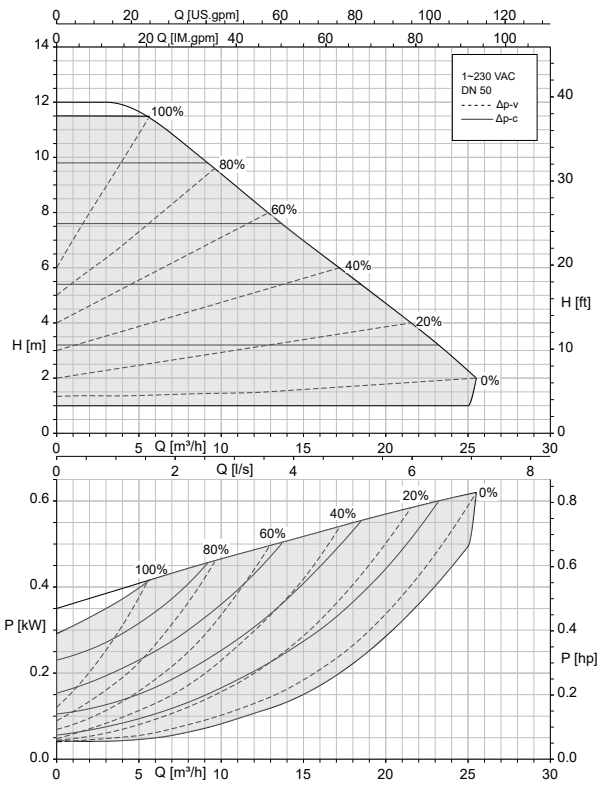
Calio Z 50-100 Δpv + Δpc



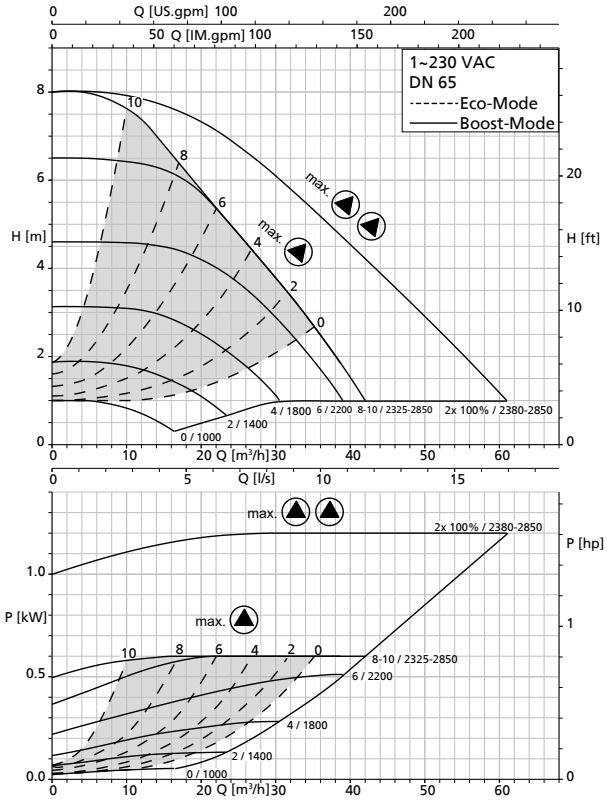
Calio Z 50-120 Open-loop Control, Eco Mode



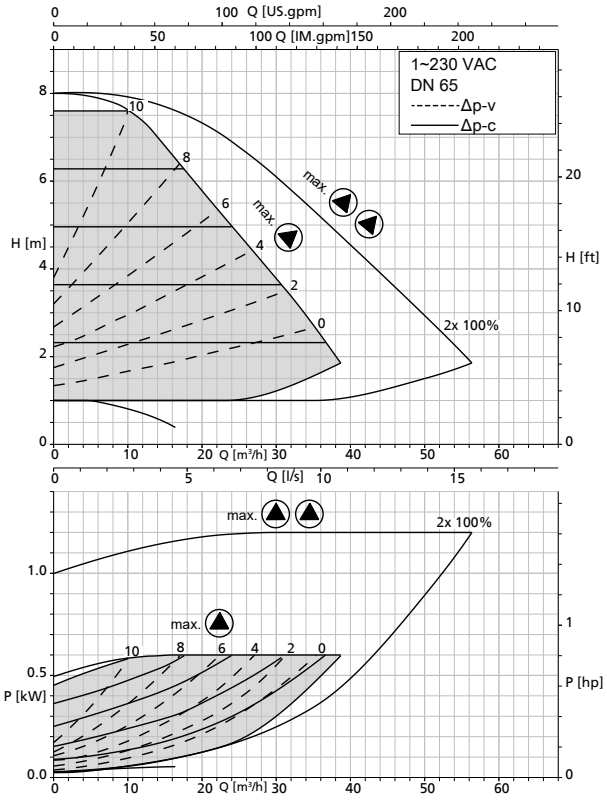
Calio Z 50-120 Δpv + Δpc



Calio Z 65-80 Open-loop Control, Eco Mode

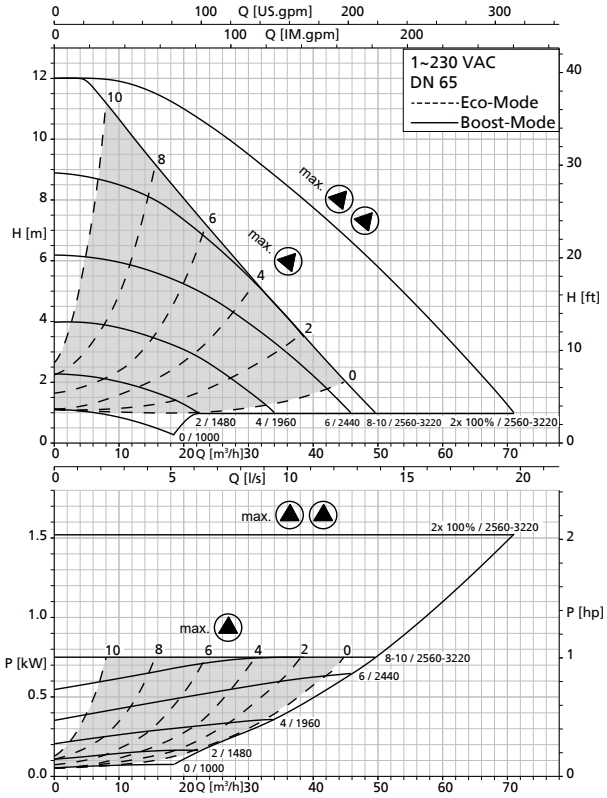


Calio Z 65-80 Δpv + Δpc

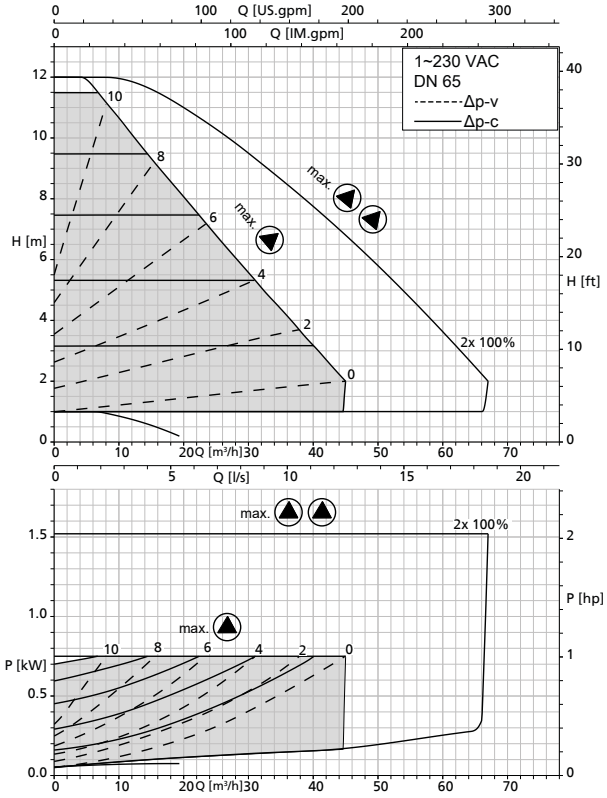


Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Calio Z 65-120 Open-loop Control, Eco Mode



Calio Z 65-120 Δpv + Δpc



Dimensions

Pump set dimensions

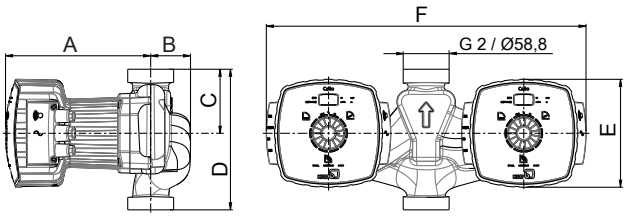


Fig. 221: Screw-ended pump set

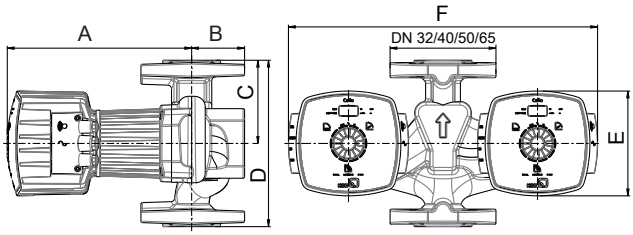


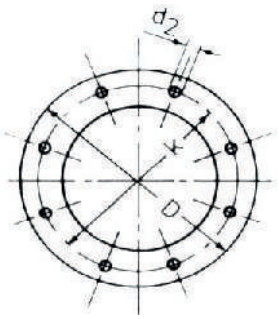
Fig. 222: Flanged pump set

Pump set dimensions

Size	Connection			A	B	C	D	E	F
	Rp	G	DN	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
30-60	1 1/4	2	-	212	51	82	180	137	418
30-100	1 1/4	2	-	212	51	82	180	137	418
32-80	-	-	32	212	70	110	220	137	418
32-120	-	-	32	232	70	110	220	137	418
40-80	-	-	40	239	75	121	220	137	418
40-100	-	-	40	239	75	121	220	137	418
40-120	-	-	40	239	75	102	250	209	560
40-180	-	-	40	239	75	102	250	209	560
50-80	-	-	50	244	83	126	240	137	418
50-100	-	-	50	390	83	140	280	209	560
50-120	-	-	50	390	83	140	280	209	560
65-80	-	-	65	400	93	180	340	209	560
65-120	-	-	65	400	93	180	340	209	560

Flange dimensions

Flange dimensions

Size	PN 6			PN 10, PN 16			Outline drawing
	Ø D	Ø k	n × Ø d_2	Ø D	Ø k	n × Ø d_2	
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
DN 32	120	90	4 × Ø 14	140	100	4 × Ø 19	
DN 40	130	100	4 × Ø 14	150	110	4 × Ø 19	
DN 50	140	110	4 × Ø 14	165	125	4 × Ø 19	
DN 65	160	130	4 × Ø 14	185	145	4 × Ø 19	

Installation information

Calio Z

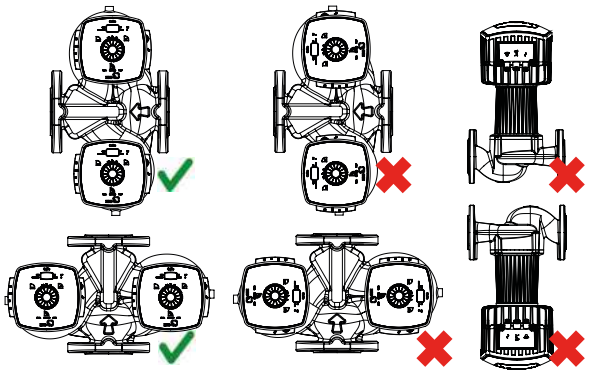


Fig. 223: Permissible installation positions

Scope of supply

Depending on the model, the following items are included in the scope of supply:

- Pump set
- Pre-configured dual connection cable
- 2 gaskets
- Installation/operating manual

Drinking Water Circulator Pumps

Calio-Therm S

http://shop.ksb.com/catalog/k0/en/product/ES000882

Product benefits

- Maximum savings of operating costs by high-efficiency technology combined with speed control
- Easy-to-use combination of controls, integrated display and symbols to show the operating status
- High availability due to manual and integrated protective functions
- Compact dimensions and plug-type connector make the pumps easy to install.

Further information

Prices on request

Selection chart 478
Characteristic curves 479
Dimensions 480

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Drinking water circulation systems to DVGW-W551

Fluids handled

- Heating water to VDI 2035
- Higher-viscosity fluids (water/glycol mixture up to a mixing ratio of 1:1)
- Drinking water and water for the food and beverage industry, as per German TrinkwV 2001 drinking water regulations

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 3,5
	Q [l/s]	≤ 1,0
Head	H [m]	≤ 6
Fluid temperature, heating water	T [°C]	≥ +2
		≤ +75
Fluid temperature, drinking water[188)]	T [°C]	≥ +2
		≤ +65
Hardness of drinking water as fluid handled	[°dH]	≤ 14
Ambient temperature	T [°C]	≥ 0
		≤ +40
Operating pressure	p [bar]	≤ 10
Sound pressure level	[dB (A)]	≤ 30
Piping connection	Rp	1

188 To prevent lime sedimentation using fluid temperatures no higher than 65 °C is recommended. Higher fluid temperatures are permissible for short periods (e.g. for thermal disinfection cycles).

Design details

Design

- Maintenance-free high-efficiency wet rotor pump (glandless)

Drive

- High-efficiency permanent magnet synchronous motor, brushless, self-cooling, with continuously variable differential pressure control
- 1~230 V AC +/- 10%
- Frequency 50 Hz/60 Hz
- IP42 enclosure
- Thermal class F
- Temperature class TF 95
- Interference emissions EN 55014-1
- Interference immunity EN 55014-2
- Interference immunity EN 60335-2-51

Bearings

- Ceramic bearings

Connections

- Screw-ended

Operating modes

- Automatic mode with constant-pressure control or proportional-pressure control
- Open-loop control via setpoint setting

Automatic functions

- Continuously variable speed adjustment depending on the mode of operation
- Soft start (limitation of starting current)
- Full motor protection with integrated trip electronics
- Setback operation
- Dynamic Control in Proportional-pressure Control operating mode dp-v

Manual functions

- Setting the operating mode
- Setting the differential pressure setpoint
- Setting the speed level
- Vent function
- Deblocking the rotor

Signalling functions and display functions

- Alternating display of flow rate, head and electrical input power
- Error codes indicated on the display

Designation

Example: Calio-Therm S 25-40

Designation key

Code	Description	
Calio-Therm S	Type series	
25	Connection	
	15	Rp 1/2
	25	Rp 1
	30	Rp 1 1/4
40	Head H [m]	
	40	Head × 10 Example: 4 m × 10 = 40

Materials

Overview of available materials

Part No.	Description	Material
102	Volute casing	Stainless steel 1.4401
210	Shaft	Ceramics
230	Impeller	Polyether sulphone (PES)
310	Bearing	Ceramics
360	Bearing plate	Stainless steel 1.4301
689	Thermal insulation shell	Polypropylene
817	Can	Stainless steel 1.4301

Casing parts which are in contact with the atmosphere and with the fluid handled are free from paint-wetting impairment materials.

All wetted components are DVGW-approved for use in drinking water circulation systems.

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Technical data

Selection table Calio-Therm S

Calio-Therm S	Connection		PN	P_1	Motor protection[189]	Signalling contacts	I_N	Mat. No.	[kg]
	Piping	Pump	[bar]	[W]			1~230 V AC, 50/60 Hz [A]		
25-40	Rp 1	G 1 1/2	10	6 -30	✗	-	0,06 - 0,26	29134995	2,9
25-60	Rp 1	G 1 1/2	10	6 - 50	✗	-	0,06 - 0,43	29134996	2,9

189 Integrated motor protection in the terminal box

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Selection information

Minimum inlet pressure

The minimum inlet pressure p_{min} at the pump suction nozzle serves to avoid cavitation noises at an ambient temperature of +40 °C and the indicated fluid temperature T_{max}.

The indicated values are applicable up to 300 m above sea level. For installation at altitudes > 300 m, an allowance of 0.01 bar / 100 m must be added.

Minimum inlet pressure p_{min} specified for the fluid temperature T_{max}.

Fluid temperature	Minimum inlet pressure
[°C]	[bar]
5 to 75	0,05

Description of the characteristic curve

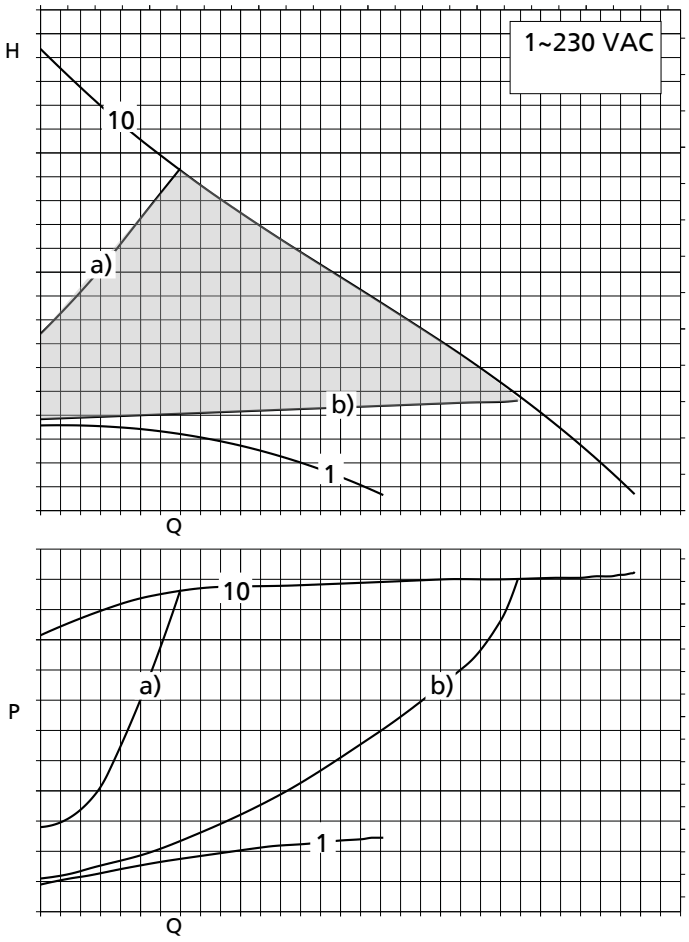


Fig. 224: Selection example

The characteristic curve can be adjusted between a) and b) in increments of 0.1 m by pressing the control keys.

1	Minimum fixed speed operation
10	Maximum fixed speed operation
	Control range
a)	Control curve, maximum head
b)	Control curve, minimum head

Selection chart

Calio-Therm S

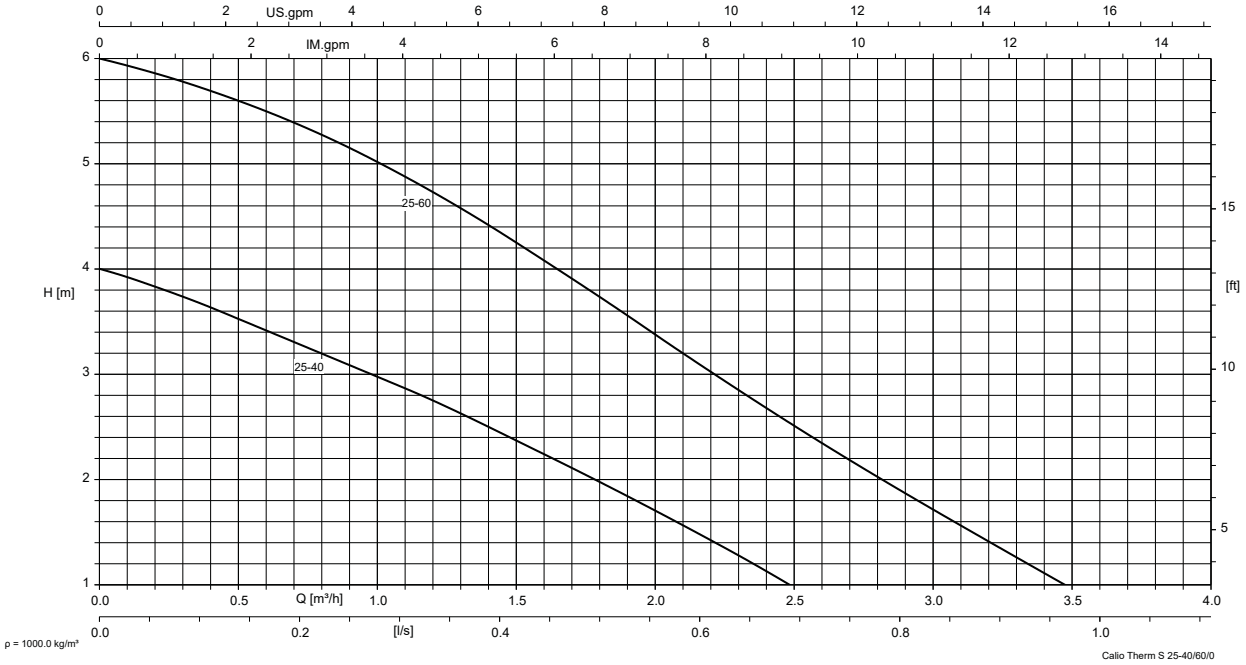
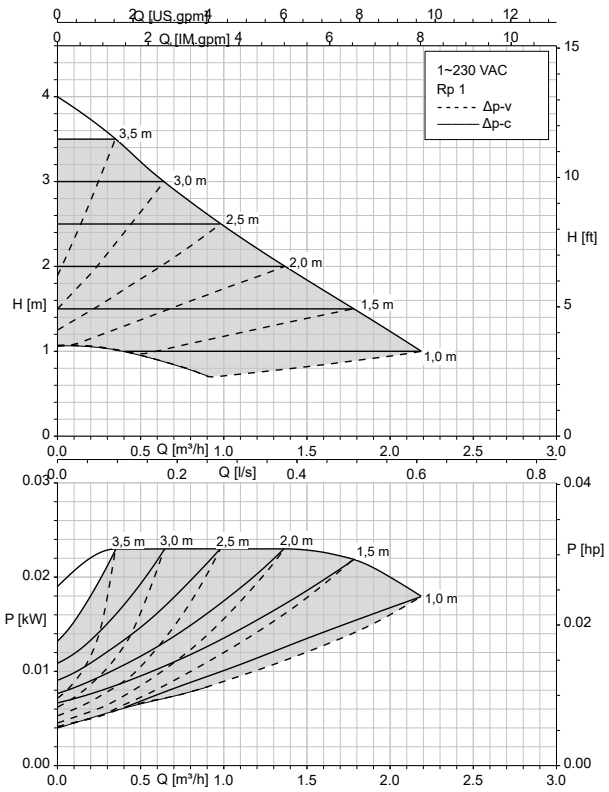


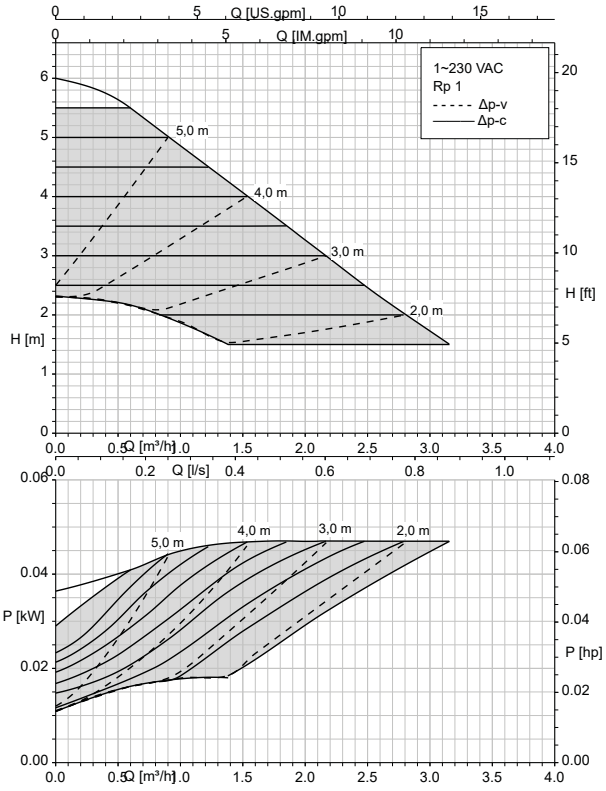
Fig. 225: Illustration of maximum control range

Characteristic curves

Calio-Therm S 25-40 Δpv, Δpc



Calio-Therm S 25-60 Δpv, Δpc



Calio-Therm S 25-40 fixed speed operation

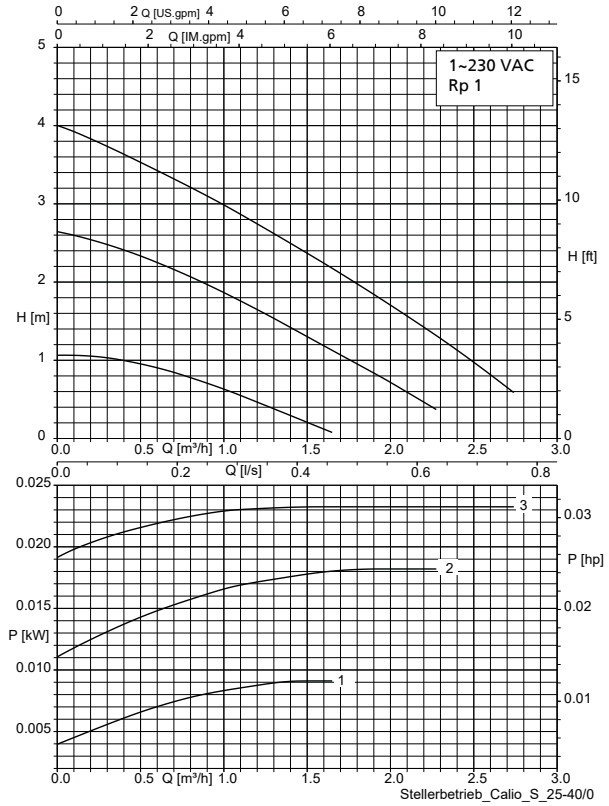


Fig. 226: 1, 2, 3 = speed level 1, 2, 3

Calio-Therm S 25-60 fixed speed operation

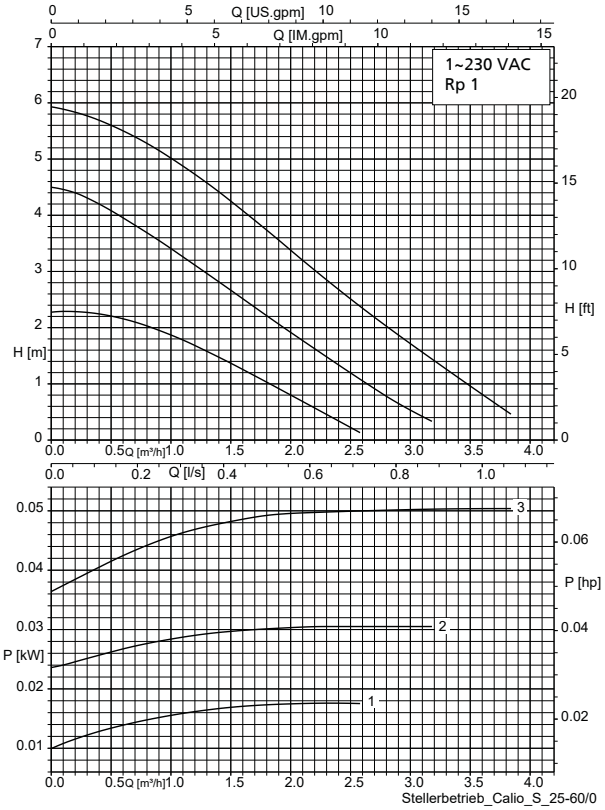


Fig. 227: 1, 2, 3 = speed level 1, 2, 3

Dimensions

Calio-Therm S

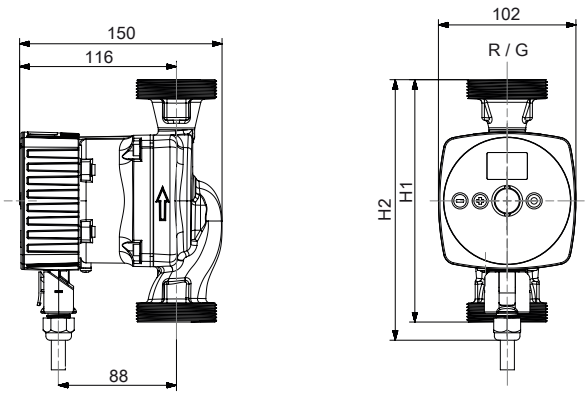


Fig. 228: Pump set dimensions [mm]

Dimensions

Calio-Therm S	Rp	G	H1	H2
			[mm]	[mm]
25-40	1	1 1/2	180	200
25-60	1	1 1/2	180	200

Installation information

Permissible installation positions

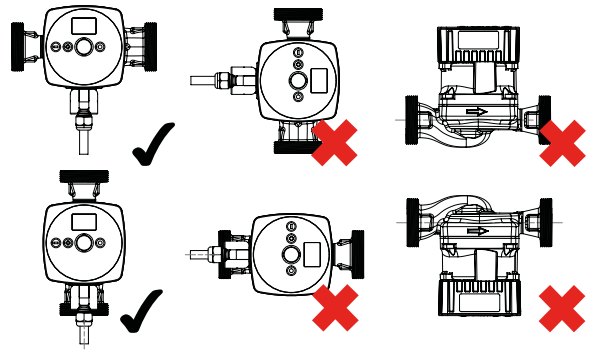


Fig. 229: Permissible installation positions

Scope of supply

Depending on the model, the following items are included in the scope of supply:

- Pump set
- Two-piece thermal insulation shell
- Sealing elements
- Plug-type connector to power supply
- Installation/operating manual

Drinking Water Circulator Pumps

Calio-Therm S NC/NCV

http://shop.ksb.com/catalog/k0/en/product/ES000918

Product benefits

- Broad product range with many connection options
- No tools required for connection
- Easy to operate; operating status displayed
- High-efficiency pump for maximum energy savings
- Three speed levels for optimum adaptation to the system

Further information

Prices on request

Characteristic curves 484
Dimensions 485

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Drinking water circulation systems to DVGW-W551

Fluids handled

- Drinking water and heated drinking water of up to 65 °C
- Fluids with a maximum kinematic viscosity of 10 mm²/s

Characteristic		Value
Operating pressure	p [bar]	≤ 10
Pipe connection, internal thread (Calio-Therm S NC)	Rp	1/2 - 3/4
Pipe connection, external thread (Calio-Therm S NCV)	G	1 1/4

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 0,7
	Q [l/s]	≤ 0,19
Head	H [m]	≤ 1
Fluid temperature	T [°C]	≥ +5
		≤ +60
Hardness of fluid handled	[°dH]	≤ 20
Ambient temperature	T [°C]	≥ 0
		≤ +40

Design details

Design

- Maintenance-free high-efficiency wet rotor pump (glandless)

Drive

- Short-circuit-proof electric motor
- 230 V, 50 Hz/60 Hz
- IP42 enclosure
- Thermal class F
- Temperature class TF 60
- Interference emission EN 55014-1:2006 + A1:2009 + A2:2011, EN 61000-3-2:2006 + A1:2009 + A2:2009, EN 61000-3-3:2008
- Interference immunity EN 55014-2:1997 + A1:2001 + A2:2008

Bearings

- Product-lubricated special plain bearing

Connections

- Screw-ended

Operating modes

- Open-loop control via setpoint setting

Automatic functions

- Automatic stop when the motor is blocked

Manual functions

- Setting the speed level

Signalling functions and display functions

- LEDs indicate operating status and faults (3 flashing LEDs)

Designation

Example: Calio-Therm S NCV S

Designation key

Code	Description	
Calio-Therm S	Type series	
NCV	Design	
	NC	Fixed speed
	NCV	Fixed speed with integrated non-return valve and shut-off valve (ball valve)
S	Connection	
	S	With plug-type connection
	K	With integrated power cable (2 m length) and shockproof plug (plug type F)

Materials

Overview of available materials

Part No.	Description	Material
102	Volute casing	Brass CW617N
210	Shaft	Stainless steel 1.4305
230	Impeller	Technopolymer
310	Bearing	CuSn8, suitable for drinking water
817	Can	Stainless steel 1.4404, wetted parts polyamide PA6.6

Casing parts which are in contact with the atmosphere and with the fluid handled are free from paint-wetting impairment materials.

All wetted components are DVGW-approved for use in drinking water circulation systems.

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Technical data

Calio-Therm S NC/NCV	Connection		Enclosure	Speed levels	P_1 [W]	Plug-type connector	Connection cable integrated in the pump	Mat. No.	[kg]
	External thread	Internal thread							
Calio-Therm S NC S	-	Rp 1/2 (EN 10266)	IP42	3	2,5 - 8,0	✗	-	29134811	1
Calio-Therm S NC K	-	Rp 1/2 (EN 10266)	IP42	3	2,5 - 8,0	-	✗	29134812	1
Calio-Therm S NCV S	G 1 1/4 (DIN ISO 228)	-	IP42	3	2,5 - 8,0	✗	-	29134813	1,3
Calio-Therm S NCV K	G 1 1/4 (DIN ISO 228)	-	IP42	3	2,5 - 8,0	-	✗	29134814	1,3

Selection information

Minimum inlet pressure

The minimum inlet pressure p_{min} at the pump suction nozzle serves to avoid cavitation noises at an ambient temperature of +40 °C and the indicated fluid temperature T_{max}.

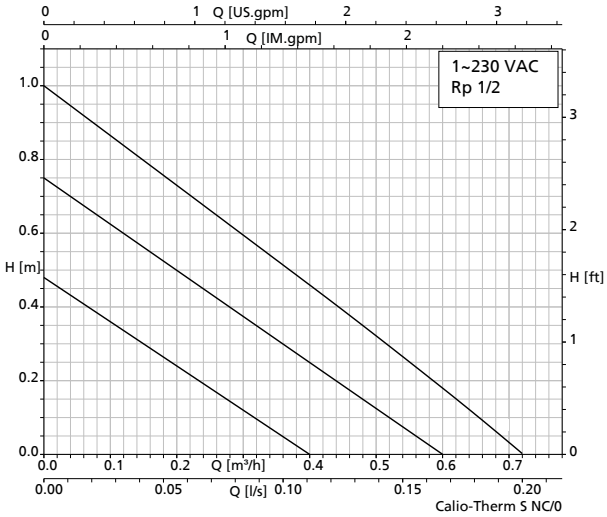
The indicated values are applicable up to 300 m above sea level. For installation at altitudes > 300 m, an allowance of 0.01 bar / 100 m must be added.

Minimum inlet pressure p_{min} specified for the fluid temperature T_{max}

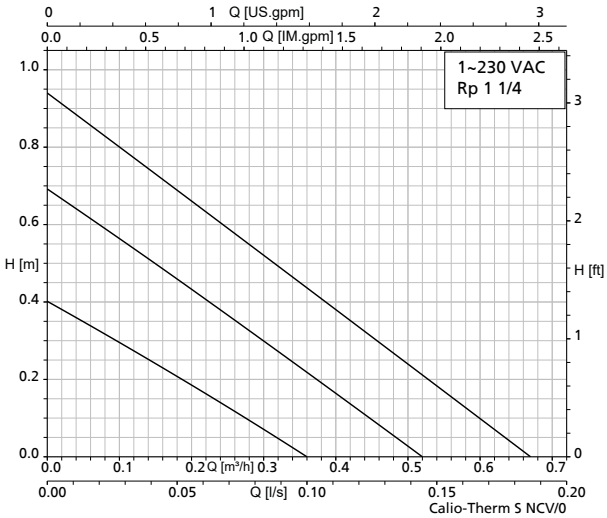
Fluid temperature	Minimum inlet pressure
[°C]	[bar]
≤ 60	0,4

Characteristic curves

Calio-Therm S NC



Calio-Therm S NCV



Dimensions

Calio-Therm S NC/NCV

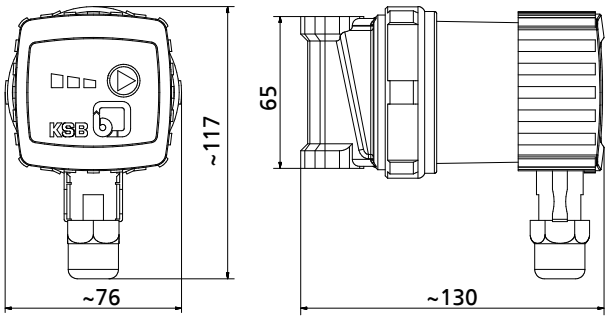


Fig. 230: Dimensions of Calio-Therm S NC S [mm]

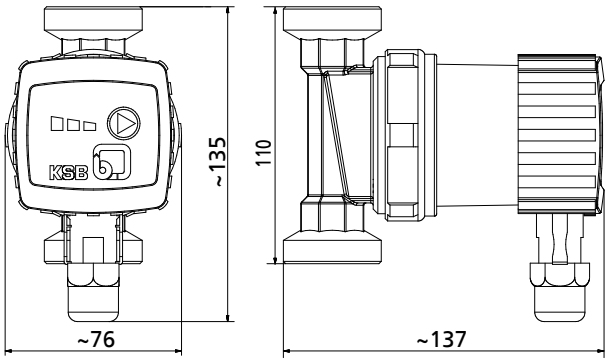


Fig. 231: Dimensions of Calio-Therm S NCV S [mm]

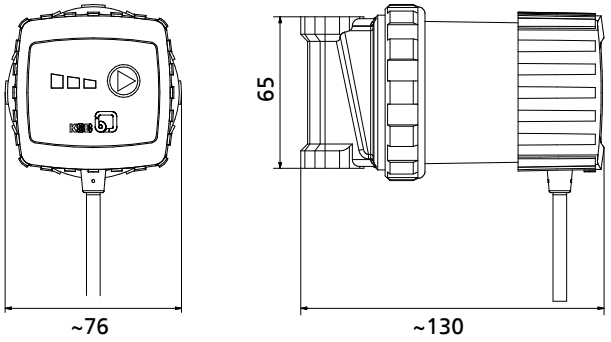


Fig. 232: Dimensions of Calio-Therm S NC K [mm]

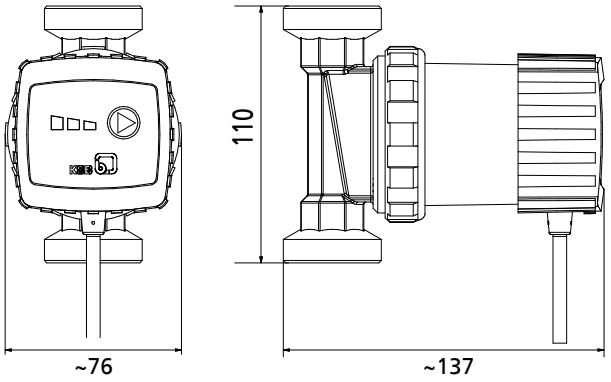


Fig. 233: Dimensions of Calio-Therm S NCV K [mm]

Installation information

Permissible installation positions

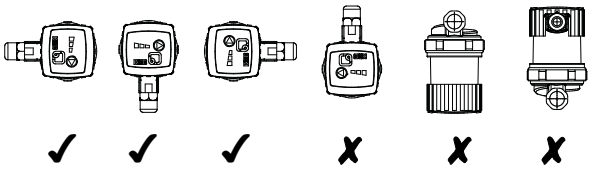


Fig. 234: Permissible installation positions of Calio-Therm S NC

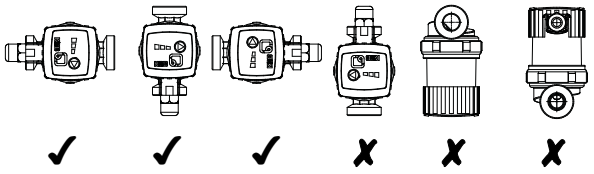


Fig. 235: Permissible installation positions of Calio-Therm S NCV

Scope of supply

Depending on the model, the following items are included in the scope of supply:

- Pump set
- Two-piece thermal insulation shell
- 2 fitted plugs preventing the ingress of foreign matter
- Plug-type connection or integrated, pre-configured connection cable
- Installation/operating manual

Drinking Water Circulator Pumps

Calio-Therm NC

http://shop.ksb.com/catalog/k0/en/product/ES000928

Product benefits

- Saving energy by matching output to individual system requirements
- Easy replacement
- All wetted parts are in compliance with KTW recommendations (use of elastomers in drinking water applications).
- Universal use reduces storage costs.

Further information

Prices on request

Selection chart 488
Characteristic curves 489
Dimensions 491

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

- Drinking water supply
- Hot-water supply
- Similar systems in industry and building services applications (e.g. cooling water circulation)

Fluids handled

- Heating water to VDI 2035
- Higher-viscosity fluids (water/glycol mixture up to a mixing ratio of 1:1)
- Drinking water and water for the food and beverage industry, as per German TrinkwV 2001 drinking water regulations

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 9
	Q [l/s]	≤ 2,5
Head	H [m]	≤ 7
Fluid temperature, heating water	T [°C]	≥ +2
		≤ +110
Fluid temperature, drinking water[190)]	T [°C]	≤ +65
Hardness of drinking water as fluid handled	[°dH]	≤ 14
Ambient temperature	T [°C]	≥ 0
		≤ +40
Operating pressure	p [bar]	≤ 10
Pressure class	PN [bar]	10
Sound pressure level	[dB(A)]	≤ 45
Pipe union connection	Rp	3/4 - 1

190 We recommend fluid temperatures no higher than 65 °C to prevent possible consequences caused by lime sedimentation. Higher fluid temperatures are permissible for short periods (e.g. for thermal disinfection cycles).

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Design details

Design
- Maintenance-free high-efficiency wet rotor pump (glandless)

Drive
- High-efficiency electric motor
- Integrated motor protection
- 1~230 V AC, 50 Hz
- Enclosure IP44
- Thermal class F
- Temperature class TF 110
- Interference emissions EN 61000-6-3
- Interference immunity EN 61000-6-2

Bearings
- Product-lubricated special plain bearing

Connections
- Screw-ended

Operating modes
- Open-loop control via setpoint setting

Automatic functions
- Soft start
- Full motor protection

Manual functions
- Setting the speed level
- Vent plug
- Deblocking function

Designation

Example: Calio-Therm NC 25-40-130

Designation key

Code	Description	
Calio-Therm	Type series	
NC	Fixed speed	
25	Connection	
	20	G 1 $^{1}/_{4}$
	25	G 1 $^{1}/_{2}$
40	Head H [m]	
	40	Head × 10 Example: 4 m × 10 = 40
130	Overall length	
	130	130 mm

Materials

Overview of available materials

Part No.	Description	Material
102	Volute casing	Stainless steel 1.4308
210	Shaft	Ceramics
230	Impeller	Plastic with glass fibre content (PSU-GF20) (PP-GF30 for Calio-Therm NC 25-70)
310	Bearing	Ceramics
689	Thermal insulation shells	Polypropylene
817	Can	Stainless steel 1.4301

Casing parts which are in contact with the atmosphere and with the fluid handled are free from paint-wetting impairment materials.

All wetted components are DVGW-approved for use in drinking water circulation systems.

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Technical data

Calio-Therm NC selection table

Calio-Therm NC	Connection		PN	n		P_1	Signalling contacts	I_N	Mat. No.	[kg]
	Piping	Pump	[bar]	Min. [rpm]	Max. [rpm]	[W]		1~230 VAC, 50 Hz [A]		
20-15	Rp 3/4	G 1 1/4	10	1300	2800	26 - 34	-	0,11 - 0,15	29134843	2,7
20-30	Rp 3/4	G 1 1/4	10	1300	2800	27 - 35	-	0,12 - 0,15	29134844	2,7
25-40-130	Rp 1	G 1 1/2	10	1800	2800	33 - 44	-	0,14 - 0,19	29134845	2,7
25-40	Rp 1	G 1 1/2	10	1800	2800	33 - 44	-	0,14 - 0,19	29134846	2,8
25-60	Rp 1	G 1 1/2	10	1800	2800	6 - 85	-	0,03 - 0,50	29134847	2,8
25-70	Rp 1	G 1 1/2	10	1800	2800	220 - 260	-	1,03 - 1,13	29134848	6,5

Selection information

Minimum inlet pressure

The minimum inlet pressure p_{min} at the pump suction nozzle serves to avoid cavitation noises at an ambient temperature of +40 °C and the indicated fluid temperature T_{max}.

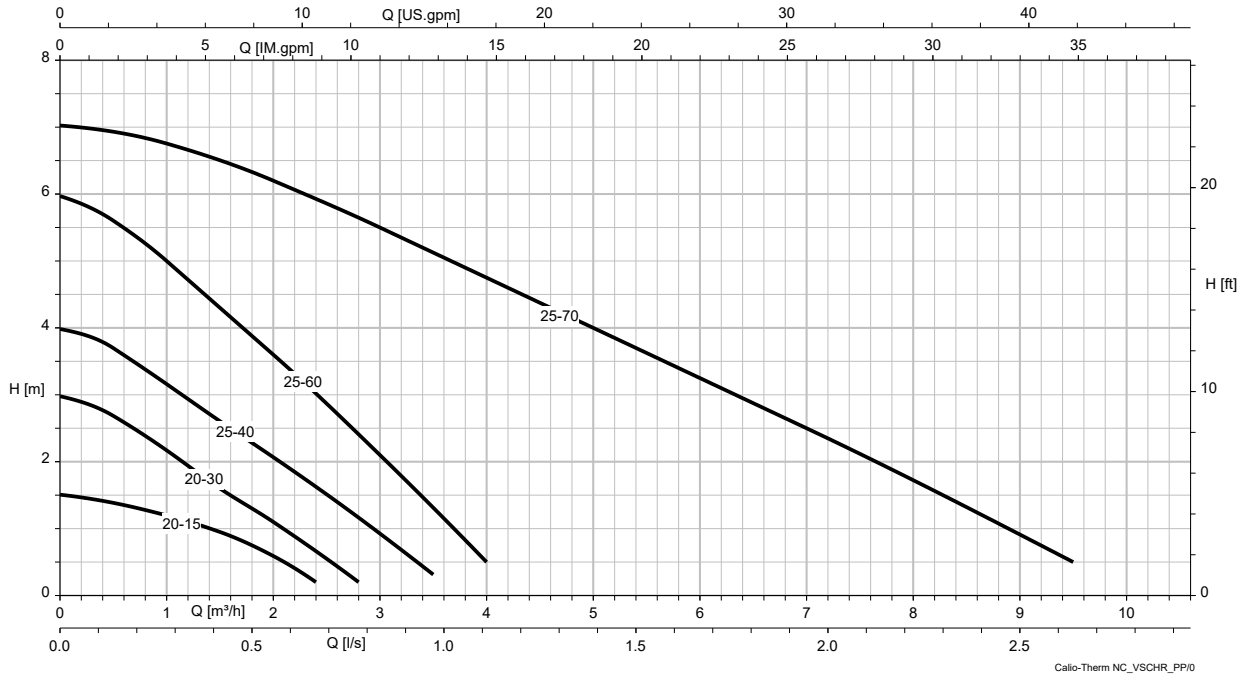
The indicated values are applicable up to 300 m above sea level. For installation at altitudes > 300 m, an allowance of 0.01 bar / 100 m must be added.

Minimum inlet pressure p_{min} specified for the fluid temperature T_{max}

Fluid temperature	Minimum inlet pressure
[°C]	[bar]
≤ 80	0,05
81 to 95	0,3
96 to 110	1,1

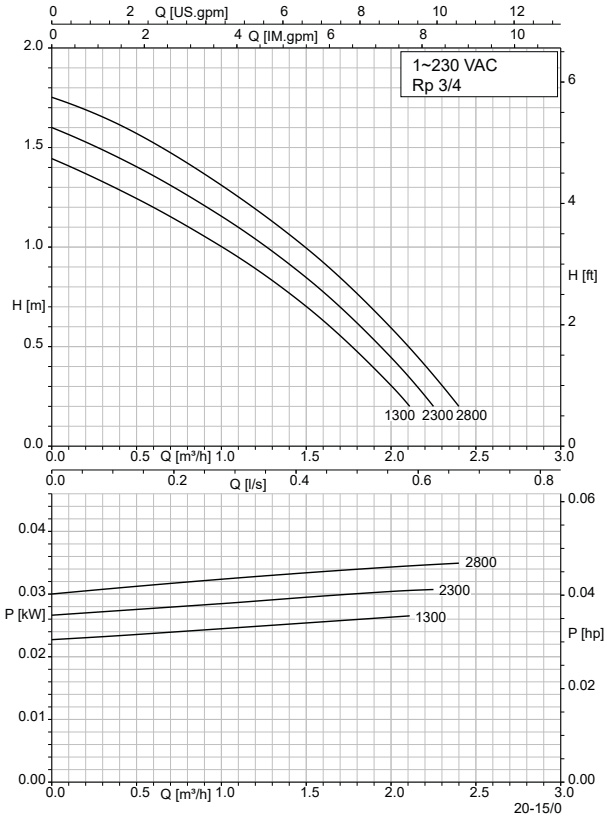
Selection chart

Calio-Therm NC

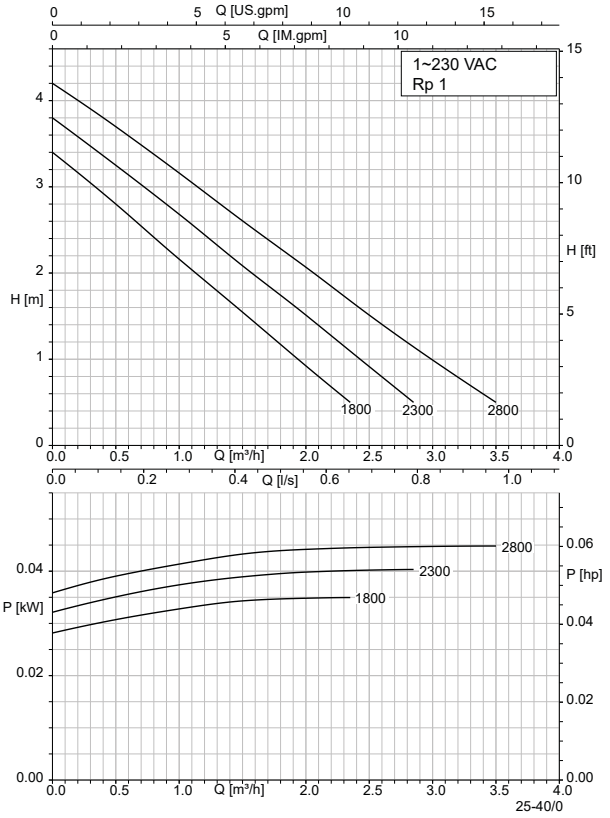


Characteristic curves

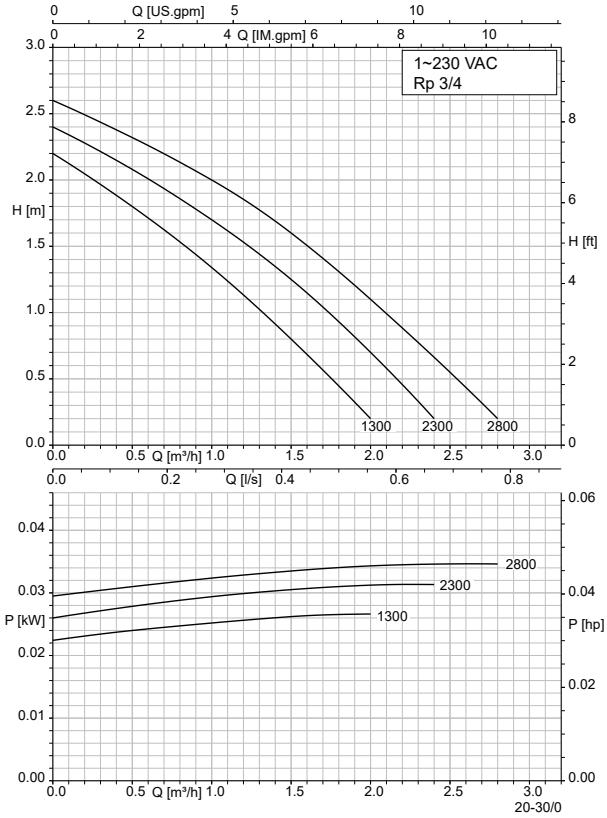
Calio-Therm NC 20-15



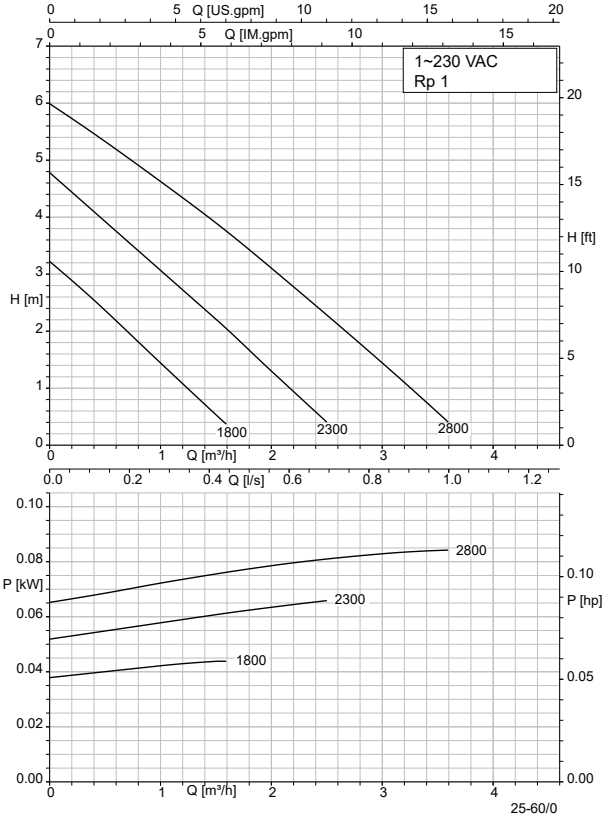
Calio-Therm NC 25-40



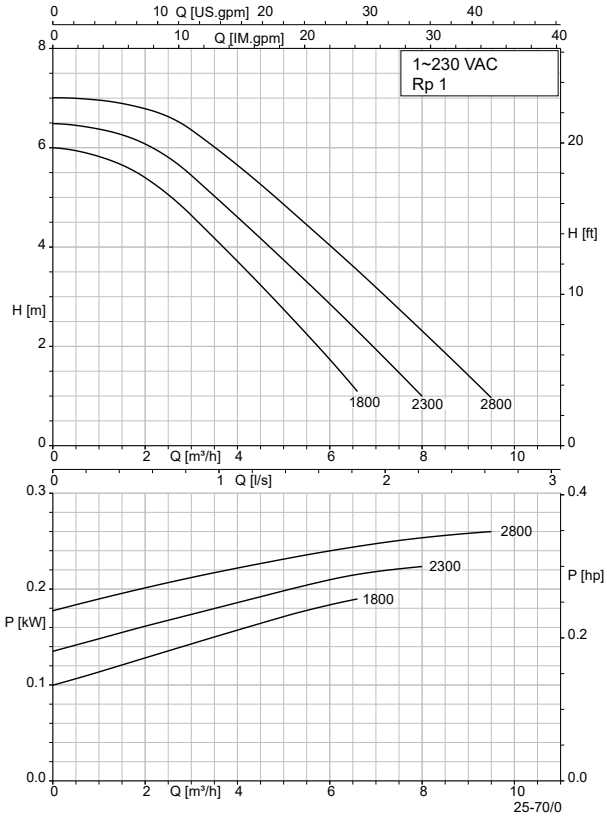
Calio-Therm NC 20-30



Calio-Therm NC 25-60



Calio-Therm NC 25-70



Dimensions

Calio-Therm NC

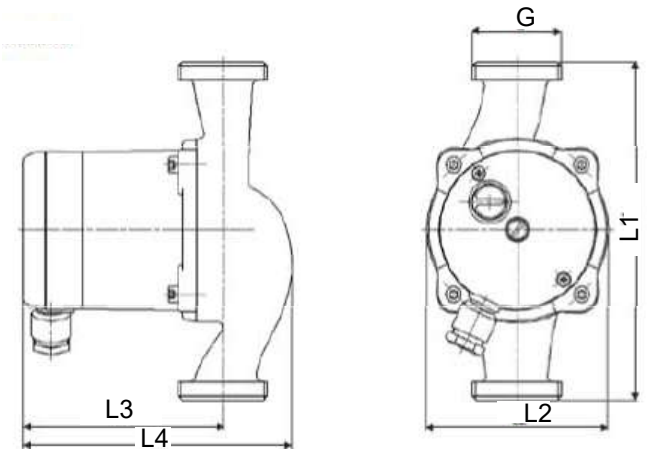


Fig. 236: Dimensions of sizes 20-15 to 25-60

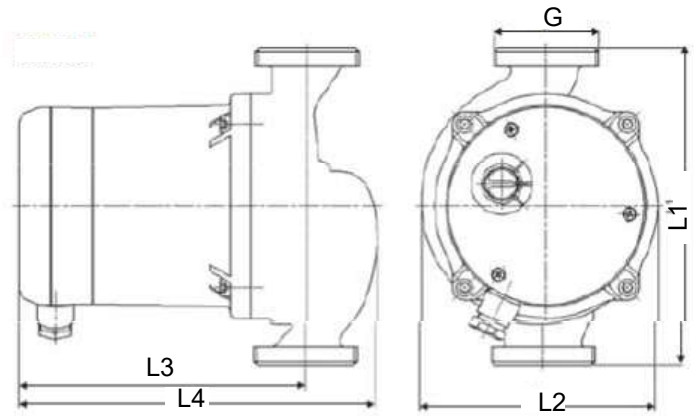


Fig. 237: Dimensions of size 25-70

Dimensions

Calio-Therm NC	Connection			L1	L2	L3	L4
	Rp	G	DN	[mm]	[mm]	[mm]	[mm]
20-15	3/4	1 1/4	-	150	98	108	145
20-30	3/4	1 1/4	-	150	98	108	145
25-40-130	1	1 1/2	-	130	98	108	145
25-40	1	1 1/2	-	180	98	108	145
25-60	1	1 1/2	-	180	98	108	145
25-70	1	1 1/2	-	180	135,5	166	206

Installation information

Calio-Therm

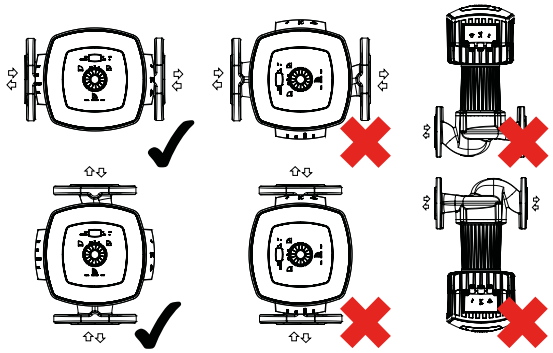


Fig. 238: Permissible installation positions

Scope of supply

Depending on the model, the following items are included in the scope of supply:

- Pump set
- Sealing elements
- Two-piece thermal insulation shell (only for overall length ≥ 180 mm)
- Installation/operating manual

Variable Speed Drinking Water Pumps

Calio-Therm

http://shop.ksb.com/catalog/k0/en/product/ES000986

Product benefits

- Maximum savings of operating costs by high-efficiency technology combined with speed control
- All-in concept saves investment costs and commissioning costs.
- Easy-to-use combination of controls, integrated display and symbols to show the operating status

Further information

Prices on request

Selection chart 499
Characteristic curves 500
Dimensions 503

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

Maintenance-free high-efficiency variable speed glandless drinking water circulator pump, screw-ended or flanged, electric motor and continuously variable differential pressure control for use in drinking water supply systems and hot water supply systems.

Main applications

- Drinking water circulation systems to DVGW-W551

Fluids handled

- Drinking water and water for the food and beverage industry, as per German TrinkwV 2001 drinking water regulations

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 24
	Q [l/s]	≤ 6,7
Head	H [m]	≤ 12
Fluid temperature[191)]	T [°C]	≥ +2
		≤ +70[192)]
Hardness of fluid handled	[°dH]	≤ 20
Ambient temperature	T [°C]	≥ 0
		≤ +40
Operating pressure	p [bar]	≤ 10
Pressure class	PN [bar]	6/10
Sound pressure level	[dB (A)]	≤ 40
Screw-ended	Rp	1 - 1 1/4
Flanged	DN	40

191 We recommend fluid temperatures no higher than 65 °C to prevent possible consequences caused by lime sedimentation. Higher fluid temperatures are permissible for short periods (e.g. for thermal disinfection cycles).

192 ≤ +75 °C for short-time duty ≤ 5 minutes

Design details

Design

- Maintenance-free high-efficiency wet rotor pump (glandless)

Drive

- High-efficiency permanent magnet synchronous motor, brushless, self-cooling, with continuously variable differential pressure control
- Integrated motor protection
- 1~230 V AC +/- 10%
- Frequency 50 Hz/60 Hz
- Enclosure IPX4D
- Thermal class F
- Temperature class TF 110
- Interference emissions EN 61000-6-3
- Interference immunity EN 61000-6-1

Bearings

- Product-lubricated special plain bearing

Connections

- Screw-ended or flanged

Operating modes

- Constant-pressure control
- Proportional-pressure control
- Temperature-governed differential pressure control (can only be activated with KSB ServiceTool)
- Open-loop control via setpoint setting
- Eco Mode

Automatic functions

- Continuously variable speed adjustment depending on the mode of operation
- 0 - 10 V with external differential pressure/speed setpoint
- 0 - 10 V as input of the actual value of the temperature or actual value of the differential pressure
- Dual-pump operation
- Peak load operation
- Setback operation
- Dynamic Control
- Remote ON/OFF
- Deblocking function
- Self-venting function
- Soft start
- Full motor protection with integrated trip electronics

Manual functions

- Setting the operating mode
- Setting the differential pressure setpoint
- Setting the speed level
- Locking the control panel

Signalling functions and display functions

- Periodically alternating display of flow rate, head and electrical input power
- Operating status shown on the display
- Error codes indicated on the display
- Configurable general fault message and "in operation" message (volt-free changeover contacts)
- Serial digital Modbus RTU interface
- Service interface for KSB ServiceTool

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Designation

Example: Calio-Therm 25-80

Designation key

Code	Description	
Calio-Therm	Type series	
25	Nominal diameter of pump nozzle	
	25	G 1
	30	G 2
	40	DN 40
80	Head H[193)] [m]	
	80	Head × 10 Example: 8 m × 10 = 80

Materials

Overview of available materials

Part No.	Description	Material
102	Volute casing	Stainless steel 1.4308
210	Shaft	Stainless steel 1.4034
230	Impeller	Plastic with glass fibre content (PSU-GF30)
310	Bearing	Ceramics/carbon
689	Thermal insulation shells	Polypropylene
817	Can	Plastic with glass fibre content (PPS-GF40)

Casing parts which are in contact with the atmosphere and with the fluid handled are free from paint-wetting impairment materials.

All wetted components are DVGW-approved for use in drinking water circulation systems.

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Technical data

Calio-Therm

Technical data

Size	Connection		PN	n		P_1	I_N	Mat. No.	[kg]
	Piping	Pump	[bar]	Min. [rpm]	Max. [rpm]	[W]	1~230 V AC, 50 Hz / 60 Hz [A]		
25-80	Rp 1	G 1 1/2	6/10	1000	4000	3,5 - 180	0,15 - 0,86	29134853	4,6
30-100	Rp 1 1/4	G 2	6/10	1000	4500	3,5 - 180	0,15 - 0,85	29134854	4,8
30-120	Rp 1 1/4	G 2	6/10	1000	4000	3,5 - 330	0,15 - 1,50	29134855	6,4
40-80	DN 40	DN 40	6/10	1000	3600	3,5 - 265	0,15 - 1,22	29134849	11,1
40-100	DN 40	DN 40	6/10	1000	4000	3,5 - 360	0,15 - 1,65	29134856	11,1

193 At flow rate Q = 0 m^3/h

Selection information

Minimum inlet pressure

The minimum inlet pressure p_{min} at the pump suction nozzle serves to avoid cavitation noises at an ambient temperature of +40 °C and the indicated fluid temperature T_{max}.

The indicated values are applicable up to 300 m above sea level. For installation at altitudes > 300 m, an allowance of 0.01 bar / 100 m must be added.

Minimum inlet pressure p_{min} specified for the fluid temperature $T_{max.}$

Fluid temperature	Minimum inlet pressure
[°C]	[bar]
≤ +70[194)]	0,5

Permissible fluid temperature

Temperature limits of the fluid handled

Permissible fluid temperature	Value
	[°C]
Maximum	+70[195)]
Minimum	+2

Permissible ambient temperature

Permissible ambient temperatures specified for the fluid temperature

Fluid temperature	Permissible ambient temperature
[°C]	[°C]
≤ +70[196)]	+40

194 ≤ +75 °C for short-time duty ≤ 5 minutes
195 ≤ +75 °C for short-time duty ≤ 5 minutes
196 ≤ +75 °C for short-time duty ≤ 5 minutes

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Description of the Modbus interface

Technical data of the Modbus interface

Parameter	Description/value
Terminal cross-section	1,5 mm²
Interface	RS485 (TIA-485-A) optically isolated
Bus connection	0.5 mm², shielded twisted pair bus cable
Cable length	▪ 1000 m max. ▪ Stub line impermissible ▪ For cable lengths > 30 m take suitable measures to ensure overvoltage protection.
Wave impedance	120 Ω (cable type B to TIA-485-A)
Data rates [baud]	4800, 9600, 38,400, 57,600, 115,200 (19,200 = factory setting)
Protocol	Modbus RTU standard
Data format	▪ 8 data bits ▪ Parity EVEN / ODD / NONE ▪ 1 stop bit
Modbus address	ID #1 to #247 selectable (ID #17 = factory setting)

Further description see operating manual of the pump set.

Description of the Eco Mode

In Eco Mode, the pump characteristic curve (1) is quadratic. Starting at the discharge head setpoint H_s , the characteristic curve intersects the discharge head axis at H_0 = 1/4 x H_s.
By changing the differential pressure setpoint this pump characteristic curve can be adjusted to higher or lower differential pressures or discharge heads.
Compared with the Proportional-pressure Control operating mode the Eco Mode can save more than 40 % in electrical input power.
An example of a characteristic curve of a pump in Eco Mode is shown below.

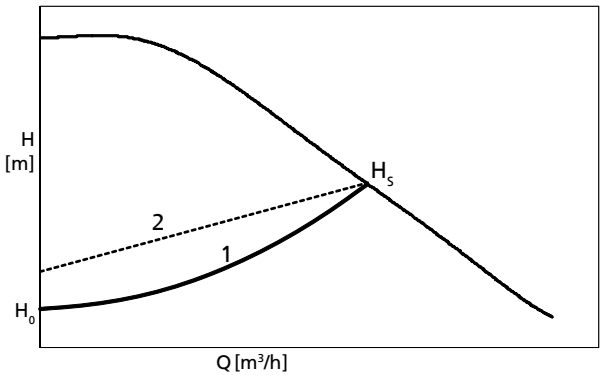


Fig. 239: Eco Mode function

1	Eco Mode characteristic curve
2	Proportional-pressure Control characteristic curve for comparison

Description of Constant-pressure Control operating mode

In Constant-pressure Control the set head ② is maintained irrespective of the flow rate. The set differential pressure setpoint H_s is constant, situated between the maximum curve ① and the permissible flow rate range.

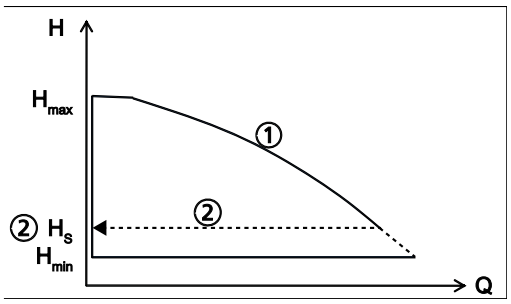


Fig. 240: Constant-pressure Control function

Description of the characteristic curve

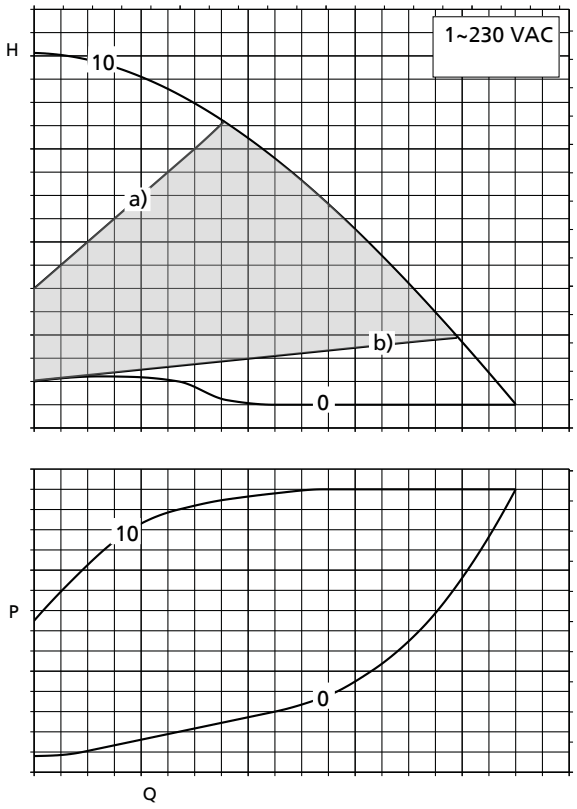


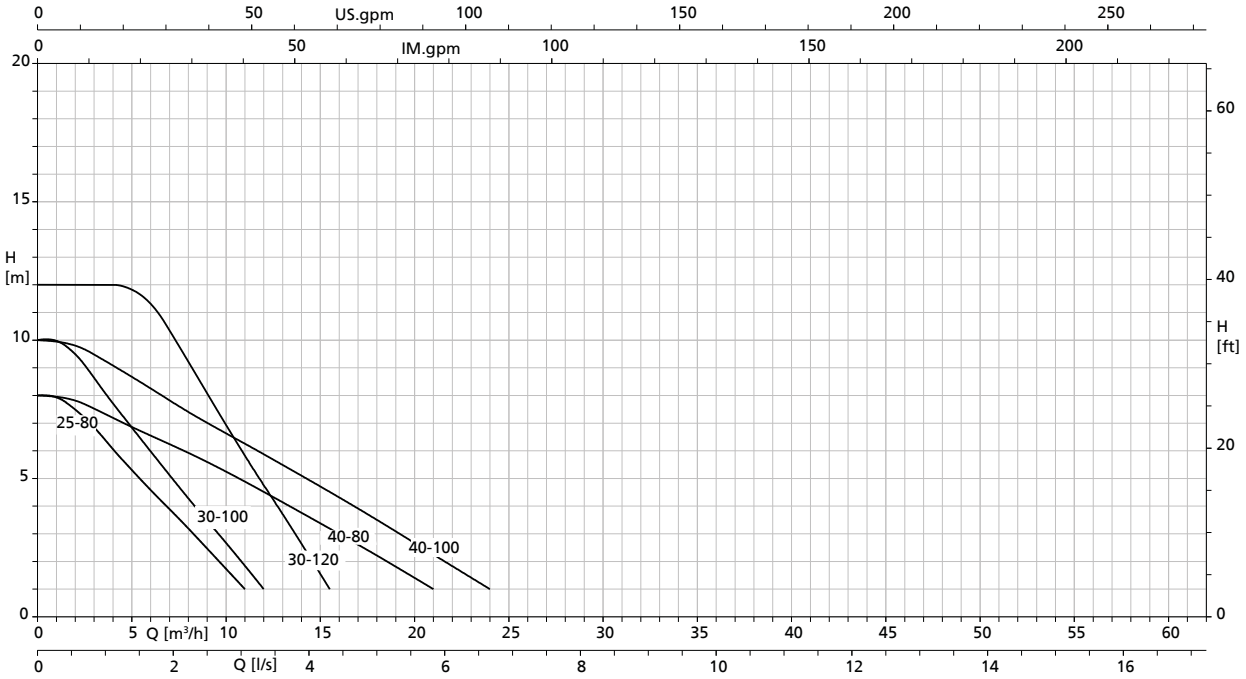
Fig. 241: Selection example

The pump characteristic curve can be adjusted between a) and b) in increments of 1 % by turning the control element.

0	Level 0 = open-loop control, minimum speed (corresponds to a setting of 0 %)
10	Level 10 = open-loop control, maximum speed (corresponds to a setting of 100 %)
	Control range
a)	Control curve, maximum head
b)	Control curve, minimum head

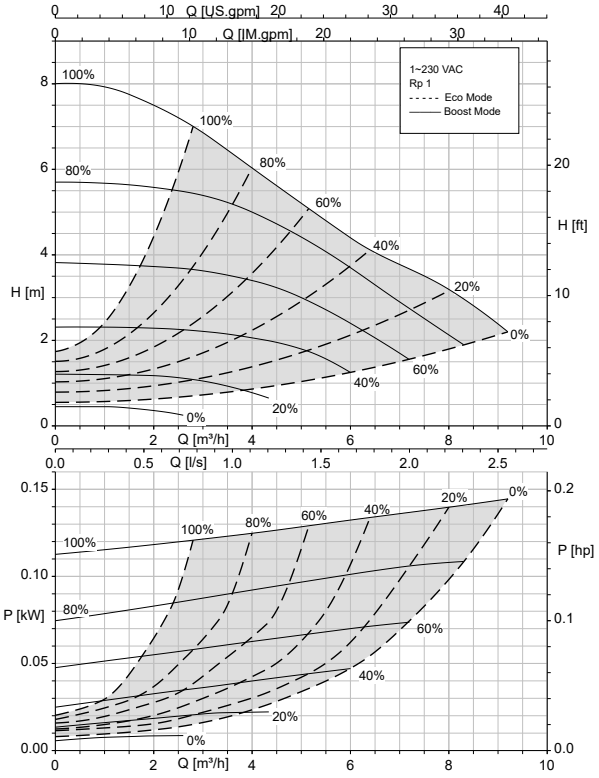
Selection chart

Calio-Therm

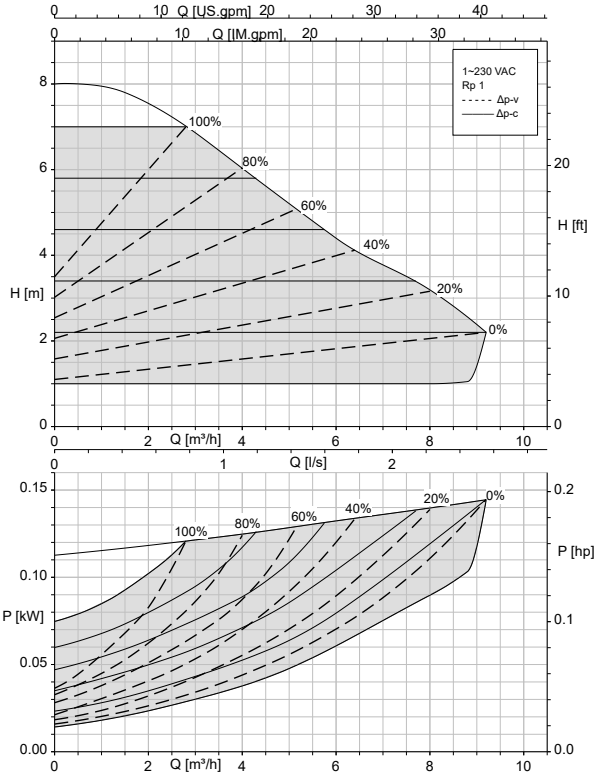


Characteristic curves

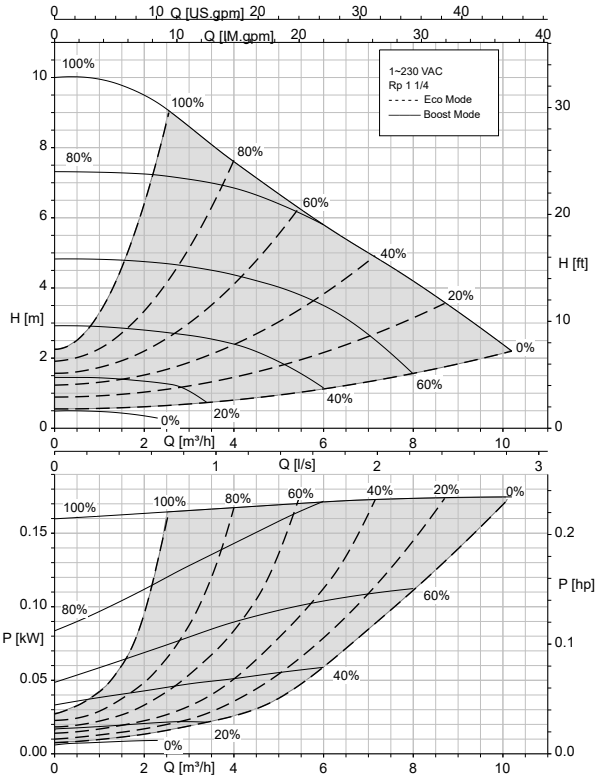
Calio-Therm 25-80, open-loop control, Eco Mode



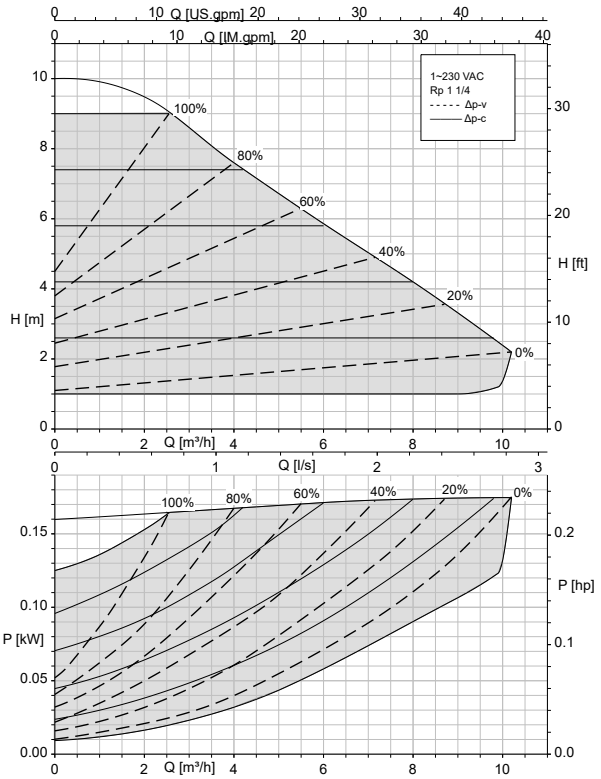
Calio 25-80 Δpv, Δpc



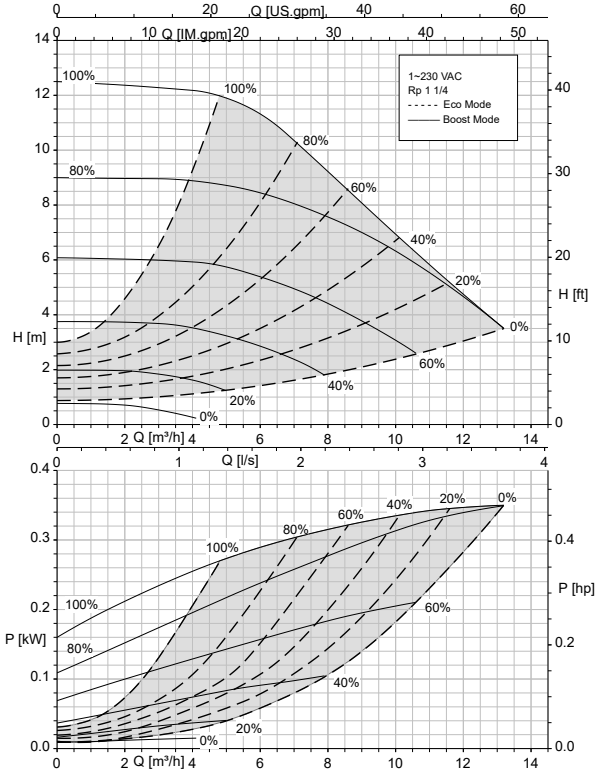
Calio-Therm 30-100, open-loop control, Eco Mode



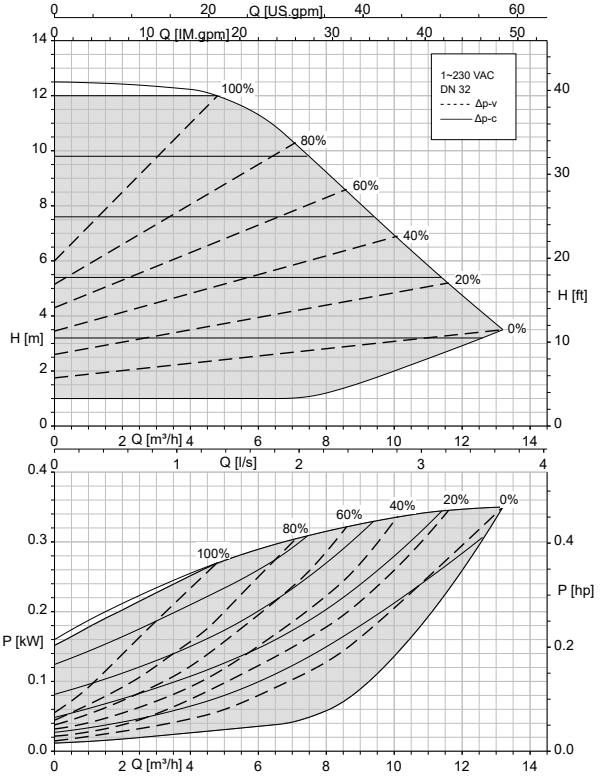
Calio 30-100 Δpv, Δpc



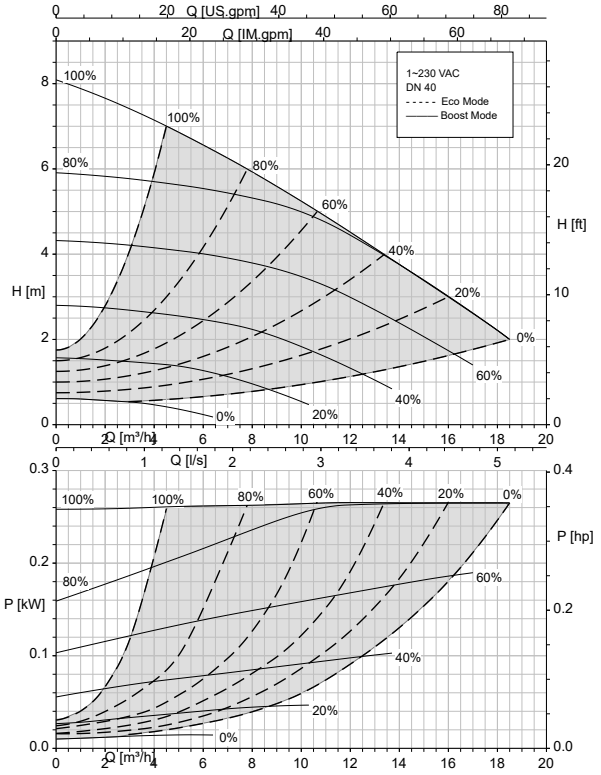
Calio-Therm 30-120, open-loop control, Eco Mode



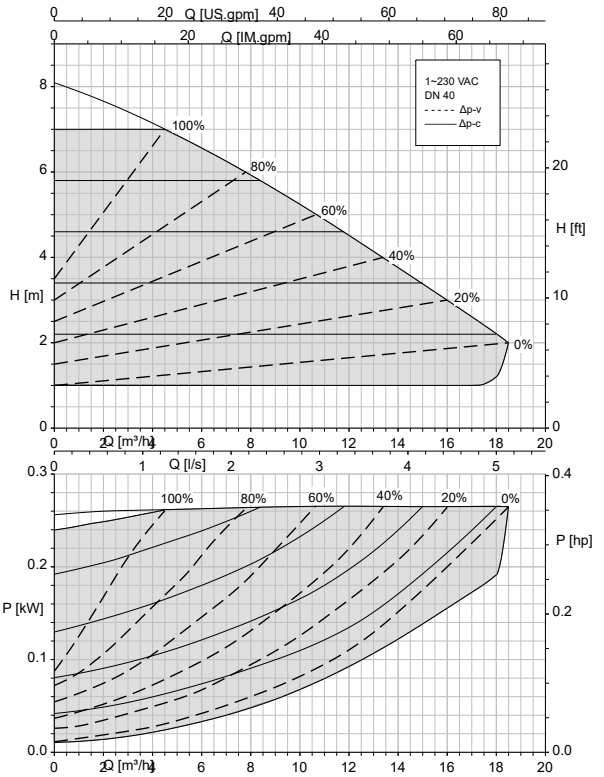
Calio 30-120 Δpv, Δpc



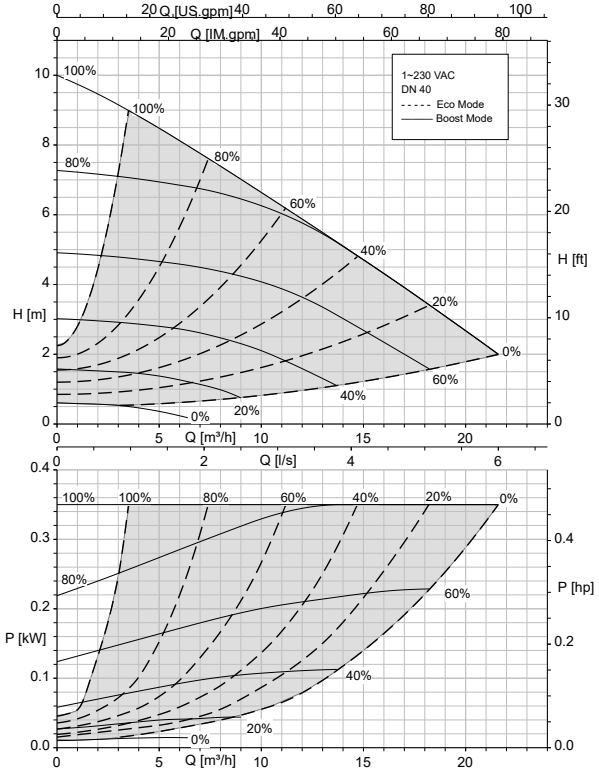
Calio-Therm 40-80, open-loop control, Eco Mode



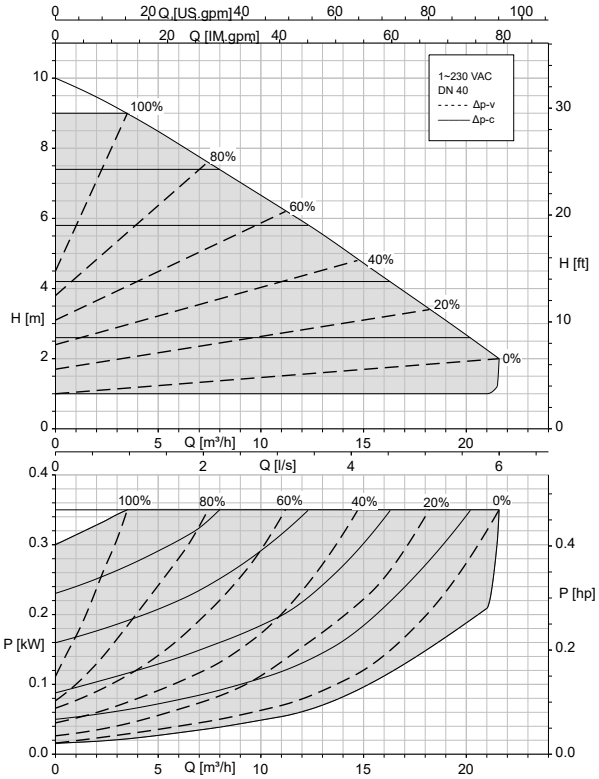
Calio-Therm 40-80 Δpv, Δpc



Calio-Therm 40-100, open-loop control, Eco Mode



Calio 40-100 Δpv, Δpc



Dimensions

Pump set dimensions

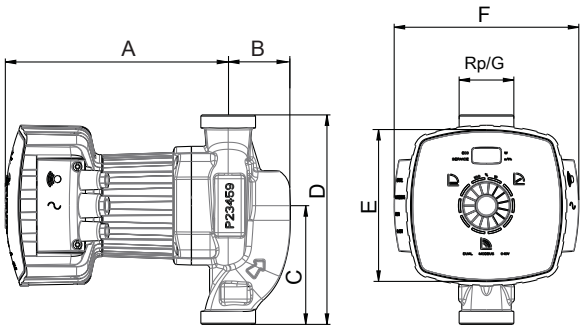


Fig. 242: Screw-ended pump set

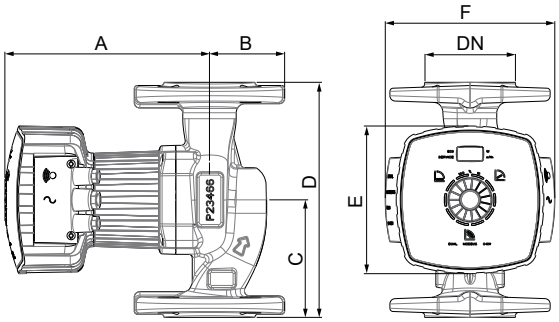


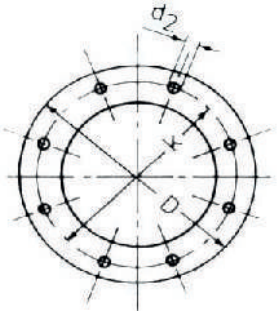
Fig. 243: Flanged pump set

Pump set dimensions

Calio-Therm	Connection			A	B	C	D	E	F
	Rp	G	DN	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
25-80	1	1 1/2	-	197	53	102	180	137	168
30-100	1 1/4	2	-	197	53	102	180	137	168
30-120	1 1/4	2	-	232	53	98	180	137	168
40-80	-	-	40	242	70	120	220	137	168
40-100	-	-	40	242	70	120	220	137	168

Flange dimensions

Flange dimensions [mm]

Size	PN 6			PN 10			Outline drawing
	Ø D	Ø k	n × Ø d_2	Ø D	Ø k	n × Ø d_2	
DN 40	130	100	4 × Ø 14	150	110	4 × Ø 19	

Installation information

Calio-Therm

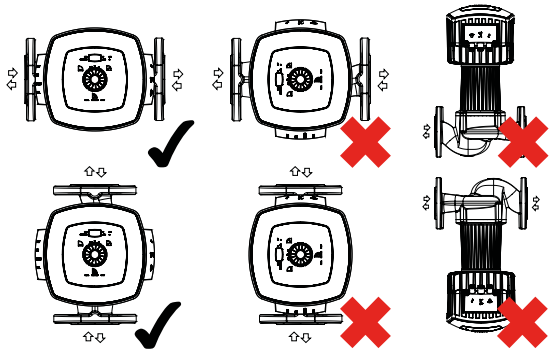


Fig. 244: Permissible installation positions

Scope of supply

Depending on the model, the following items are included in the scope of supply:

- Pump set
- Two-piece thermal insulation shell (single pump)
- 2 gaskets
- Installation/operating manual

In-line Pumps

Etaline L

http://shop.ksb.com/catalog/k0/en/product/ES000925

Product benefits

- Improved efficiency and NPSHreq by experimentally verified hydraulic design of impellers (vanes)
- Little wear, low vibration levels and excellent smooth running characteristics thanks to good suction performance and virtually cavitation-free operation across a wide operating range
- Casing sealed reliably – even in varying operating conditions – by confined casing gasket
- Large variety of materials as standard for perfectly matching the pump to the fluid handled
- Low-noise low-vibration (2-pole and 4-pole) motors specially designed for Etaline L.
- PumpDrive 2 Eco perfectly matched to pump and motor by default factory parameter settings
- Space-saving owing to motor-mounted variable speed system

Further information

Prices on request

Selection charts 514
Characteristic curves 515
Dimensions 521
Accessories 527

Further information

	PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for water pumps with a maximum nominal shaft power of 150 kW as per Regulation (EU) No. 547/2012.

Main applications

- Service water supply systems
- Heating systems
- Industrial recirculation systems
- Air-conditioning systems
- Cooling circuits
- Swimming pools
- Water supply systems[197)]

Fluids handled

- Fluids not chemically or mechanically aggressive to the materials

Further information on fluids handled

Overview of fluids handled (⇨ Page 508)

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 95
	Q [l/s]	≤ 26,3
Head	H [m]	≤ 21
Fluid temperature	T [°C]	≥ -15
		≤ +120
Operating pressure	p [bar]	≤ 10

197 No drinking water in acc. with UBA (German drinking water regulations to German Environment Agency)

Design details

Design

- Close-coupled design / in-line design
- Single-stage
- Horizontal installation / vertical installation
- Rigid connection between pump and motor
- Fixed speed version (without PumpDrive 2 Eco) / variable speed version (with PumpDrive 2 Eco)

Pump casing

- Radially split volute casing
- In-line design

Drive (fixed speed version)

- Surface-cooled squirrel-cage motor to KSB standard
- Efficiency class IE3 to IEC 60034-30 (≥ 0.75 kW)
- Rated voltage (50 Hz) 1~ 220 - 240 V / 3~ 220 - 240 V 3~ 380 - 420 V ≤ 1.1 kW
- Rated voltage (50 Hz) 3~ 220 - 240 V / 3~ 380 - 420 V ≥ 1.8 kW
- Type of construction IM B14
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F

Drive (variable speed version)

- Surface-cooled squirrel-cage motor to KSB standard prepared for mounting a PumpDrive 2 Eco
- Efficiency class IE2 to IEC 60034-30 (≥ 0.75 kW)
- Rated voltage (50 Hz) 3~ 220 - 240 V / 3~ 380 - 420 V
- Type of construction IM B14
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F

PumpDrive 2 Eco:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals or the control panel
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains voltage 1~ 220 V AC -10 % to 240 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

Shaft seal

- KSB mechanical seal

Impeller type

- Closed radial impeller

Bearings

- Radial ball bearings in the motor housing
- Grease lubrication

Designation

Designation example

Position																																						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
E	T	L	L	0	2	5	-	0	2	5	-	0	6	3	-	G	G	S	A	V	1	1	D	2	0	0	1	2	2	C		A	A	T	B	I	E	3	P	D	2	E
See name plate and data sheet																																									

Designation key

Position	Code	Description	
1-4	Pump type		
	ETLL	Etaline L	
	ETLD	Etaline DL	
5-16	Size, e.g.		
	025	Nominal suction nozzle diameter [mm]	
	025	Nominal discharge nozzle diameter [mm]	
	063	Nominal impeller diameter [mm]	
17	Pump casing material		
	B	Bronze	CC491K
	G	Grey cast iron	EN-GJL-200 / EN-GJL-250
18	Impeller material		
	B	Bronze	G-CuSn10Zn
	G	Grey cast iron	EN-GJL-150
	P	Polysulphone	PSU-GF30
19	Design		
	P	With casing cover made of polysulphone PSU-GF30	
	S	Standard	
	W	Approved for drinking water to WRAS	
	X	Non-standard (BT3D, BT3)	
20	Casing cover		
	A	Conical seal chamber	
21	Shaft seal type		
	V	Conical seal chamber with vent	

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Position	Code	Description	
22-23	Seal code, single mechanical seal		
	11	BQ1EGG	≥ -15 - ≤ +120 [°C]
	12	BQ1PGG	Available upon request.
	13	BVPGG	Available upon request.
	14	Q5Q1EGG	Available upon request.
	15	Q5Q1PGG	Available upon request.
24	Scope of supply		
	D	Pump, motor	
25	Shaft unit		
	2	Shaft unit 12	
	4	Shaft unit 14	
	6	Shaft unit 16	
26-29	Motor rating P_N [kW] (basis 50 Hz)		
	0012	0,12	
	...	...	
	0300	3,00	
30	Number of motor poles		
31	Motor design		
	C	3-phase AC motor 230 V / 400 V	
	M	1-phase AC motor 230 V	
32	-		
33	Product generation		
	A	Etaline L / Etaline DL	
34-36	Motor manufacturer		
	ATB	ATB	
37-39	Efficiency class		
40-43	Design		
	-	Fixed speed version, without PumpDrive 2 Eco	
	PD2E	Variable speed version, with PumpDrive 2 Eco	

Materials

Symbols key

Symbol	Description
✗	Standard
o	Optional
-	Version not available / not feasible

Overview of available materials

Part No.	Description	Material	Material variant[198]			
			GG	GP	BB	BP
102	Volute casing	Grey cast iron EN-GJL 200 / EN-GJL 250[199]	✗	✗	-	-
		Bronze CC491K	-	-	✗	✗
230	Impeller	Grey cast iron EN-GJL-150	✗	-	-	-
		Bronze G-CuSn10Zn	-	-	✗	-
		Polysulphone PSU-GF30	-	✗	-	✗
341	Drive lantern	Aluminium AC-46500	✗	✗	✗	✗
412.50	O-ring	EPDM	✗	✗	✗	✗
554.03	Washer	CW508L	✗	✗	✗	✗
580	Cap, conical	Polyamide 66	✗	✗	✗	✗
		Polysulphone PSU-GF20	o[200]	o[200]	o[200]	o[200]
914.21	Hexagon socket head cap screw	A4	✗	✗	✗	✗

198 Dependent on size
199 DN 80
200 Optional design with additional code P

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

Symbols key

Symbol	Description
✗	Standard
-	Version not available / not feasible

Excerpt from the overview of fluids handled with associated material variants

Fluid handled	T[201]		Material variant				Seal code		Comments
			Grey cast iron / grey cast iron	Grey cast iron / polysulphone	Tin bronze / tin bronze	Tin bronze / polysulphone	BQ1EGG	Q5Q1EGG	
	Min.	Max.	GG	GP	BB	BP	11	14[202]	
	[°C]								
Service water	-	-	✗	✗	-	-	✗	-	-
Heating water[203]	-	-	✗	✗	-	-	✗	-	-
Condensate	-	-	✗	✗	-	-	✗	-	-
Cooling water without antifreeze	-	≤ +60	✗	✗	-	-	✗	-	Open circuit: use material variant BB/BP.
Cooling water with antifreeze, pH ≥ 7.5	≥ -15	≤ +60	✗	✗	-	-	✗	-	Open circuit: use material variant BB/BP.
Cooling water with antifreeze, pH ≥ 7.5	≥ +60	≤ +110	✗	✗	-	-	-	✗	Open circuit: use material variant BB/BP.
Pure water	-	≤ +60	✗	✗	-	-	✗	-	-
Swimming pool water: filtration	-	≤ +40	-	-	✗	✗	✗	-	Use pumps with additional code P.
Swimming pool water, water features without turbulences and/or air content	-	≤ +40	-	-	✗	✗	✗	-	Use pumps with additional code P.
Partly desalinated water	-	≤ +120	✗	✗	-	-	✗	-	-
Fully desalinated (deionised) water, boiler feed water	-	≤ +110	✗	✗	-	-	✗	-	-
Cooling brine, inorganic; pH > 7.5, inhibited	≥ -15	≤ +25	✗	✗	-	-	✗	-	-
Water with antifreeze, pH ≥ 7.5	≥ -15	≤ +60	✗	✗	-	-	✗	-	-
Water with antifreeze, pH ≥ 7.5	≥ +60	≤ +120	✗	✗	-	-	-	✗	-

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

201 T = fluid temperature
202 Special design
203 Treatment to VdTÜV 1466; additional requirement: O2 t < 0.02 mg/l

Technical data

Motor (fixed speed version), n = 2900 rpm

50 Hz, technical data of the motor, n = 2900 rpm (fixed speed version)

Etaline L	P_2 Max.[204] IE3[205]	P_N IE3[205]	I_N 1~230 V	I_N 3~230 V	I_N 3~400 V	Motor	[kg]
n = 2900 rpm	[kW]	[kW]	[A]	[A]	[A]		
025-025-063	0,30	0,25	-	1,32	0,76	63	8,4
025-025-063	0,30	0,25	2,00	-	-	63	8
025-025-070.1	0,21	0,18	-	1,05	0,60	63	8,5
025-025-070.1	0,14	0,12	1,20	-	-	63	8,6
025-025-071	0,30	0,25	-	1,32	0,76	63	7,7
025-025-071	0,30	0,25	2,00	-	-	63	8
025-025-080	0,30	0,25	-	1,32	0,76	63	8,7
025-025-080	0,30	0,25	2,00	-	-	63	9
025-025-080	0,44	0,37	-	1,60	0,92	63	8,7
025-025-085	0,21	0,18	-	1,05	0,60	63	10
025-025-105	0,44	0,37	-	1,60	0,92	63	11
032-032-063	0,30	0,25	-	1,32	0,76	63	7,9
032-032-071	0,30	0,25	-	1,32	0,76	63	7,7
032-032-080	0,30	0,25	-	1,32	0,76	63	8,4
032-032-080	0,30	0,25	2,00	-	-	63	9
032-032-080	0,30	0,25	-	1,32	0,76	63	8,1
032-032-080	0,44	0,37	-	1,60	0,92	63	8,7
032-032-100	0,30	0,25	-	1,32	0,76	63	14,9
032-032-100	0,30	0,25	2,00	-	-	63	14,9
032-032-105	0,66	0,55	-	2,80	1,60	63	16,1
032-032-105	0,66	0,55	4,20	-	-	63	15,9
032-032-125	0,90	0,75	-	2,77	1,60	71	17,8
032-032-125	0,90	0,75	4,75	-	-	71	18,7
040-040-060	0,30	0,25	-	1,32	0,76	63	15,3
040-040-060	0,30	0,25	2,00	-	-	63	15,2
040-040-060	0,44	0,37	-	1,60	0,92	63	16
040-040-090	0,66	0,55	-	2,80	1,60	63	15,6
040-040-090	0,66	0,55	4,20	-	-	63	19
040-040-090	0,90	0,75	-	2,77	1,60	71	18,3
040-040-100	0,90	0,75	-	2,77	1,60	71	18,9
040-040-100	0,90	0,75	4,75	-	-	71	21,4
050-050-090	0,66	0,55	-	2,80	1,60	63	17,8
050-050-090	0,66	0,55	4,20	-	-	63	18,5
050-050-100	0,90	0,75	-	2,77	1,60	71	21,1
050-050-100	0,90	0,75	4,75	-	-	71	21
050-050-110	1,30	1,10	-	3,90	2,25	80	28,1
050-050-110	1,30	1,10	6,90	-	-	80	24,8
050-050-110	2,20	1,80	-	5,90	3,40	80	27,4
050-050-125	2,20	1,80	-	5,90	3,40	90S	31,24
065-065-100	1,30	1,10	-	3,90	2,25	80	35,8
065-065-100	1,30	1,10	6,90	-	-	80	32
065-065-115	2,20	1,80	-	5,90	3,40	90S	39,1
065-065-125	3,40	3,00	-	9,70	5,60	90L	46,1
080-080-105	1,30	1,10	-	3,90	2,25	80	40,3
080-080-105	1,30	1,10	6,90	-	-	80	37,4
080-080-115	2,20	1,80	-	5,90	3,40	90S	44,9
080-080-125	3,40	3,00	-	9,70	5,60	90L	50,9

204 Continuous duty S1
205 ≥ 0,75 kW = IE3

Motor (fixed speed version), n = 1450 rpm

50 Hz, technical data of the motor, n = 1450 rpm (fixed speed version)

Etaline L	P_2 Max.[206] IE3[207]	P_N IE3[207]	I_N 1~230 V	I_N 3~230 V	I_N 3~400 V	Motor	[kg]
n = 1450 rpm	[kW]	[kW]	[A]	[A]	[A]		
025-025-080	0,14	0,12	-	0,83	0,48	63	8,5
025-025-080	0,14	0,12	1,20	-	-	63	8,8
032-032-080	0,14	0,12	-	0,83	0,48	63	8
032-032-080	0,14	0,12	1,20	-	-	63	8,5
032-032-125	0,14	0,12	-	0,83	0,48	63	14,6
032-032-125	0,14	0,12	1,20	-	-	63	14
040-040-100	0,14	0,12	-	0,83	0,48	63	15,5
040-040-100	0,14	0,12	1,20	-	-	63	17,3
050-050-100	0,14	0,12	-	0,83	0,48	63	16,7
050-050-100	0,14	0,12	1,20	-	-	63	17
050-050-125	0,21	0,18	-	1,15	0,66	63	20,8
050-050-125	0,21	0,18	1,60	-	-	63	21,4
050-050-160	0,90	0,75	-	2,96	1,71	80	33,8
050-050-160	0,90	0,75	5,75	-	-	80	32,1
065-065-125	0,44	0,37	-	2,15	1,25	63	29,7
065-065-125	0,44	0,37	3,20	-	-	63	30
080-080-125	0,44	0,37	-	2,15	1,25	63	35
080-080-125	0,44	0,37	3,20	-	-	63	34,1

206 Continuous duty S1
207 ≥ 0,75 kW = IE3

Motor (variable speed version), n = 2900 rpm

50 Hz, technical data of the motor, n = 2900 rpm (variable speed version)

Etaline L PumpDrive 2 Eco	P_2 Max.[208] IE2[209]	P_N IE2[209]	I_N 1~230 V	I_N 3~400 V	Motor	[kg]
n = 2900 rpm	[kW]	[kW]	[A]	[A]		
025-025-063	0,30	0,25	-	0,76	63	13,4
025-025-063	0,30	0,25	2,00	-	63	13
025-025-070.1	0,21	0,18	-	1,60	63	13
025-025-070.1	0,14	0,12	1,20	-	63	13
025-025-071	0,30	0,25	-	0,76	63	12,17
025-025-071	0,30	0,25	2,00	-	63	13,6
025-025-080	0,30	0,25	-	0,76	63	13
025-025-080	0,30	0,25	2,00	-	63	13
025-025-080	0,44	0,37	-	0,92	63	13
025-025-085	0,21	0,18	-	0,60	63	14
025-025-105	0,44	0,37	-	0,92	63	15,5
032-032-063	0,30	0,25	-	0,76	63	12,4
032-032-071	0,30	0,25	-	0,76	63	12,4
032-032-080	0,30	0,25	-	0,76	63	13
032-032-080	0,30	0,25	2,00	-	63	13
032-032-080	0,44	0,37	-	0,92	63	13
032-032-100	0,30	0,25	-	0,76	63	18,9
032-032-100	0,30	0,25	2,00	-	63	19,2
032-032-105	0,66	0,55	-	1,60	63	20,1
032-032-105	0,66	0,55	4,20	-	63	20,5
032-032-125	0,90	0,75	-	1,60	71	24,8
032-032-125	0,90	0,75	4,75	-	71	25,2
040-040-060	0,30	0,25	-	0,76	63	19
040-040-060	0,30	0,25	2,00	-	63	19,2
040-040-060	0,44	0,37	-	0,92	63	22,1
040-040-090	0,66	0,55	-	1,60	63	21,8
040-040-090	0,66	0,55	4,20	-	63	23
040-040-090	0,90	0,75	-	1,60	71	22
040-040-100	0,90	0,75	-	1,60	71	23
040-040-100	0,90	0,75	4,75	-	71	25,4
050-050-090	0,66	0,55	-	1,60	63	25,2
050-050-090	0,66	0,55	4,20	-	63	24,7
050-050-100	0,90	0,75	-	1,60	71	27,7
050-050-100	0,90	0,75	4,75	-	71	25
050-050-110	1,30	1,10	-	2,25	80	29
050-050-110	1,30	1,10	6,90	-	80	28,8
050-050-110	2,20	1,80	-	3,40	90S	31
050-050-125	2,20	1,80	-	3,40	90S	36,8
065-065-100	1,30	1,10	-	2,25	80	36
065-065-100	1,30	1,10	6,90	-	80	36
065-065-115	2,20	1,80	-	3,40	90S	39
065-065-125	3,40	3,00	-	5,60	90L	43
080-080-105	1,30	1,10	-	2,25	80	45,9
080-080-105	1,30	1,10	6,90	-	80	46,5
080-080-115	2,20	1,80	-	3,40	90S	50,6
080-080-125	3,40	3,00	-	5,60	90L	57,3

208 Continuous duty S1
209 ≥ 0,75 kW = IE2

Motor (variable speed version), n = 1450 rpm

50 Hz, technical data of the motor, n = 1450 rpm (variable speed version)

Etaline L PumpDrive 2 Eco	P_2 Max.[210] IE2[211]	P_N IE2[211]	I_N 1~230 V	I_N 3~400 V	Motor	[kg]
n = 1450 rpm	[kW]	[kW]	[A]	[A]		
025-025-080	0,14	0,12	-	0,48	63	12,6
025-025-080	0,14	0,12	1,20	-	63	12,9
032-032-080	0,14	0,12	-	0,48	63	12
032-032-080	0,14	0,12	1,20	-	63	12,5
032-032-125	0,14	0,12	-	0,48	63	18,6
032-032-125	0,14	0,12	1,20	-	63	19
040-040-100	0,14	0,12	-	0,48	63	21
040-040-100	0,14	0,12	1,20	-	63	21,3
050-050-100	0,14	0,12	-	0,48	63	21
050-050-100	0,14	0,12	1,20	-	63	21,4
050-050-125	0,21	0,18	-	0,66	63	26,6
050-050-125	0,21	0,18	1,60	-	63	25,4
050-050-160	0,90	0,75	-	1,71	80	40,2
050-050-160	0,90	0,75	5,75	-	80	40
065-065-125	0,44	0,37	-	1,25	63	34
065-065-125	0,44	0,37	3,20	-	63	34
080-080-125	0,44	0,37	-	1,25	63	37,5
080-080-125	0,44	0,37	3,20	-	63	38

210 Continuous duty S1
211 ≥ 0,75 kW = IE2

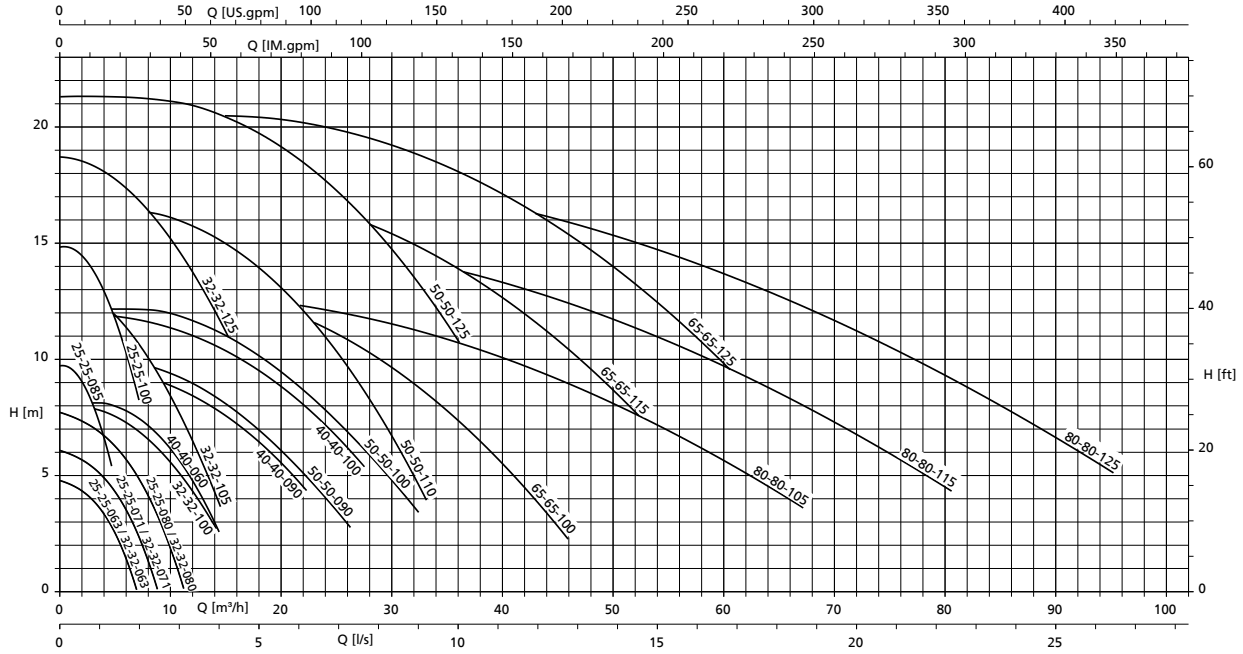
Pump

Technical data of the pump

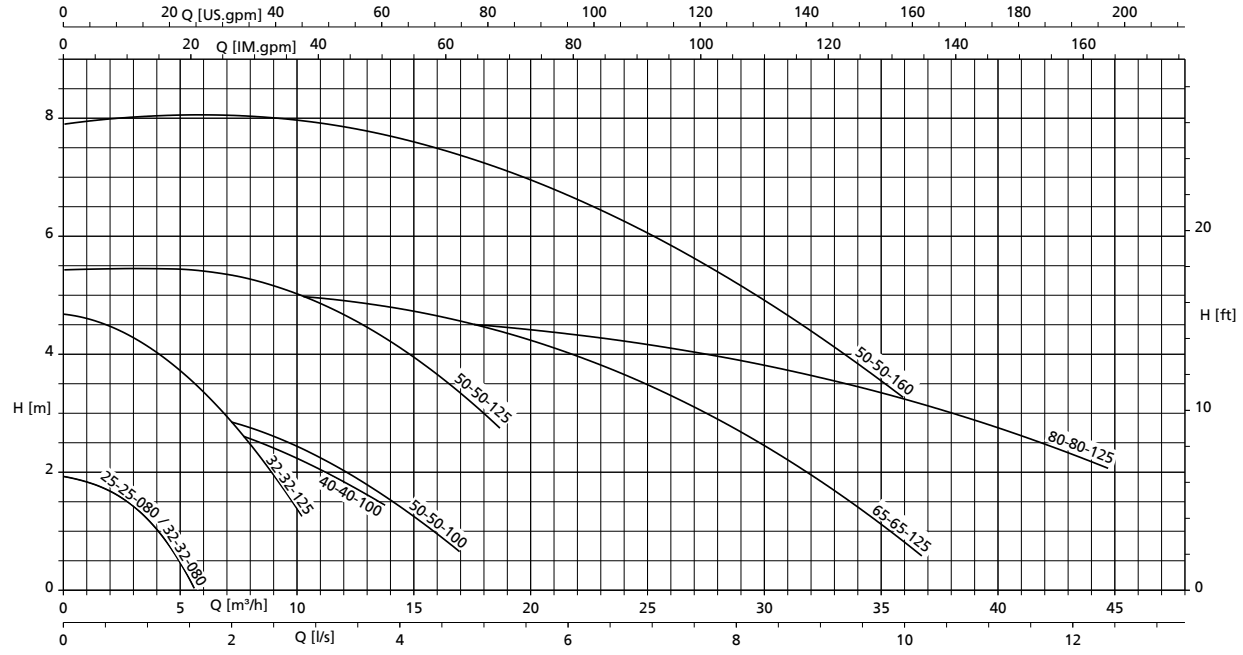
Etaline L	Shaft unit	Impeller diameter	Speed limit	
			Minimum	Maximum
		[mm]	[rpm]	[rpm]
025-025-063	WE 12	63	500	3000
025-025-070.1	WE 12	70	500	3000
025-025-071	WE 12	71	500	3000
025-025-080	WE 12	80	500	3000
025-025-085	WE 12	85	500	3000
025-025-105	WE 12	110	500	3000
032-032-063	WE 12	63	500	3000
032-032-071	WE 12	71	500	3000
032-032-080	WE 12	80	500	3000
032-032-100	WE 12	80	500	3000
032-032-105	WE 12	105	500	3000
032-032-125	WE 12	125	500	3000
040-040-060	WE 12	80	500	3000
040-040-090	WE 12	90	500	3000
040-040-100	WE 12	98	500	3000
050-050-090	WE 12	90	500	3000
050-050-100	WE 12	98	500	3000
050-050-110	WE 14	109	500	3000
050-050-125	WE 12	125	500	3000
050-050-125	WE 16	125	500	3000
050-050-160	WE 14	159	500	3000
050-050-160	WE 16	159	500	3000
065-065-100	WE 14	100	500	3000
065-065-115	WE 16	113	500	3000
065-065-125	WE 12	125	500	3000
065-065-125	WE 16	125	500	3000
080-080-105	WE 14	100	500	3000
080-080-115	WE 16	112	500	3000
080-080-125	WE 12	126,5	500	3000
080-080-125	WE 16	126,5	500	3000

Selection charts

Etaline L (fixed speed version), n = 2900 rpm



Etaline L (fixed speed version), n = 1450 rpm



Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Characteristic curves

General

Test class
Characteristic curves to ISO 9906 Class 3B

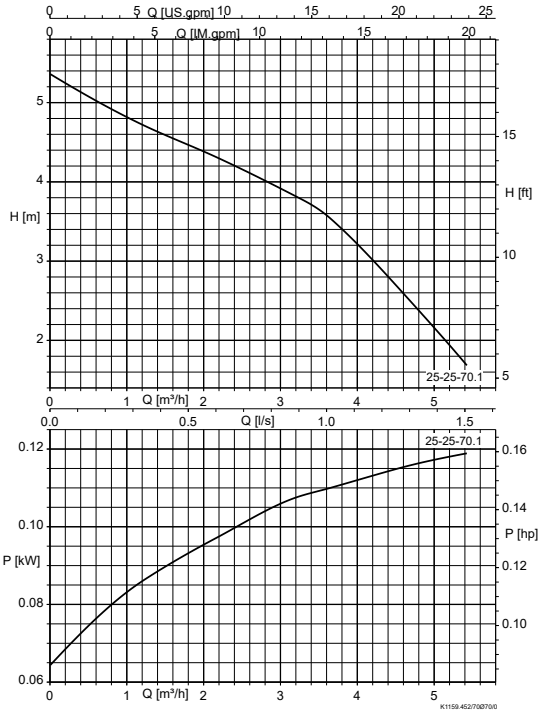
NPSH values
The NPSH values indicated in the characteristic curves correspond to a head drop of 3 %.

NPSH values in part-load conditions
NPSH values for flow rates below Q = 0.3 x Q_{BEP} can only be measured with intense technical efforts. Evidence of NPSH values in the part-load range cannot be provided.

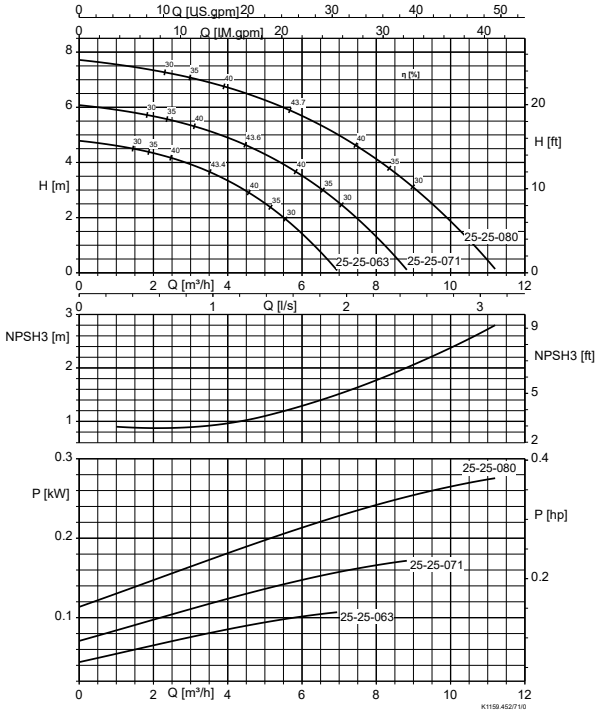
Density of the fluid handled
The indicated heads and performance data apply to pumped fluids with a density ρ = 1.0 kg/dm³ and a kinematic viscosity of up to 20 mm²/s max. If the density ≠ 1.0, the performance data must be multiplied by ρ. For a viscosity > 20 mm²/s the corresponding data for cold water has to be calculated and the impact on the pump's performance has to be determined.

Correction factors
The characteristic curves apply to pumps with cast iron impellers, plastic impellers and bronze impellers.

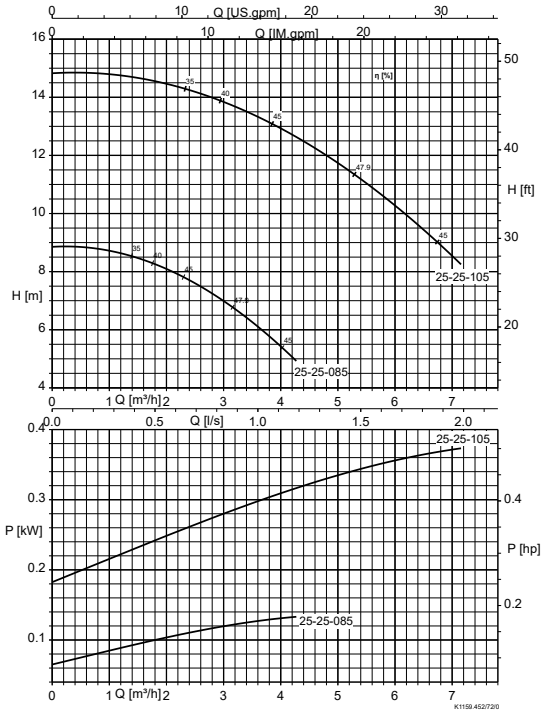
Etaline L 025-025-070.1, n = 2900 rpm



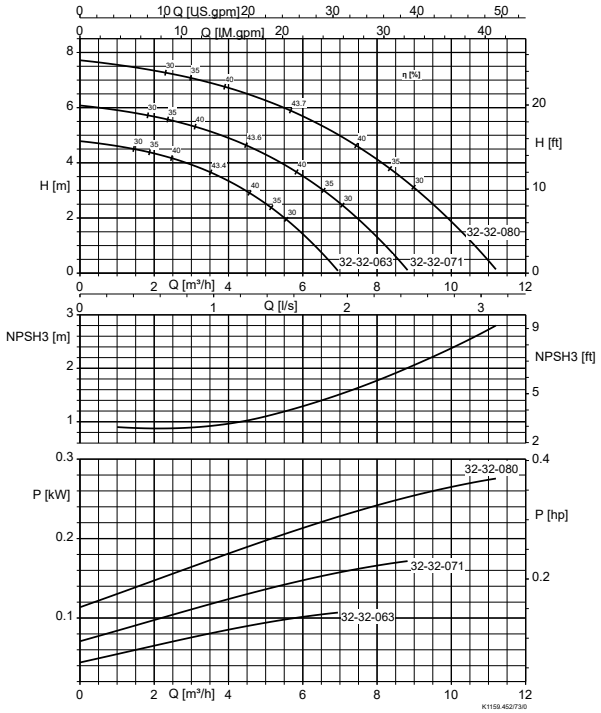
Etaline L 025-025-063/071/080, n = 2900 rpm



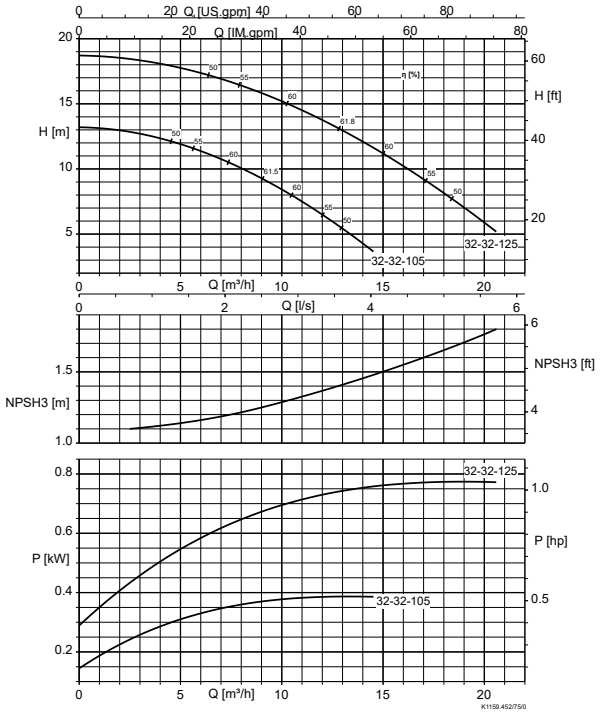
Etaline L 025-025-085/105, n = 2900 rpm



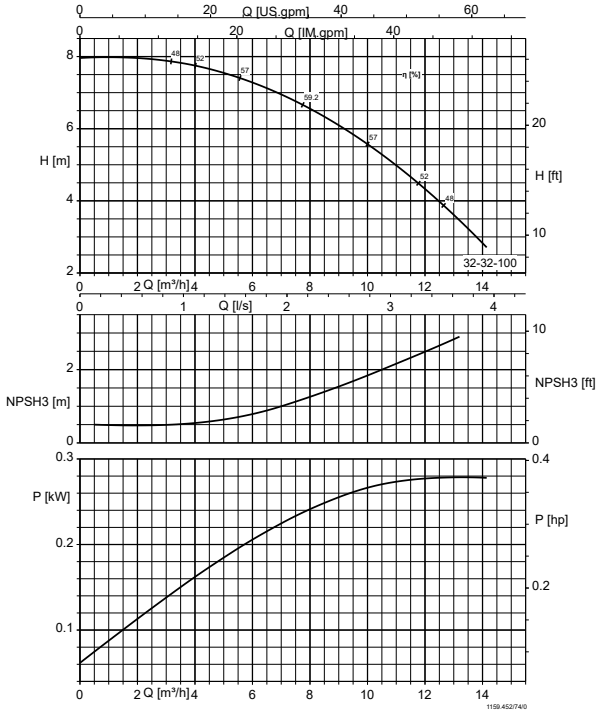
Etaline L 032-032-063/071/080, n = 2900 rpm



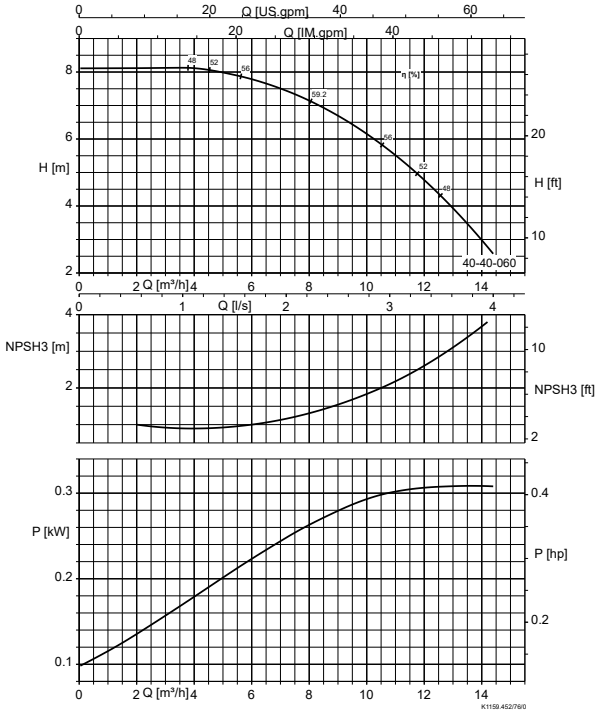
Etaline L 032-032-105/125, n = 2900 rpm



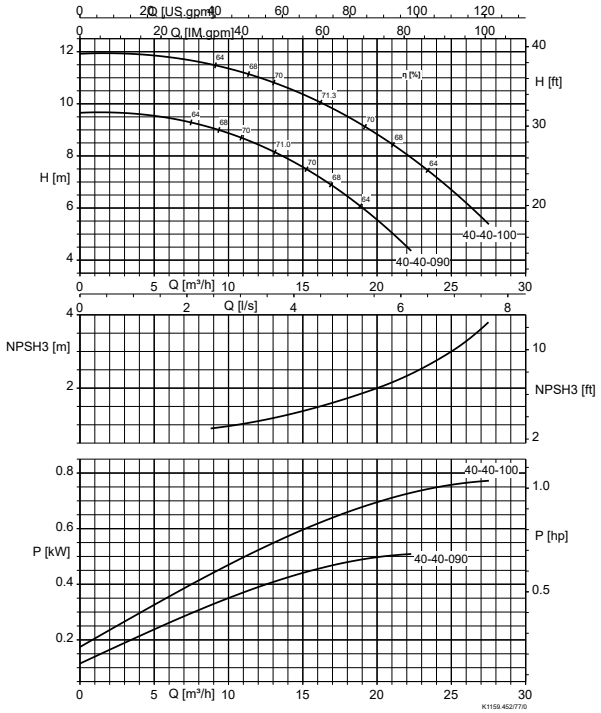
Etaline L 032-032-100, n = 2900 rpm



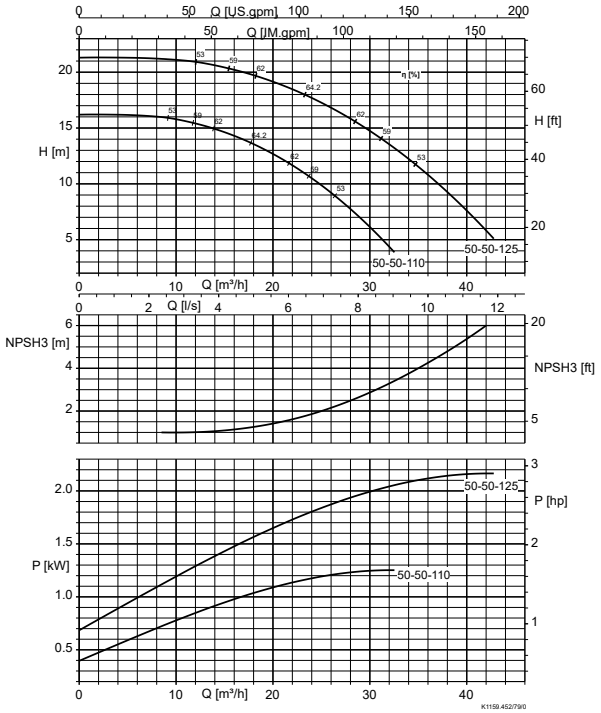
Etaline L 040-040-060, n = 2900 rpm



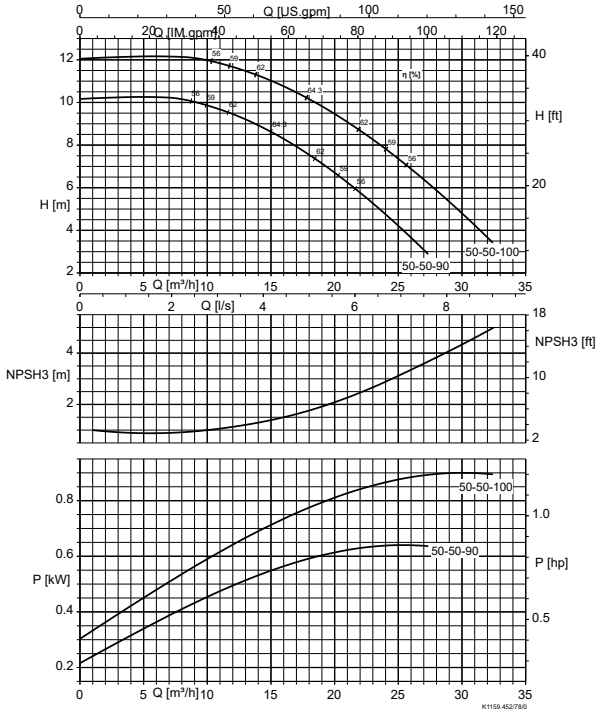
Etaline L 040-040-090/100, n = 2900 rpm



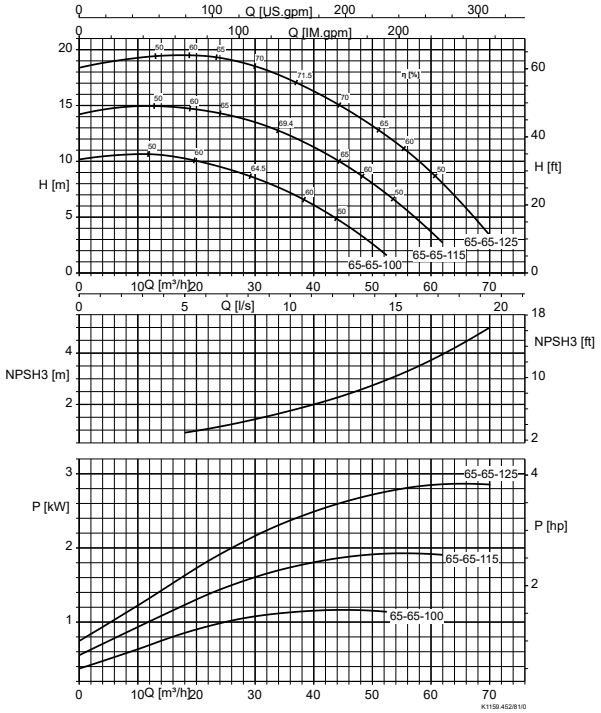
Etaline L 050-050-110/125, n = 2900 rpm



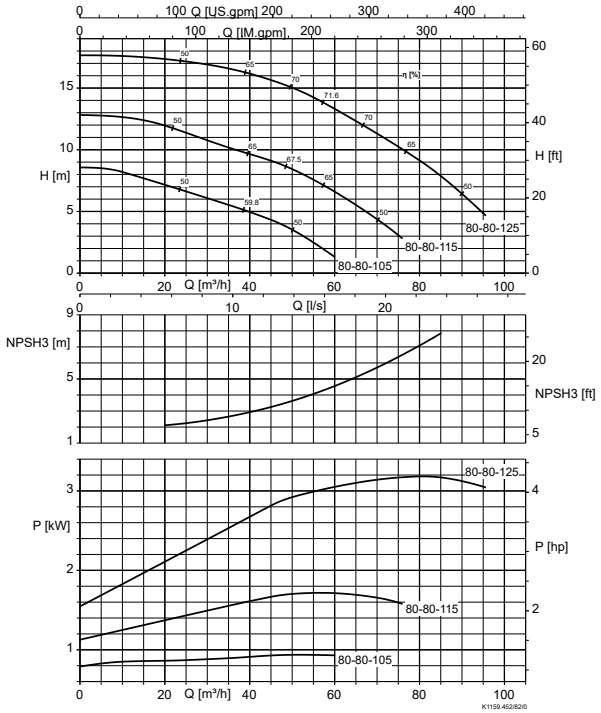
Etaline L 050-050-090/100, n = 2900 rpm



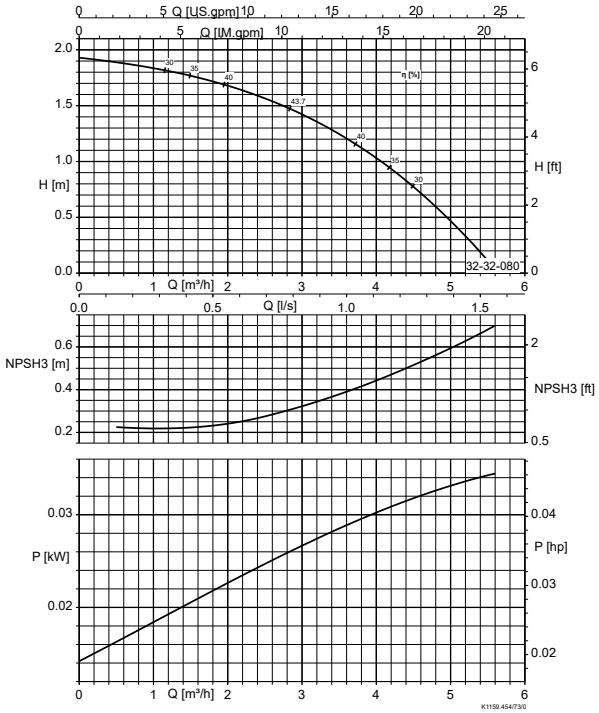
Etaline L 065-065-100/115/125, n = 2900 rpm



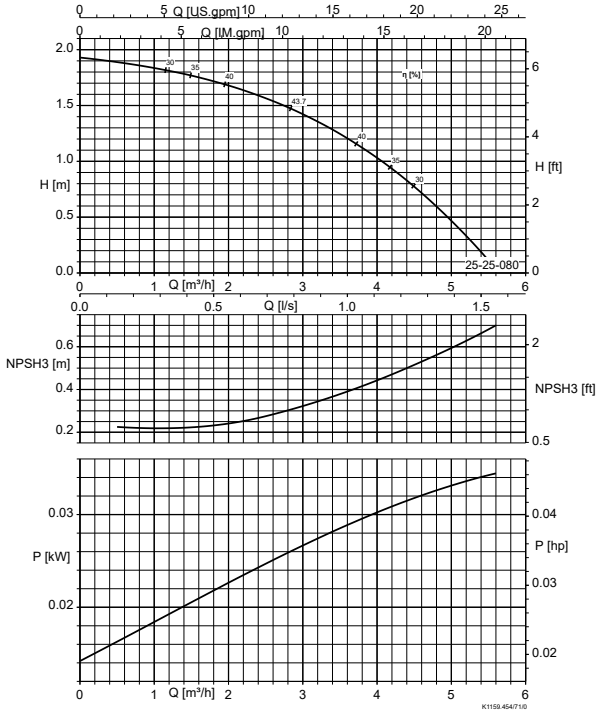
Etaline L 080-080-105/115/125, n = 2900 rpm



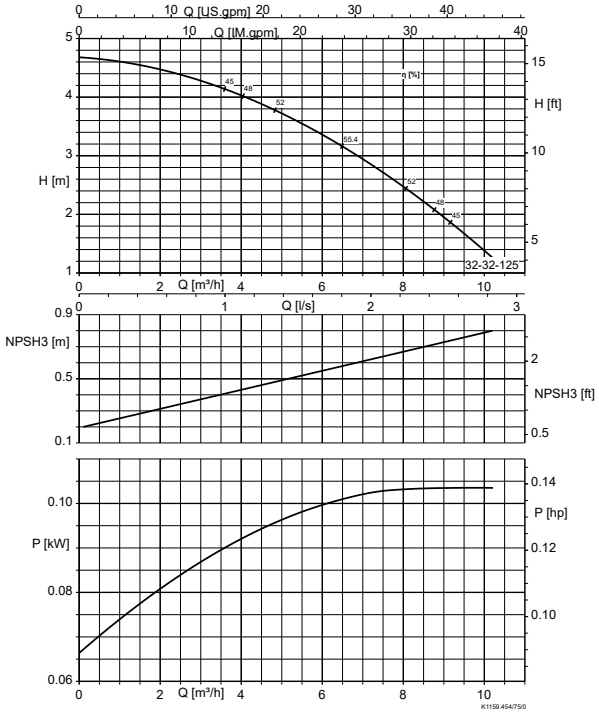
Etaline L 032-032-080, n = 1450 rpm



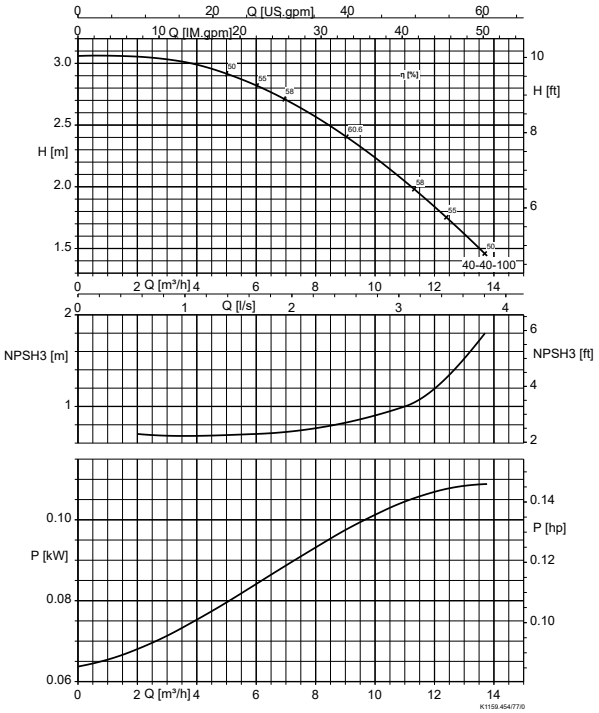
Etaline L 025-025-080, n = 1450 rpm



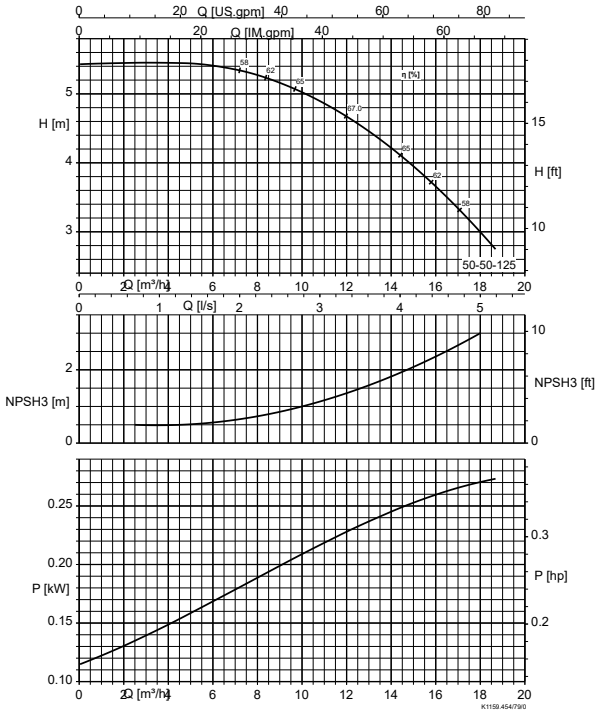
Etaline L 032-032-125, n = 1450 rpm



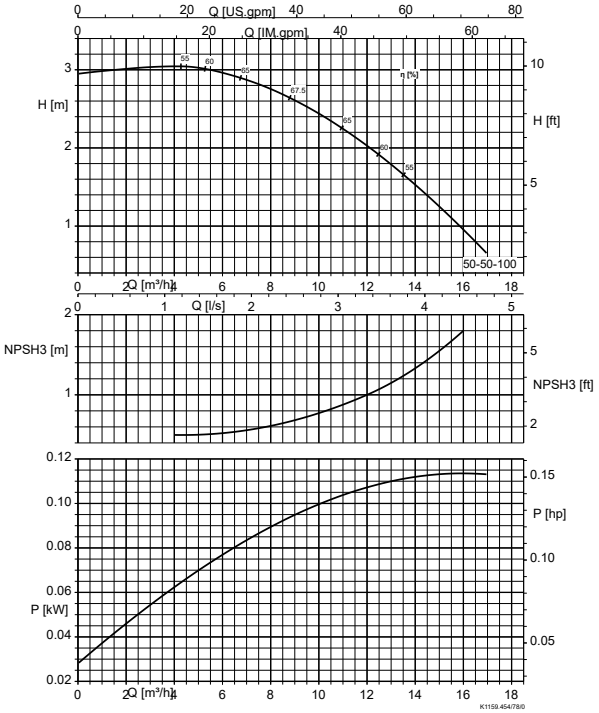
Etaline L 040-040-100, n = 1450 rpm



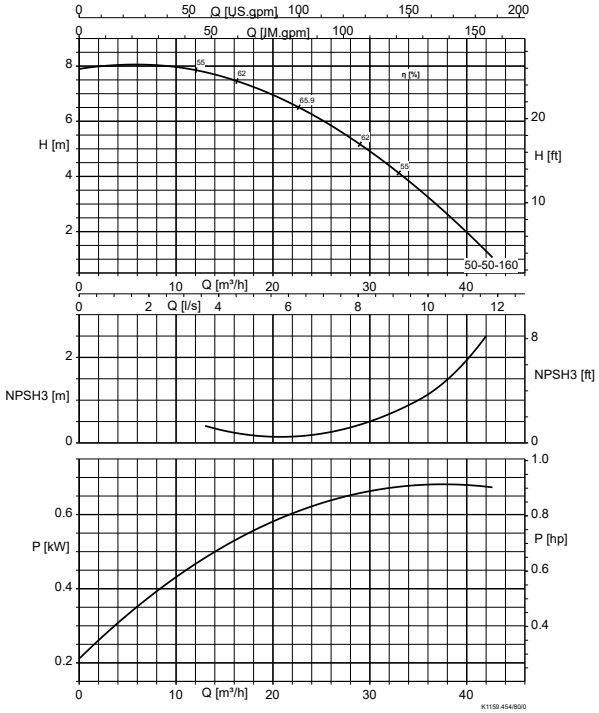
Etaline L 050-050-125, n = 1450 rpm



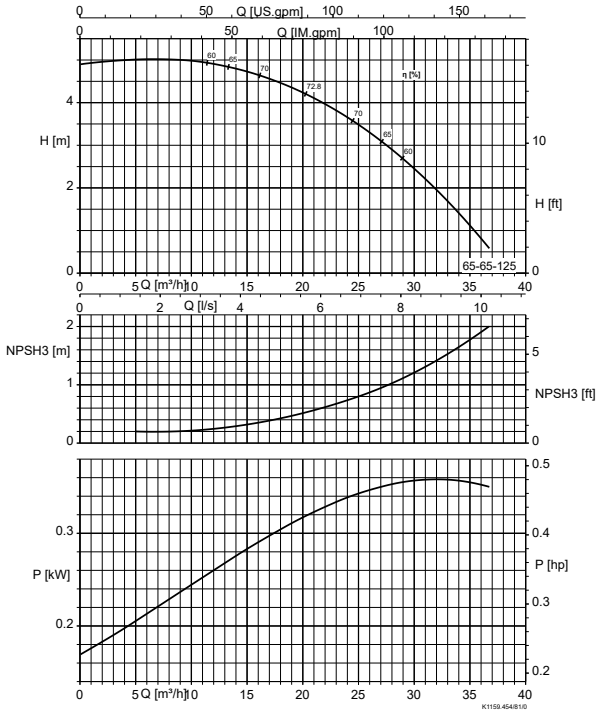
Etaline L 050-050-100, n = 1450 rpm



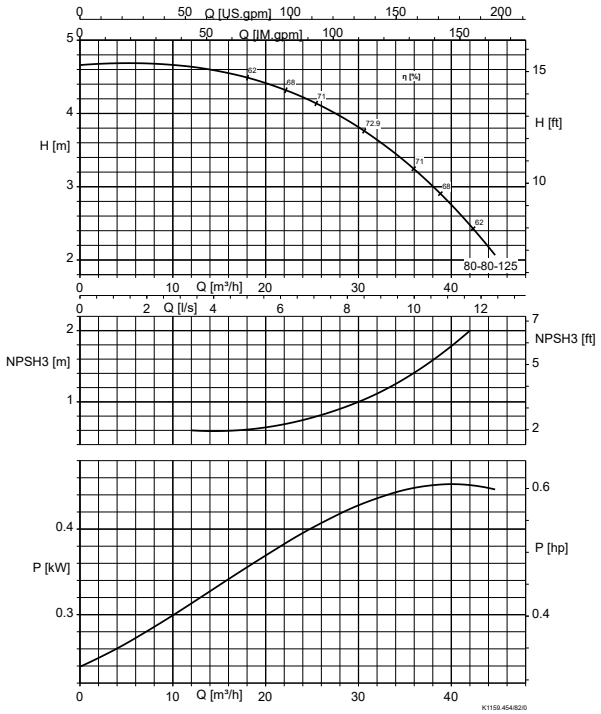
Etaline L 050-050-160, n = 1450 rpm



Etaline L 065-065-125, n = 1450 rpm



Etaline L 080-080-125, n = 1450 rpm



Dimensions

Pump set dimensions (fixed speed version)

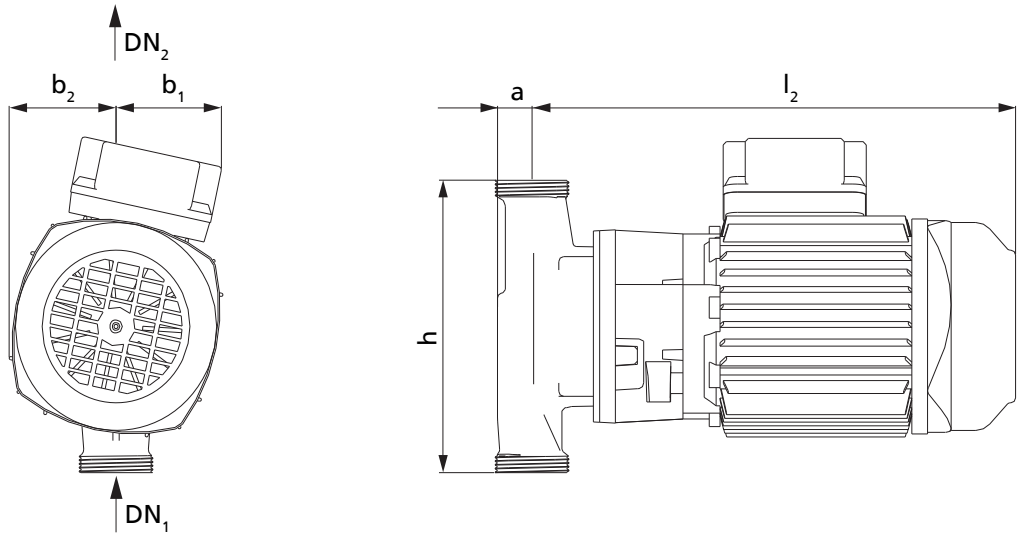


Fig. 245: Dimensions of screw-ended pump set, size < 032-032-100

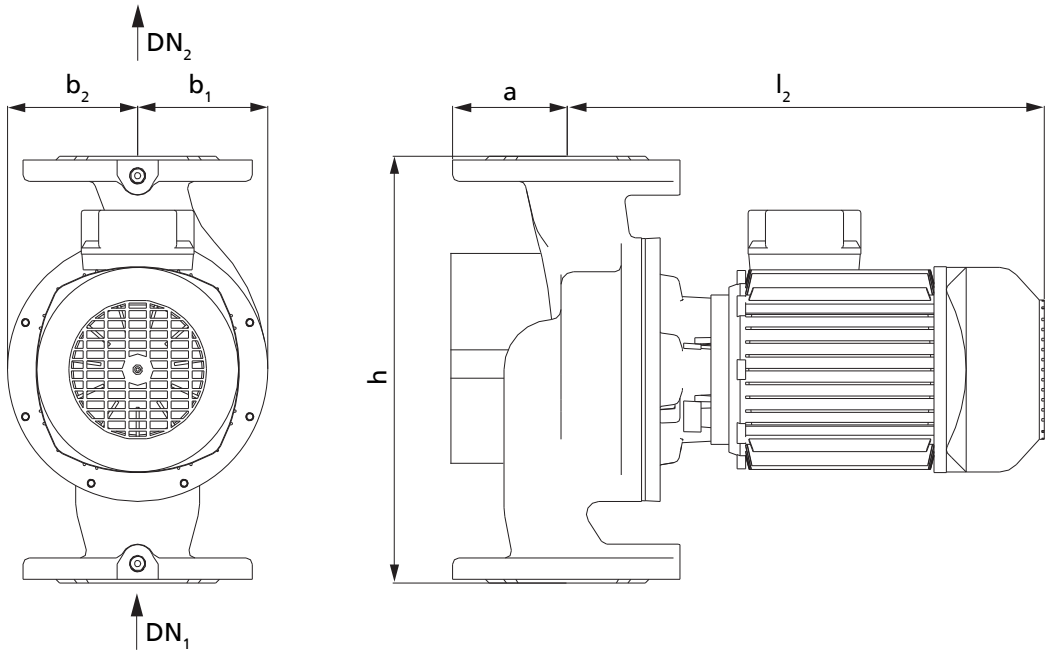


Fig. 246: Dimensions of flanged pump set, size ≥ 032-032-100

Pump set dimensions (fixed speed version), n = 2900 rpm

Etaline L	P_2 max.[212)]	P_N	DN	Connection	a	h	b_1	b_2	l_2
n = 2900 rpm	[kW]	[kW]	[mm]	Thread	[mm]	[mm]	[mm]	[mm]	[mm]
025-025-063	0,30	0,25	25	G 1 1/2	30	180	67	68	266
025-025-070.1	0,14	0,12	25	G 1 1/2	53	180	68	68	282
025-025-070.1	0,21	0,18	25	G 1 1/2	53	180	68	68	282
025-025-071	0,30	0,25	25	G 1 1/2	30	180	67	68	266
025-025-080	0,30	0,25	25	G 1 1/2	30	180	67	68	266
025-025-080	0,44	0,37	25	G 1 1/2	30	180	67	68	315
025-025-085	0,21	0,18	25	G 1 1/2	35	200	80	84	287
025-025-105	0,44	0,37	25	G 1 1/2	35	200	80	84	287
032-032-063	0,30	0,25	32	G 2	30	180	67	68	266

212 Continuous duty S1

Etaline L	P_2 max.[212)]	P_N	DN	Connection	a	h	b_1	b_2	l_2
n = 2900 rpm	[kW]	[kW]	[mm]	Thread	[mm]	[mm]	[mm]	[mm]	[mm]
032-032-071	0,30	0,25	32	G 2	30	180	67	68	266
032-032-080	0,30	0,25	32	G 2	30	180	67	68	266
032-032-080	0,44	0,37	32	G 2	30	180	67	68	315
032-032-100	0,30	0,25	32	-	70	220	72	70	280
032-032-105	0,66	0,55	32	-	70	260	88	80	302
032-032-125	0,90	0,75	32	-	70	260	88	80	302
040-040-060	0,30	0,25	40	-	70	250	75	75	270
040-040-060	0,44	0,37	40	-	70	250	75	75	295
040-040-090	0,66	0,55	40	-	75	250	75	75	295
040-040-090	0,90	0,75	40	-	75	250	75	75	315
040-040-100	0,90	0,75	40	-	75	250	75	75	315
050-050-090	0,66	0,55	50	-	85	280	86	85	280
050-050-100	0,90	0,75	50	-	85	280	86	85	290
050-050-110	1,30	1,10	50	-	85	280	94	85	325
050-050-125	2,20	1,80	50	-	85	280	94	85	355
065-065-100	1,30	1,10	65	-	95	340	105	105	360
065-065-115	2,20	1,80	65	-	95	340	105	105	390
065-065-125	3,40	3,00	65	-	95	340	105	105	405
080-080-105	1,30	1,10	80	-	105	360	130	105	325
080-080-115	2,20	1,80	80	-	105	360	130	105	360
080-080-125	3,40	3,00	80	-	105	360	130	105	380

Pump set dimensions (fixed speed version), n = 1450 rpm

Etaline L	P_2 max.[213)]	P_N	DN	Connection	a	h	b_1	b_2	l_2
n = 1450 rpm	[kW]	[kW]	[mm]	Thread	[mm]	[mm]	[mm]	[mm]	[mm]
025-025-080	0,14	0,12	25	G 1 1/2	30	180	67	68	266
032-032-080	0,14	0,12	32	G 2	30	180	67	68	266
032-032-125	0,14	0,12	32	-	70	260	88	80	302
040-040-100	0,14	0,12	40	-	75	250	75	75	295
050-050-100	0,14	0,12	50	-	85	280	86	85	280
050-050-125	0,21	0,18	50	-	85	280	94	85	280
050-050-160	0,90	0,75	50	-	87	340	155	105	355
065-065-125	0,44	0,37	65	-	95	340	105	105	311
080-080-125	0,44	0,37	80	-	105	360	130	105	275

213 Continuous duty S1

Pump set dimensions (variable speed version)

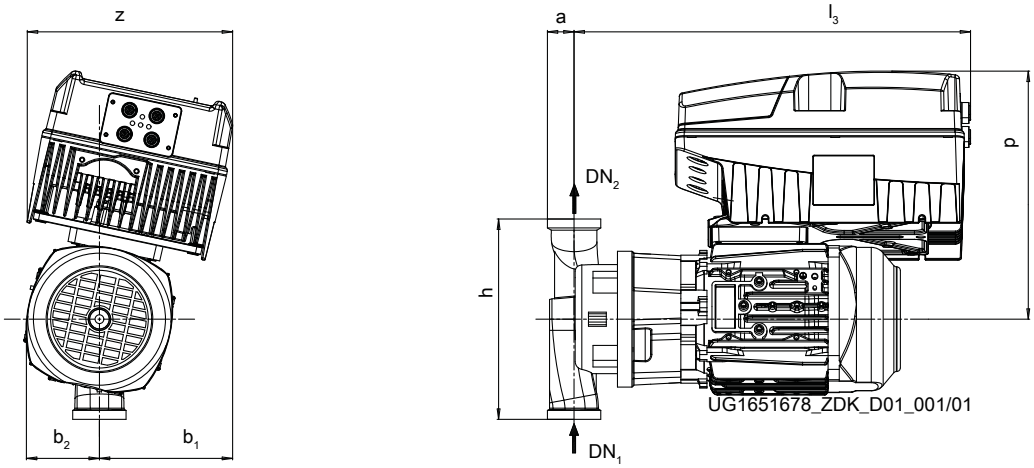


Fig. 247: Dimensions of screw-ended pump set with PumpDrive 2 Eco, size < 032-032-100

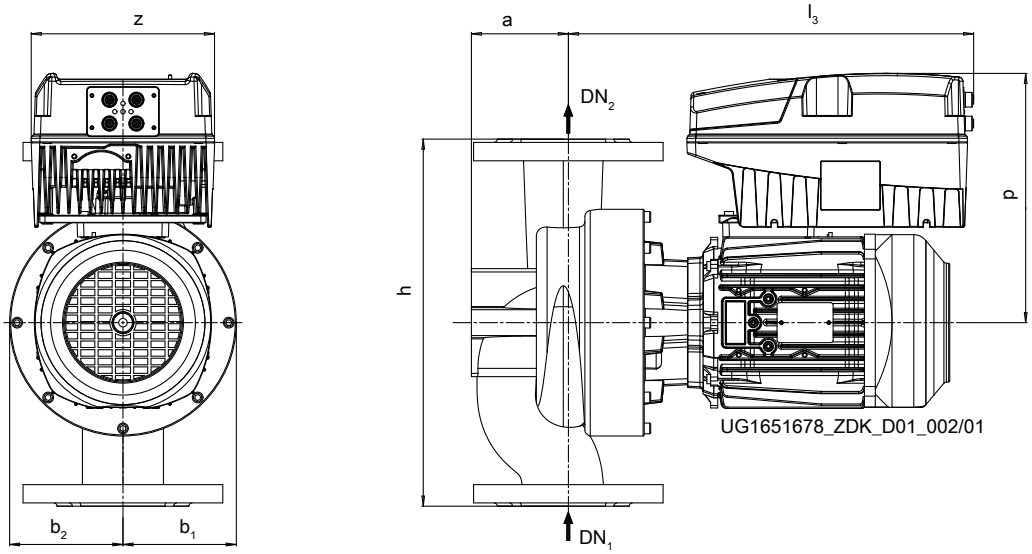


Fig. 248: Dimensions of flanged pump set with PumpDrive 2 Eco, size ≥ 032-032-100

Dimensions of pump set with PumpDrive 2 Eco (variable speed version), n = 2900 rpm

Etaline L PumpDrive 2 Eco	P_2 Max.[215]	P_N	DN	Connection	a	b_1	b_2	h	l_3	p[214]	z
n = 2900 rpm	[kW]	[kW]	[mm]	Thread	[mm]						
025-025-063	0,30	0,25	25	G 1 1/2	30	123	68	180	368	224	171
025-025-070.1	0,14	0,12	25	G 1 1/2	24	123	75	180	368	224	171
025-025-070.1	0,21	0,18	25	G 1 1/2	24	123	75	180	368	224	171
025-025-071	0,30	0,25	25	G 1 1/2	30	123	68	180	368	224	171
025-025-080	0,30	0,25	25	G 1 1/2	30	123	68	180	368	224	171
025-025-080	0,44	0,37	25	G 1 1/2	30	123	68	180	368	224	171
025-025-085	0,21	0,18	25	G 1 1/2	35	85	105	200	376	215	171
025-025-105	0,44	0,37	25	G 1 1/2	35	85	105	200	376	215	171
032-032-063	0,30	0,25	32	G 2	30	123	68	180	364	224	171
032-032-071	0,30	0,25	32	G 2	30	123	68	180	364	224	171
032-032-080	0,30	0,25	32	G 2	30	123	68	180	364	224	171
032-032-080	0,44	0,37	32	G 2	30	123	68	180	364	224	171
032-032-100	0,30	0,25	32	-	70	85	105	220	368	215	171
032-032-105	0,66	0,55	32	-	70	88	105	260	365	215	171

214 For angular position (12°) dimension p is greater
215 Continuous duty S1

Etaline L PumpDrive 2 Eco	P_2 Max.[215]	P_N	DN	Connection	a	b_1	b_2	h	l_3	p[214]	z
n = 2900 rpm	[kW]	[kW]	[mm]	Thread	[mm]						
032-032-125	0,90	0,75	32	-	70	88	85	260	365	223	171
040-040-060	0,30	0,25	40	-	70	123	75	250	367	224	171
040-040-060	0,44	0,37	40	-	70	123	75	250	367	224	171
040-040-090	0,66	0,55	40	-	75	85	105	250	368	215	171
040-040-090	0,90	0,75	40	-	75	85	85	250	368	223	171
040-040-100	0,90	0,75	40	-	75	85	85	250	368	223	171
050-050-090	0,66	0,55	50	-	85	86	105	280	355	215	171
050-050-100	0,90	0,75	50	-	85	86	85	280	355	223	171
050-050-110	1,30	1,10	50	-	85	94	85	280	362	232	171
050-050-110	2,20	1,80	50	-	85	94	105	280	389	245	171
050-050-125	2,20	1,80	50	-	85	94	105	280	389	245	171
065-065-100	1,30	1,10	65	-	95	105	105	340	370	232	171
065-065-115	2,20	1,80	65	-	95	105	105	340	397	245	171
065-065-125	3,40	3,00	65	-	95	105	118	340	397	246	186
080-080-105	1,30	1,10	80	-	105	130	105	360	377	232	171
080-080-115	2,20	1,80	80	-	105	130	105	360	404	245	171
080-080-125	3,40	3,00	80	-	105	130	118	360	404	246	186

Dimensions of pump set with PumpDrive 2 Eco (variable speed version), n = 1450 rpm

Etaline L PumpDrive 2 Eco	P_2 Max.[216]	P_N	DN	Connection	a	b_1	b_2	h	l_3	p	z
n = 1450 rpm	[kW]	[kW]	[mm]	Thread	[mm]						
025-025-080	0,14	0,12	25	G 1 1/2	30	123	68	180	368	224	171
032-032-080	0,14	0,12	32	G 2	30	123	68	180	364	215	171
032-032-125	0,14	0,12	32	-	70	88	105	260	365	215	171
040-040-100	0,14	0,12	40	-	75	85	105	250	368	215	171
050-050-100	0,14	0,12	50	-	85	86	105	280	355	215	171
050-050-125	0,21	0,18	50	-	85	94	105	280	362	215	171
050-050-160	0,90	0,75	50	-	87	155	105	340	370	232	171
065-065-125	0,44	0,37	65	-	95	105	105	340	370	215	171
080-080-125	0,44	0,37	80	-	105	130	105	360	377	215	171

216 Continuous duty S1

Connections

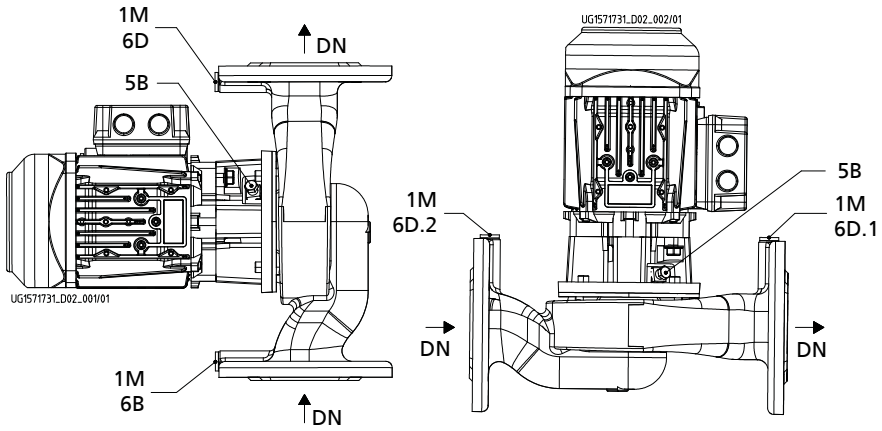


Fig. 249: Connections

Connections

Connection	Description	Configuration	Position
1M	Connection for pressure gauge	Drilled and closed	Suction flange and discharge flange
5B	Vent connection for the mechanical seal chamber	Plugged with vent plug	Casing cover
6B	Fluid drain	Drilled and closed	Volute casing
6D, 6D.1, 6D.2	Fluid priming and venting	Drilled and closed	Volute casing

Connection

Etaline L	1M, 6B, 6D, 6D.1, 6D.2
032-032-100	G 1/4
032-032-105	G 1/4
032-032-125	G 1/4
040-040-060	G 1/4
040-040-090	G 1/4
040-040-100	G 1/4
050-050-090	G 1/4
050-050-100	G 1/4
050-050-110	G 1/4
050-050-125	G 1/4
050-050-160	G 1/4
065-065-100	G 1/4
065-065-115	G 1/4
065-065-125	G 1/4
080-080-105	G 1/4
080-080-115	G 1/4
080-080-125	G 1/4

Flange design

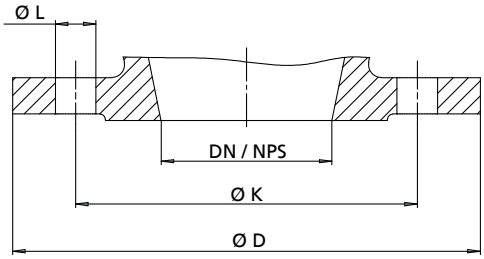


Fig. 250: Flange dimensions

Flange dimensions [mm]

DN / NPS	Standard							Comment
	EN 1092-2						DIN EN ISO 228-1	
	Material							
	G, B							
	PN 10			PN 6			Thread	
	Ø K	Ø D	Number of holes L	Ø K	Ø D	Number of holes L		
25	-	-	-	-	-	-	G 1 1/2	-
32 / NPS11/4	100	140	4×∅19	90	140	4×∅14	G 2[217)]	Adapter flange PN6/ PN10
40 / NPS11/2	110	150	4×∅19	100	150	4×∅14	-	
50 / NPS2	125	165	4×∅19	110	165	4×∅14	-	
65 / NPS21/2	145	185	4×∅19	130	185	4×∅14	-	
80 / NPS3	160	200	8×∅19	-	-	-	-	-

Flange design by materials

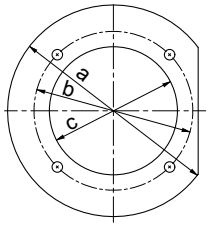
Material variant	Standard	Nominal size	Pressure class
GG, GP, BB, BP	DIN EN ISO 228-1	DN 25	PN 10
	DIN EN ISO 228-1	032-032-063 to 032-032-080	PN 10
	Drilled to EN 1092-2	DN 32 - DN 65	PN 6 / PN 10
	EN 1092-2	DN 80	PN 10

217 For sizes < 032-032-100 only

Accessories

Pump accessories

Pump accessories

Component	Ø a / Ø b / Ø c [mm]	For size	Mat. No.	[kg]
Blind flange with sealing element 	140 / 105 / 84,8	025-025-063	01734726	0,8
		025-025-070.1		
		025-025-071		
		025-025-080		
		032-032-063		
		032-032-071		
		032-032-080		
		040-040-060		
	140 / 122 / 101,8	032-032-100	01734727	0,9
		040-040-090		
		040-040-100		
		050-050-090		
		050-050-100		
	161 / 147 / 125,8	025-025-085	01734725	1,6
		025-025-105		
		025-025-110		
		025-025-115		
		025-025-120		
		032-032-105		
		032-032-125		
		050-050-110		
		050-050-125		
	210 / 171,5 / 160,8	050-050-160	01734723	3,2
	210 / 196 / 126,5	065-065-100	01734724	2,6
		065-065-115		
		065-065-125		
		080-080-105		
		080-080-115		
		080-080-125		
Pump foot			On request	

In-line Pumps

Etaline

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000113

Product benefits

- Maximum energy efficiency through demand-driven operation in combination with KSB SuPremE IE4/IE5 motor[218)] to IEC TS 60034-30-2:2016
- PumpDrive 2 / PumpDrive 2 Eco perfectly matched to pump and motor by default factory parameter settings
- Motor-mounted variable speed system up to 45 kW saves space
- Pump operation made fully transparent with PumpMeter

Further information

Prices on request

Selection charts 545
Characteristic curves 546
Dimensions 555
Accessories 568

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[219)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

218 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.
219 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for water pumps with a maximum nominal shaft power of 150 kW as per Regulation (EU) No. 547/2012.

Main applications

- Service water supply systems
- Heating systems
- Industrial recirculation systems
- Air-conditioning systems
- Cooling circuits
- Water supply systems[220)]

Fluids handled

- Fluids not chemically or mechanically aggressive to the materials

Further information on fluids handled

Overview of fluids handled (⇨ Page 533)

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 700
	Q [l/s]	≤ 194
Head	H [m]	≤ 96
Fluid temperature	T [°C]	≥ -30
		≤ +140
Operating pressure	p [bar]	≤ 16

Design details

Design

- Close-coupled design / in-line design
- Single-stage
- Horizontal installation / vertical installation
- Rigid connection between pump and motor
- Back pull-out design
- Fixed speed version (without PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R) / variable speed version (with PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R)

Pump casing

- Radially split volute casing
- In-line design

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- II 3G Ex ec IIC T3 Gc
- II 2G Ex eb IIC T3 Gb
- II 2G Ex db (eb) IIB T4 Gb
- II 2G Ex db (eb) IIC T4 Gb

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[221)] (PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 0.55 kW to 45 kW
- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

220 No drinking water in acc. with UBA (German drinking water regulations to German Environment Agency)
221 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

KSB SuPremE X1:

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2 / PumpDrive 2 Eco:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for motor mounting, wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

PumpMeter:

- Intelligent pressure transmitter for pumps, with on-site display of measured values and operating data
- For recording the load profile of the pump
- Supplied completely assembled and parameterised for the individual pump

KSB Guard

- System for monitoring the pump's condition by means of temperature and vibration sensors
- Measured values and operating data may be retrieved via the KSB Guard app and the web portal at any time.

Shaft seal

- Standardised mechanical seal to EN 12756
- Shaft equipped with replaceable shaft protecting sleeve in the shaft seal area

Impeller type

- Closed radial impeller

Bearings

- Radial ball bearings in the motor housing
- Grease lubrication

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Designation

Designation example

Position																																											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
E	T	L	-	0	3	2	-	0	3	2	-	1	6	0	-	G	G	S	A	V	0	1	D	2	1	1	0	0	2	e	x	B	K	S	B	I	E	3	P	D	2	E	M
See name plate and data sheet																									See data sheet																		

Designation key

Position	Code	Description		
1-4	Pump type			
	ETL	Etaline		
	ETLZ	Etaline Z (refer to Etaline to select back pull-out unit)		
5-16	Size [mm], e.g.			
	032	Nominal suction nozzle diameter		
	032	Nominal discharge nozzle diameter		
	160	Nominal impeller diameter		
17	Pump casing material			
	G	Cast iron	EN-GJL-250 / A48CL35	
18	Impeller material			
	G	Cast iron	EN-GJL-250 / A48CL35	
	C	Stainless steel	1.4408 / A743CF8M	
	B	Bronze	CC480K-GS / B30 C90700	
19	Design			
	H	Approved for drinking water to ACS		
	K	Approved for drinking water to KSB standard		
	S	Standard		
	U	Approved for drinking water to UBA		
	W	Approved for drinking water to WRAS		
	X	Non-standard (BT3D, BT3)		
20	Casing cover			
	A	Conical seal chamber		
21	Shaft seal type			
	V	Single mechanical seal with vented chamber (A-type cover)		
22-23	Seal code, single mechanical seal			
	01	Q1Q1VGG	1 (ZN1181)	≥ -20 - ≤ +110 [°C]
	06	U3BEGG (shaft units 25, 35)	RMG13G606	≥ -30 - ≤ +140 [°C]
	07	Q1Q1EGG	1A (ZN1181)	≥ -30 - ≤ +110 [°C]
	09	U3U3VGG	MG13G60	≥ -20 - ≤ +110 [°C]
	10	Q1Q1X4GG	1 (ZN1181)	≥ -20 - ≤ +110 [°C]
	11	BQ1EGG-WA (WA = drinking water)	1 (ZN1181)	≥ -30 - ≤ +110 [°C]
	22	AQ1EGG (shaft unit 55)	M32N69	≥ -30 - ≤ +140 [°C]
	66	Q7Q7EGG	MG13G6	≥ -30 - ≤ +120 [°C]
24	Scope of supply			
	A	Pump only (Fig. 0)		
	D	Pump, motor		
	E	Back pull-out unit		
25	Shaft unit			
	2	Shaft unit 25		
	3	Shaft unit 35		
	5	Shaft unit 55		
26-29	Motor rating P_N [kW]			
	0002	0,25		
	...	...		
	0550	55,00		
30	Number of motor poles			
31-32	Explosion protection			
	ex	With explosion-proof motor		
	--	Without explosion-proof motor		
33	Product generation			

Position	Code	Description
33	B	Etaline / Etaline Z
34-36	Motor manufacturer	
	KSB	KSB (ISO 9001)
	SIE	Siemens
	LOH	Loher
	HAL	Halter
37-39	Efficiency class	
40-43	PumpDrive	
	PD2	PumpDrive 2
	PD2E	PumpDrive 2 Eco
	IFS	MyFlow Drive
44	PumpMeter	
	M	PumpMeter

Materials

Symbols key

Symbol	Description
✘	Standard
-	Version not available / not feasible

Overview of available materials

Part No.	Description	Material	Material variant		
			GG	GB	GC
102	Volute casing	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✘	✘	✘
161	Casing cover, conical	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✘	✘	✘
210	Shaft	Tempered steel C45+N	✘	✘	✘
		Stainless steel 1.4571 (optional)	✘	✘	✘
230	Impeller	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✘	-	-
		Bronze CC480K-GS / B30 C90700	-	✘	-
		Stainless steel 1.4408 / A743 Gr. CF8 M [222)]	-	-	✘
341	Drive lantern	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✘	✘	✘
400	Sealing elements	DPAF, asbestos-free	✘	✘	✘
502.01	Casing wear ring, suction side	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✘	✘	✘
		Bronze CC495K-GS	-	✘	-
502.02	Casing wear ring, discharge side	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✘	✘	✘
		Bronze CC495K-GS	-	✘	-
523	Shaft sleeve	Stainless steel (CrNiMo steel)	✘	✘	✘
902	Studs	Steel 8.8	✘	✘	✘
903	Plug	Steel	✘	✘	✘
920	Nut	8+A2A / 8+B633 SC1 TP3	✘	✘	✘
920.95	Impeller nut	Stainless steel (CrNiMo steel)	✘	✘	✘
		Steel 8	✘	✘	-

222 Size Etaline GC 125-125-250 not available in Europe.

Overview of product features / selection tables

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

Symbols key

Symbol	Description
✘	Standard
-	Version not available / not feasible

Excerpt from the overview of fluids handled with associated material variants

Fluid handled	T[223]		Materials			Shaft seal							Comments
			Casing/impeller			Mechanical seal							
	Minimum	Maximum	Grey cast iron / grey cast iron	Grey cast iron / stainless steel	Grey cast iron / tin bronze	U3BEGG (WE 25, 35)	AQ1EGG (WE 55)	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG	Q7Q7EGG	
	[°C]		GG	GC	GB	6	22	7	9	10	11	66	
Water													
Service water	-	≤ +110	✘	-	-	-	-	-	-	✘	-	-	CrNiMo cast steel can be used.
Fire-fighting water[224]	-	≤ +60	-	-	✘	-	-	-	-	✘	-	-	Contact KSB for supply to VdS guidelines.
Heating water[225]	-	≤ +110	✘	-	-	-	-	-	-	-	✘	-	If used as circulating pump to DIN 4752: p max ≤ 10 bar
Heating water	-	≤ +140	✘	-	-	✘	✘	-	-	-	-	-	
Condensate	-	≤ +110	✘	-	-	-	-	-	-	-	✘	-	-
Cooling water without antifreeze	-	≤ +60	✘	-	-	-	-	-	-	✘	-	-	Open circuit: GB 10 required
Cooling water with antifreeze[226], pH ≥ 7.5	≥ -30	≤ +60	✘	-	-	-	-	-	-	-	✘	-	Open circuit: GB required
Cooling water with antifreeze[226], pH ≥ 7.5	≥ +60	≤ +110	✘	-	-	-	-	✘	-	-	-	-	Open circuit: GB required
Slightly contaminated water	-	≤ +60	✘	-	-	-	-	-	-	✘	-	-	-
Pure water[227]	-	≤ +60	✘	-	-	-	-	-	-	-	✘	-	-
Raw water	-	≤ +60	✘	-	-	-	-	-	-	✘	-	-	-
Swimming pool water (fresh water)	-	≤ +60	✘	-	-	-	-	-	-	✘	-	-	Also applies to requirements as per DIN 19643
Swimming pool water[228]: filtration	-	≤ +40	-	-	✘	-	-	-	-	✘	-	-	Variant GB: shaft C45+N, shaft sleeve CrNiMo steel, nut A4/AISI 316, key A2, casing wear ring (suction and discharge side) grey cast iron JL 1040/ CI
Swimming pool water[228]: water features; without turbulences and/or air content	-	≤ +40	-	-	✘	-	-	-	-	✘	-	-	Variant GB: shaft C45+N, shaft sleeve CrNiMo steel, nut A4/ AISI 316, key A2, casing wear ring (suction and discharge side) CC495K-GS
Dam water	-	≤ +60	-	-	✘	-	-	-	-	✘	-	-	If solids are contained, contact KSB.
Drinking water[229]	-	≤ +60	-	-	✘	-	-	-	-	-	✘	-	-
Partly desalinated water	-	≤ +120	✘	-	-	-	-	-	-	-	✘	-	-
Fully desalinated water as boiler feed water	-	≤ +110	✘	-	-	-	-	-	-	-	✘	-	-
Refrigerants, cooling brines													
Cooling brine; inorganic, pH > 7.5, inhibited	≥ -30	≤ +25	✘	-	-	-	-	-	-	-	-	✘	-

223 T = fluid temperature
224 General evaluation criteria for results of water analysis: pH ≥ 7; chlorides content (Cl) ≤ 250 mg/kg. Chlorine (Cl2) ≤ 0.6 mg/kg
225 Treatment to VdTÜV 1466, additional requirement: O2 t ≤ 0.02 mg/l
226 Antifreeze on ethylene glycol basis with inhibitors, content > 20 % to 50 % (e.g. Antifrogen N)
227 No pure water, electrical conductivity at 25 °C: ≤ 800 µS/cm, neutral with regard to chemical corrosion
228 France: Observe the rules as per ministerial order dated 18 January 2002.
229 For France, ACS approval is required.

Fluid handled	T[223]		Materials			Shaft seal							Comments
			Casing/impeller			Mechanical seal							
	Minimum	Maximum	Grey cast iron / grey cast iron	Grey cast iron / stainless steel	Grey cast iron / tin bronze	U3BEGG (WE 25, 35)	AQ1EGG (WE 55)	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG	Q7Q7EGG	
	[°C]		GG	GC	GB	6	22	7	9	10	11	66	
Water with antifreeze, pH ≥ 7.5	≥ -30	≤ +60	✘	-	-	-	-	-	-	-	✘	-	-
Water with antifreeze, pH ≥ 7.5	≥ +60	≤ +110	✘	-	-	-	-	✘	-	-	-	-	-
Oils/emulsions													
Drilling emulsion, grinding emulsion	-	≤ +60	✘	-	-	-	-	-	✘	-	-	-	-
Oil-water emulsion	-	≤ +60	✘	-	-	-	-	-	✘	-	-	-	-

Overview of variants

Other designs on request

Symbols key

Symbol	Description
✘	Standard
-	Version not available / not feasible

Overview of Etaline / Etaline Z variants

Variant	102 / Volute casing	230 / Impeller	Mechanical seal	T	Main applications				
				[°C]	Handling clean or aggressive fluids not chemically and mechanically aggressive to the pump materials	Water supply systems	Cooling circuits	Heating systems	Air-conditioning systems
GG06	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	SU 25, 35: mech. seal U3BEGG SU 55: mech. seal AQ1EGG	≥ -30 - ≤ +140	-	-	-	✘	-
GG10	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Mech. seal Q1Q1X4GG	≥ -20 - ≤ +110	-	✘	-	-	-
GG11	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Mech. seal BQ1EGG	≥ -30 - ≤ +110	✘	✘	✘ 230)	-	✘ 230)
GB06	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Bronze CC480K-DW / B30 C90700	SU 25, 35: mech. seal U3BEGG SU 55: mech. seal AQ1EGG	≥ -30 - ≤ +140	-	-	-	✘	-
GB10	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Bronze CC480K-DW / B30 C90700	Mech. seal Q1Q1X4GG	≥ -20 - ≤ +110	-	✘	-	-	-
GB11	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Bronze CC480K-DW / B30 C90700	Mech. seal BQ1EGG	≥ -30 - ≤ +110	✘	✘	✘ 230)	-	✘ 230)

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

230 Q1Q1EGG / Q7Q7EGG, fluid handled: water, glycol with inhibitors

Technical data

Motor (fixed speed version), n = 2900 rpm

50 Hz, technical data of the motor, n = 2900 rpm (fixed speed version)

Etaline	Efficiency class	P_N	I_N	Motor	[kg]
			3~400 V		
n = 2900 rpm		[kW]	[A]		
032-032-160	IE3	1,10	2,14	080M	35,14
032-032-160	IE3	1,50	2,85	090S	38,17
032-032-160	IE3	2,20	3,99	090L	40,97
032-032-160	IE3	3,00	5,89	100L	47,61
032-032-160	IE3	4,00	7,79	112M	51,61
032-032-160	IE3	5,50	10,42	132S	72,02
032-032-160	IE3	7,50	13,79	132S	79,02
032-032-200	IE3	3,00	5,89	100L	56,74
032-032-200	IE3	4,00	7,79	112M	60,74
032-032-200	IE3	5,50	10,42	132S	81,15
032-032-200	IE3	7,50	13,79	132S	88,15
032-032-200	IE3	11,00	20,63	160M	114,36
032-032-200	IE3	15,00	28,42	160M	125,36
040-040-160	IE3	2,20	3,99	090L	41,49
040-040-160	IE3	3,00	5,89	100L	48,13
040-040-160	IE3	4,00	7,79	112M	52,13
040-040-160	IE3	5,50	10,42	132S	72,54
040-040-160	IE3	7,50	13,79	132S	79,54
040-040-160	IE3	11,00	20,63	160M	105,75
040-040-250	IE3	5,50	10,42	132S	87,9
040-040-250	IE3	7,50	13,79	132S	94,9
040-040-250	IE3	11,00	20,63	160M	121,11
040-040-250	IE3	15,00	28,42	160M	132,11
040-040-250	IE3	18,50	33,68	160L	149,11
040-040-250	IE3	22,00	40,53	180M	214,74
040-040-250	IE3	30,00	55,79	200L	284,23
040-040-250	IE3	37,00	68,42	200L	304,23
050-050-160	IE3	2,20	3,99	090L	45,78
050-050-160	IE3	3,00	5,89	100L	52,42
050-050-160	IE3	4,00	7,79	112M	56,42
050-050-160	IE3	5,50	10,42	132S	76,83
050-050-160	IE3	7,50	13,79	132S	83,83
050-050-160	IE3	11,00	20,63	160M	110,04
050-050-160	IE3	15,00	28,42	160M	121,04
050-050-250	IE3	7,50	13,79	132S	97,93
050-050-250	IE3	11,00	20,63	160M	124,14
050-050-250	IE3	15,00	28,42	160M	135,14
050-050-250	IE3	18,50	33,68	160L	152,14
050-050-250	IE3	22,00	40,53	180M	217,77
050-050-250	IE3	30,00	55,79	200L	287,26
050-050-250	IE3	37,00	68,42	200L	307,26
065-065-160	IE3	3,00	5,89	100L	54,67
065-065-160	IE3	4,00	7,79	112M	58,67
065-065-160	IE3	5,50	10,42	132S	79,08
065-065-160	IE3	7,50	13,79	132S	86,08
065-065-160	IE3	11,00	20,63	160M	112,29
065-065-160	IE3	15,00	28,42	160M	123,29
065-065-160	IE3	18,50	33,68	160L	140,29
065-065-160	IE3	22,00	40,53	180M	205,92
065-065-250	IE3	11,00	20,63	160M	128,21
065-065-250	IE3	15,00	28,42	160M	139,21
065-065-250	IE3	18,50	33,68	160L	156,21

Etaline	Efficiency class	P_N	I_N	Motor	[kg]
			3~400 V		
n = 2900 rpm		[kW]	[A]		
065-065-250	IE3	22,00	40,53	180M	221,84
065-065-250	IE3	30,00	55,79	200L	291,33
065-065-250	IE3	37,00	68,42	200L	311,33
080-080-160	IE3	5,50	10,42	132S	85,12
080-080-160	IE3	7,50	13,79	132S	92,12
080-080-160	IE3	11,00	20,63	160M	118,33
080-080-160	IE3	15,00	28,42	160M	129,33
080-080-160	IE3	18,50	33,68	160L	146,33
080-080-160	IE3	22,00	40,53	180M	211,96
080-080-160	IE3	30,00	55,79	200L	281,45
080-080-200	IE3	11,00	20,63	160M	127,11
080-080-200	IE3	15,00	28,42	160M	138,11
080-080-200	IE3	18,50	33,68	160L	155,11
080-080-200	IE3	22,00	40,53	180M	220,74
080-080-200	IE3	30,00	55,79	200L	290,23
080-080-200	IE3	37,00	68,42	200L	310,23
100-100-125	IE3	5,50	10,42	132S	90,06
100-100-125	IE3	7,50	13,79	132S	97,06
100-100-125	IE3	11,00	20,63	160M	123,27
100-100-125	IE3	15,00	28,42	160M	134,27
100-100-160	IE3	11,00	20,63	160M	129,85
100-100-160	IE3	15,00	28,42	160M	140,85
100-100-160	IE3	18,50	33,68	160L	157,85
100-100-160	IE3	22,00	40,53	180M	223,48
100-100-160	IE3	30,00	55,79	200L	292,97
100-100-160	IE3	37,00	68,42	200L	312,97
125-125-160	IE3	18,50	33,68	160L	212,48
125-125-160	IE3	22,00	40,53	180M	278,1
125-125-160	IE3	30,00	55,79	200L	347,39
125-125-160	IE3	37,00	68,42	200L	367,39
125-125-200	IE3	22,00	40,53	180M	275,19
125-125-200	IE3	30,00	55,79	200L	344,48
125-125-200	IE3	37,00	68,42	200L	364,48
125-125-200	IE3	45,00	82,11	225M	430,73

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Motor (fixed speed version), n = 1450 rpm

50 Hz, technical data of the motor, n = 1450 rpm (fixed speed version)

Etaline	Efficiency class	P_N	I_N	Motor	[kg]
			3~400 V		
n = 1450 rpm		[kW]	[A]		
032-032-160	IE1	0,25	0,77	071M	28,68
032-032-160	IE1	0,37	1,06	071M	29,88
032-032-160	IE1	0,55	1,46	080M	33,24
032-032-160	IE1	0,75	1,66	080M	34,64
032-032-160	IE3	1,10	2,28	090S	37,57
032-032-200	IE1	0,37	1,06	071M	39,01
032-032-200	IE1	0,55	1,46	080M	42,37
032-032-200	IE1	0,75	1,66	080M	43,77
032-032-200	IE3	1,10	2,28	090S	46,7
032-032-200	IE3	1,50	2,99	090L	50
032-032-200	IE3	2,20	4,18	100L	57,74
040-040-160	IE1	0,37	1,06	071M	30,4
040-040-160	IE1	0,55	1,46	080M	33,76
040-040-160	IE1	0,75	1,66	080M	35,16
040-040-160	IE3	1,10	2,28	090S	38,09
040-040-160	IE3	1,50	5,77	090L	41,39
040-040-250	IE1	0,75	1,66	080M	50,52
040-040-250	IE3	1,10	2,28	090S	53,45
040-040-250	IE3	1,50	2,99	090L	56,75
040-040-250	IE3	2,20	4,18	100L	64,49
040-040-250	IE3	3,00	6,21	100L	66,49
040-040-250	IE3	4,00	8,32	112M	71,49
040-040-250	IE3	5,50	11,05	132S	83,9
050-050-160	IE1	0,37	1,06	071M	34,69
050-050-160	IE1	0,55	1,46	080M	38,05
050-050-160	IE1	0,75	1,66	080M	39,45
050-050-160	IE3	1,10	2,28	090S	42,38
050-050-160	IE3	1,50	2,99	090L	45,68
050-050-160	IE3	2,20	4,18	100L	53,42
050-050-250	IE3	1,10	2,28	090S	56,48
050-050-250	IE3	1,50	2,99	090L	59,78
050-050-250	IE3	2,20	4,18	100L	67,52
050-050-250	IE3	3,00	6,21	100L	69,52
050-050-250	IE3	4,00	8,32	112M	74,52
050-050-250	IE3	5,50	11,05	132S	86,93
050-050-250	IE3	7,50	15,05	132M	100,93
065-065-160	IE1	0,37	1,06	071M	36,94
065-065-160	IE1	0,55	1,46	080M	40,3
065-065-160	IE1	0,75	1,66	080M	41,7
065-065-160	IE3	1,10	2,28	090S	44,63
065-065-160	IE3	1,50	2,99	090L	47,93
065-065-160	IE3	2,20	4,18	100L	55,67
065-065-160	IE3	3,00	6,21	100L	57,67
065-065-250	IE3	1,50	2,99	090L	63,85
065-065-250	IE3	2,20	4,18	100L	71,59
065-065-250	IE3	3,00	6,21	100L	73,59
065-065-250	IE3	4,00	8,32	112M	78,59
065-065-250	IE3	5,50	11,05	132S	91
065-065-250	IE3	7,50	15,05	132M	105
065-065-250	IE3	11,00	21,58	160M	131,21
080-080-160	IE1	0,55	1,46	080M	46,34
080-080-160	IE1	0,75	1,66	080M	47,74
080-080-160	IE3	1,10	2,28	090S	50,67
080-080-160	IE3	1,50	2,99	090L	53,97

Etaline	Efficiency class	P_N	I_N	Motor	[kg]
			3~400 V		
n = 1450 rpm		[kW]	[A]		
080-080-160	IE3	2,20	4,18	100L	61,71
080-080-160	IE3	3,00	6,21	100L	63,71
080-080-160	IE3	4,00	8,32	112M	68,71
080-080-200	IE3	1,10	2,28	090S	59,45
080-080-200	IE3	1,50	2,99	090L	62,75
080-080-200	IE3	2,20	4,18	100L	70,49
080-080-200	IE3	3,00	6,21	100L	72,49
080-080-200	IE3	4,00	8,32	112M	77,49
080-080-200	IE3	5,50	11,05	132S	89,9
080-080-200	IE3	7,50	15,05	132M	103,9
080-080-250	IE3	2,20	4,18	100L	90,79
080-080-250	IE3	3,00	6,21	100L	92,79
080-080-250	IE3	4,00	8,32	112M	97,79
080-080-250	IE3	5,50	11,05	132S	109,69
080-080-250	IE3	7,50	15,05	132M	123,69
080-080-250	IE3	11,00	21,58	160M	149,9
080-080-250	IE3	15,00	30,00	160L	165,9
100-100-125	IE1	0,75	1,66	080M	52,68
100-100-125	IE3	1,10	2,28	090S	55,61
100-100-125	IE3	1,50	2,99	090L	58,91
100-100-125	IE3	2,20	4,18	100L	66,65
100-100-160	IE3	1,50	2,99	090L	65,49
100-100-160	IE3	2,20	4,18	100L	73,23
100-100-160	IE3	3,00	6,21	100L	75,23
100-100-160	IE3	4,00	8,32	112M	80,23
100-100-160	IE3	5,50	11,05	132S	92,64
100-100-200	IE3	2,20	4,18	100L	105,64
100-100-200	IE3	3,00	6,21	100L	107,64
100-100-200	IE3	4,00	8,32	112M	112,64
100-100-200	IE3	5,50	11,05	132S	124,54
100-100-200	IE3	7,50	15,05	132M	138,54
100-100-200	IE3	11,00	21,58	160M	164,75
100-100-250	IE3	3,00	6,21	100L	119,56
100-100-250	IE3	4,00	8,32	112M	124,56
100-100-250	IE3	5,50	11,05	132S	136,46
100-100-250	IE3	7,50	15,05	132M	150,46
100-100-250	IE3	11,00	21,58	160M	176,67
100-100-250	IE3	15,00	30,00	160L	192,67
100-100-250	IE3	18,50	37,37	180M	267,29
125-125-160	IE3	2,20	4,18	100L	128,37
125-125-160	IE3	3,00	6,21	100L	130,37
125-125-160	IE3	4,00	8,32	112M	135,37
125-125-160	IE3	5,50	11,05	132S	147,27
125-125-160	IE3	7,50	15,05	132M	161,27
125-125-200	IE3	3,00	6,21	100L	127,46
125-125-200	IE3	4,00	8,32	112M	132,46
125-125-200	IE3	5,50	11,05	132S	144,36
125-125-200	IE3	7,50	15,05	132M	158,36
125-125-200	IE3	11,00	21,58	160M	184,57
125-125-200	IE3	15,00	30,00	160L	200,57
125-125-250	IE3	5,50	11,05	132S	156,47
125-125-250	IE3	7,50	15,05	132M	170,47
125-125-250	IE3	11,00	21,58	160M	196,68
125-125-250	IE3	15,00	30,00	160L	212,68
125-125-250	IE3	18,50	37,37	180M	287,3
125-125-250	IE3	22,00	43,68	180L	302,3

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Etaline	Efficiency class	P_N	I_N	Motor	[kg]
			3~400 V		
n = 1450 rpm		[kW]	[A]		
150-150-200	IE3	5,50	11,05	132S	175,85
150-150-200	IE3	7,50	15,05	132M	189,85
150-150-200	IE3	11,00	21,58	160M	216,06
150-150-200	IE3	15,00	30,00	160L	232,06
150-150-200	IE3	18,50	37,37	180M	306,68
150-150-250	IE3	7,50	15,05	132M	204,14
150-150-250	IE3	11,00	21,58	160M	230,35
150-150-250	IE3	15,00	30,00	160L	246,35
150-150-250	IE3	18,50	37,37	180M	320,97
150-150-250	IE3	22,00	43,68	180L	335,97
150-150-250	IE3	30,00	56,84	200L	400,26
150-150-250	IE3	37,00	69,47	225S	466,65
200-200-250	IE3	11,00	21,58	160M	285,87
200-200-250	IE3	15,00	30,00	160L	301,87
200-200-250	IE3	18,50	37,37	180M	376,49
200-200-250	IE3	22,00	43,68	180L	391,49
200-200-250	IE3	30,00	56,84	200L	455,78
200-200-250	IE3	37,00	69,47	225S	522,17
200-200-250	IE3	45,00	84,21	225M	552,17
200-200-315	IE3	30,00	56,84	200L	490,01
200-200-315	IE3	37,00	69,47	225S	556,25
200-200-315	IE3	45,00	84,21	225M	586,25
200-200-315	IE3	55,00	101,05	250M	699,62

Motor (variable speed version), n = 3000 rpm

50 Hz, technical data of the motor, n = 3000 rpm (variable speed version)

Etaline PumpDrive 2 n = 3000 rpm	Efficiency class	P_N [kW]	I_N 3~400 V [A]	Motor	[kg]
032-032-160	IE5	1,10	3,0	080M	42,2
032-032-160	IE5	1,50	4,1	090S	45,3
032-032-160	IE5	2,20	5,6	090L	49,8
032-032-160	IE5	3,00	7,6	100L	57,1
032-032-160	IE5	4,00	9,4	112M	68,1
032-032-160	IE5	5,50	12,5	132S	81,6
032-032-200	IE5	4,00	9,4	112M	77,2
032-032-200	IE5	5,50	12,5	132S	90,8
032-032-200	IE5	7,50	16,7	132S	106,8
032-032-200	IE5	11,00	23,7	160M	126
040-040-160	IE5	3,00	7,6	100L	57,6
040-040-160	IE5	4,00	9,4	112M	68,6
040-040-160	IE5	5,50	12,5	132S	82,1
040-040-160	IE5	7,50	16,7	132S	98,1
040-040-250	IE5	7,50	16,7	132S	113,5
040-040-250	IE5	11,00	23,7	160M	132,7
040-040-250	IE5	15,00	32,0	160M	157,7
040-040-250	IE5	18,50	38,8	160L	176,1
040-040-250	IE4	22,00	50,7	180M	242,7
040-040-250	IE4	30,00	63,5	200L	312,2
050-050-160	IE5	3,00	7,6	100L	61,9
050-050-160	IE5	4,00	9,4	112M	72,9
050-050-160	IE5	5,50	12,5	132S	86,4
050-050-160	IE5	7,50	16,7	132S	102,4
050-050-160	IE5	11,00	23,7	160M	121,6
050-050-250	IE5	11,00	23,7	160M	135,7
050-050-250	IE5	15,00	32,0	160M	160,7
050-050-250	IE5	18,50	38,8	160L	179,1
050-050-250	IE4	22,00	50,7	180M	245,8
050-050-250	IE4	30,00	63,5	200L	315,3
050-050-250	IE4	37,00	77,8	200L	371,9
065-065-160	IE5	3,00	7,6	100L	64,2
065-065-160	IE5	4,00	9,4	112M	75,2
065-065-160	IE5	5,50	12,5	132S	88,7
065-065-160	IE5	7,50	16,7	132S	104,7
065-065-160	IE5	11,00	23,7	160M	123,9
065-065-160	IE5	15,00	32,0	160M	148,9
065-065-160	IE5	18,50	38,8	160L	167,3
065-065-250	IE5	15,00	32,0	160M	164,8
065-065-250	IE5	18,50	38,8	160L	183,2
065-065-250	IE4	22,00	50,7	180M	249,8
065-065-250	IE4	30,00	63,5	200L	319,3
065-065-250	IE4	37,00	77,8	200L	375,9
080-080-160	IE5	5,50	12,5	132S	94,7
080-080-160	IE5	7,50	16,7	132S	110,7
080-080-160	IE5	11,00	23,7	160M	129,9
080-080-160	IE5	15,00	32,0	160M	154,9
080-080-160	IE5	18,50	38,8	160L	173,3
080-080-200	IE5	11,00	23,7	160M	138,7
080-080-200	IE5	15,00	32,0	160M	163,7
080-080-200	IE5	18,50	38,8	160L	182,1
080-080-200	IE4	22,00	50,7	180M	248,7
080-080-200	IE4	30,00	63,5	200L	318,2
080-080-200	IE4	37,00	77,8	200L	374,8

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Etaline PumpDrive 2 n = 3000 rpm	Efficiency class	P_N [kW]	I_N 3~400 V [A]	Motor	[kg]
100-100-125	IE5	5,50	12,5	132S	99,7
100-100-125	IE5	7,50	16,7	132S	115,7
100-100-125	IE5	11,00	23,7	160M	134,9
100-100-160	IE5	11,00	23,7	160M	141,5
100-100-160	IE5	15,00	32,0	160M	166,5
100-100-160	IE5	18,50	38,8	160L	184,9
100-100-160	IE4	22,00	50,7	180M	251,5
100-100-160	IE4	30,00	63,5	200L	321
125-125-160	IE5	18,50	38,8	160L	239,5
125-125-160	IE4	22,00	50,7	180M	306,1
125-125-160	IE4	30,00	63,5	200L	375,4
125-125-160	IE4	37,00	77,8	200L	432

Motor (variable speed version), n = 1500 rpm

50 Hz, technical data of the motor, n = 1500 rpm (variable speed version)

Etaline PumpDrive 2 n = 1500 rpm	Efficiency class	P_N [kW]	I_N 3~400 V [A]	Motor	[kg]
032-032-160	IE5	0,55	1,6	080M	41,2
032-032-160	IE5	0,75	2,1	080M	43,2
032-032-200	IE5	0,55	1,6	080M	50,4
032-032-200	IE5	0,75	2,1	080M	52,4
032-032-200	IE5	1,10	3,0	090S	54,4
040-040-160	IE5	0,55	1,6	080M	41,8
040-040-160	IE5	0,75	2,1	080M	43,8
040-040-160	IE5	1,10	3,0	090S	45,8
040-040-250	IE5	1,10	3,0	090S	61,2
040-040-250	IE5	1,50	4,0	090L	64,2
040-040-250	IE5	2,20	5,7	100L	74
040-040-250	IE5	3,00	7,8	100L	79
040-040-250	IE5	4,00	9,6	112M	86
050-050-160	IE5	0,55	1,6	080M	46,1
050-050-160	IE5	0,75	2,1	080M	48,1
050-050-160	IE5	1,10	3,0	090S	50,1
050-050-160	IE5	1,50	4,0	090L	53,1
050-050-250	IE5	1,50	4,0	090L	67,2
050-050-250	IE5	2,20	5,7	100L	77
050-050-250	IE5	3,00	7,8	100L	92
050-050-250	IE5	4,00	9,6	112M	89
050-050-250	IE5	5,50	13,5	132S	115,5
065-065-160	IE5	0,55	1,6	080M	48,3
065-065-160	IE5	0,75	2,1	080M	50,3
065-065-160	IE5	1,10	3,0	090S	52,3
065-065-160	IE5	1,50	4,0	090L	55,3
065-065-160	IE5	2,20	5,7	100L	65,2
065-065-250	IE5	2,20	5,7	100L	81,1
065-065-250	IE5	3,00	7,8	100L	86,1
065-065-250	IE5	4,00	9,6	112M	93,1
065-065-250	IE5	5,50	13,5	132S	119,6
065-065-250	IE5	7,50	17,6	132M	126,6
080-080-160	IE5	0,75	2,1	080M	56,3
080-080-160	IE5	1,10	3,0	090S	58,4
080-080-160	IE5	1,50	4,0	090L	61,4
080-080-160	IE5	2,20	5,7	100L	71,2
080-080-160	IE5	3,00	7,8	100L	76,2
080-080-200	IE5	1,50	4,0	090L	70,2
080-080-200	IE5	2,20	5,7	100L	80
080-080-200	IE5	3,00	7,8	100L	85
080-080-200	IE5	4,00	9,6	112M	92
080-080-200	IE5	5,50	13,5	132S	118,5
080-080-250	IE5	3,00	7,8	100L	105,3
080-080-250	IE5	4,00	9,6	112M	112,3
080-080-250	IE5	5,50	13,5	132S	138,3
080-080-250	IE5	7,50	17,6	132M	145,3
080-080-250	IE5	11,00	24,2	160M	168,5
100-100-125	IE5	0,75	2,1	080M	61,3
100-100-125	IE5	1,10	3,0	090S	63,3
100-100-125	IE5	1,50	4,0	090L	66,3
100-100-160	IE5	1,50	4,0	090L	72,9
100-100-160	IE5	2,20	5,7	100L	82,7
100-100-160	IE5	3,00	7,8	100L	87,7
100-100-160	IE5	4,00	9,6	112M	94,7

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Etaline PumpDrive 2 n = 1500 rpm	Efficiency class	P_N [kW]	I_N 3~400 V [A]	Motor	[kg]
100-100-200	IE5	3,00	7,8	100L	120,1
100-100-200	IE5	4,00	9,6	112M	127,1
100-100-200	IE5	5,50	13,5	132S	153,1
100-100-200	IE5	7,50	17,6	132M	160,1
100-100-250	IE5	4,00	9,6	112M	139,1
100-100-250	IE5	5,50	13,5	132S	165,1
100-100-250	IE5	7,50	17,6	132M	172,1
100-100-250	IE5	11,00	24,2	160M	195,3
100-100-250	IE5	15,00	33,0	160L	220,3
125-125-160	IE5	3,00	7,8	100L	142,9
125-125-160	IE5	4,00	9,6	112M	149,9
125-125-160	IE5	5,50	13,5	132S	175,9
125-125-200	IE5	4,00	9,6	112M	147
125-125-200	IE5	5,50	13,5	132S	173
125-125-200	IE5	7,50	17,6	132M	180
125-125-200	IE5	11,00	24,2	160M	203,2
125-125-250	IE5	5,50	13,5	132S	185,1
125-125-250	IE5	7,50	17,6	132M	192,1
125-125-250	IE5	11,00	24,2	160M	215,3
125-125-250	IE5	15,00	33,0	160L	240,3
150-150-200	IE5	5,50	13,5	132S	204,5
150-150-200	IE5	7,50	17,6	132M	211,5
150-150-200	IE5	11,00	24,2	160M	234,7
150-150-200	IE5	15,00	33,0	160L	259,7
150-150-250	IE5	11,00	24,2	160M	249
150-150-250	IE5	15,00	33,0	160L	274
150-150-250	IE4	18,50	42,0	180M	343
150-150-250	IE4	22,00	48,5	180L	367
200-200-250	IE5	15,00	33,0	160L	329,5
200-200-250	IE4	18,50	42,0	180M	398,5
200-200-250	IE4	22,00	48,5	180L	422,5
200-200-250	IE4	30,00	65,4	200L	490,8
200-200-250	IE4	37,00	80,9	225S	627,8
200-200-315	IE4	30,00	65,4	200L	525
200-200-315	IE4	37,00	80,9	225S	661,9
200-200-315	IE4	45,00	99,3	225M	712,3

Pump

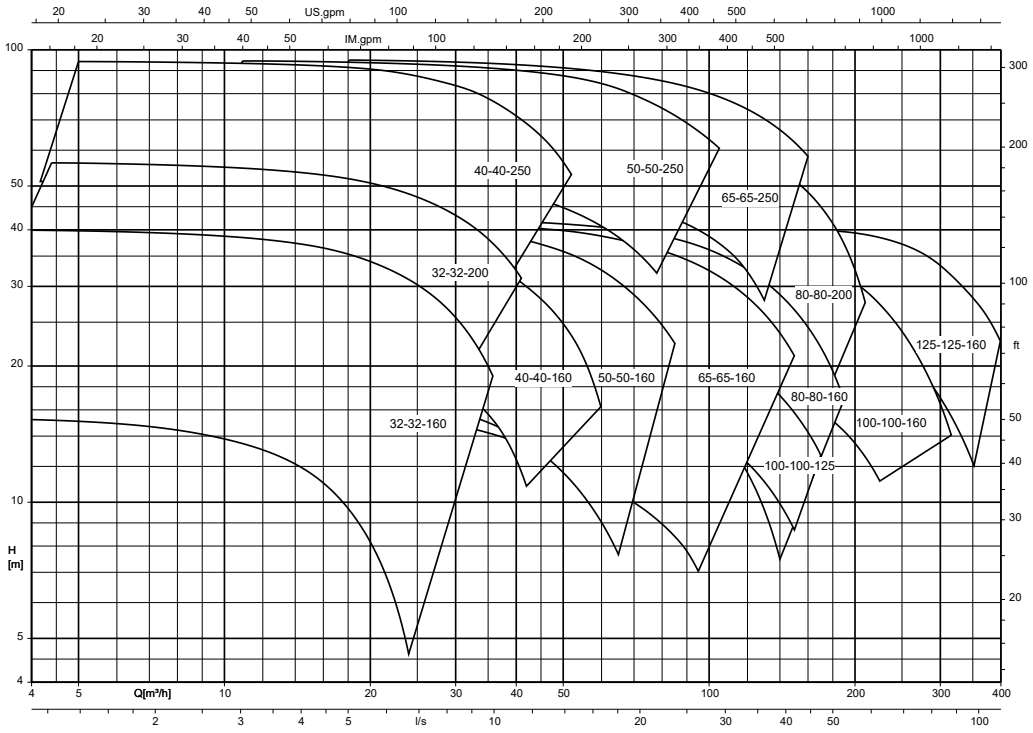
Technical data of the pump

Etaline	Shaft unit	Impeller				Speed limit	
		Impeller outlet width	Impeller inlet diameter	Nominal impeller diameter		Minimum	Maximum
				Minimum	Maximum		
		[mm]				[rpm]	
032-032-160	WS_25	5,7	52,7	112	170	500	4400
032-032-200	WS_25	5,6	54,0	165	204	500	3800
040-040-160	WS_25	8,5	60,6	136	174	500	3600
040-040-250	WS_25	7,5	62,6	197	261	500	3600
050-050-160	WS_25	13,0	70,0	120	174	500	4400
050-050-250	WS_25	8,4	74,1	198	260	500	3600
065-065-160	WS_25	16,9	86,9	108	174	500	4400
065-065-250	WS_25	10,5	84,0	196	260	500	3600
080-080-160	WS_25	21,0	92,0	132	174	500	3900
080-080-200	WS_25	17,0	99,7	170	219	500	3600
080-080-250	WS_35	15,1	101,0	190	260	500	3600
100-100-125	WS_25	25,8	99,0	124	141	500	3900
100-100-160	WS_25	31,6	124,0	138	174	500	3600
100-100-200	WS_35	24,5	115,0	178	219	500	3600
100-100-250	WS_35	19,0	115,0	215	269	500	3600
125-125-160	WS_35	37,6	135,0	155	185	500	3600
125-125-200	WS_35	32,5	142,0	179	219	500	3600
125-125-250	WS_35	27,0	145,0	210	269	500	3600
150-150-200	WS_35	40,7	159,0	178	224	500	2000
150-150-250	WS_35	37,0	162,4	218	269	500	1900
200-200-250	WS_35	48,8	191,0	220	269	500	1800
200-200-315	WS_55	39,7	191,5	264	334	500	1800

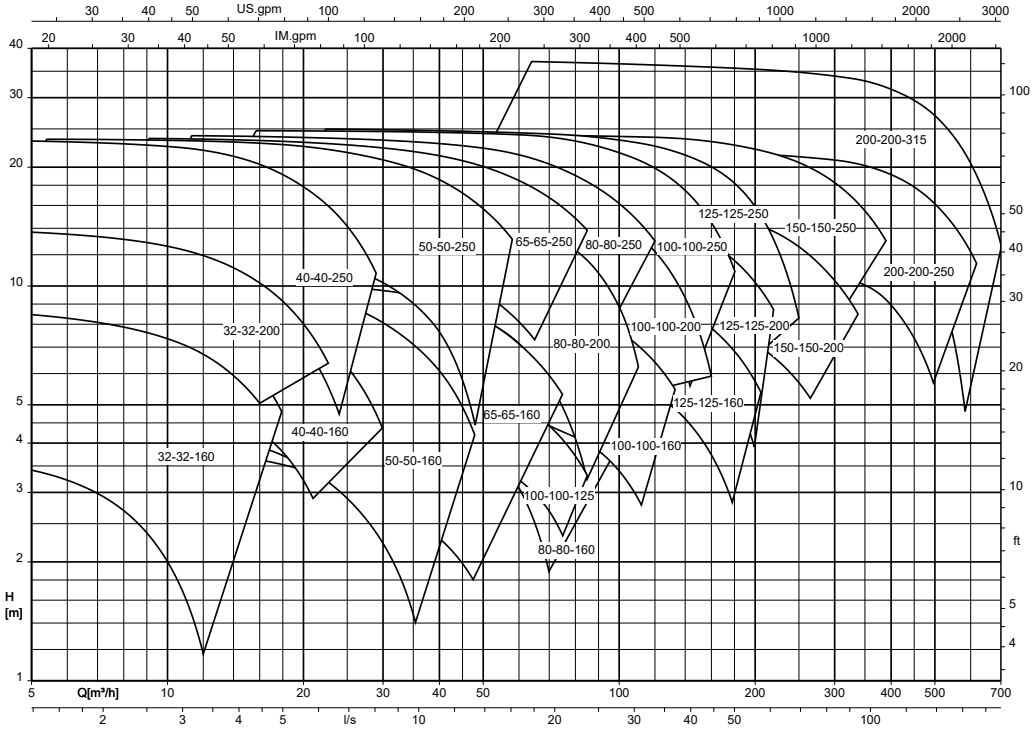
Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Selection charts

Etaline (fixed speed version), n = 2900 rpm



Etaline (fixed speed version), n = 1450 rpm



Characteristic curves

General

Test class
Characteristic curves to ISO 9906 Class 3B

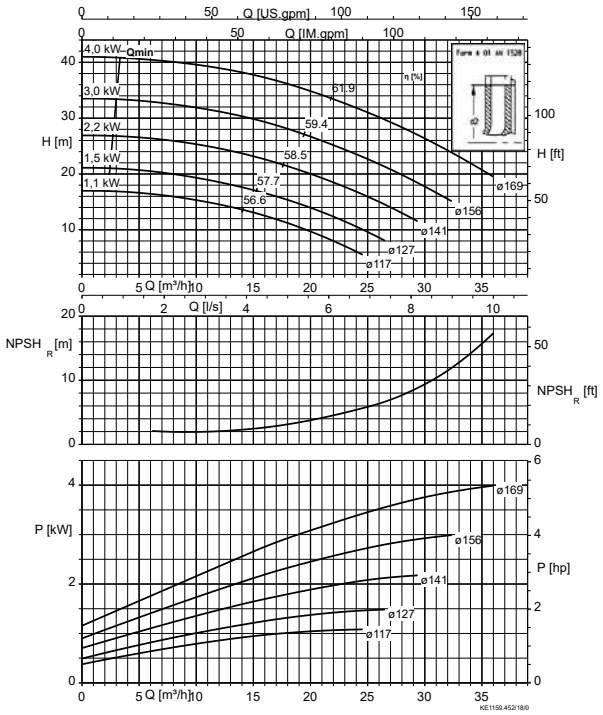
NPSH values
The NPSH values indicated in the characteristic curves correspond to a head drop of 3 %.

NPSH values in part-load conditions
NPSH values for flow rates below Q = 0.3 x Q_{BEP} can only be measured with intense technical efforts. Evidence of NPSH values in the part-load range cannot be provided.

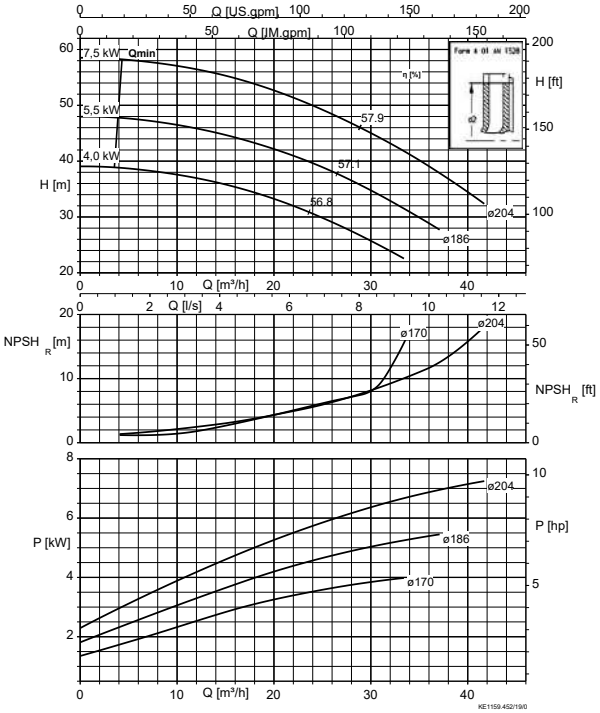
Density of the fluid handled
The indicated heads and performance data apply to pumped fluids with a density ρ = 1.0 kg/dm³ and a kinematic viscosity of up to 20 mm²/s max. If the density ≠ 1.0, the performance data must be multiplied by ρ. For a viscosity > 20 mm²/s the corresponding data for cold water has to be calculated and the impact on the pump's performance has to be determined.

Correction factors
The characteristic curves apply to pumps with cast iron or bronze impellers. When using an impeller made of cast steel materials the efficiency and pump power of the corresponding pump sizes have to be multiplied by the correction factors indicated in the characteristic curves.

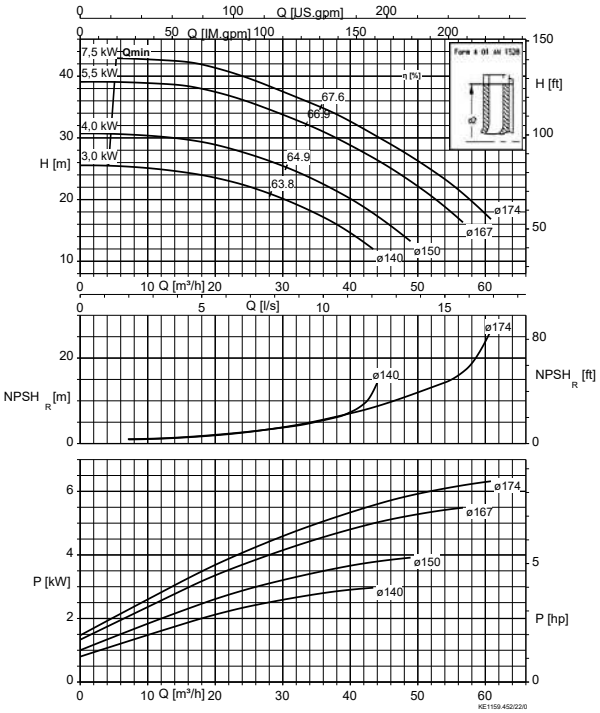
Etaline 032-032-160, n ≈ 2900 rpm



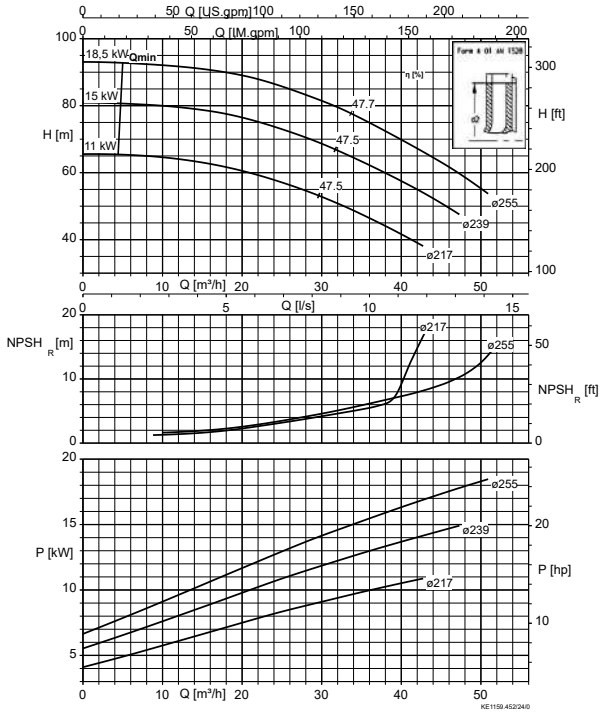
Etaline 032-032-200, n ≈ 2900 rpm



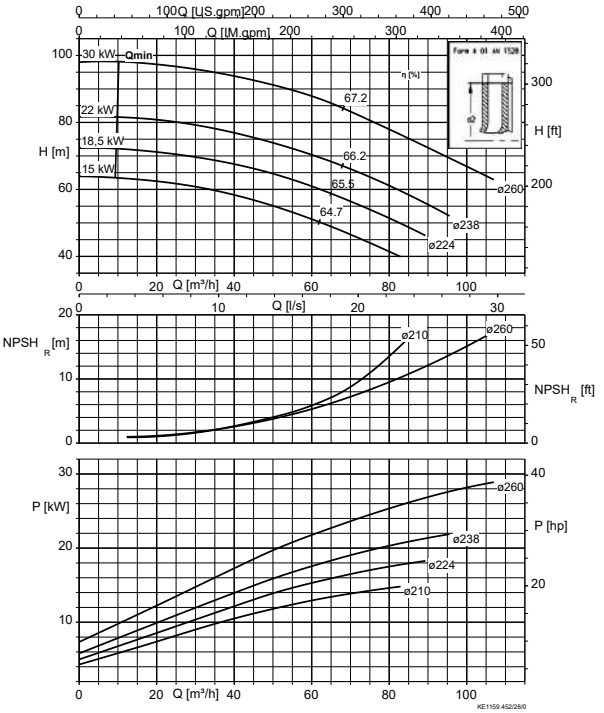
Etaline 040-040-160, n ≈ 2900 rpm



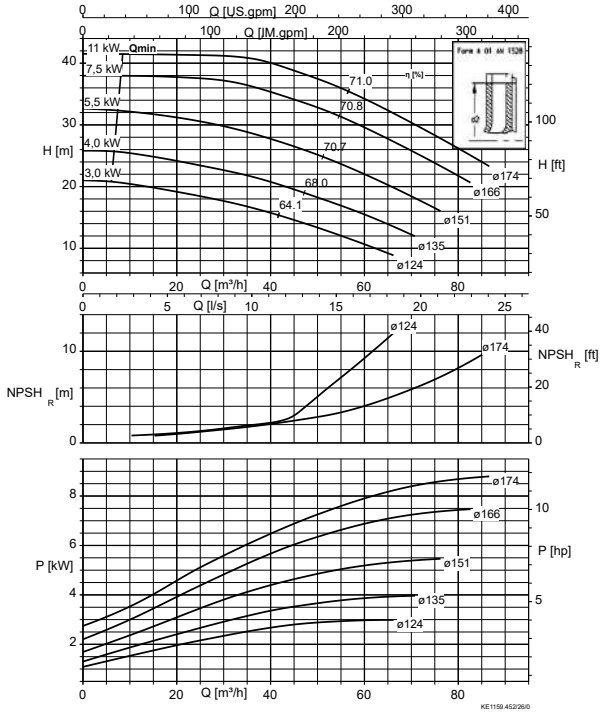
Etaline 040-040-250, n ≈ 2900 rpm



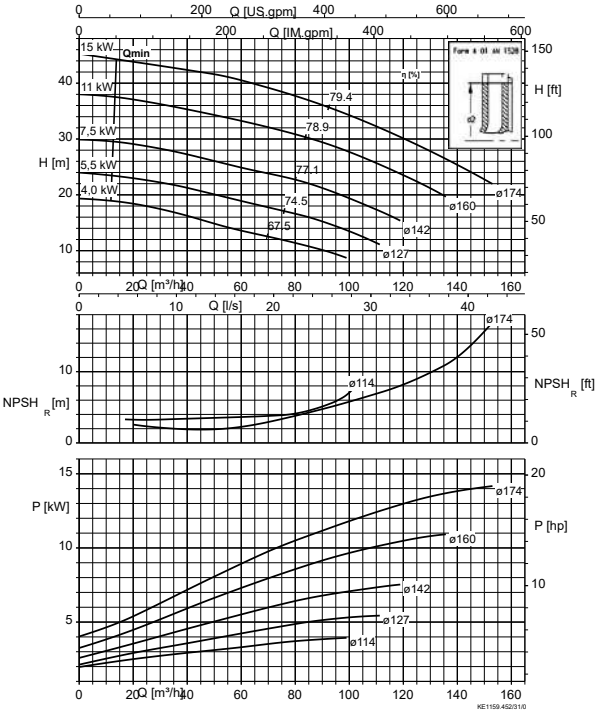
Etaline 050-050-250, n ≈ 2900 rpm



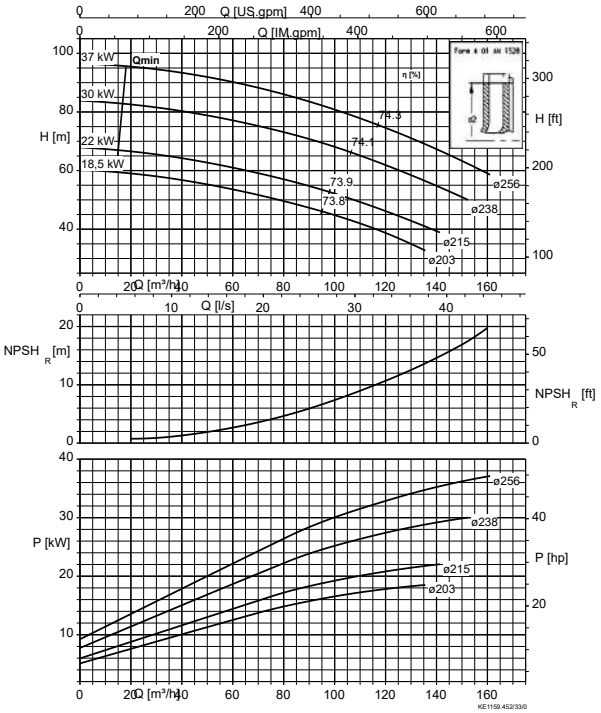
Etaline 050-050-160, n ≈ 2900 rpm



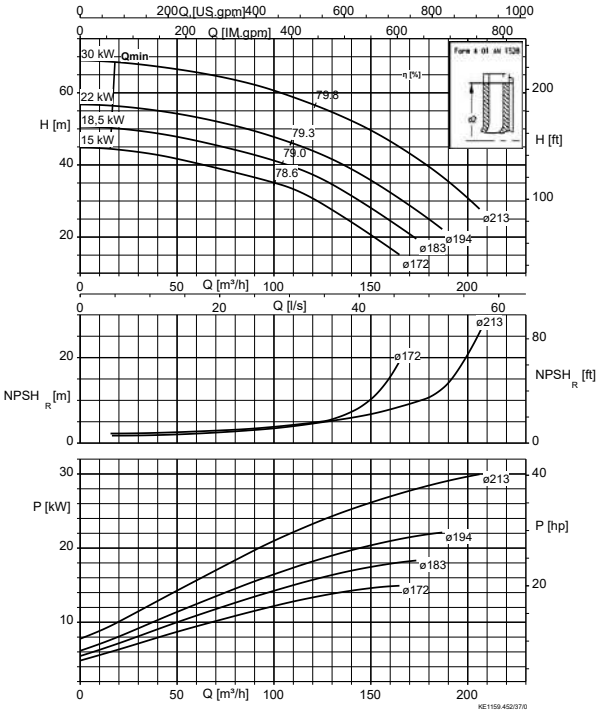
Etaline 065-065-160, n ≈ 2900 rpm



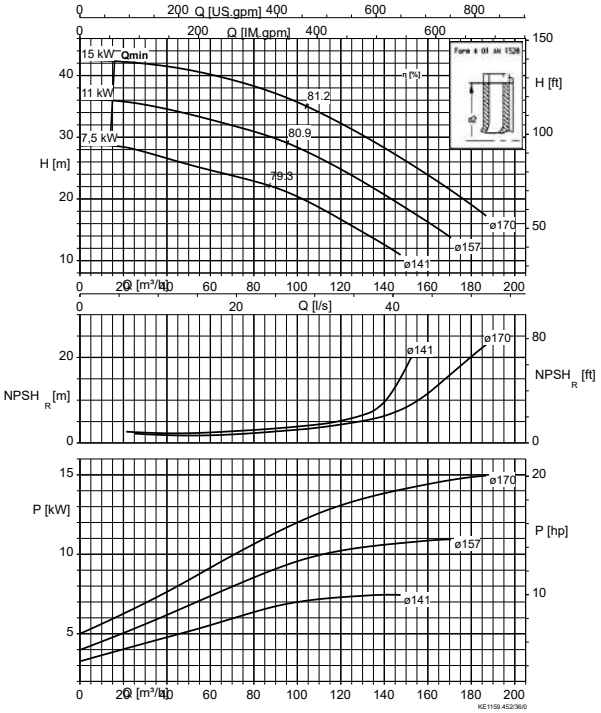
Etaline 065-065-250, n ≈ 2900 rpm



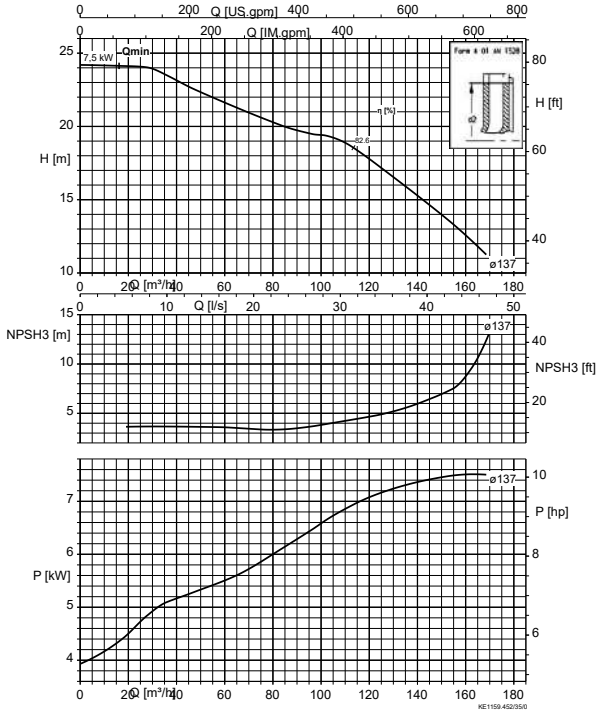
Etaline 080-080-200, n ≈ 2900 rpm



Etaline 080-080-160, n ≈ 2900 rpm

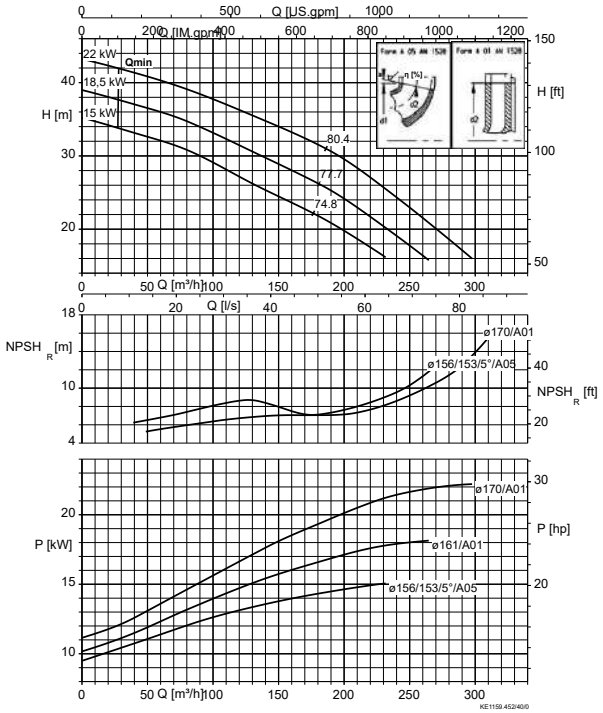


Etaline 100-100-125, n ≈ 2900 rpm

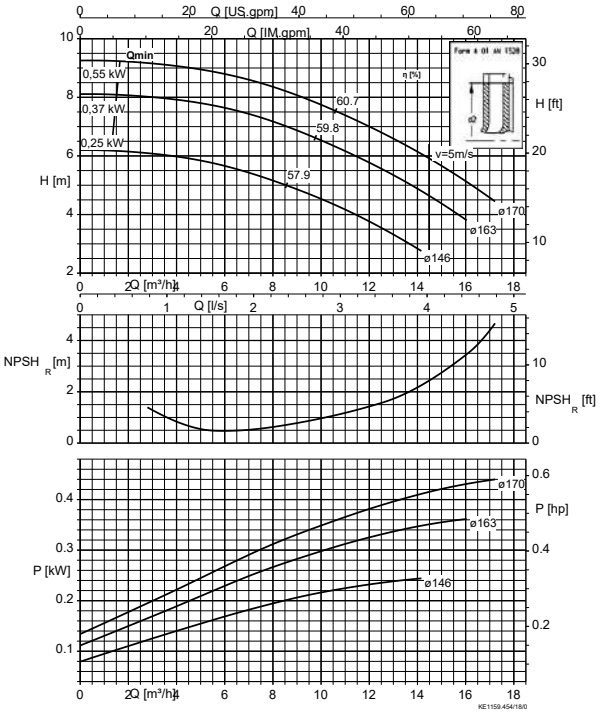


Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

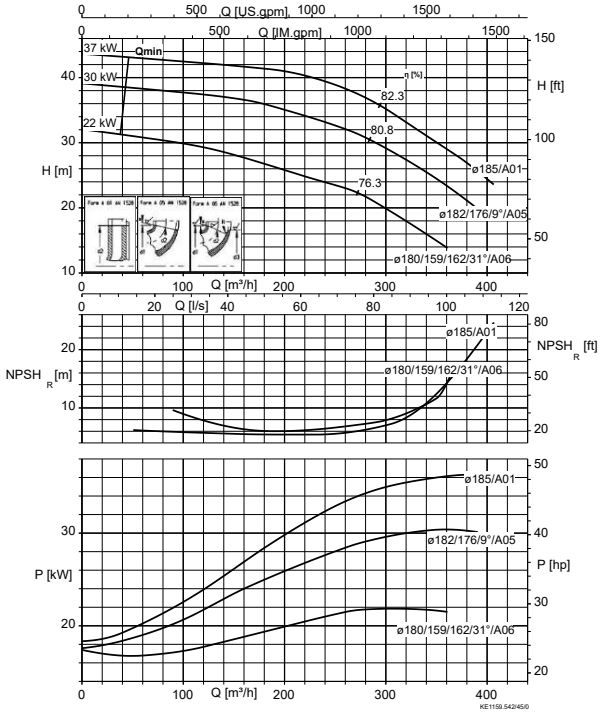
Etaline 100-100-160, n ≈ 2900 rpm



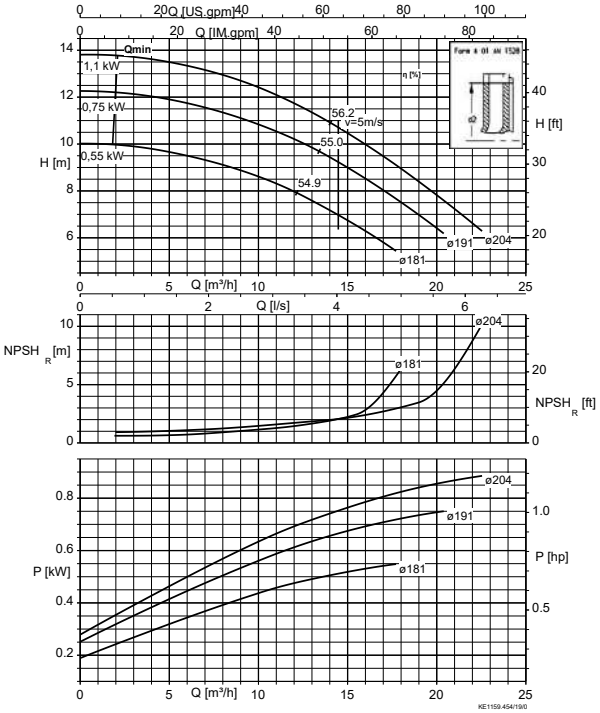
Etaline 032-032-160, n ≈ 1450 rpm



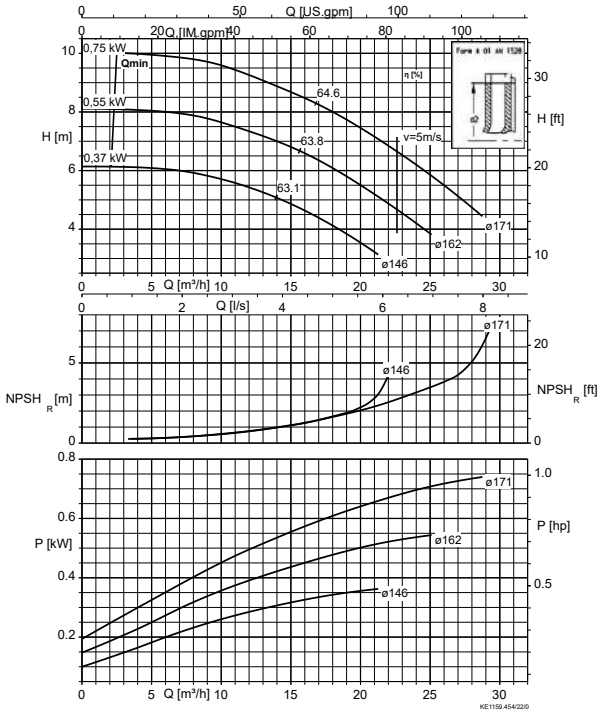
Etaline 125-125-160, n ≈ 2900 rpm



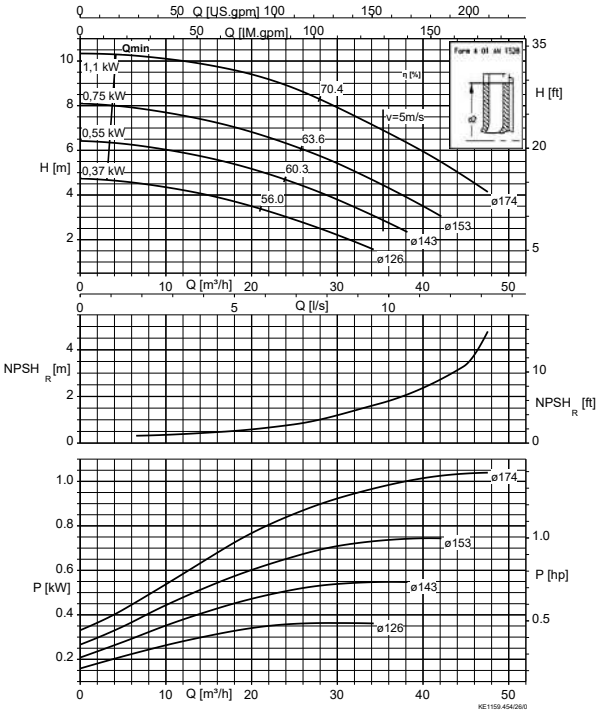
Etaline 032-032-200, n ≈ 1450 rpm



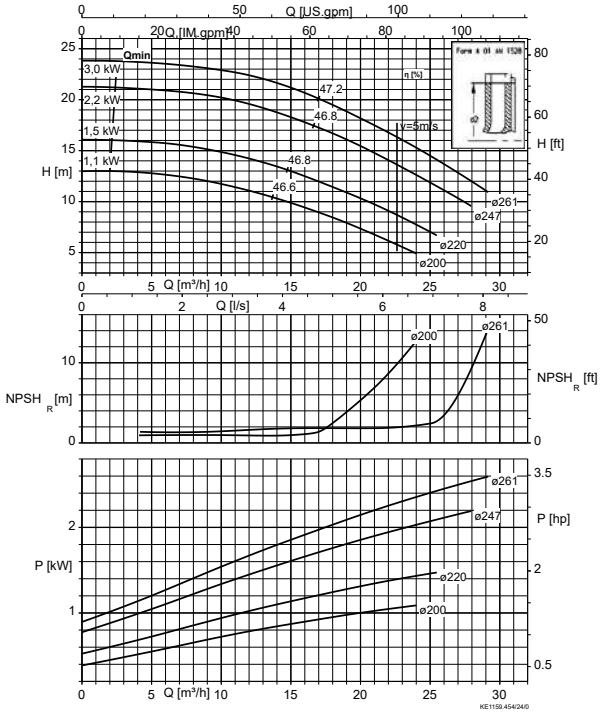
Etaline 040-040-160, n ≈ 1450 rpm



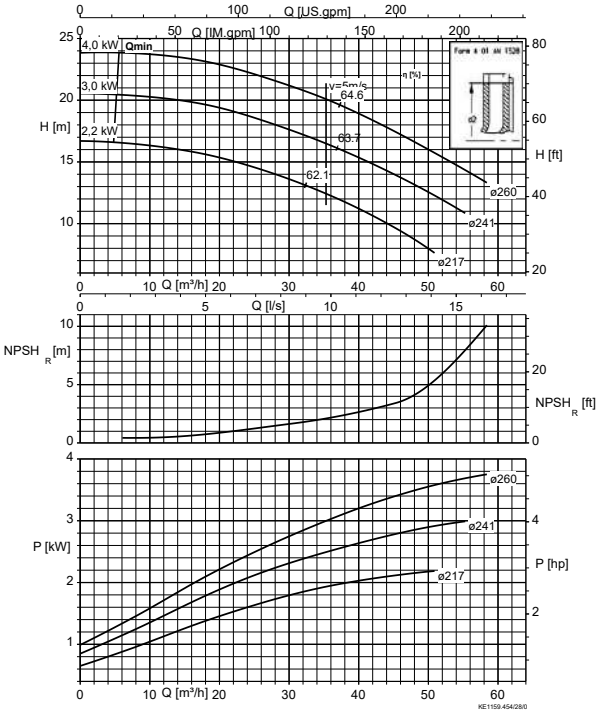
Etaline 050-050-160, n ≈ 1450 rpm



Etaline 040-040-250, n ≈ 1450 rpm

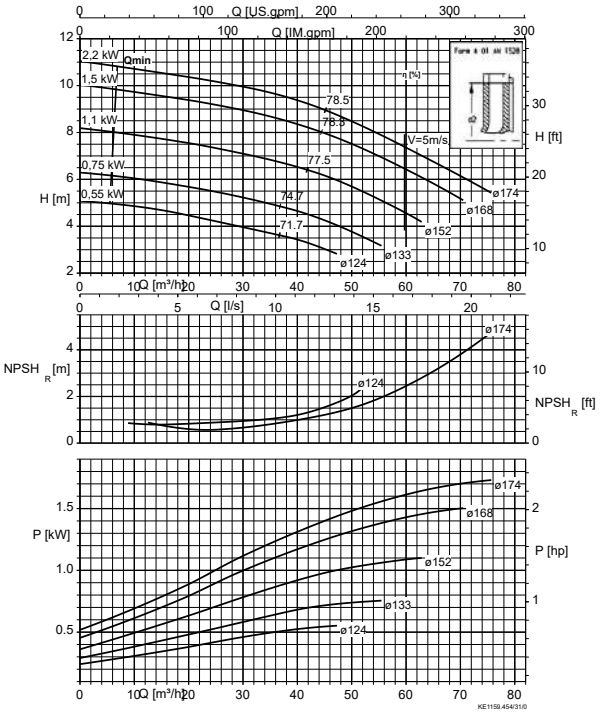


Etaline 050-050-250, n ≈ 1450 rpm

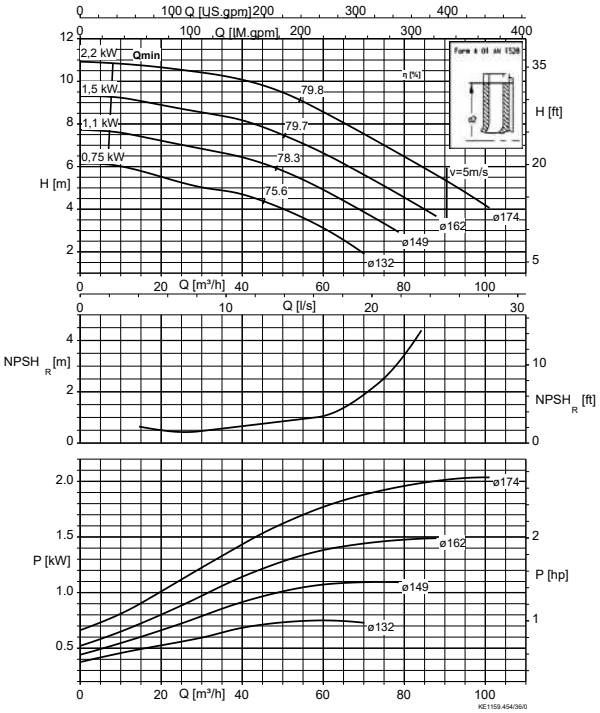


Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

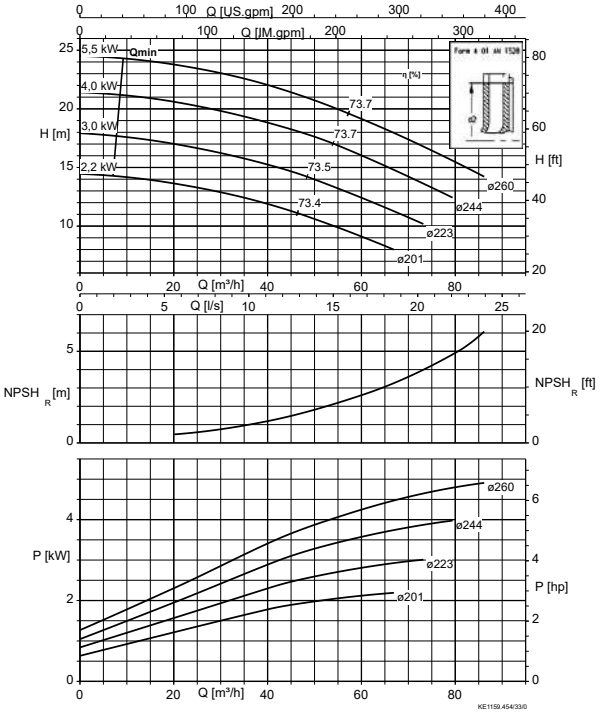
Etaline 065-065-160, n ≈ 1450 rpm



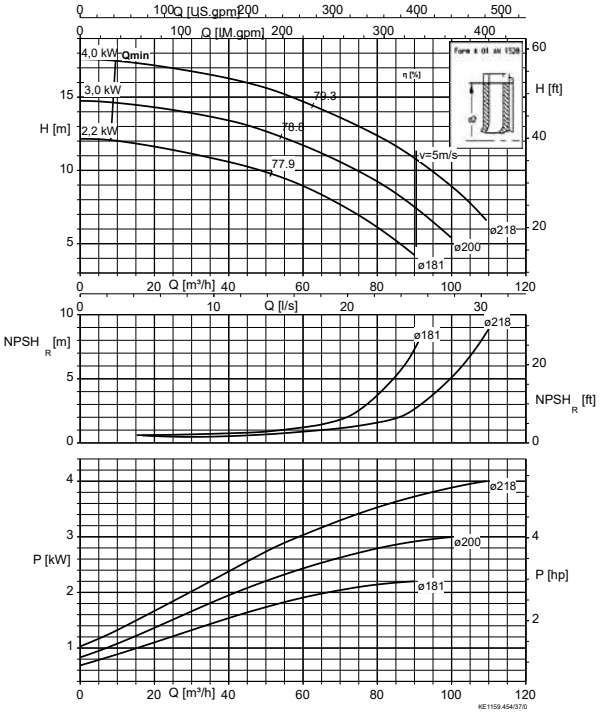
Etaline 080-080-160, n ≈ 1450 rpm



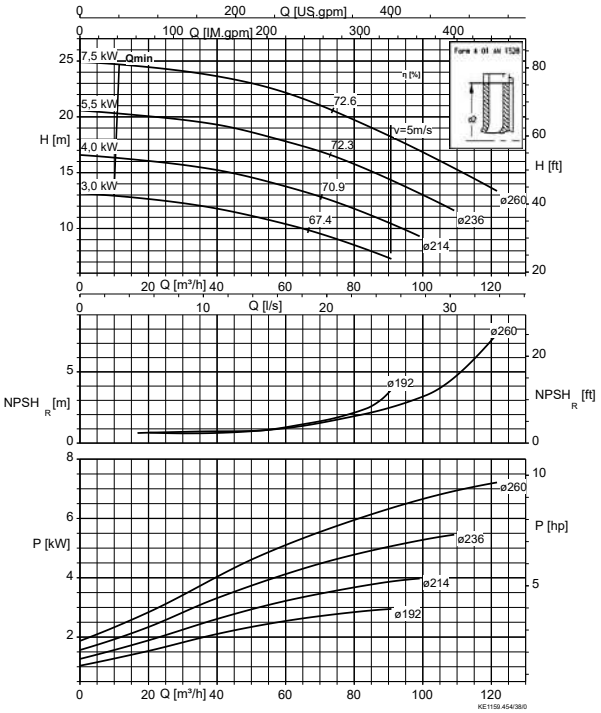
Etaline 065-065-250, n ≈ 1450 rpm



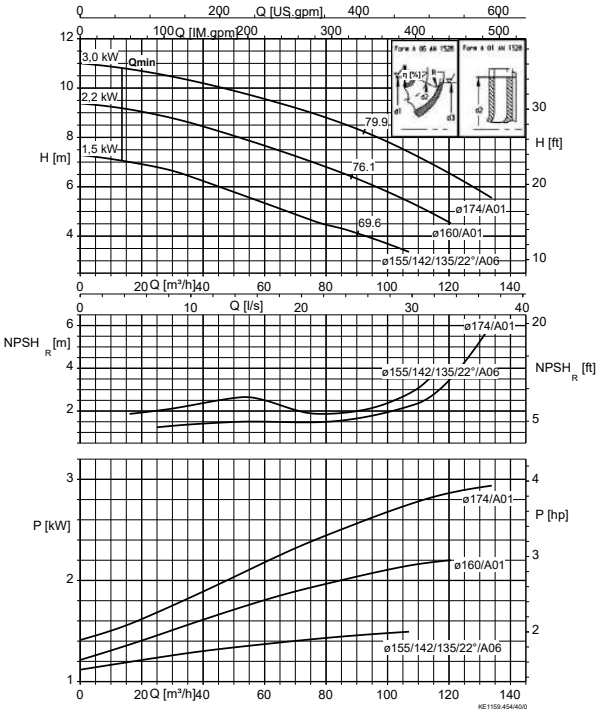
Etaline 080-080-200, n ≈ 1450 rpm



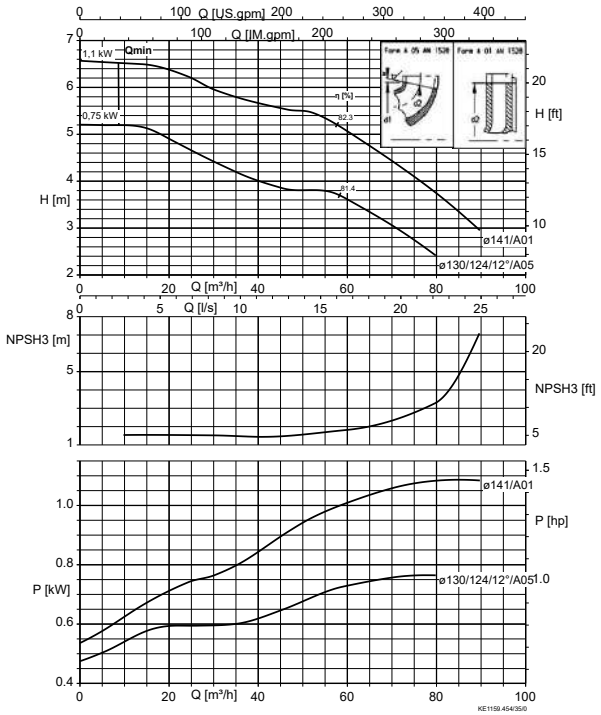
Etaline 080-080-250, n ≈ 1450 rpm



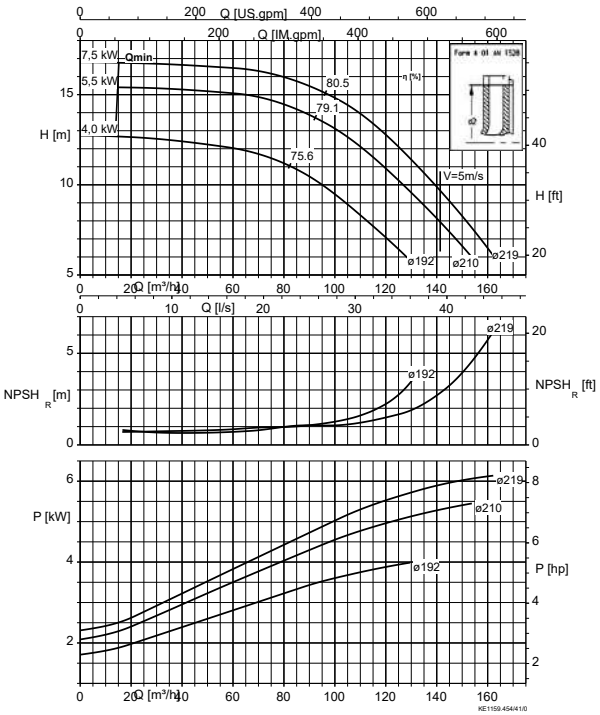
Etaline 100-100-160, n ≈ 1450 rpm



Etaline 100-100-125, n ≈ 1450 rpm

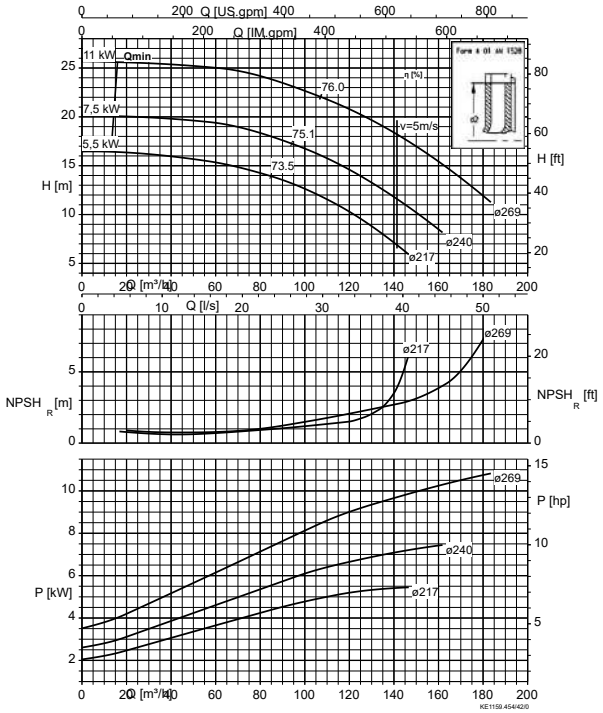


Etaline 100-100-200, n ≈ 1450 rpm

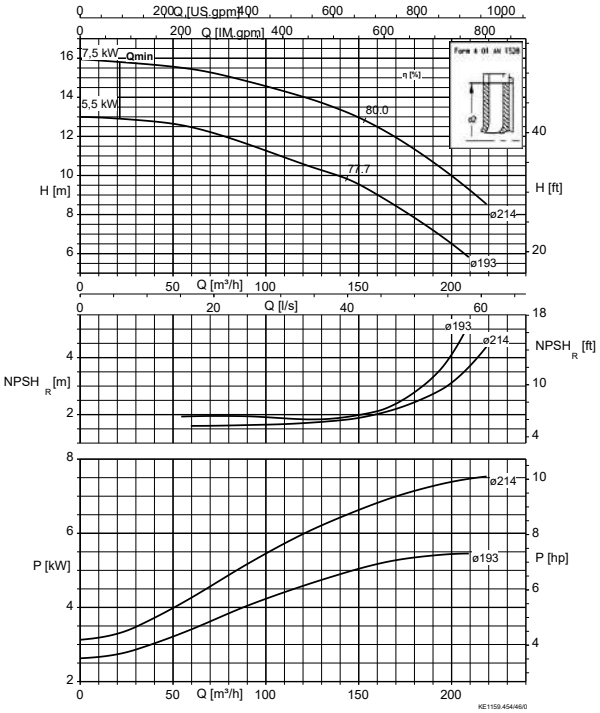


Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

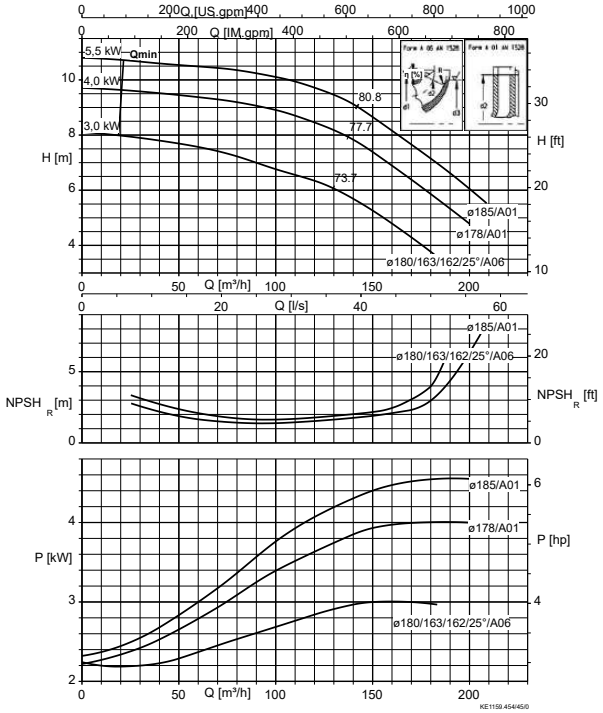
Etaline 100-100-250, n ≈ 1450 rpm



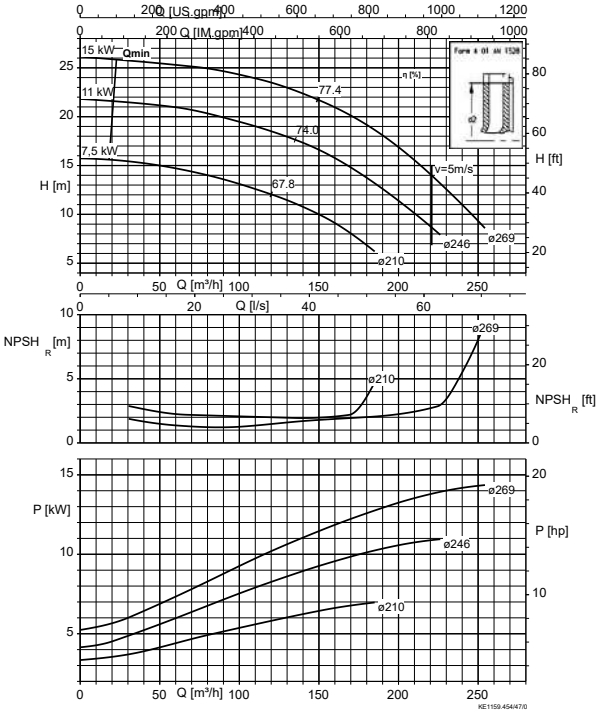
Etaline 125-125-200, n ≈ 1450 rpm



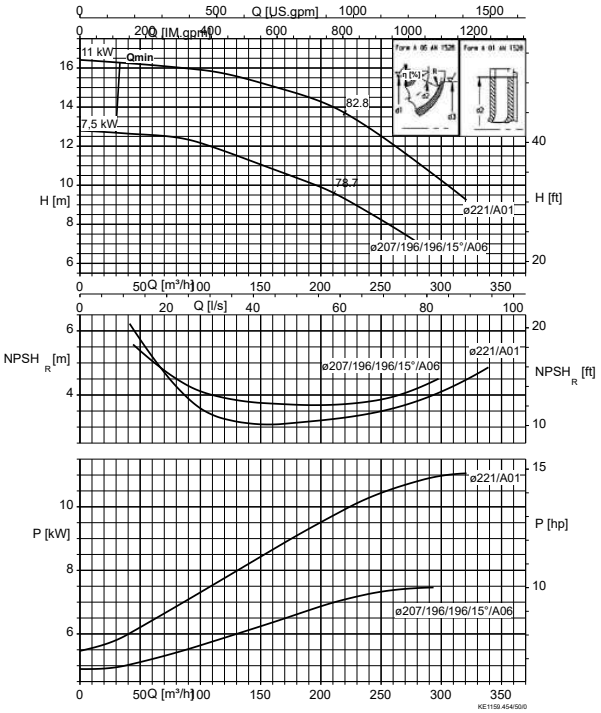
Etaline 125-125-160, n ≈ 1450 rpm



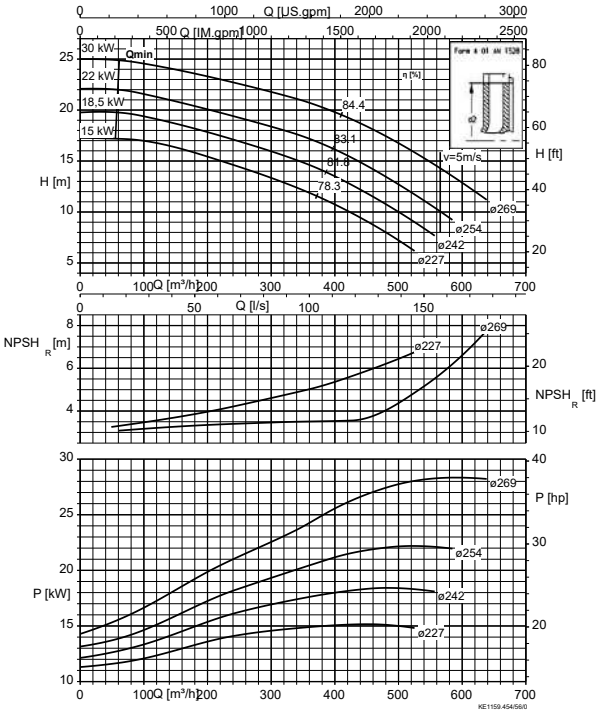
Etaline 125-125-250, n ≈ 1450 rpm



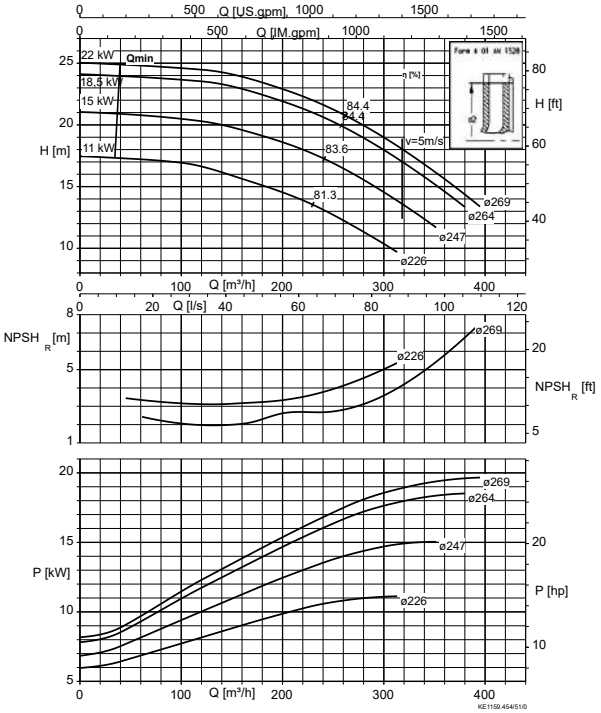
Etaline 150-150-200, n ≈ 1450 rpm



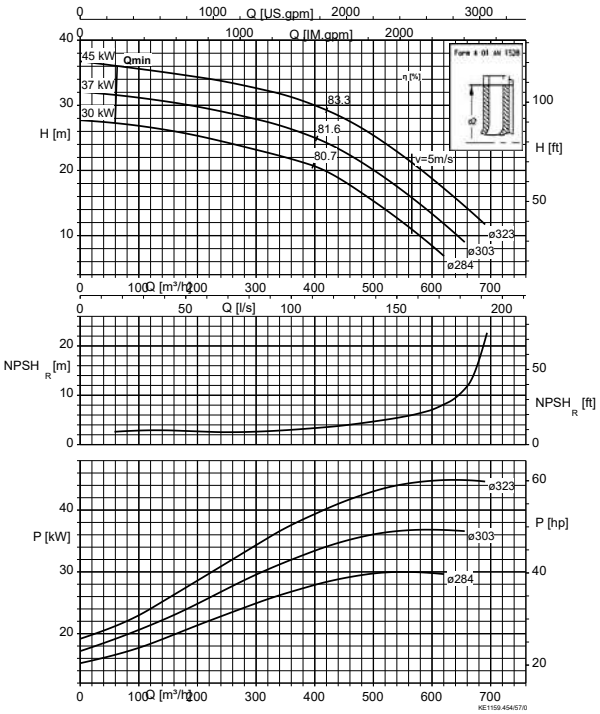
Etaline 200-200-250, n ≈ 1450 rpm



Etaline 150-150-250, n ≈ 1450 rpm



Etaline 200-200-315, n ≈ 1450 rpm



Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Dimensions

Pump set (fixed speed version), n = 2900 rpm

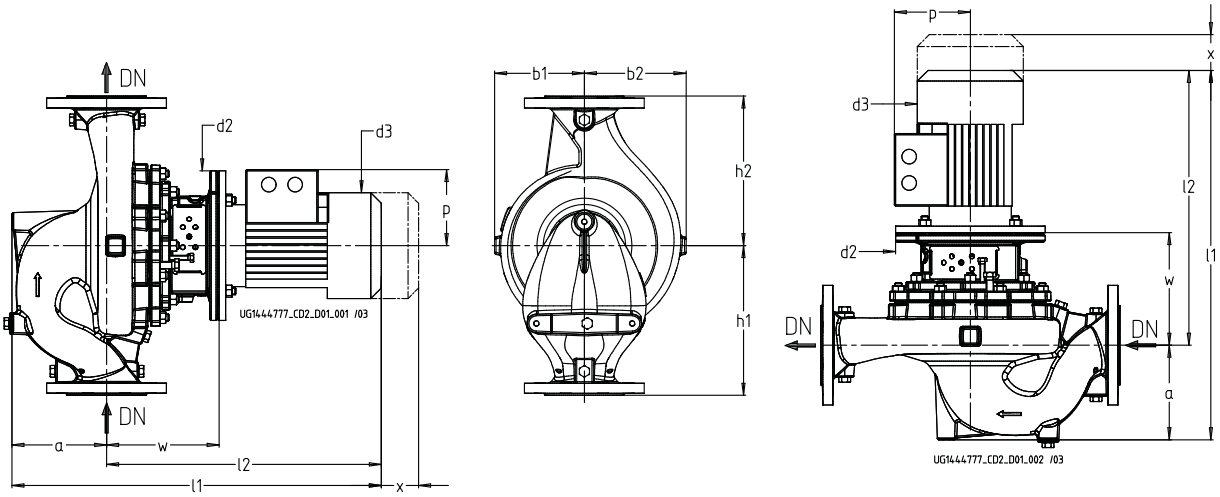


Fig. 251: Pump set dimensions

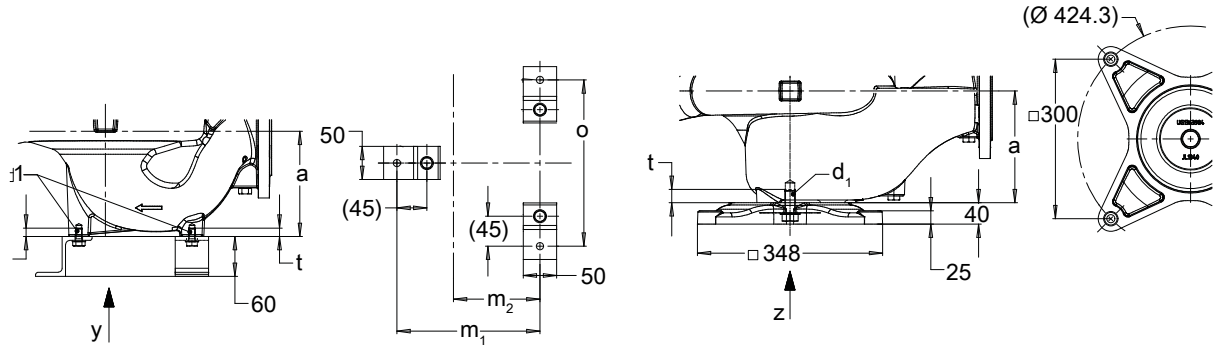


Fig. 252: Foundation fastening dimensions

Pump set dimensions (fixed speed version), n = 2900 rpm

Etaline	P_N	DN [231]	a	≈b_1 [232]	≈b_2 [232]	d_1	d_2	d_3	p	h_1	h_2	≈l_1 [232]	≈l_2 [232]	t	≈x [232]	w	m_1	m_2	o
n = 2900 rpm	[kW]	[mm]																	
032-032-160	1,10	32	87	119	131	M10	200	162	120	180	160	512	425	12,5	100	156	175	100	190
032-032-160	1,50	32	87	119	131	M10	200	190	128	180	160	525	438	12,5	100	156	175	100	190
032-032-160	2,20	32	87	119	131	M10	200	190	128	180	160	551	464	12,5	100	156	175	100	190
032-032-160	3,00	32	87	119	131	M10	250	213	135	180	160	604	517	12,5	100	170	175	100	190
032-032-160	4,00	32	87	119	131	M10	250	234	148	180	160	628	541	12,5	100	170	175	100	190
032-032-160	5,50	32	87	119	131	M10	300	266	167	180	160	693	606	12,5	100	193	175	100	190
032-032-160	7,50	32	87	119	131	M10	300	266	167	180	160	693	606	12,5	100	193	175	100	190
032-032-200	3,00	32	100	134	146	M10	250	213	135	250	190	617	517	12,5	100	170	175	100	190
032-032-200	4,00	32	100	134	146	M10	250	234	148	250	190	641	541	12,5	100	170	175	100	190
032-032-200	5,50	32	100	134	146	M10	300	266	167	250	190	706	606	12,5	100	193	175	100	190
032-032-200	7,50	32	100	134	146	M10	300	266	167	250	190	706	606	12,5	100	193	175	100	190
032-032-200	11,00	32	100	134	146	M10	350	325	197	250	190	872	772	12,5	100	226	175	100	190
032-032-200	15,00	32	100	134	146	M10	350	325	197	250	190	872	772	12,5	100	226	175	100	190
040-040-160	2,20	40	114	118	132	M10	200	190	128	180	160	578	464	12,5	100	156	165	90	190
040-040-160	3,00	40	114	118	132	M10	250	213	135	180	160	631	517	12,5	100	170	165	90	190
040-040-160	4,00	40	114	118	132	M10	250	234	148	180	160	655	541	12,5	100	170	165	90	190
040-040-160	5,50	40	114	118	132	M10	300	266	167	180	160	720	606	12,5	100	193	165	90	190
040-040-160	7,50	40	114	118	132	M10	300	266	167	180	160	720	606	12,5	100	193	165	90	190
040-040-160	11,00	40	114	118	132	M10	350	325	197	180	160	886	772	12,5	100	226	165	90	190
040-040-250	5,50	40	104	163	173	M10	300	266	167	220	220	714	610	12,5	100	197	175	100	190

231 DN = EN 1092-2, PN 16

232 For the exact motor-related dimensions refer to the general arrangement drawing.

Etaline	P_N	DN 231)	a	≈b_1 232)	≈b_2 232)	d_1	d_2	d_3	p	h_1	h_2	≈l_1 232)	≈l_2 232)	t	≈x 232)	w	m_1	m_2	o
n = 2900 rpm	[kW]	[mm]																	
040-040-250	7,50	40	104	163	173	M10	300	266	167	220	220	714	610	12,5	100	197	175	100	190
040-040-250	11,00	40	104	163	173	M10	350	325	197	220	220	880	776	12,5	100	230	175	100	190
040-040-250	15,00	40	104	163	173	M10	350	325	197	220	220	880	776	12,5	100	230	175	100	190
040-040-250	18,50	40	104	163	173	M10	350	325	197	220	220	886	782	12,5	100	230	175	100	190
040-040-250	22,00	40	104	163	173	M10	350	370	262	220	220	944	840	12,5	100	230	175	100	190
040-040-250	30,00	40	104	163	173	M10	400	422	305	220	220	1003	899	12,5	100	230	175	100	190
040-040-250	37,00	40	104	163	173	M10	400	422	305	220	220	1003	899	12,5	100	230	175	100	190
050-050-160	2,20	50	134	116	135	M10	200	190	128	250	190	598	464	12,5	100	156	175	100	190
050-050-160	3,00	50	134	116	135	M10	250	213	135	250	190	651	517	12,5	100	170	175	100	190
050-050-160	4,00	50	134	116	135	M10	250	234	148	250	190	675	541	12,5	100	170	175	100	190
050-050-160	5,50	50	134	116	135	M10	300	266	167	250	190	740	606	12,5	100	193	175	100	190
050-050-160	7,50	50	134	116	135	M10	300	266	167	250	190	740	606	12,5	100	193	175	100	190
050-050-160	11,00	50	134	116	135	M10	350	325	197	250	190	906	772	12,5	100	226	175	100	190
050-050-160	15,00	50	134	116	135	M10	350	325	197	250	190	906	772	12,5	100	226	175	100	190
050-050-250	7,50	50	129	167	182	M10	300	266	167	220	220	745	616	12,5	100	203	175	100	190
050-050-250	11,00	50	129	167	182	M10	350	325	197	220	220	911	782	12,5	100	236	175	100	190
050-050-250	15,00	50	129	167	182	M10	350	325	197	220	220	911	782	12,5	100	236	175	100	190
050-050-250	18,50	50	129	167	182	M10	350	325	197	220	220	917	788	12,5	100	236	175	100	190
050-050-250	22,00	50	129	167	182	M10	350	370	262	220	220	975	846	12,5	100	236	175	100	190
050-050-250	30,00	50	129	167	182	M10	400	422	305	220	220	1034	905	12,5	100	236	175	100	190
050-050-250	37,00	50	129	167	182	M10	400	422	305	220	220	1034	905	12,5	100	236	175	100	190
065-065-160	3,00	65	150	114	135	M10	250	213	135	270	170	667	517	12,5	100	170	175	110	210
065-065-160	4,00	65	150	114	135	M10	250	234	148	270	170	691	541	12,5	100	170	175	110	210
065-065-160	5,50	65	150	114	135	M10	300	266	167	270	170	756	606	12,5	100	193	175	110	210
065-065-160	7,50	65	150	114	135	M10	300	266	167	270	170	756	606	12,5	100	193	175	110	210
065-065-160	11,00	65	150	114	135	M10	350	325	197	270	170	922	772	12,5	100	226	175	110	210
065-065-160	15,00	65	150	114	135	M10	350	325	197	270	170	922	772	12,5	100	226	175	110	210
065-065-160	18,50	65	150	114	135	M10	350	325	197	270	170	928	778	12,5	100	226	175	110	210
065-065-160	22,00	65	150	114	135	M10	350	370	262	270	170	986	836	12,5	100	226	175	110	210
065-065-250	11,00	65	134	174	196	M10	350	325	197	225	250	931	797	12,5	100	251	175	100	220
065-065-250	15,00	65	134	174	196	M10	350	325	197	225	250	931	797	12,5	100	251	175	100	220
065-065-250	18,50	65	134	174	196	M10	350	325	197	225	250	937	803	12,5	100	251	175	100	220
065-065-250	22,00	65	134	174	196	M10	350	370	262	225	250	995	861	12,5	100	251	175	100	220
065-065-250	30,00	65	134	174	196	M10	400	422	305	225	250	1054	920	12,5	100	251	175	100	220
065-065-250	37,00	65	134	174	196	M10	400	422	305	225	250	1054	920	12,5	100	251	175	100	220
080-080-160	5,50	80	176	119	147	M10	300	266	167	260	180	782	606	12,5	100	193	175	100	230
080-080-160	7,50	80	176	119	147	M10	300	266	167	260	180	782	606	12,5	100	193	175	100	230
080-080-160	11,00	80	176	119	147	M10	350	325	197	260	180	948	772	12,5	100	226	175	100	230
080-080-160	15,00	80	176	119	147	M10	350	325	197	260	180	948	772	12,5	100	226	175	100	230
080-080-160	18,50	80	176	119	147	M10	350	325	197	260	180	954	778	12,5	100	226	175	100	230
080-080-160	22,00	80	176	119	147	M10	350	370	262	260	180	1012	836	12,5	100	226	175	100	230
080-080-160	30,00	80	176	119	147	M10	400	422	305	260	180	1071	895	12,5	100	226	175	100	230
080-080-200	11,00	80	158	150	170	M10	350	325	197	250	250	945	787	12,5	140	241	215	130	250
080-080-200	15,00	80	158	150	170	M10	350	325	197	250	250	945	787	12,5	140	241	215	130	250
080-080-200	18,50	80	158	150	170	M10	350	325	197	250	250	951	793	12,5	140	241	215	130	250
080-080-200	22,00	80	158	150	170	M10	350	370	262	250	250	1009	851	12,5	140	241	215	130	250
080-080-200	30,00	80	158	150	170	M10	400	422	305	250	250	1068	910	12,5	140	241	215	130	250
080-080-200	37,00	80	158	150	170	M10	400	422	305	250	250	1068	910	12,5	140	241	215	130	250
100-100-125	5,50	100	129	112	160	M10	300	266	167	230	220	744	615	12,5	100	202	195	100	230
100-100-125	7,50	100	129	112	160	M10	300	266	167	230	220	744	615	12,5	100	202	195	100	230
100-100-125	11,00	100	129	112	160	M10	350	325	197	230	220	910	781	12,5	100	235	195	100	230
100-100-125	15,00	100	129	112	160	M10	350	325	197	230	220	910	781	12,5	100	235	195	100	230
100-100-160	11,00	100	156	128	163	M20	350	325	197	245	205	948	792	25	140	246	-	-	-
100-100-160	15,00	100	156	128	163	M20	350	325	197	245	205	948	792	25	140	246	-	-	-
100-100-160	18,50	100	156	128	163	M20	350	325	197	245	205	954	798	25	140	246	-	-	-
100-100-160	22,00	100	156	128	163	M20	350	370	262	245	205	1012	856	25	140	246	-	-	-
100-100-160	30,00	100	156	128	163	M20	400	422	305	245	205	1071	915	25	140	246	-	-	-
100-100-160	37,00	100	156	128	163	M20	400	422	305	245	205	1071	915	25	140	246	-	-	-
125-125-160	18,50	125	203	182	226	M20	350	325	197	420	280	1001	798	25	140	246	-	-	-
125-125-160	22,00	125	203	182	226	M20	350	370	262	420	280	1059	856	25	140	246	-	-	-
125-125-160	30,00	125	203	182	226	M20	400	422	305	420	280	1118	915	25	140	246	-	-	-
125-125-160	37,00	125	203	182	226	M20	400	422	305	420	280	1118	915	25	140	246	-	-	-

Etaline	P_N	DN [231]	a	≈b_1 [232]	≈b_2 [232]	d_1	d_2	d_3	p	h_1	h_2	≈l_1 [232]	≈l_2 [232]	t	≈x [232]	w	m_1	m_2	o
n = 2900 rpm	[kW]	[mm]																	
125-125-160	45,00	125	203	182	226	M20	450	468	325	420	280	1235	1032	25	140	277	-	-	-
125-125-200	22,00	125	206	175	214	M20	350	370	262	380	320	1062	856	25	140	246	-	-	-
125-125-200	30,00	125	206	175	214	M20	400	422	305	380	320	1121	915	25	140	246	-	-	-
125-125-200	37,00	125	206	175	214	M20	400	422	305	380	320	1065	859	25	140	190	-	-	-
125-125-200	45,00	125	206	175	214	M20	450	468	325	380	320	1238	1032	25	140	277	-	-	-

Pump set (fixed speed version), n = 1450 rpm

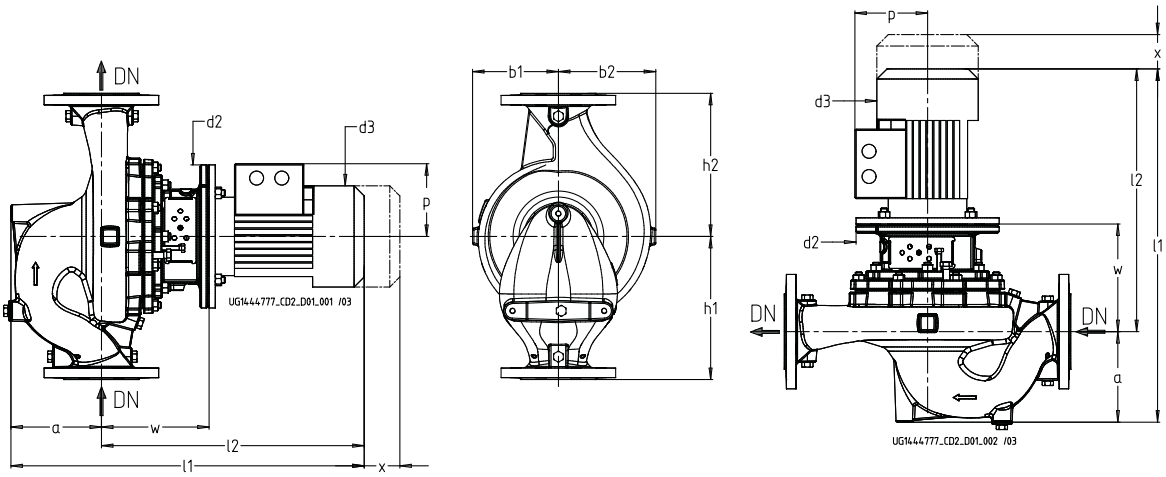


Fig. 253: Pump set dimensions

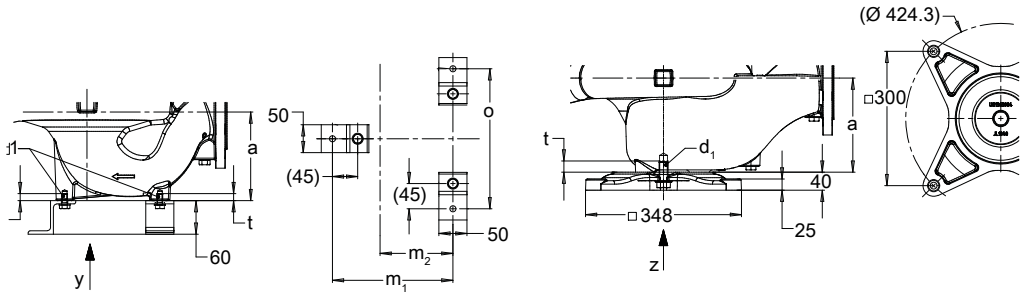


Fig. 254: Foundation fastening dimensions

Pump set dimensions (fixed speed version), n = 1450 rpm

Etaline	P_N	DN [233]	a	≈b_1 [234]	≈b_2 [234]	d_1	d_2	d_3	p	h_1	h_2	≈l_1 [234]	≈l_2 [234]	t	≈x [234]	w	m_1	m_2	o
n = 1450 rpm	[kW]	[mm]																	
032-032-160	0,25	32	87	119	131	M10	160	145	111	180	160	460	373	12,5	100	136	175	100	190
032-032-160	0,37	32	87	119	131	M10	160	145	111	180	160	460	373	12,5	100	136	175	100	190
032-032-160	0,55	32	87	119	131	M10	200	162	120	180	160	498	411	12,5	100	156	175	100	190
032-032-160	0,75	32	87	119	131	M10	200	162	120	180	160	498	411	12,5	100	156	175	100	190
032-032-160	1,10	32	87	119	131	M10	200	190	128	180	160	525	438	12,5	100	156	175	100	190
032-032-200	0,37	32	100	134	146	M10	160	145	111	250	190	473	373	12,5	100	136	175	100	190
032-032-200	0,55	32	100	134	146	M10	200	162	120	250	190	511	411	12,5	100	156	175	100	190
032-032-200	0,75	32	100	134	146	M10	200	162	120	250	190	511	411	12,5	100	156	175	100	190
032-032-200	1,10	32	100	134	146	M10	200	190	128	250	190	538	438	12,5	100	156	175	100	190
032-032-200	1,50	32	100	134	146	M10	200	190	128	250	190	564	464	12,5	100	156	175	100	190
032-032-200	2,20	32	100	134	146	M10	250	213	135	250	190	617	517	12,5	100	170	175	100	190
040-040-160	0,37	40	114	118	132	M10	160	145	111	180	160	487	373	12,5	100	136	165	90	190
040-040-160	0,55	40	114	118	132	M10	200	162	120	180	160	525	411	12,5	100	156	165	90	190
040-040-160	0,75	40	114	118	132	M10	200	162	120	180	160	525	411	12,5	100	156	165	90	190
040-040-160	1,10	40	114	118	132	M10	200	190	128	180	160	552	438	12,5	100	156	165	90	190
040-040-160	1,50	40	114	118	132	M10	200	190	128	180	160	578	464	12,5	100	156	165	90	190
040-040-250	0,75	40	104	163	173	M10	200	162	120	220	220	519	415	12,5	100	160	175	100	190
040-040-250	1,10	40	104	163	173	M10	200	190	128	220	220	546	442	12,5	100	160	175	100	190
040-040-250	1,50	40	104	163	173	M10	200	190	128	220	220	572	468	12,5	100	160	175	100	190
040-040-250	2,20	40	104	163	173	M10	250	213	135	220	220	625	521	12,5	100	174	175	100	190
040-040-250	3,00	40	104	163	173	M10	250	213	135	220	220	660	556	12,5	100	174	175	100	190
040-040-250	4,00	40	104	163	173	M10	250	234	148	220	220	649	545	12,5	100	174	175	100	190
040-040-250	5,50	40	104	163	173	M10	300	266	167	220	220	714	610	12,5	100	197	175	100	190
050-050-160	0,37	50	134	116	135	M10	160	145	111	250	190	507	373	12,5	100	136	175	100	190
050-050-160	0,55	50	134	116	135	M10	200	162	120	250	190	545	411	12,5	100	156	175	100	190

233 DN = EN 1092-2, PN 16

234 For the exact motor-related dimensions refer to the general arrangement drawing.

Etaline	P_N	DN [233]	a	≈b_1 [234]	≈b_2 [234]	d_1	d_2	d_3	p	h_1	h_2	≈l_1 [234]	≈l_2 [234]	t	≈x [234]	w	m_1	m_2	o
n = 1450 rpm	[kW]	[mm]																	
050-050-160	0,75	50	134	116	135	M10	200	162	120	250	190	545	411	12,5	100	156	175	100	190
050-050-160	1,10	50	134	116	135	M10	200	190	128	250	190	572	438	12,5	100	156	175	100	190
050-050-160	1,50	50	134	116	135	M10	200	190	128	250	190	598	464	12,5	100	156	175	100	190
050-050-160	2,20	50	134	116	135	M10	250	213	135	250	190	651	517	12,5	100	170	175	100	190
050-050-250	1,10	50	129	167	182	M10	200	190	128	220	220	577	448	12,5	100	166	175	100	190
050-050-250	1,50	50	129	167	182	M10	200	190	128	220	220	603	474	12,5	100	166	175	100	190
050-050-250	2,20	50	129	167	182	M10	250	213	135	220	220	656	527	12,5	100	180	175	100	190
050-050-250	3,00	50	129	167	182	M10	250	213	135	220	220	691	562	12,5	100	180	175	100	190
050-050-250	4,00	50	129	167	182	M10	250	234	148	220	220	680	551	12,5	100	180	175	100	190
050-050-250	5,50	50	129	167	182	M10	300	266	167	220	220	745	616	12,5	100	203	175	100	190
050-050-250	7,50	50	129	167	182	M10	300	298	167	220	220	773	644	12,5	100	203	175	100	190
065-065-160	0,37	65	150	114	135	M10	160	145	111	270	170	523	373	12,5	100	136	175	110	210
065-065-160	0,55	65	150	114	135	M10	200	162	120	270	170	561	411	12,5	100	156	175	110	210
065-065-160	0,75	65	150	114	135	M10	200	162	120	270	170	561	411	12,5	100	156	175	110	210
065-065-160	1,10	65	150	114	135	M10	200	190	128	270	170	588	438	12,5	100	156	175	110	210
065-065-160	1,50	65	150	114	135	M10	200	190	128	270	170	614	464	12,5	100	156	175	110	210
065-065-160	2,20	65	150	114	135	M10	250	213	135	270	170	667	517	12,5	100	170	175	110	210
065-065-160	3,00	65	150	114	135	M10	250	213	135	270	170	702	552	12,5	100	170	175	110	210
065-065-250	1,50	65	134	174	196	M10	200	190	128	225	250	623	489	12,5	100	181	175	100	220
065-065-250	2,20	65	134	174	196	M10	250	213	135	225	250	676	542	12,5	100	195	175	100	220
065-065-250	3,00	65	134	174	196	M10	250	213	135	225	250	711	577	12,5	100	195	175	100	220
065-065-250	4,00	65	134	174	196	M10	250	234	148	225	250	700	566	12,5	100	195	175	100	220
065-065-250	5,50	65	134	174	196	M10	300	266	167	225	250	765	631	12,5	100	218	175	100	220
065-065-250	7,50	65	134	174	196	M10	300	298	167	225	250	793	659	12,5	100	218	175	100	220
065-065-250	11,00	65	134	174	196	M10	350	325	197	225	250	931	797	12,5	100	251	175	100	220
080-080-160	0,55	80	176	119	147	M10	160	145	111	260	180	569	393	12,5	100	156	175	100	230
080-080-160	0,75	80	176	119	147	M10	200	162	120	260	180	587	411	12,5	100	156	175	100	230
080-080-160	1,10	80	176	119	147	M10	200	190	128	260	180	614	438	12,5	100	156	175	100	230
080-080-160	1,50	80	176	119	147	M10	200	190	128	260	180	640	464	12,5	100	156	175	100	230
080-080-160	2,20	80	176	119	147	M10	250	213	135	260	180	693	517	12,5	100	170	175	100	230
080-080-160	3,00	80	176	119	147	M10	250	213	135	260	180	728	552	12,5	100	170	175	100	230
080-080-160	4,00	80	176	119	147	M10	250	234	148	260	180	717	541	12,5	100	170	175	100	230
080-080-200	1,10	80	158	150	170	M10	200	190	128	250	250	611	453	12,5	140	171	215	130	250
080-080-200	1,50	80	158	150	170	M10	200	190	128	250	250	637	479	12,5	140	171	215	130	250
080-080-200	2,20	80	158	150	170	M10	250	213	135	250	250	690	532	12,5	140	185	215	130	250
080-080-200	3,00	80	158	150	170	M10	250	213	135	250	250	725	567	12,5	140	185	215	130	250
080-080-200	4,00	80	158	150	170	M10	250	234	148	250	250	714	556	12,5	140	185	215	130	250
080-080-200	5,50	80	158	150	170	M10	300	266	167	250	250	779	621	12,5	140	208	215	130	250
080-080-200	7,50	80	158	150	170	M10	300	298	167	250	250	807	649	12,5	140	208	215	130	250
080-080-250	2,20	80	187	173	193	M10	250	213	135	350	270	724	537	12,5	140	190	180	105	230
080-080-250	3,00	80	187	173	193	M10	250	213	135	350	270	759	572	12,5	140	190	180	105	230
080-080-250	4,00	80	187	173	193	M10	250	234	148	350	270	748	561	12,5	140	190	180	105	230
080-080-250	5,50	80	187	173	193	M10	300	266	167	350	270	813	626	12,5	140	213	180	105	230
080-080-250	7,50	80	187	173	193	M10	300	298	167	350	270	841	654	12,5	140	213	180	105	230
080-080-250	11,00	80	187	173	193	M10	350	325	197	350	270	979	792	12,5	140	246	180	105	230
080-080-250	15,00	80	187	173	193	M10	350	325	197	350	270	985	798	12,5	140	246	180	105	230
100-100-125	0,75	100	129	112	160	M10	200	162	120	230	220	549	420	12,5	100	165	195	100	230
100-100-125	1,10	100	129	112	160	M10	200	190	128	230	220	576	447	12,5	100	165	195	100	230
100-100-125	1,50	100	129	112	160	M10	200	190	128	230	220	602	473	12,5	100	165	195	100	230
100-100-125	2,20	100	129	112	160	M10	250	213	135	230	220	655	526	12,5	100	179	195	100	230
100-100-160	1,50	100	156	128	163	M20	200	190	128	245	205	640	484	25	140	176	-	-	-
100-100-160	2,20	100	156	128	163	M20	250	213	135	245	205	693	537	25	140	190	-	-	-
100-100-160	3,00	100	156	128	163	M20	250	213	135	245	205	728	572	25	140	190	-	-	-
100-100-160	4,00	100	156	128	163	M20	250	234	148	245	205	717	561	25	140	190	-	-	-
100-100-160	5,50	100	156	128	163	M20	300	266	167	245	205	782	626	25	140	213	-	-	-
100-100-200	2,20	100	180	172	202	M20	250	213	135	305	245	717	537	25	140	190	-	-	-
100-100-200	3,00	100	180	172	202	M20	250	213	135	305	245	752	572	25	140	190	-	-	-
100-100-200	4,00	100	180	172	202	M20	250	234	148	305	245	741	561	25	140	190	-	-	-
100-100-200	5,50	100	180	172	202	M20	300	266	167	305	245	806	626	25	140	213	-	-	-
100-100-200	7,50	100	180	172	202	M20	300	298	167	305	245	834	654	25	140	213	-	-	-
100-100-200	11,00	100	180	172	202	M20	350	325	197	305	245	972	792	25	140	246	-	-	-
100-100-250	3,00	100	158	196	222	M20	250	213	135	290	260	754	596	25	140	214	-	-	-

Etaline	P_N	DN [233]	a	≈b_1 [234]	≈b_2 [234]	d_1	d_2	d_3	p	h_1	h_2	≈l_1 [234]	≈l_2 [234]	t	≈x [234]	w	m_1	m_2	o
n = 1450 rpm	[kW]	[mm]																	
100-100-250	4,00	100	158	196	222	M20	250	234	148	290	260	743	585	25	140	214	-	-	-
100-100-250	5,50	100	158	196	222	M20	300	266	167	290	260	808	650	25	140	237	-	-	-
100-100-250	7,50	100	158	196	222	M20	300	298	167	290	260	836	678	25	140	237	-	-	-
100-100-250	11,00	100	158	196	222	M20	350	325	197	290	260	974	816	25	140	270	-	-	-
100-100-250	15,00	100	158	196	222	M20	350	325	197	290	260	980	822	25	140	270	-	-	-
100-100-250	18,50	100	158	196	222	M20	350	370	262	290	260	1038	880	25	140	270	-	-	-
125-125-160	2,20	125	203	182	226	M20	250	213	135	420	280	740	537	25	140	190	-	-	-
125-125-160	3,00	125	203	182	226	M20	250	213	135	420	280	775	572	25	140	190	-	-	-
125-125-160	4,00	125	203	182	226	M20	250	234	148	420	280	764	561	25	140	190	-	-	-
125-125-160	5,50	125	203	182	226	M20	300	266	167	420	280	829	626	25	140	213	-	-	-
125-125-160	7,50	125	203	182	226	M20	300	298	167	420	280	857	654	25	140	213	-	-	-
125-125-200	3,00	125	206	175	214	M20	250	213	135	380	320	778	572	25	140	190	-	-	-
125-125-200	4,00	125	206	175	214	M20	250	234	148	380	320	767	561	25	140	190	-	-	-
125-125-200	5,50	125	206	175	214	M20	300	266	167	380	320	832	626	25	140	213	-	-	-
125-125-200	7,50	125	206	175	214	M20	300	298	167	380	320	860	654	25	140	213	-	-	-
125-125-200	11,00	125	206	175	214	M20	350	325	197	380	320	998	792	25	140	246	-	-	-
125-125-200	15,00	125	206	175	214	M20	350	325	197	380	320	1004	798	25	140	246	-	-	-
125-125-250	5,50	125	210	188	219	M20	300	266	167	380	320	836	626	25	140	213	-	-	-
125-125-250	7,50	125	210	188	219	M20	300	298	167	380	320	864	654	25	140	213	-	-	-
125-125-250	11,00	125	210	188	219	M20	350	325	197	380	320	1002	792	25	140	246	-	-	-
125-125-250	15,00	125	210	188	219	M20	350	325	197	380	320	1008	798	25	140	246	-	-	-
125-125-250	18,50	125	210	188	219	M20	350	370	262	380	320	1066	856	25	140	246	-	-	-
125-125-250	22,00	125	210	188	219	M20	350	370	262	380	320	1066	856	25	140	246	-	-	-
150-150-200	5,50	150	230	187	240	M20	300	266	167	385	315	856	626	25	140	213	-	-	-
150-150-200	7,50	150	230	187	240	M20	300	298	167	385	315	884	654	25	140	213	-	-	-
150-150-200	11,00	150	230	187	240	M20	350	325	197	385	315	1022	792	25	140	246	-	-	-
150-150-200	15,00	150	230	187	240	M20	350	325	197	385	315	1028	798	25	140	246	-	-	-
150-150-200	18,50	150	230	187	240	M20	350	370	262	385	315	1086	856	25	140	246	-	-	-
150-150-250	7,50	150	222	226	275	M20	300	298	167	370	330	891	669	25	140	228	-	-	-
150-150-250	11,00	150	222	226	275	M20	350	325	197	370	330	1029	807	25	140	261	-	-	-
150-150-250	15,00	150	222	226	275	M20	350	325	197	370	330	1035	813	25	140	261	-	-	-
150-150-250	18,50	150	222	226	275	M20	350	370	262	370	330	1093	871	25	140	261	-	-	-
150-150-250	22,00	150	222	226	275	M20	350	370	262	370	330	1093	871	25	140	261	-	-	-
150-150-250	30,00	150	222	226	275	M20	400	422	305	370	330	1152	930	25	140	261	-	-	-
150-150-250	37,00	150	222	226	275	M20	450	460	325	370	330	1209	987	25	140	292	-	-	-
200-200-250	11,00	200	222	233	303	M20	350	325	197	400	400	1067	845	25	140	299	-	-	-
200-200-250	15,00	200	222	233	303	M20	350	325	197	400	400	1073	851	25	140	299	-	-	-
200-200-250	18,50	200	222	233	303	M20	350	370	262	400	400	1131	909	25	140	299	-	-	-
200-200-250	22,00	200	222	233	303	M20	350	370	262	400	400	1131	909	25	140	299	-	-	-
200-200-250	30,00	200	222	233	303	M20	400	422	305	400	400	1190	968	25	140	299	-	-	-
200-200-250	37,00	200	222	233	303	M20	450	460	325	400	400	1247	1025	25	140	330	-	-	-
200-200-250	45,00	200	222	233	303	M20	450	468	325	400	400	1277	1055	25	140	330	-	-	-
200-200-315	22,00	200	255	259	318	M20	350	370	262	490	410	1141	886	25	140	276	-	-	-
200-200-315	30,00	200	255	259	318	M20	400	422	305	490	410	1200	945	25	140	276	-	-	-
200-200-315	37,00	200	255	259	318	M20	450	460	325	490	410	1257	1002	25	140	307	-	-	-
200-200-315	45,00	200	255	259	318	M20	450	468	325	490	410	1287	1032	25	140	307	-	-	-
200-200-315	55,00	200	255	259	318	M20	550	520	392	490	410	1391	1136	25	140	319	-	-	-

Pump set (variable speed version), n = 3000 rpm

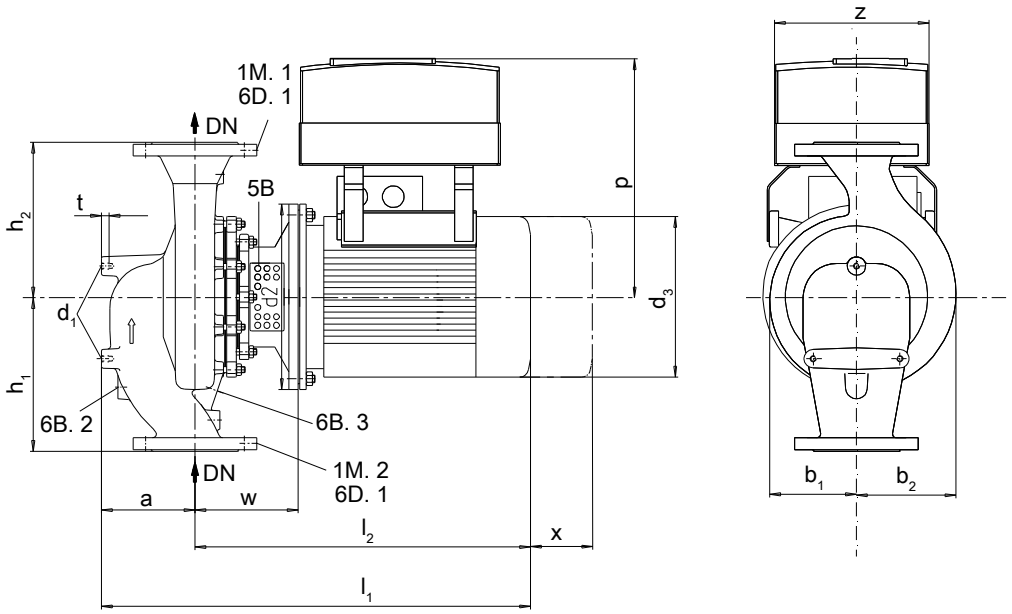


Fig. 255: Pump set dimensions with PumpDrive 2

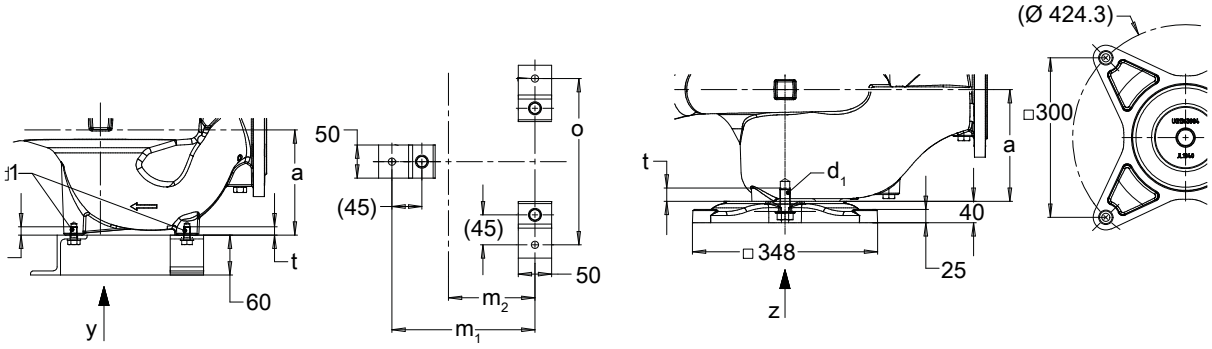


Fig. 256: Foundation fastening dimensions

Dimensions of pump set with PumpDrive 2 (variable speed version), n = 3000 rpm [235)]

Etaline PumpDrive 2	P_N	DN [236)]	a	≈b_1 [237)]	≈b_2 [237)]	d_1	d_2	d_3	≈p [237)]	h_1	h_2	≈l_1 [237)]	≈l_2 [237)]	t	≈x [237)]	w	m_1	m_2	o	z
n = 3000 rpm	[kW]	[mm]																		
032-032-160	1,10	32	87	119	131	M10	200	162	294	180	160	512	425	12,5	100	156	175	100	190	190
032-032-160	1,50	32	87	119	131	M10	200	190	299	180	160	525	438	12,5	100	156	175	100	190	190
032-032-160	2,20	32	87	119	131	M10	200	190	299	180	160	551	464	12,5	100	156	175	100	190	211
032-032-160	3,00	32	87	119	131	M10	250	213	338	180	160	604	517	12,5	100	170	175	100	190	211
032-032-160	4,00	32	87	119	131	M10	250	234	353	180	160	628	541	12,5	100	170	175	100	190	211
032-032-160	5,50	32	87	119	131	M10	300	266	374	180	160	693	606	12,5	100	193	175	100	190	255
032-032-160	7,50	32	87	119	131	M10	300	266	374	180	160	693	606	12,5	100	193	175	100	190	255
032-032-200	3,00	32	100	134	146	M10	250	213	338	250	190	617	517	12,5	100	170	175	100	190	211
032-032-200	4,00	32	100	134	146	M10	250	234	353	250	190	641	541	12,5	100	170	175	100	190	211
032-032-200	5,50	32	100	134	146	M10	300	266	374	250	190	706	606	12,5	100	193	175	100	190	255
032-032-200	7,50	32	100	134	146	M10	300	266	374	250	190	706	606	12,5	100	193	175	100	190	255
032-032-200	11,00	32	100	134	146	M10	350	325	405	250	190	872	772	12,5	100	226	175	100	190	255
032-032-200	15,00	32	100	134	146	M10	350	325	457	250	190	872	772	12,5	100	226	175	100	190	325
040-040-160	2,20	40	114	118	132	M10	200	190	299	180	160	578	464	12,5	100	156	165	90	190	211
040-040-160	3,00	40	114	118	132	M10	250	213	338	180	160	631	517	12,5	100	170	165	90	190	211
040-040-160	4,00	40	114	118	132	M10	250	234	353	180	160	655	541	12,5	100	170	165	90	190	211
040-040-160	5,50	40	114	118	132	M10	300	266	374	180	160	720	606	12,5	100	193	165	90	190	255

235 The dimensions of IE3, IE4, and IE5 drives may differ slightly.
236 DN = EN 1092-2, PN 16
237 For the exact motor-related dimensions refer to the general arrangement drawing in KSB EasySelect.

Etaline PumpDrive 2	P_N	DN [236]	a	≈b_1 [237]	≈b_2 [237]	d_1	d_2	d_3	≈p [237]	h_1	h_2	≈l_1 [237]	≈l_2 [237]	t	≈x [237]	w	m_1	m_2	o	z
n = 3000 rpm	[kW]	[mm]																		
040-040-160	7,50	40	114	118	132	M10	300	266	374	180	160	720	606	12,5	100	193	165	90	190	255
040-040-160	11,00	40	114	118	132	M10	350	325	405	180	160	886	772	12,5	100	226	165	90	190	255
040-040-250	5,50	40	104	163	173	M10	300	266	374	220	220	714	610	12,5	100	197	175	100	190	255
040-040-250	7,50	40	104	163	173	M10	300	266	374	220	220	714	610	12,5	100	197	175	100	190	255
040-040-250	11,00	40	104	163	173	M10	350	325	405	220	220	880	776	12,5	100	230	175	100	190	255
040-040-250	15,00	40	104	163	173	M10	350	325	457	220	220	880	776	12,5	100	230	175	100	190	325
040-040-250	18,50	40	104	163	173	M10	350	325	457	220	220	886	782	12,5	100	230	175	100	190	325
040-040-250	22,00	40	104	163	173	M10	350	370	509	220	220	944	840	12,5	100	230	175	100	190	325
040-040-250	30,00	40	104	163	173	M10	400	422	558	220	220	1003	899	12,5	100	230	175	100	190	325
040-040-250	37,00	40	104	163	173	M10	400	422	573	220	220	1003	899	12,5	100	230	175	100	190	425
050-050-160	2,20	50	134	116	135	M10	200	190	299	250	190	598	464	12,5	100	156	175	100	190	211
050-050-160	3,00	50	134	116	135	M10	250	213	338	250	190	651	517	12,5	100	170	175	100	190	211
050-050-160	4,00	50	134	116	135	M10	250	234	353	250	190	675	541	12,5	100	170	175	100	190	211
050-050-160	5,50	50	134	116	135	M10	300	266	374	250	190	740	606	12,5	100	193	175	100	190	255
050-050-160	7,50	50	134	116	135	M10	300	266	374	250	190	740	606	12,5	100	193	175	100	190	255
050-050-160	11,00	50	134	116	135	M10	350	325	405	250	190	906	772	12,5	100	226	175	100	190	255
050-050-160	15,00	50	134	116	135	M10	350	325	457	250	190	906	772	12,5	100	226	175	100	190	325
050-050-250	7,50	50	129	167	182	M10	300	266	374	220	220	745	616	12,5	100	203	175	100	190	255
050-050-250	11,00	50	129	167	182	M10	350	325	405	220	220	911	782	12,5	100	236	175	100	190	255
050-050-250	15,00	50	129	167	182	M10	350	325	457	220	220	911	782	12,5	100	236	175	100	190	325
050-050-250	18,50	50	129	167	182	M10	350	325	457	220	220	917	788	12,5	100	236	175	100	190	325
050-050-250	22,00	50	129	167	182	M10	350	370	509	220	220	975	846	12,5	100	236	175	100	190	325
050-050-250	30,00	50	129	167	182	M10	400	422	558	220	220	1034	905	12,5	100	236	175	100	190	325
050-050-250	37,00	50	129	167	182	M10	400	422	573	220	220	1034	905	12,5	100	236	175	100	190	425
065-065-160	3,00	65	150	114	135	M10	250	213	338	270	170	667	517	12,5	100	170	175	110	210	211
065-065-160	4,00	65	150	114	135	M10	250	234	353	270	170	691	541	12,5	100	170	175	110	210	211
065-065-160	5,50	65	150	114	135	M10	300	266	374	270	170	756	606	12,5	100	193	175	110	210	255
065-065-160	7,50	65	150	114	135	M10	300	266	374	270	170	756	606	12,5	100	193	175	110	210	255
065-065-160	11,00	65	150	114	135	M10	350	325	405	270	170	922	772	12,5	100	226	175	110	210	255
065-065-160	15,00	65	150	114	135	M10	350	325	457	270	170	922	772	12,5	100	226	175	110	210	325
065-065-160	18,50	65	150	114	135	M10	350	325	457	270	170	928	778	12,5	100	226	175	110	210	325
065-065-160	22,00	65	150	114	135	M10	350	370	509	270	170	986	836	12,5	100	226	175	110	210	325
065-065-250	11,00	65	134	174	196	M10	350	325	405	225	250	931	797	12,5	100	251	175	100	220	255
065-065-250	15,00	65	134	174	196	M10	350	325	457	225	250	931	797	12,5	100	251	175	100	220	325
065-065-250	18,50	65	134	174	196	M10	350	325	457	225	250	937	803	12,5	100	251	175	100	220	325
065-065-250	22,00	65	134	174	196	M10	350	370	509	225	250	995	861	12,5	100	251	175	100	220	325
065-065-250	30,00	65	134	174	196	M10	400	422	558	225	250	1054	920	12,5	100	251	175	100	220	325
065-065-250	37,00	65	134	174	196	M10	400	422	573	225	250	1054	920	12,5	100	251	175	100	220	425
080-080-160	5,50	80	176	119	147	M10	300	266	374	260	180	782	606	12,5	100	193	175	100	230	255
080-080-160	7,50	80	176	119	147	M10	300	266	374	260	180	782	606	12,5	100	193	175	100	230	255
080-080-160	11,00	80	176	119	147	M10	350	325	405	260	180	948	772	12,5	100	226	175	100	230	255
080-080-160	15,00	80	176	119	147	M10	350	325	457	260	180	948	772	12,5	100	226	175	100	230	325
080-080-160	18,50	80	176	119	147	M10	350	325	457	260	180	954	778	12,5	100	226	175	100	230	325
080-080-160	22,00	80	176	119	147	M10	350	370	509	260	180	1012	836	12,5	100	226	175	100	230	325
080-080-160	30,00	80	176	119	147	M10	400	422	558	260	180	1071	895	12,5	100	226	175	100	230	325
080-080-200	11,00	80	158	150	170	M10	350	325	405	250	250	945	787	12,5	140	241	215	130	250	255
080-080-200	15,00	80	158	150	170	M10	350	325	457	250	250	945	787	12,5	140	241	215	130	250	325
080-080-200	18,50	80	158	150	170	M10	350	325	457	250	250	951	793	12,5	140	241	215	130	250	325
080-080-200	22,00	80	158	150	170	M10	350	370	509	250	250	1009	851	12,5	140	241	215	130	250	325
080-080-200	30,00	80	158	150	170	M10	400	422	558	250	250	1068	910	12,5	140	241	215	130	250	325
080-080-200	37,00	80	158	150	170	M10	400	422	573	250	250	1068	910	12,5	140	241	215	130	250	425
100-100-125	5,50	100	129	112	160	M10	300	266	374	230	220	744	615	12,5	100	202	195	100	230	255
100-100-125	7,50	100	129	112	160	M10	300	266	374	230	220	744	615	12,5	100	202	195	100	230	255
100-100-125	11,00	100	129	112	160	M10	350	325	405	230	220	910	781	12,5	100	235	195	100	230	255
100-100-125	15,00	100	129	112	160	M10	350	325	457	230	220	910	781	12,5	100	235	195	100	230	325
100-100-160	11,00	100	156	128	163	M20	350	325	405	245	205	948	792	25	140	246	-	-	-	255
100-100-160	15,00	100	156	128	163	M20	350	325	457	245	205	948	792	25	140	246	-	-	-	325
100-100-160	18,50	100	156	128	163	M20	350	325	457	245	205	954	798	25	140	246	-	-	-	325
100-100-160	22,00	100	156	128	163	M20	350	370	509	245	205	1012	856	25	140	246	-	-	-	325
100-100-160	30,00	100	156	128	163	M20	400	422	558	245	205	1071	915	25	140	246	-	-	-	325
100-100-160	37,00	100	156	128	163	M20	400	422	573	245	205	1071	915	25	140	246	-	-	-	425

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Etaline PumpDrive 2	P_N	DN [236]	a	≈b_1 [237]	≈b_2 [237]	d_1	d_2	d_3	≈p [237]	h_1	h_2	≈l_1 [237]	≈l_2 [237]	t	≈x [237]	w	m_1	m_2	o	z
n = 3000 rpm	[kW]	[mm]																		
125-125-160	18,50	125	203	182	226	M20	350	325	457	420	280	1001	798	25	140	246	-	-	-	325
125-125-160	22,00	125	203	182	226	M20	350	370	509	420	280	1059	856	25	140	246	-	-	-	325
125-125-160	30,00	125	203	182	226	M20	400	422	558	420	280	1118	915	25	140	246	-	-	-	325
125-125-160	37,00	125	203	182	226	M20	400	422	573	420	280	1118	915	25	140	246	-	-	-	425
125-125-160	45,00	125	203	182	226	M20	450	468	597	420	280	1235	1032	25	140	277	-	-	-	425
125-125-200	22,00	125	206	175	214	M20	350	370	509	380	320	1062	856	25	140	246	-	-	-	325
125-125-200	30,00	125	206	175	214	M20	400	422	558	380	320	1121	915	25	140	246	-	-	-	325
125-125-200	37,00	125	206	175	214	M20	400	422	573	380	320	1065	859	25	140	190	-	-	-	425
125-125-200	45,00	125	206	175	214	M20	450	468	597	380	320	1238	1032	25	140	277	-	-	-	425

Pump set (variable speed version), n = 1500 rpm

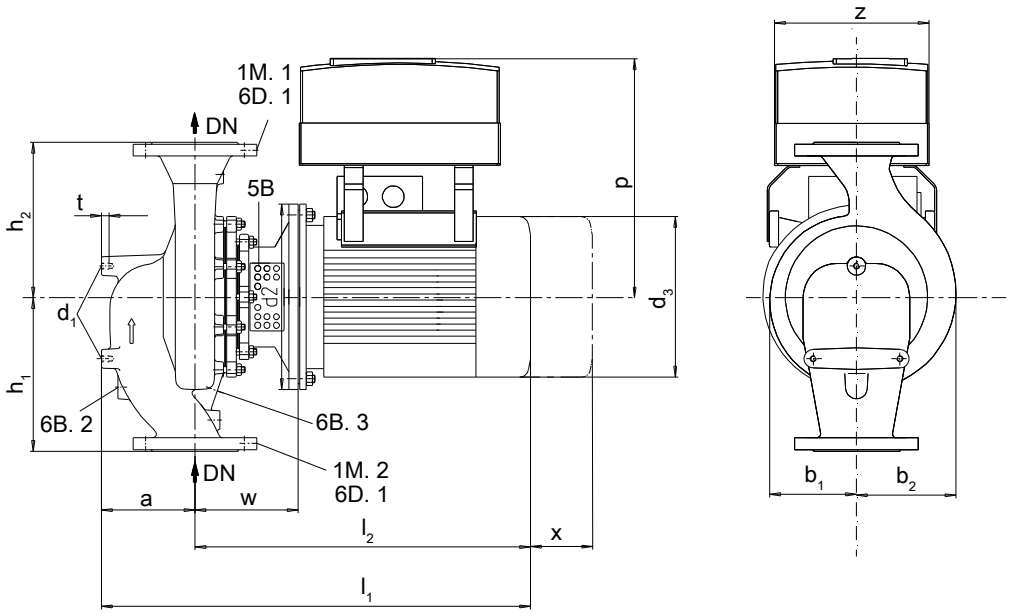


Fig. 257: Pump set dimensions with PumpDrive 2

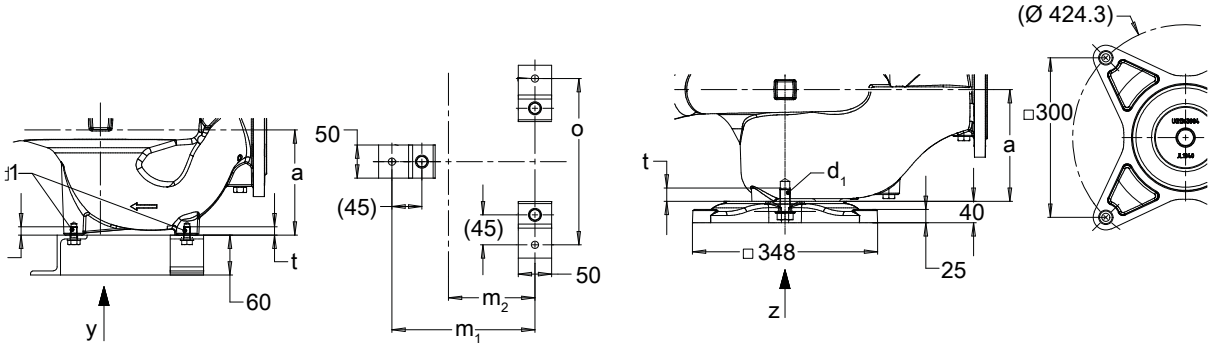


Fig. 258: Foundation fastening dimensions

Dimensions of pump set with PumpDrive 2 (variable speed version), n = 1500 rpm [238)]

Etaline PumpDrive 2	P_N	DN [239)]	a	≈b_1 [240)]	≈b_2 [240)]	d_1	d_2	d_3	≈p [240)]	h_1	h_2	≈l_1 [240)]	≈l_2 [240)]	t	≈x [240)]	w	m_1	m_2	o	z
n = 1500 rpm	[kW]	[mm]																		
032-032-160	0,55	32	87	119	131	M10	200	162	294	180	160	498	411	12,5	100	156	175	100	190	190
032-032-160	0,75	32	87	119	131	M10	200	162	294	180	160	498	411	12,5	100	156	175	100	190	190
032-032-160	1,10	32	87	119	131	M10	200	190	299	180	160	525	438	12,5	100	156	175	100	190	190
032-032-200	0,55	32	100	134	146	M10	200	162	294	250	190	511	411	12,5	100	156	175	100	190	190
032-032-200	0,75	32	100	134	146	M10	200	162	294	250	190	511	411	12,5	100	156	175	100	190	190
032-032-200	1,10	32	100	134	146	M10	200	190	299	250	190	538	438	12,5	100	156	175	100	190	190
032-032-200	1,50	32	100	134	146	M10	200	190	299	250	190	564	464	12,5	100	156	175	100	190	190
032-032-200	2,20	32	100	134	146	M10	250	213	338	250	190	617	517	12,5	100	170	175	100	190	211
040-040-160	0,55	40	114	118	132	M10	200	162	294	180	160	525	411	12,5	100	156	165	90	190	190
040-040-160	0,75	40	114	118	132	M10	200	162	294	180	160	525	411	12,5	100	156	165	90	190	190
040-040-160	1,10	40	114	118	132	M10	200	190	299	180	160	552	438	12,5	100	156	165	90	190	190
040-040-160	1,50	40	114	118	132	M10	200	190	299	180	160	578	464	12,5	100	156	165	90	190	190
040-040-250	0,75	40	104	163	173	M10	200	162	294	220	220	519	415	12,5	100	160	175	100	190	190
040-040-250	1,10	40	104	163	173	M10	200	190	299	220	220	546	442	12,5	100	160	175	100	190	190
040-040-250	1,50	40	104	163	173	M10	200	190	299	220	220	572	468	12,5	100	160	175	100	190	190
040-040-250	2,20	40	104	163	173	M10	250	213	338	220	220	625	521	12,5	100	174	175	100	190	211
040-040-250	3,00	40	104	163	173	M10	250	213	338	220	220	660	556	12,5	100	174	175	100	190	211

238 The dimensions of IE3, IE4, and IE5 drives may differ slightly.
239 DN = EN 1092-2, PN 16
240 For the exact motor-related dimensions refer to the general arrangement drawing in KSB EasySelect.

Etaline PumpDrive 2	P_N	DN 239)	a	≈b_1 240)	≈b_2 240)	d_1	d_2	d_3	≈p 240)	h_1	h_2	≈l_1 240)	≈l_2 240)	t	≈x 240)	w	m_1	m_2	o	z
n = 1500 rpm	[kW]	[mm]																		
040-040-250	4,00	40	104	163	173	M10	250	234	353	220	220	649	545	12,5	100	174	175	100	190	211
040-040-250	5,50	40	104	163	173	M10	300	266	374	220	220	714	610	12,5	100	197	175	100	190	255
050-050-160	0,55	50	134	116	135	M10	200	162	294	250	190	545	411	12,5	100	156	175	100	190	190
050-050-160	0,75	50	134	116	135	M10	200	162	294	250	190	545	411	12,5	100	156	175	100	190	190
050-050-160	1,10	50	134	116	135	M10	200	190	299	250	190	572	438	12,5	100	156	175	100	190	190
050-050-160	1,50	50	134	116	135	M10	200	190	299	250	190	598	464	12,5	100	156	175	100	190	190
050-050-160	2,20	50	134	116	135	M10	250	213	338	250	190	651	517	12,5	100	170	175	100	190	211
050-050-250	1,10	50	129	167	182	M10	200	190	299	220	220	577	448	12,5	100	166	175	100	190	190
050-050-250	1,50	50	129	167	182	M10	200	190	299	220	220	603	474	12,5	100	166	175	100	190	190
050-050-250	2,20	50	129	167	182	M10	250	213	338	220	220	656	527	12,5	100	180	175	100	190	211
050-050-250	3,00	50	129	167	182	M10	250	213	338	220	220	691	562	12,5	100	180	175	100	190	211
050-050-250	4,0	50	129	167	182	M10	250	234	353	220	220	680	551	12,5	100	180	175	100	190	211
050-050-250	5,5	50	129	167	182	M10	300	266	374	220	220	745	616	12,5	100	203	175	100	190	255
050-050-250	7,5	50	129	167	182	M10	300	298	374	220	220	773	644	12,5	100	203	175	100	190	255
065-065-160	0,55	65	150	114	135	M10	200	162	294	270	170	561	411	12,5	100	156	175	110	210	190
065-065-160	0,75	65	150	114	135	M10	200	162	294	270	170	561	411	12,5	100	156	175	110	210	190
065-065-160	1,10	65	150	114	135	M10	200	190	299	270	170	588	438	12,5	100	156	175	110	210	190
065-065-160	1,50	65	150	114	135	M10	200	190	299	270	170	614	464	12,5	100	156	175	110	210	190
065-065-160	2,20	65	150	114	135	M10	250	213	338	270	170	667	517	12,5	100	170	175	110	210	211
065-065-160	3,00	65	150	114	135	M10	250	213	338	270	170	702	552	12,5	100	170	175	110	210	211
065-065-250	1,50	65	134	174	196	M10	200	190	299	225	250	623	489	12,5	100	181	175	100	220	190
065-065-250	2,20	65	134	174	196	M10	250	213	338	225	250	676	542	12,5	100	195	175	100	220	211
065-065-250	3,00	65	134	174	196	M10	250	213	338	225	250	711	577	12,5	100	195	175	100	220	211
065-065-250	4,00	65	134	174	196	M10	250	234	353	225	250	700	566	12,5	100	195	175	100	220	211
065-065-250	5,50	65	134	174	196	M10	300	266	374	225	250	765	631	12,5	100	218	175	100	220	255
065-065-250	7,50	65	134	174	196	M10	300	298	374	225	250	793	659	12,5	100	218	175	100	220	255
065-065-250	11,00	65	134	174	196	M10	350	325	405	225	250	931	797	12,5	100	251	175	100	220	255
080-080-160	0,55	80	176	119	147	M10	160	145	294	260	180	569	393	12,5	100	156	175	100	230	190
080-080-160	0,75	80	176	119	147	M10	200	162	294	260	180	587	411	12,5	100	156	175	100	230	190
080-080-160	1,10	80	176	119	147	M10	200	190	299	260	180	614	438	12,5	100	156	175	100	230	190
080-080-160	1,50	80	176	119	147	M10	200	190	299	260	180	640	464	12,5	100	156	175	100	230	190
080-080-160	2,20	80	176	119	147	M10	250	213	338	260	180	693	517	12,5	100	170	175	100	230	211
080-080-160	3,00	80	176	119	147	M10	250	213	338	260	180	728	552	12,5	100	170	175	100	230	211
080-080-160	4,00	80	176	119	147	M10	250	234	353	260	180	717	541	12,5	100	170	175	100	230	211
080-080-200	1,10	80	158	150	170	M10	200	190	299	250	250	611	453	12,5	140	171	215	130	250	190
080-080-200	1,50	80	158	150	170	M10	200	190	299	250	250	637	479	12,5	140	171	215	130	250	190
080-080-200	2,20	80	158	150	170	M10	250	213	338	250	250	690	532	12,5	140	185	215	130	250	211
080-080-200	3,00	80	158	150	170	M10	250	213	338	250	250	725	567	12,5	140	185	215	130	250	211
080-080-200	4,00	80	158	150	170	M10	250	234	353	250	250	714	556	12,5	140	185	215	130	250	211
080-080-200	5,50	80	158	150	170	M10	300	266	374	250	250	779	621	12,5	140	208	215	130	250	255
080-080-200	7,50	80	158	150	170	M10	300	298	374	250	250	807	649	12,5	140	208	215	130	250	255
080-080-250	2,20	80	187	173	193	M10	250	213	338	350	270	724	537	12,5	140	190	180	105	230	211
080-080-250	3,00	80	187	173	193	M10	250	213	338	350	270	759	572	12,5	140	190	180	105	230	211
080-080-250	4,00	80	187	173	193	M10	250	234	353	350	270	748	561	12,5	140	190	180	105	230	211
080-080-250	5,50	80	187	173	193	M10	300	266	374	350	270	813	626	12,5	140	213	180	105	230	255
080-080-250	7,50	80	187	173	193	M10	300	298	374	350	270	841	654	12,5	140	213	180	105	230	255
080-080-250	11,00	80	187	173	193	M10	350	325	405	350	270	979	792	12,5	140	246	180	105	230	255
080-080-250	15,00	80	187	173	193	M10	350	325	457	350	270	985	798	12,5	140	246	180	105	230	325
100-100-125	0,75	100	129	112	160	M10	200	162	294	230	220	549	420	12,5	100	165	195	100	230	190
100-100-125	1,10	100	129	112	160	M10	200	190	299	230	220	576	447	12,5	100	165	195	100	230	190
100-100-125	1,50	100	129	112	160	M10	200	190	299	230	220	602	473	12,5	100	165	195	100	230	190
100-100-125	2,20	100	129	112	160	M10	250	213	338	230	220	655	526	12,5	100	179	195	100	230	211
100-100-160	1,50	100	156	128	163	M20	200	190	299	245	205	640	484	25	140	176	-	-	-	190
100-100-160	2,20	100	156	128	163	M20	250	213	338	245	205	693	537	25	140	190	-	-	-	211
100-100-160	3,00	100	156	128	163	M20	250	213	338	245	205	728	572	25	140	190	-	-	-	211
100-100-160	4,00	100	156	128	163	M20	250	234	353	245	205	717	561	25	140	190	-	-	-	211
100-100-160	5,50	100	156	128	163	M20	300	266	374	245	205	782	626	25	140	213	-	-	-	255
100-100-200	2,20	100	180	172	202	M20	250	213	338	305	245	717	537	25	140	190	-	-	-	211
100-100-200	3,00	100	180	172	202	M20	250	213	338	305	245	752	572	25	140	190	-	-	-	211
100-100-200	4,00	100	180	172	202	M20	250	234	353	305	245	741	561	25	140	190	-	-	-	211
100-100-200	5,50	100	180	172	202	M20	300	266	374	305	245	806	626	25	140	213	-	-	-	255

Etaline PumpDrive 2	P_N	DN [239]	a	≈b_1 [240]	≈b_2 [240]	d_1	d_2	d_3	≈p [240]	h_1	h_2	≈l_1 [240]	≈l_2 [240]	t	≈x [240]	w	m_1	m_2	o	z
n = 1500 rpm	[kW]	[mm]																		
100-100-200	7,50	100	180	172	202	M20	300	298	374	305	245	834	654	25	140	213	-	-	-	255
100-100-200	11,00	100	180	172	202	M20	350	325	405	305	245	972	792	25	140	246	-	-	-	255
100-100-250	3,00	100	158	196	222	M20	250	213	338	290	260	754	596	25	140	214	-	-	-	211
100-100-250	4,00	100	158	196	222	M20	250	234	353	290	260	743	585	25	140	214	-	-	-	211
100-100-250	5,50	100	158	196	222	M20	300	266	374	290	260	808	650	25	140	237	-	-	-	255
100-100-250	7,50	100	158	196	222	M20	300	298	374	290	260	836	678	25	140	237	-	-	-	255
100-100-250	11,00	100	158	196	222	M20	350	325	405	290	260	974	816	25	140	270	-	-	-	255
100-100-250	15,00	100	158	196	222	M20	350	325	457	290	260	980	822	25	140	270	-	-	-	325
100-100-250	18,50	100	158	196	222	M20	350	370	509	290	260	1038	880	25	140	270	-	-	-	325
125-125-160	2,20	125	203	182	226	M20	250	213	338	420	280	740	537	25	140	190	-	-	-	211
125-125-160	3,00	125	203	182	226	M20	250	213	338	420	280	775	572	25	140	190	-	-	-	211
125-125-160	4,00	125	203	182	226	M20	250	234	353	420	280	764	561	25	140	190	-	-	-	211
125-125-160	5,50	125	203	182	226	M20	300	266	374	420	280	829	626	25	140	213	-	-	-	255
125-125-160	7,50	125	203	182	226	M20	300	298	374	420	280	857	654	25	140	213	-	-	-	255
125-125-200	3,00	125	206	175	214	M20	250	213	338	380	320	778	572	25	140	190	-	-	-	211
125-125-200	4,00	125	206	175	214	M20	250	234	353	380	320	767	561	25	140	190	-	-	-	211
125-125-200	5,50	125	206	175	214	M20	300	266	374	380	320	832	626	25	140	213	-	-	-	255
125-125-200	7,50	125	206	175	214	M20	300	298	374	380	320	860	654	25	140	213	-	-	-	255
125-125-200	11,00	125	206	175	214	M20	350	325	405	380	320	998	792	25	140	246	-	-	-	255
125-125-200	15,00	125	206	175	214	M20	350	325	457	380	320	1004	798	25	140	246	-	-	-	325
125-125-250	5,50	125	210	188	219	M20	300	266	374	380	320	836	626	25	140	213	-	-	-	255
125-125-250	7,50	125	210	188	219	M20	300	298	374	380	320	864	654	25	140	213	-	-	-	255
125-125-250	11,00	125	210	188	219	M20	350	325	405	380	320	1002	792	25	140	246	-	-	-	255
125-125-250	15,00	125	210	188	219	M20	350	325	457	380	320	1008	798	25	140	246	-	-	-	325
125-125-250	18,50	125	210	188	219	M20	350	370	509	380	320	1066	856	25	140	246	-	-	-	325
125-125-250	22,00	125	210	188	219	M20	350	370	509	380	320	1066	856	25	140	246	-	-	-	325
150-150-200	5,50	150	230	187	240	M20	300	266	374	385	315	856	626	25	140	213	-	-	-	255
150-150-200	7,50	150	230	187	240	M20	300	298	374	385	315	884	654	25	140	213	-	-	-	255
150-150-200	11,00	150	230	187	240	M20	350	325	405	385	315	1022	792	25	140	246	-	-	-	255
150-150-200	15,00	150	230	187	240	M20	350	325	457	385	315	1028	798	25	140	246	-	-	-	325
150-150-200	18,50	150	230	187	240	M20	350	370	509	385	315	1086	856	25	140	246	-	-	-	325
150-150-250	7,50	150	222	226	275	M20	300	298	374	370	330	891	669	25	140	228	-	-	-	255
150-150-250	11,00	150	222	226	275	M20	350	325	405	370	330	1029	807	25	140	261	-	-	-	255
150-150-250	15,00	150	222	226	275	M20	350	325	457	370	330	1035	813	25	140	261	-	-	-	325
150-150-250	18,50	150	222	226	275	M20	350	370	509	370	330	1093	871	25	140	261	-	-	-	325
150-150-250	22,00	150	222	226	275	M20	350	370	509	370	330	1093	871	25	140	261	-	-	-	325
150-150-250	30,00	150	222	226	275	M20	400	422	558	370	330	1152	930	25	140	261	-	-	-	325
150-150-250	37,00	150	222	226	275	M20	450	460	597	370	330	1209	987	25	140	292	-	-	-	425
200-200-250	11,00	200	222	233	303	M20	350	325	405	400	400	1067	845	25	140	299	-	-	-	255
200-200-250	15,00	200	222	233	303	M20	350	325	457	400	400	1073	851	25	140	299	-	-	-	325
200-200-250	18,50	200	222	233	303	M20	350	370	509	400	400	1131	909	25	140	299	-	-	-	325
200-200-250	22,00	200	222	233	303	M20	350	370	509	400	400	1131	909	25	140	299	-	-	-	325
200-200-250	30,00	200	222	233	303	M20	400	422	558	400	400	1190	968	25	140	299	-	-	-	325
200-200-250	37,00	200	222	233	303	M20	450	460	597	400	400	1247	1025	25	140	330	-	-	-	425
200-200-250	45,00	200	222	233	303	M20	450	468	597	400	400	1277	1055	25	140	330	-	-	-	425
200-200-315	22,00	200	255	259	318	M20	350	370	509	490	410	1141	886	25	140	276	-	-	-	325
200-200-315	30,00	200	255	259	318	M20	400	422	558	490	410	1200	945	25	140	276	-	-	-	325
200-200-315	37,00	200	255	259	318	M20	450	460	597	490	410	1257	1002	25	140	307	-	-	-	425
200-200-315	45,00	200	255	259	318	M20	450	468	597	490	410	1287	1032	25	140	307	-	-	-	425

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Connections

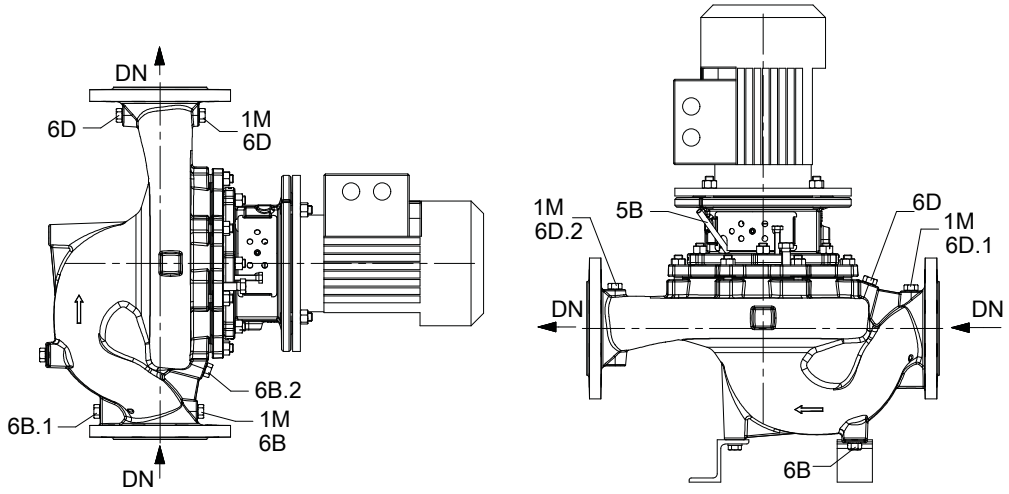


Fig. 259: Connections

Connection types

Connection	Description	Configuration	Position
1M	Connection for pressure gauge	Drilled and closed, or pressure sensor for PumpMeter (if selected)	Suction flange and discharge flange
5B	Vent connection for the mechanical seal chamber	Plugged with vent plug	Casing cover
6B, 6B.1, 6B.2	Fluid drain	Drilled and closed	Volute casing
6D, 6D.1, 6D.2	Fluid priming and venting	Drilled and closed	Volute casing

Connection [mm]

Etaline	1M, 6B, 6D	5B
032-032-160	G 1/4	G 1/4
032-032-200	G 1/4	G 1/4
040-040-160	G 1/4	G 1/4
040-040-250	G 1/4	G 1/4
050-050-160	G 1/4	G 1/4
050-050-250	G 1/4	G 1/4
065-065-160	G 1/4	G 1/4
065-065-250	G 1/4	G 1/4
080-080-160	G 3/8	G 1/4
080-080-200	G 3/8	G 1/4
080-080-250	G 3/8	G 1/4
100-100-125	G 3/8	G 1/4
100-100-160	G 3/8	G 1/4
100-100-200	G 3/8	G 1/4
100-100-250	G 3/8	G 1/4
125-125-160	G 1/2	G 1/4
125-125-200	G 1/2	G 1/4
125-125-250	G 1/2	G 1/4
150-150-200	G 1/2	G 1/4
150-150-250	G 1/2	G 1/4
200-200-250	G 1/2	G 1/4
200-200-315	G 1/2	G 1/4

Flange design

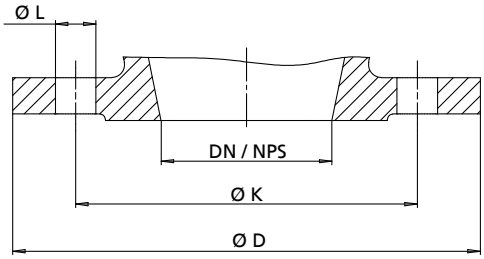


Fig. 260: Flange dimensions

Flange dimensions [mm]

DN / NPS	Standard					
	EN 1092-2			ASME B 16.1		
	Material					
	G			G		
	PN 16			Class 125		
	Ø K	Ø D	Number of holes L	Ø K	Ø D	Number of holes L
32 / NPS 1 1/4	100	140	4×Ø19	88,9	140	4×Ø15,7
40 / NPS 1 1/2	110	150	4×Ø19	98,6	150	4×Ø15,7
50 / NPS 2	125	165	4×Ø19	120,7	165	4×Ø19,1
65 / NPS 2 1/2	145	185	4×Ø19	139,7	185	4×Ø19,1
80 / NPS 3	160	200	8×Ø19	152,4	200	4×Ø19,1
100 / NPS 4	180	229	8×Ø19	190,5	229	8×Ø19,1
125 / NPS 5	210	254	8×Ø19	215,9	254	8×Ø22,4
150 / NPS 6	240	285	8×Ø23	241,3	285	8×Ø22,4
200 / NPS 8	295	343	12×Ø23	298,5	343	8×Ø22,4

Flange design by materials

Material variant	Standard	Nominal size	Pressure class
GG, GB, GC	EN 1092-2	DN 32 - DN 200	PN 16
	Drilled to ASME B16.1	DN 32 - DN 200	Class 125

Accessories

Pump accessories

Pump accessories

Item		Description	Connection	Mat. No.	[kg]
-	-	Pump foot	Etaline 032-032–160 to 100-100–125[241)]	47077960	1,5
			Etaline 100-100–160 to 200-200–315[242)]	01614068	12,4
-	-	Vent valve 5B[243)] for vertical installation	-	-	-
	-	Blind flange with sealing element	Etaline 032/040/050/065/080/100-160, 100-125	01621012	6,7
			Etaline 032/080/100/125/150-200, 125-160	01621013	12,4
			Etaline 040/050/065/080/100/125/150/200-250	01621014	14,7
			Etaline 200-315	01621015	22,2

241 3 pump feet with bolts
242 One pump foot with bolt
243 Can only be processed via KSB EasySelect (configurable range)

In-line Pumps

Etaline-R

http://shop.ksb.com/catalog/k0/en/product/ES000812

Product benefits

- Improved efficiency and NPSHreq by experimentally verified hydraulic design of impellers (vanes)
- Operating costs reduced by trimming the nominal impeller diameter to match the specified duty point
- Little wear, low vibration levels and excellent smooth running characteristics thanks to good suction performance and virtually cavitation-free operation across a wide operating range
- Casing sealed reliably – even in varying operating conditions – by confined casing gasket
- Large variety of materials as standard for perfectly matching the pump to the fluid handled

Further information

Prices on request

Selection charts 578
Characteristic curves 578
Dimensions 583

Further information

	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[244)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for water pumps with a maximum nominal shaft power of 150 kW as per Regulation (EU) No. 547/2012.

244 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Main applications

- Service water supply systems
- Heating systems
- Industrial recirculation systems
- Air-conditioning systems
- Cooling circuits
- Water supply systems[245)]

Fluids handled

- Fluids not chemically or mechanically aggressive to the materials

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 1900
	Q [l/s]	≤ 528
Head	H [m]	≤ 93
Fluid temperature	T [°C]	≥ -30
		≤ +140
Operating pressure	p [bar]	≤ 25

Design details

Design

- Close-coupled design / in-line design
- Single-stage
- Vertical installation
- Rigid connection between pump and motor
- Fixed speed version (without PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R) / variable speed version (with PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R)

Pump casing

- Radially split volute casing

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Type of protection EEx eb II
- Temperature class T3

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[246)] (PumpDrive required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 0.55 kW to 45 kW
- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2 / PumpDrive 2 Eco:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for motor mounting, wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

PumpMeter:

245 No drinking water in acc. with UBA (German drinking water regulations to German Environment Agency)
246 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

- Intelligent pressure transmitter for pumps, with on-site display of measured values and operating data
- For recording the load profile of the pump
- Supplied completely assembled and parameterised for the individual pump

KSB Guard

- System for monitoring the pump's condition by means of temperature and vibration sensors
- Measured values and operating data may be retrieved via the KSB Guard app and the web portal at any time.

Shaft seal

- KSB mechanical seal

Impeller type

- Closed radial impeller

Bearings

- Radial ball bearing in the bearing bracket
- Grease lubrication

Designation

Example: Etaline-R GN 300-400/31504

Designation key

Code	Description	
Etaline	Type series	
R	Extended selection chart	
G	Material combination volute casing / casing cover / impeller	
	G	Nodular cast iron / grey cast iron / grey cast iron
	GC	Nodular cast iron / grey cast iron / stainless steel
	M	Nodular cast iron / grey cast iron / tin bronze
	S	Nodular cast iron / nodular cast iron / grey cast iron
	SC	Nodular cast iron / nodular cast iron / stainless steel
	SM	Nodular cast iron / nodular cast iron / tin bronze
N	Stub shaft design and standardised motor	
300	Nominal discharge nozzle diameter [mm]	
400	Nominal impeller diameter [mm]	
3150	Motor rating × 10, e.g. 315 kW	
4	Number of motor poles	

Materials

Symbols key

Symbol	Description
✗	Standard
-	Version not available / not feasible

Overview of available materials

Part No.	Description	Material	Material variant					
			GN	GCN	MN	SN	SCN	SMN
102	Volute casing	Nodular cast iron EN-GJS-400-18-LT	✗	✗	✗	✗	✗	✗
161	Casing cover	Grey cast iron EN-GJL-250	✗	✗	✗	-	-	-
		Nodular cast iron EN-GJS-400-18-LT	-	-	-	✗	✗	✗
210	Shaft	Tempered steel C45	✗	✗	✗	✗	✗	✗
		Stainless steel 1.4057 (optional)	✗	✗	✗	✗	✗	✗
230	Impeller	Grey cast iron EN-GJL-250	✗	-	-	✗	-	-
		Stainless steel 1.4408	-	✗	-	-	✗	-
		Tin bronze CC480K-GS	-	-	✗	-	-	✗
330	Bearing bracket	Grey cast iron EN-GJL-250	✗	✗	✗	✗	✗	✗
400	Sealing elements	DPAF, asbestos-free	✗	✗	✗	✗	✗	✗
502	Casing wear ring Casing/discharge cover	Grey cast iron EN-GJL-250	✗	✗	-	✗	✗	-
		Lead bronze CC495K-GS	-	-	✗	-	-	✗
902.01	Studs	1.7709	✗	✗	✗	-	-	-
		1.6772	-	-	-	✗	✗	✗
920.01	Nut	1.7218	✗	✗	✗	-	-	-
		1.6772	-	-	-	✗	✗	✗
920.95	Impeller nut	Stainless steel 1.4571	✗	✗	✗	✗	✗	✗

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Overview of product features / selection tables

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

Symbols key

Symbol	Description
✘	Standard
-	Version not available / not feasible

Excerpt from the overview of fluids handled with associated material variants

Fluid handled	Application limits		Material				Design code
	t	p	Casing/impeller			Mechanical seal	Mechanical seal
	[°C]	[bar]	G	M	S	4	
Water							
Service water	≤ 60	≤ 16	✘	-	-	✘	G4
Fire-fighting water[247)]	≤ 60	≤ 16	-	✘	-	✘	M4
Heating water[248)]	≤ 120	≤ 16	✘	-	-	✘	G4
Heating water[248)]	≤ 140	≤ 25	-	-	✘	✘	S4
Heating water[248)]	≤ 110	≤ 16	✘	-	-	✘	G4
Condensate[248)]	≤ 120	≤ 16	✘	-	-	✘	Contact the manufacturer.
Cooling water[247)] (without antifreeze)	≤ 60	≤ 16	✘	-	-	✘	G4
Cooling water pH ≥ 7.5 (with antifreeze)[249)])	≥ -30	≤ 16	✘	-	-	✘	G4
	≤ 110	≤ 25	-	-	✘	-	
Slightly contaminated water[247)]	≤ 60	≤ 16	✘	-	-	✘	G4
Pure water[250)]	≤ 25	≤ 16	✘	-	-	✘	G4
Raw water (irrigation)[247)]	≤ 60	≤ 16	✘	-	-	✘	G4
Raw water (industrial application)[247)]	≤ 60	≤ 16	✘	-	-	✘	G4
Swimming pool water (fresh water)[247)]	≤ 60	≤ 16	✘	-	-	✘	G4
Dam water[247)]	≤ 60	≤ 16	-	✘	-	✘	M4
Drinking water[247)]	≤ 60	≤ 16	-	✘	-	✘	M4
Partly desalinated water[248)]	≤ 120	≤ 16	✘	-	-	✘	Contact the manufacturer.
Fully desalinated water as boiler feed water[248)]	≤ 120	≤ 16	✘	-	-	✘	G4
Refrigerants, cooling brines							
Cooling brine, inorganic, pH ≥ 7.5, inhibited	≥ -30	≤ 16	✘	-	-	✘	G4
	≤ 25						
Water with antifreeze pH ≥ 7.5[247)249)]	≥ -30	≤ 16	✘	-	-	✘	G4
	≤ 110						
Oils/emulsions							
Diesel oil, extra light fuel oil	≤ 60	≤ 16	-	-	✘	✘	S4

247 General evaluation criteria for results of water analysis: pH > 7; chlorides content (Cl) < 250 mg/kg, chlorine (Cl2) < 0.6 mg/kg
248 Treatment to VdTÜV 1466; additional requirement: O2 < 0.02 mg/l
249 Antifreeze on ethylene glycol basis with inhibitors, content > 20 % to 50 % (e.g. Antifrogen N)
250 No ultra-pure water! Electrical conductivity at 25 °C: < 800 µS/cm, neutral with regard to chemical corrosion

Fluid handled	Application limits		Material				Design code
	t	p	Casing/impeller			Mechanical seal	Mechanical seal
	[°C]	[bar]	G	M	S	4	
Lubricating oil, turbine oil, does not apply to SF-D oils (hardly flammable)	≤ 80	≤ 16	-	-	✘	✘	S4
Drilling emulsion, grinding emulsion	≤ 60	≤ 16	✘	-	-	✘	G4
Oil-water emulsion	≤ 60	≤ 16	✘	-	-	✘	G4
Cleaning agents							
Lyes for bottle rinsers	≤ 90	≤ 16	✘	-	-	-	-
Brewery applications							
Beer mash	≤ 100	≤ 16	✘	-	-	✘	G4
Beer wort	≤ 100	≤ 16	✘	-	-	✘	G4

Overview of variants

Other designs on request

Symbols key

Symbol	Description
✘	Standard
-	Version not available / not feasible

Overview of Etaline-R variants

Variant	102 / Volute casing	230 / Impeller	Mechanical seal	T	Main applications				
				[°C]	Handling clean or aggressive fluids not chemically and mechanically aggressive to the pump materials	Water supply systems	Cooling circuits	Heating systems	Air-conditioning systems
GN01	Nodular cast iron EN-GJS-400-18_LT	Grey cast iron ENGJL-250/ A 48 CL 35 B	Mech. seal Q1BEGG	≥ -30 - ≤ +110	✘	✘	✘	-	✘
GN05	Nodular cast iron EN-GJS-400-18_LT	Grey cast iron ENGJL-250/ A 48 CL 35 B	Mech. seal Q1AEGG	≥ -30 - ≤ +140	-	-	-	✘	✘
SN01	Nodular cast iron EN-GJS-400-18_LT	Grey cast iron ENGJL-250/A 48 Cl. 35 B	Mech. seal Q1BEGG	≥ -30 - ≤ +110	✘	✘	✘	-	✘
SN05	Nodular cast iron EN-GJS-400-18_LT	Grey cast iron ENGJL-250/ A 48 CL 35 B	Mech. seal Q1AEGG	≥ -30 - ≤ +140	-	-	-	✘	✘

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Technical data

Motor (fixed speed version), n = 1450 rpm

Etaline-R, n = 1450 rpm

Etaline-R	Motor			[kg]
	Size	[kW]	400 V [A]	
150-500/3004	200L	30,00	55,00	884
150-500/3704	225S	37,00	66,00	965
150-500/4504	225M	45,00	80,00	1015
150-500/5504	250M	55,00	96,00	1205
150-500/7504	280S	75,00	133,00	1305
150-500/9004	228M	90,00	157,00	1485
150-500/11004	315S	110,00	191,00	1571
150-500/13204	315M	132,00	230,00	1796
150-500/16004	315L	160,00	275,00	1896
200-330/1504	160L	15,00	28,50	724
200-330/1854	180M	18,50	35,00	748
200-330/2204	180L	22,00	41,00	770
200-330/3004	200L	30,00	55,00	814
200-330/3704	225S	37,00	66,00	895
200-330/4504	225M	45,00	80,00	945
200-330/5504	250M	55,00	96,00	1145
200-330/7504	280S	75,00	133,00	1245
200-330/9004	228M	90,00	157,00	1425
200-330/11004	315S	110,00	191,00	1511
200-400/3004	200L	30,00	55,00	989
200-400/3704	225S	37,00	66,00	1070
200-400/4504	225M	45,00	80,00	1120
200-400/5504	250M	55,00	96,00	1315
200-400/7504	280S	75,00	133,00	1415
200-400/9004	228M	90,00	157,00	1595
200-400/11004	315S	110,00	191,00	1681
200-400/13204	315M	132,00	230,00	1906
200-400/16004	315L	160,00	275,00	2006
200-400/2004	315L	200,00	340,00	2006
200-500/4504	225M	45,00	80,00	1190
200-500/5504	250M	55,00	96,00	1380
200-500/7504	280S	75,00	133,00	1480
200-500-9004	228M	90,00	157,00	1660
200-500/11004	315S	110,00	191,00	1746
200-500/13204	315M	132,00	230,00	1971
200-500/16004	315L	160,00	275,00	2071
200-500/20004	315L	200,00	340,00	2071
200-500/25004	315L	250,00	249,27	2185
250-250/754	132M	7,50	15,05	620
250-250/1104	160M	11,00	21,58	641
250-250/1504	160L	15,00	28,50	684
250-250/1854	180M	18,50	35,00	708
250-250/2204	180L	22,00	41,00	730
250-250/3004	200L	30,00	55,00	774
250-250/3704	225S	37,00	66,00	855
250-250/4504	225M	45,00	80,00	905
250-260/1104	160M	11,00	21,58	701
250-260/1504	160L	15,00	28,50	744
250-260/1854	180M	18,50	35,00	768
250-260/2204	180L	22,00	41,00	790
250-260/3004	200L	30,00	55,00	834
250-260/3704	225S	37,00	66,00	915

Etaline-R	Motor			[kg]
	Size	[kW]	400 V [A]	
250-260/4504	225M	45,00	80,00	965
250-260/5504	250M	55,00	96,00	1165
250-300/1504	160L	15,00	28,50	899
250-300/1854	180M	18,50	35,00	923
250-300/2204	180L	22,00	41,00	945
250-300/3004	200L	30,00	55,00	989
250-300/3704	225S	37,00	66,00	1070
250-300/4504	225M	45,00	80,00	1120
250-300/5504	250M	55,00	96,00	1300
250-300/7504	280S	75,00	133,00	1400
250-300/9004	228M	90,00	157,00	1580
250-330/2204	180L	22,00	41,00	910
250-330/3004	200L	30,00	55,00	954
250-330/3704	225S	37,00	66,00	1035
250-330/4504	225M	45,00	80,00	1085
250-330/5504	250M	55,00	96,00	1285
250-330/7504	280S	75,00	133,00	1385
250-330/9004	228M	90,00	157,00	1565
250-330/11004	315S	110,00	191,00	1651
250-330/13204	315M	132,00	230,00	1876
250-330/16004	315L	160,00	275,00	1976
250-400/3004	200L	30,00	55,00	1119
250-400/3704	225S	37,00	66,00	1200
250-400/4504	225M	45,00	80,00	1250
250-400/5504	250M	55,00	96,00	1445
250-400/7504	280S	75,00	133,00	1545
250-400/9004	228M	90,00	157,00	1725
250-400/11004	315S	110,00	191,00	1811
250-400/13204	315M	132,00	230,00	2036
250-400/16004	315L	160,00	275,00	2136
250-400/20004	315L	200,00	340,00	2136
250-400/25004	315L	250,00	249,27	2250
250-500/7504	280S	75,00	133,00	1760
250-500/9004	228M	90,00	157,00	1940
250-500/11004	315S	110,00	191,00	2026
250-500/13204	315M	132,00	230,00	2251
250-500/16004	315L	160,00	275,00	2351
250-500/20004	315L	200,00	340,00	2351
250-500/25004	315L	250,00	249,27	2465
250-500/31504	315L	318,84	315,00	2665
300-360/3704	225S	37,00	66,00	1470
300-360/4504	225M	45,00	80,00	1520
300-360/5504	250M	55,00	96,00	1715
300-360/7504	280S	75,00	133,00	1815
300-360/9004	228M	90,00	157,00	1995
300-360/11004	315S	110,00	191,00	2081
300-360/13204	315M	132,00	230,00	2306
300-360/16004	315L	160,00	275,00	2406
300-360/20004	315L	200,00	340,00	2406
300-400/5504	250M	55,00	96,00	1680
300-400/7504	280S	75,00	133,00	1780
300-400/9004	228M	90,00	157,00	1960
300-400/11004	315S	110,00	191,00	2046
300-400/13204	315M	132,00	230,00	2271
300-400/16004	315L	160,00	275,00	2371
300-400/20004	315L	200,00	340,00	2371
300-400/25004	315L	250,00	249,27	2485

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Etaline-R	Motor			[kg]
	Size	[kW]	400 V [A]	
300-400/31504	315L	315,00	318,84	2685
300-500/11004	315S	110,00	191,00	2171
300-500/13204	315M	132,00	230,00	2396
300-500/16004	315L	160,00	275,00	2496
300-500/20004	315L	200,00	340,00	2496
300-500/25004	315L	250,00	249,27	2610
300-500/31504	315L	315,00	318,84	2810
350-340/2204	180L	22,00	41,00	1195
350-340/3004	200L	30,00	55,00	1239
350-340/3704	225S	37,00	66,00	1320
350-340/4504	225M	45,00	80,00	1370
350-340/5504	250M	55,00	96,00	1565
350-340/7504	280S	75,00	133,00	1665
350-340/9004	228M	90,00	157,00	1845

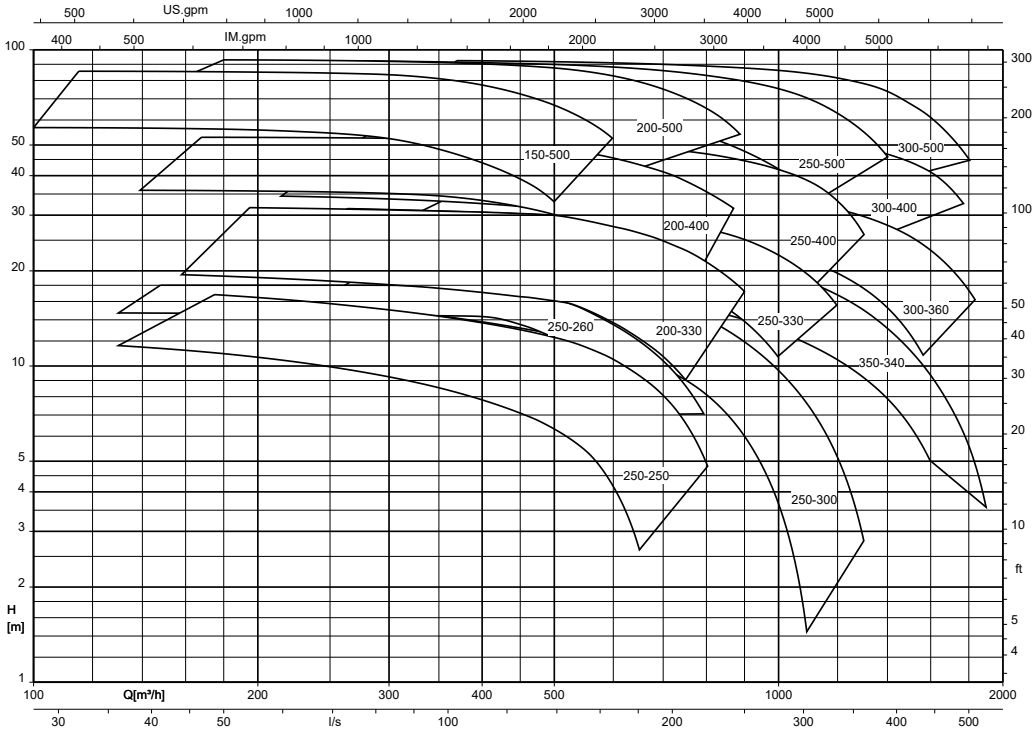
Pump

Technical data of Etaline-R

Etaline-R	Shaft unit	Impeller				Speed limit	
		Impeller outlet width	Impeller inlet diameter	Nominal diameter		Minimum	Maximum
				Minimum	Maximum		
		[mm]				[rpm]	
150-500	WE65	21,0	200	410	500	300	1500
200-330	WE65	54,0	220	270	330	300	1800
200-400	WE65	38,0	240	340	405	300	1800
200-500	WE65	36,0	220	420	510	300	1500
250-250	WE65	57,0	213	200	240	300	1800
250-260	WE65	62,0	190	240	260	300	1800
250-300	WE65	66,5	248	245	285	300	1800
250-330	WE65	72,0	240	290	330	300	1800
250-400	WE65	58,0	280	340	405	300	1800
250-500	WE65	44,0	260	440	520	300	1500
300-360	WE65	78,0	260	320	360	300	1800
300-400	WE65	65,0	290	360	430	300	1800
300-500	WE65	56,0	290	450	520	300	1500
350-340	WE65	74,5	278	320	270	300	1800

Selection charts

Etanorm-R (fixed speed version), n = 1450 rpm



Characteristic curves

General

Test class
Characteristic curves to ISO 9906 Class 3B

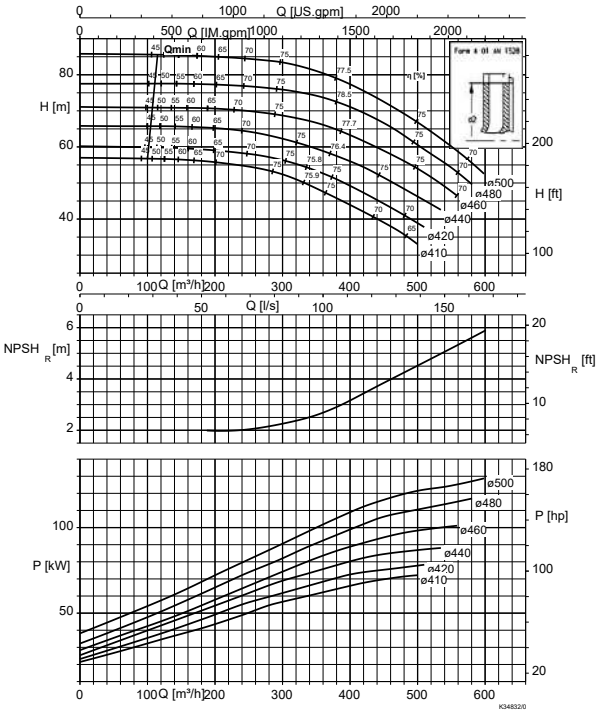
NPSH values
The NPSH values indicated in the characteristic curves correspond to a head drop of 3 %.

NPSH values in part-load conditions
NPSH values for flow rates below Q = 0.3 x Q_{BEP} can only be measured with intense technical efforts. Evidence of NPSH values in the part-load range cannot be provided.

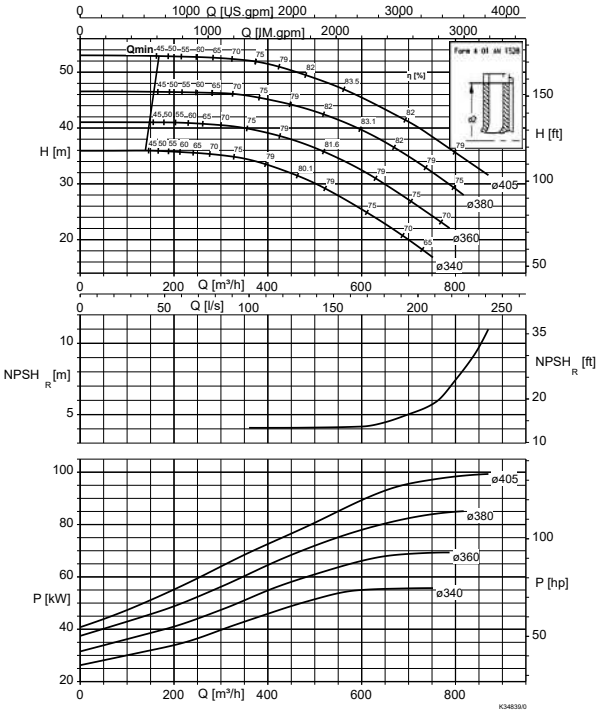
Density of the fluid handled
The indicated heads and performance data apply to pumped fluids with a density ρ = 1.0 kg/dm³ and a kinematic viscosity of up to 20 mm²/s max. If the density ≠ 1.0, the performance data must be multiplied by ρ. For a viscosity > 20 mm²/s the corresponding data for cold water has to be calculated and the impact on the pump's performance has to be determined.

Correction factors
The characteristic curves apply to pumps with cast iron or bronze impellers. When using an impeller made of cast steel materials the efficiency and pump power of the corresponding pump sizes have to be multiplied by the correction factors indicated in the characteristic curves.

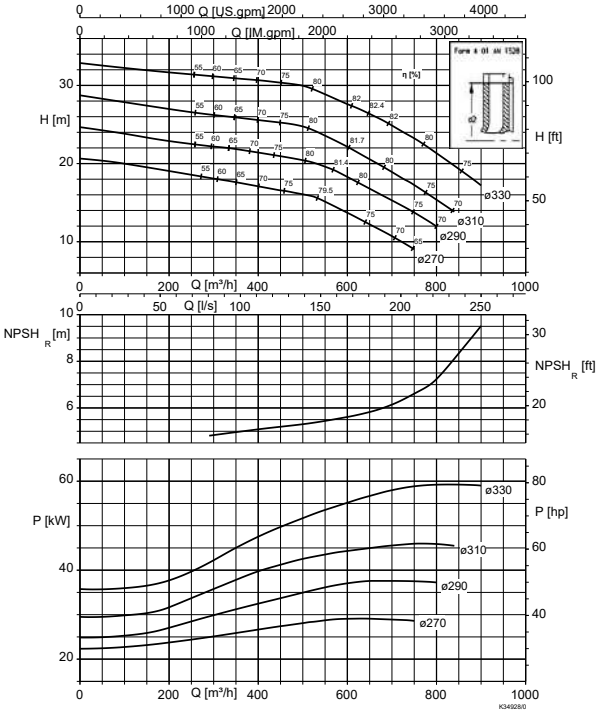
Etaline-R 150-500, n = 1450 rpm



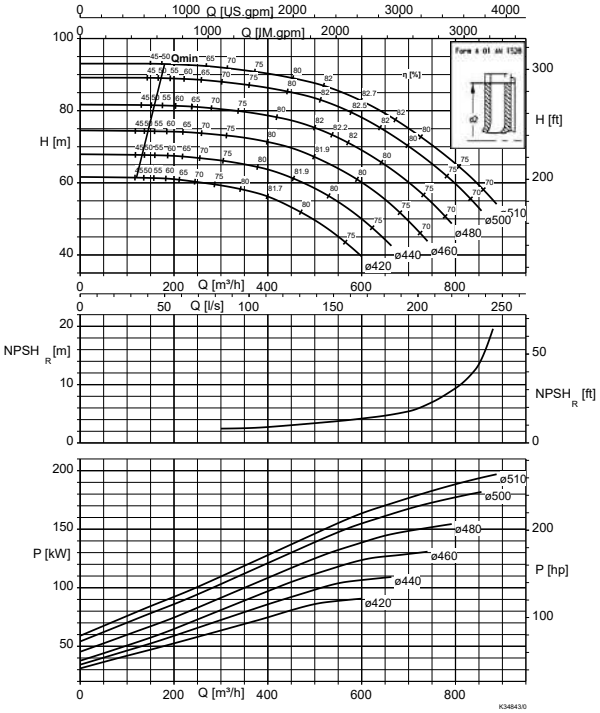
Etaline-R 200-400, n = 1450 rpm



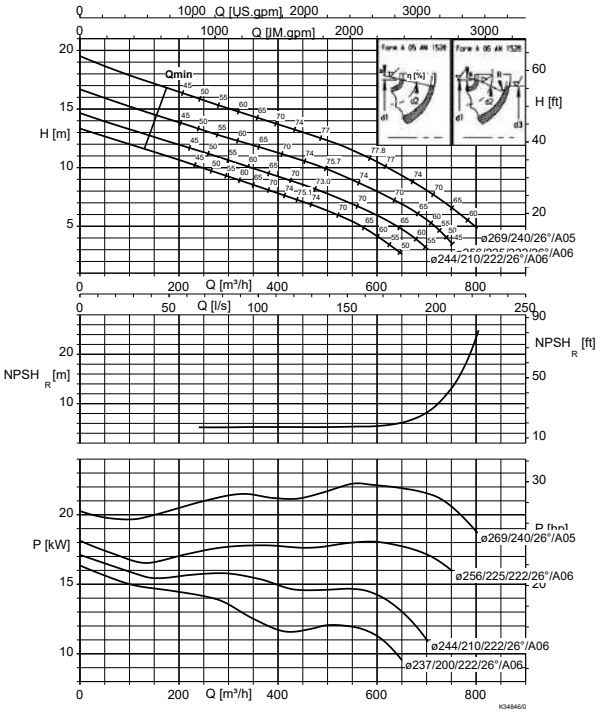
Etaline-R 200-330, n = 1450 rpm



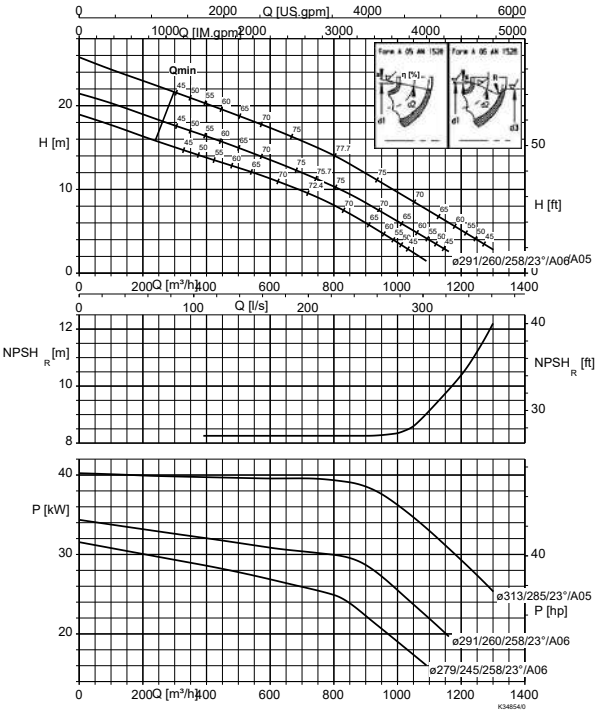
Etaline-R 200-500, n = 1450 rpm



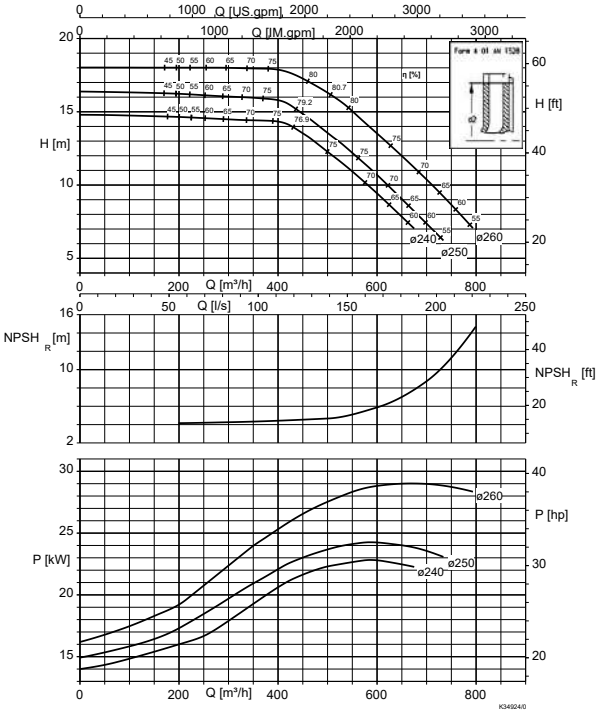
Etaline-R 250-250, n = 1450 rpm



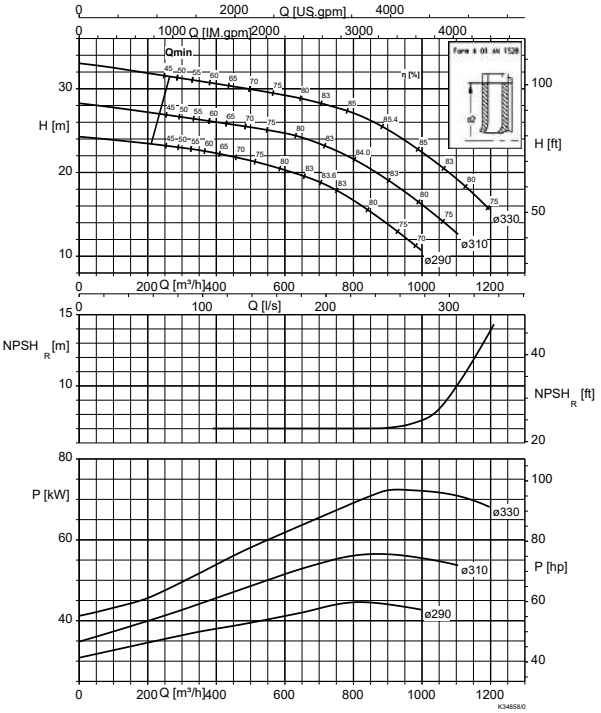
Etaline-R 250-300, n = 1450 rpm



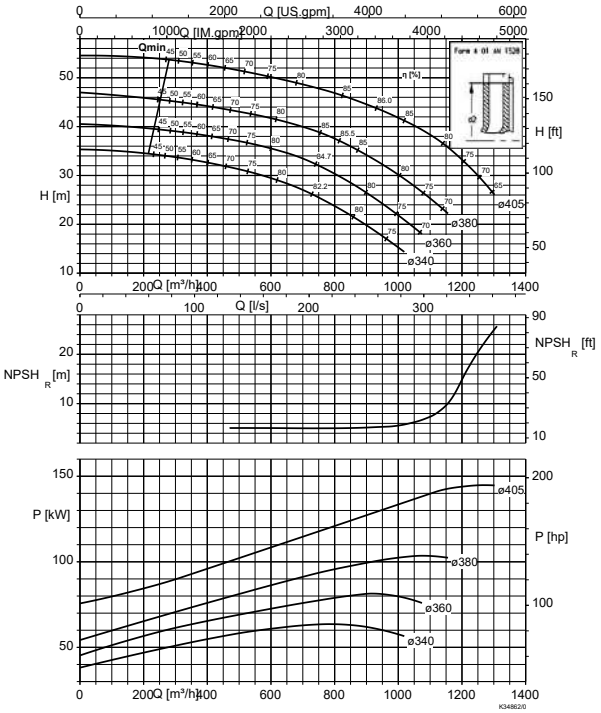
Etaline-R 250-260, n = 1450 rpm



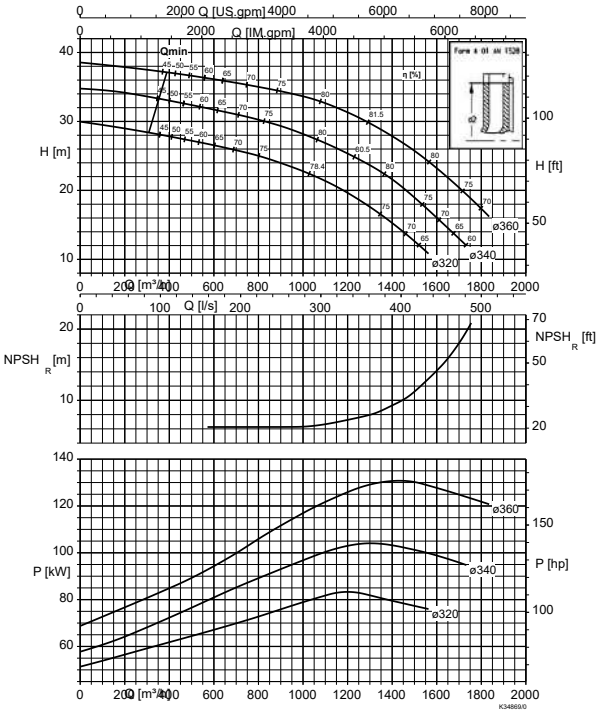
Etaline-R 250-330, n = 1450 rpm



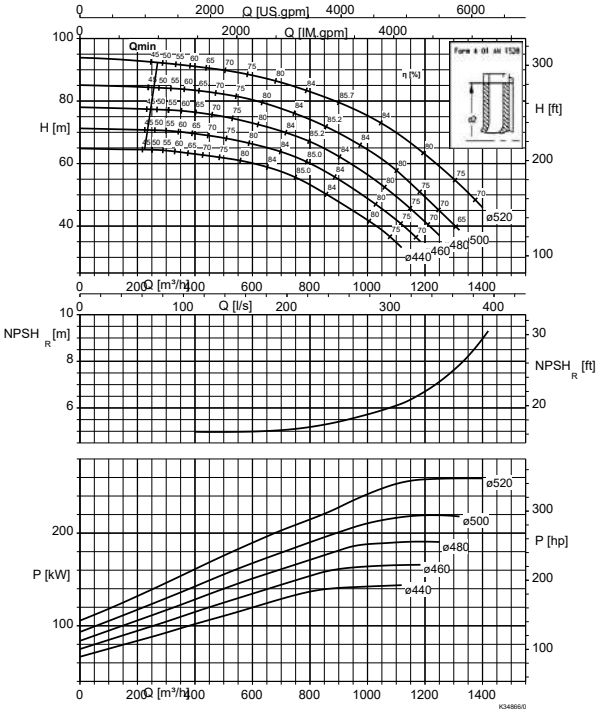
Etaline-R 250-400, n = 1450 rpm



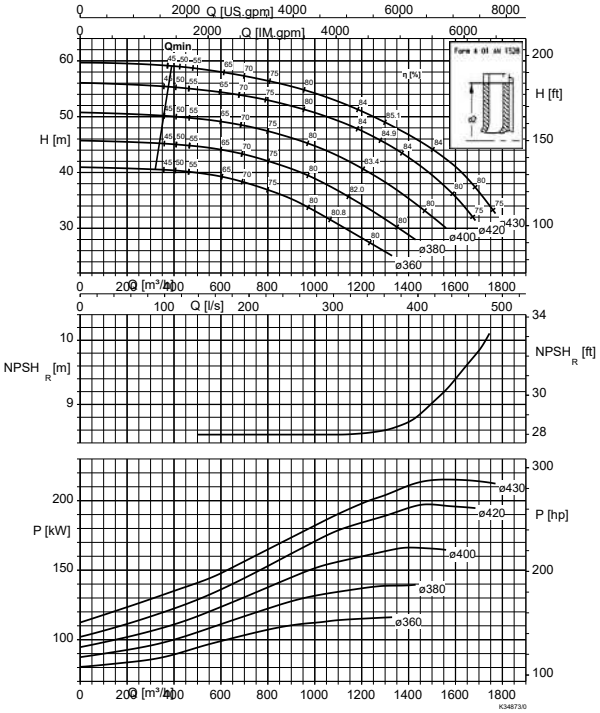
Etaline-R 300-360, n = 1450 rpm



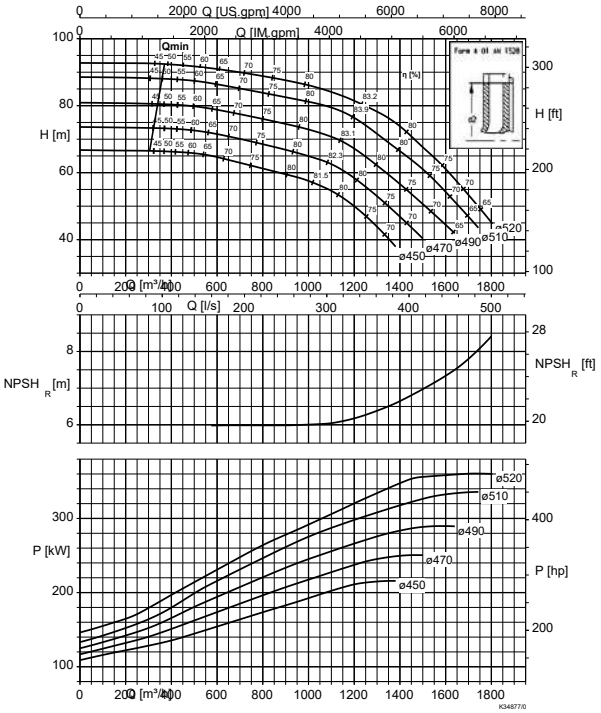
Etaline-R 250-500, n = 1450 rpm



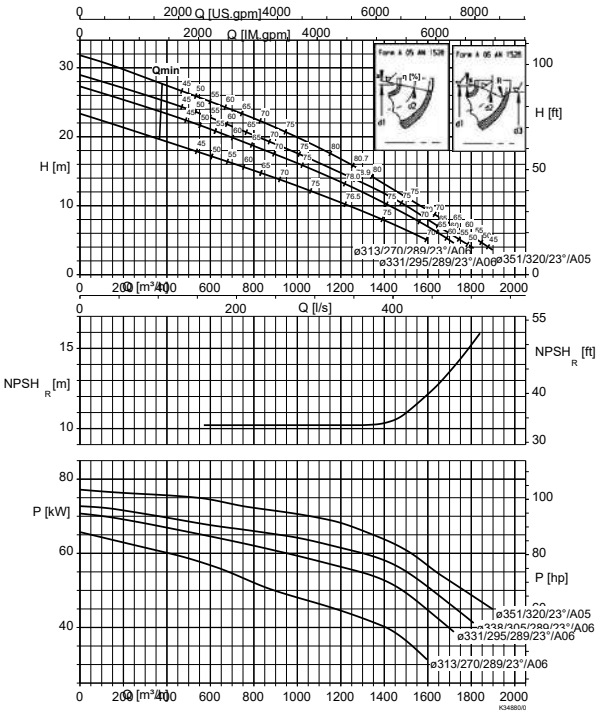
Etaline-R 300-400, n = 1450 rpm



Etaline-R 300-500, n = 1450 rpm

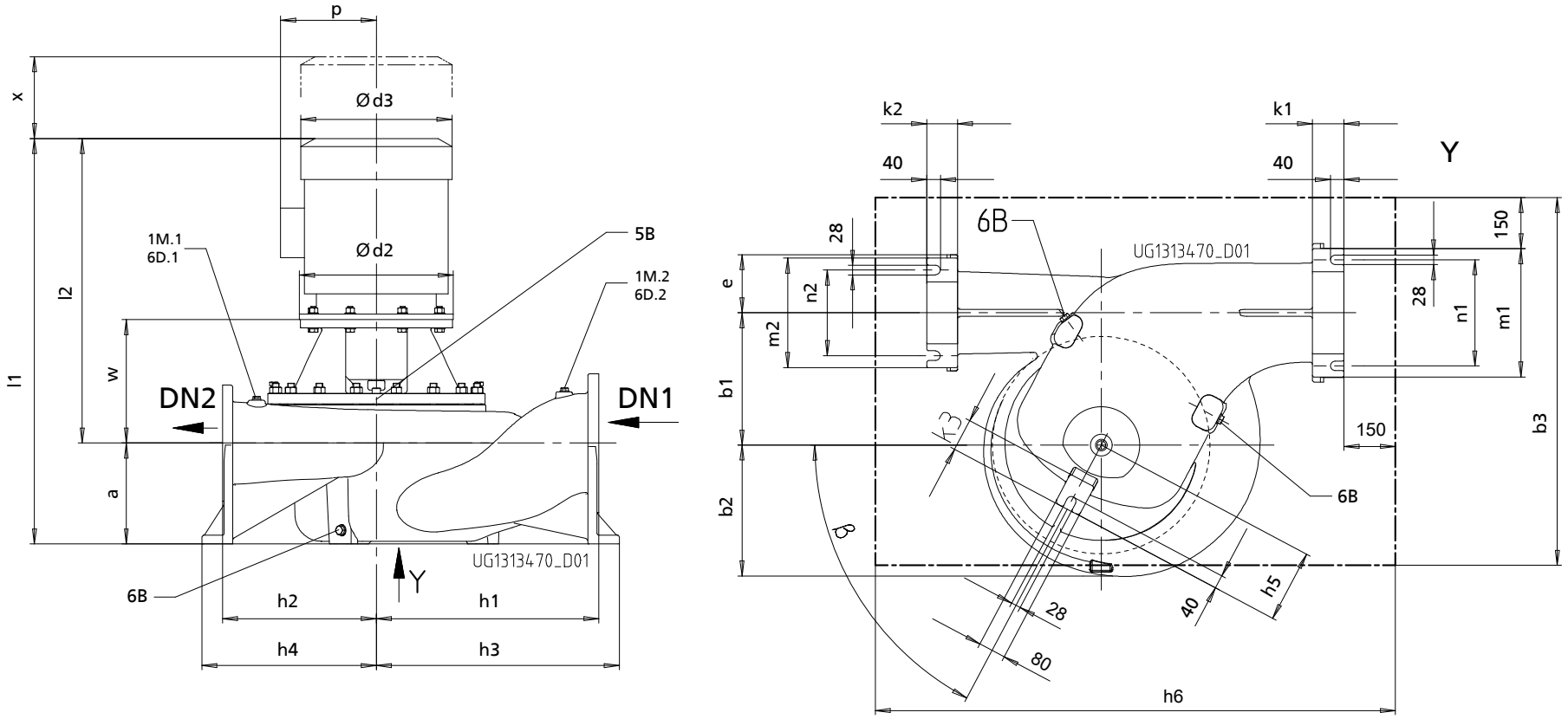


Etaline-R 350-340, n = 1450 rpm



Dimensions

Pump set (fixed speed version), n = 1450 rpm / 1750 rpm



Dimensions [mm]

Etaline-R	DN_1[251]	DN_2[251]	a	b_1	b_2	b_3	d_2	d_3	e	h_1	h_2	h_3	h_4	h_5	h_6	k_1	k_2	k_3	l_1	l_2	m_1	m_2	n_1	n_2	p	w	x	β
150-500/3004	200	150	280	315	350	955	450	402	180	650	450	710	510	207	1520	90	86	75	1291	1011	320	260	250	190	300	352	200	50
150-500/3704	200	150	280	315	350	955	450	442	180	650	450	710	510	207	1520	90	86	75	1281	1001	320	260	250	190	325	352	200	50
150-500/4504	200	150	280	315	350	955	450	442	180	650	450	710	510	207	1520	90	86	75	1464	1184	320	260	250	190	325	361	200	50
150-500/5504	200	150	280	315	350	955	660	495	180	650	450	710	510	207	1520	90	86	75	1515	1235	320	260	250	190	392	418	200	50
150-500/7504	200	150	280	315	350	955	660	555	180	650	450	710	510	207	1520	90	86	75	1518	1238	320	260	250	190	432	418	200	50
150-500/9004	200	150	280	315	350	955	660	555	180	650	450	710	510	207	1520	90	86	75	1628	1348	320	260	250	190	432	418	200	50
150-500/11004	200	150	280	315	350	955	660	610	180	650	450	710	510	207	1520	90	86	75	1635	1355	320	260	250	190	495	425	200	50

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Etaline-R	DN_1[251]	DN_2[251]	a	b_1	b_2	b_3	d_2	d_3	e	h_1	h_2	h_3	h_4	h_5	h_6	k_1	k_2	k_3	l_1	l_2	m_1	m_2	n_1	n_2	p	w	x	β
150-500/13204	200	150	280	315	350	955	660	610	180	650	450	710	510	207	1520	90	86	75	1637	1357	320	260	250	190	495	425	200	50
150-500/16004	200	150	280	315	350	955	660	610	180	650	450	710	510	207	1520	90	86	75	1797	1517	320	260	250	190	495	425	200	50
200-330/1504	250	200	310	295	333	955	450	320	213	650	300	710	360	225	1370	85	82	105	1180	870	375	320	310	250	197	352	200	40
200-330/1854	250	200	310	295	333	955	450	363	213	650	300	710	360	225	1370	85	82	105	1264	954	375	320	310	250	262	352	200	40
200-330/2204	250	200	310	295	333	955	450	363	213	650	300	710	360	225	1370	85	82	105	1264	954	375	320	310	250	262	352	200	40
200-330/3004	250	200	310	295	333	955	450	402	213	650	300	710	360	225	1370	85	82	105	1321	1011	375	320	310	250	300	352	200	40
200-330/3704	250	200	310	295	333	955	450	442	213	650	300	710	360	225	1370	85	82	105	1320	1010	375	320	310	250	325	361	200	40
200-330/4504	250	200	310	295	333	955	450	442	213	650	300	710	360	225	1370	85	82	105	1494	1184	375	320	310	250	325	361	200	40
200-330/5504	250	200	310	295	333	955	660	495	213	650	300	710	360	225	1370	85	82	105	1488	1178	375	320	310	250	392	418	200	40
200-330/7504	250	200	310	295	333	955	660	555	213	650	300	710	360	225	1370	85	82	105	1548	1238	375	320	310	250	432	418	200	40
200-330/9004	250	200	310	295	333	955	660	555	213	650	300	710	360	225	1370	85	82	105	1658	1348	375	320	310	250	432	418	200	40
200-330/11004	250	200	310	295	333	955	660	610	213	650	300	710	360	225	1370	85	82	105	1667	1357	375	320	310	250	495	425	200	40
200-400/3004	250	200	295	290	351	975	450	402	213	700	400	760	460	225	1520	85	82	105	1306	1011	375	320	310	250	300	352	200	50
200-400/3704	250	200	295	290	351	975	450	442	213	700	400	760	460	225	1520	85	82	105	1305	1010	375	320	310	250	325	352	200	50
200-400/4504	250	200	295	290	351	975	450	442	213	700	400	760	460	225	1520	85	82	105	1479	1184	375	320	310	250	325	361	200	50
200-400/5504	250	200	295	290	351	975	660	495	213	700	400	760	460	225	1520	85	82	105	1473	1178	375	320	310	250	392	418	200	50
200-400/7504	250	200	295	290	351	975	660	555	213	700	400	760	460	225	1520	85	82	105	1533	1238	375	320	310	250	432	418	200	50
200-400/9004	250	200	295	290	351	975	660	555	213	700	400	760	460	225	1520	85	82	105	1643	1348	375	320	310	250	432	418	200	50
200-400/11004	250	200	295	290	351	975	660	610	213	700	400	760	460	225	1520	85	82	105	1652	1357	375	320	310	250	495	425	200	50
200-400/13204	250	200	295	290	351	975	660	610	213	700	400	760	460	225	1520	85	82	105	1812	1517	375	320	310	250	495	425	200	50
200-400/16004	250	200	295	290	351	975	660	610	213	700	400	760	460	225	1520	85	82	105	1812	1517	375	320	310	250	495	425	200	50
200-400/20004	250	200	295	290	351	975	660	610	213	700	400	760	460	225	1520	85	82	105	1952	1657	375	320	310	250	495	425	200	50
200-500/4504	250	200	295	397	385	1100	450	442	213	650	450	710	510	212	1520	85	82	95	1407	1112	375	320	310	250	325	352	200	50
200-500/5504	250	200	295	397	385	1100	660	495	213	650	450	710	510	212	1520	85	82	95	1473	1178	375	320	310	250	392	361	200	62
200-500/7504	250	200	295	397	385	1100	660	555	213	650	450	710	510	212	1520	85	82	95	1533	1238	375	320	310	250	432	418	200	62
200-500/9004	250	200	295	397	385	1100	660	555	213	650	450	710	510	212	1520	85	82	95	1643	1348	375	320	310	250	432	418	200	62
200-500/1004	250	200	295	397	385	1100	660	610	213	650	450	710	510	212	1520	85	82	95	1652	1357	375	320	310	250	495	425	200	62
200-500/13204	250	200	295	397	385	1100	660	610	213	650	450	710	510	212	1520	85	82	95	1812	1517	375	320	310	250	495	425	200	62
200-500/16004	250	200	295	397	385	1100	660	610	213	650	450	710	510	212	1520	85	82	95	1812	1517	375	320	310	250	495	425	200	62
200-500/20004	250	200	295	397	385	1100	660	610	213	650	450	710	510	212	1520	85	82	95	1952	1657	375	320	310	250	495	425	200	62
200-500/25004	250	200	295	397	385	1100	800	610	213	650	450	710	510	212	1520	85	82	95	2041	1746	375	320	310	250	495	454	200	62
250-250/754	250	250	320	265	322	910	450	267	203	555	345	615	405	215	1320	85	85	105	1166	846	375	375	310	310	167	435	200	40
250-250/1104	250	250	320	265	322	910	450	320	203	555	345	615	405	215	1320	85	85	105	1233	913	375	375	310	310	167	435	200	40
250-250/1504	250	250	320	265	322	910	450	320	203	555	345	615	405	215	1320	85	85	105	1275	955	375	375	310	310	197	437	200	40
250-250/1854	250	250	320	265	322	910	450	363	203	555	345	615	405	215	1320	85	85	105	1359	1039	375	375	310	310	262	437	200	40
250-250/2204	250	250	320	265	322	910	450	363	203	555	345	615	405	215	1320	85	85	105	1359	1039	375	375	310	310	300	437	200	40
250-250/3004	250	250	320	265	322	910	450	402	203	555	345	615	405	215	1320	85	85	105	1416	1096	375	375	310	310	300	437	200	40
250-250/3704	250	250	320	265	322	910	450	442	203	555	345	615	405	215	1320	85	85	105	1406	1086	375	375	310	310	325	437	200	40
250-250/4504	250	250	320	265	322	910	450	442	203	555	345	615	405	215	1320	85	85	105	1589	1269	375	375	310	310	325	446	200	40
250-260/1104	250	250	320	300	335	955	450	320	203	580	350	640	410	200	1350	85	85	90	1150	830	375	375	310	310	197	352	200	49
250-260/1504	250	250	320	300	335	955	450	320	203	580	350	640	410	200	1350	85	85	90	1190	870	375	375	310	310	197	352	200	49
250-260/1854	250	250	320	300	335	955	450	363	203	580	350	640	410	200	1350	85	85	90	1274	954	375	375	310	310	262	352	200	49
250-260/2204	250	250	320	300	335	955	450	402	203	580	350	640	410	200	1350	85	85	90	1274	954	375	375	310	310	262	352	200	49
250-260/3004	250	250	320	300	335	955	450	402	203	580	350	640	410	200	1350	85	85	90	1331	1011	375	375	310	310	300	352	200	49

Etaline-R	DN_1[251]	DN_2[251]	a	b_1	b_2	b_3	d_2	d_3	e	h_1	h_2	h_3	h_4	h_5	h_6	k_1	k_2	k_3	l_1	l_2	m_1	m_2	n_1	n_2	p	w	x	β
250-260/3704	250	250	320	300	335	955	450	442	203	580	350	640	410	200	1350	85	85	90	1321	1001	375	375	310	310	325	352	200	49
250-260/4504	250	250	320	300	335	955	450	442	203	580	350	640	410	200	1350	85	85	90	1504	1184	375	375	310	310	325	361	200	49
250-260/5504	250	250	320	300	335	955	660	495	203	580	350	640	410	200	1350	85	85	90	1555	1235	375	375	310	310	392	418	200	49
250-300/1504	300	250	340	300	352	1015	450	320	243	650	450	710	510	225	1520	88	85	95	1325	985	430	375	360	310	197	467	250	50
250-300/1854	300	250	340	300	352	1015	450	363	243	650	450	710	510	225	1520	88	85	95	1409	1069	430	375	360	310	262	467	250	50
250-300/2204	300	250	340	300	352	1015	450	363	243	650	450	710	510	225	1520	88	85	95	1409	1069	430	375	360	310	262	467	250	50
250-300/3004	300	250	340	300	352	1015	450	402	243	650	450	710	510	225	1520	88	85	95	1466	1126	430	375	360	310	300	467	250	50
250-300/3704	300	250	340	300	352	1015	450	442	243	650	450	710	510	225	1520	88	85	95	1456	1116	430	375	360	310	325	467	250	50
250-300/4504	300	250	340	300	352	1015	450	442	243	650	450	710	510	225	1520	88	85	95	1639	1299	430	375	360	310	325	476	250	50
250-300/5504	300	250	340	300	352	1015	660	495	243	650	450	710	510	225	1520	88	85	95	1690	1350	430	375	360	310	392	533	250	50
250-300/7504	300	250	340	300	352	1015	660	555	243	650	450	710	510	225	1520	88	85	95	1593	1253	430	375	360	310	432	533	250	50
250-300/9004	300	250	340	300	352	1015	660	555	243	650	450	710	510	225	1520	88	85	95	1803	1463	430	375	360	310	432	533	250	50
250-330/220	300	250	385	325	355	1050	450	363	243	600	350	660	410	225	1370	88	85	95	1339	954	430	380	360	310	262	352	200	53
250-330/300	300	250	385	325	355	1050	450	402	243	600	350	660	410	225	1370	88	85	95	1396	1011	430	380	360	310	300	352	200	53
250-330/370	300	250	385	325	355	1050	450	442	243	600	350	660	410	225	1370	88	85	95	1386	1001	430	380	360	310	325	352	200	53
250-330/450	300	250	385	325	355	1050	450	442	243	600	350	660	410	225	1370	88	85	95	1569	1184	430	380	360	310	325	361	200	53
250-330/550	300	250	385	325	355	1050	660	495	243	600	350	660	410	225	1370	88	85	95	1620	1235	430	380	360	310	392	418	200	53
250-330/750	300	250	385	325	355	1050	660	555	243	600	350	660	410	225	1370	88	85	95	1623	1238	430	380	360	310	432	418	200	53
250-330/900	300	250	385	325	355	1050	660	555	243	600	350	660	410	225	1370	88	85	95	1733	1348	430	380	360	310	432	418	200	53
250-330/1100	300	250	385	325	355	1050	660	610	243	600	350	660	410	225	1370	88	85	95	1742	1357	430	380	360	310	495	425	200	53
250-330/13204	300	250	385	325	355	1050	660	610	243	600	350	660	410	225	1370	88	85	95	1902	1517	430	380	360	310	495	425	200	53
250-330/16004	300	250	385	325	355	1050	660	610	243	600	350	660	410	225	1370	88	85	95	1902	1517	430	380	360	310	495	425	200	53
250-400/3004	300	250	355	325	376	1065	450	402	243	750	450	810	510	255	1620	88	85	105	1410	1055	430	380	360	310	300	352	200	50
250-400/370	300	250	355	325	376	1065	450	442	243	750	450	810	510	255	1620	88	85	105	1386	1031	430	380	360	310	325	352	200	50
250-400/4504	300	250	355	325	376	1065	450	442	243	750	450	810	510	255	1620	88	85	105	1476	1121	430	380	360	310	325	361	200	50
250-400/5504	300	250	355	325	376	1065	660	555	243	750	450	810	510	255	1620	88	85	105	1590	1235	430	380	360	310	392	418	200	50
250-400/7504	300	250	355	325	376	1065	660	555	243	750	450	810	510	255	1620	88	85	105	1593	1238	430	380	360	310	432	418	200	50
250-400/9004	300	250	355	325	376	1065	660	555	243	750	450	810	510	255	1620	88	85	105	1703	1348	430	380	360	310	432	418	200	50
250-400/11004	300	250	355	325	376	1065	660	610	243	750	450	810	510	255	1620	88	85	105	1712	1357	430	380	360	310	495	425	200	50
250-400/13204	300	250	355	325	376	1065	660	610	243	750	450	810	510	255	1620	88	85	105	1872	1517	430	380	360	310	495	425	200	50
250-400/16004	300	250	355	325	376	1065	660	610	243	750	450	810	510	255	1620	88	85	105	1872	1517	430	380	360	310	495	425	200	50
250-400/20004	300	250	355	325	376	1065	660	610	243	750	450	810	510	255	1620	88	85	105	2012	1657	430	380	360	310	495	425	200	50
250-400/25004	300	250	355	325	376	1065	800	610	243	750	450	810	510	255	1620	88	85	105	2101	1746	430	380	360	310	495	454	200	50
250-500/7504	300	250	360	425	443	1160	660	555	243	800	500	860	560	230	1720	88	85	95	1598	1238	430	375	360	310	432	418	200	55
250-500/9004	300	250	360	425	443	1160	660	555	243	800	500	860	560	230	1720	88	85	95	1708	1348	430	375	360	310	432	418	200	55
250-500/11004	300	250	360	425	443	1160	660	610	243	800	500	860	560	230	1720	88	85	95	1717	1357	430	375	360	310	495	425	200	55
250-500/13204	300	250	360	425	443	1160	660	610	243	800	500	860	560	230	1720	88	85	95	1877	1517	430	375	360	310	495	425	200	55
250-500/16004	300	250	360	425	443	1160	660	610	243	800	500	860	560	230	1720	88	85	95	1877	1517	430	375	360	310	495	425	200	55
250-500/20004	300	250	360	425	443	1160	660	610	243	800	500	860	560	230	1720	88	85	95	2017	1657	430	375	360	310	495	425	200	55
250-500/25004	300	250	360	425	443	1160	800	710	243	800	500	860	560	230	1720	88	85	95	2106	1746	430	375	360	310	570	454	200	55
250-500/31504	300	250	360	425	443	1160	800	710	243	800	500	860	560	230	1720	88	85	95	2190	1830	430	375	360	310	570	454	200	55
300-360/3704	300	300	435	387	458	1100	450	442	243	800	450	860	510	240	1670	88	87,5	105	1447	1012	430	430	360	360	325	363	250	45
300-360/4504	300	300	435	387	458	1100	450	442	243	800	450	860	510	240	1670	88	87,5	105	1621	1186	430	430	360	360	325	363	250	45
300-360/5504	300	300	435	387	458	1100	660	495	243	800	450	860	510	240	1670	88	87,5	105	1667	1237	430	430	360	360	392	420	250	45

Etaline-R	DN_1[251]	DN_2[251]	a	b_1	b_2	b_3	d_2	d_3	e	h_1	h_2	h_3	h_4	h_5	h_6	k_1	k_2	k_3	l_1	l_2	m_1	m_2	n_1	n_2	p	w	x	β
300-360/7504	300	300	435	387	458	1100	660	555	243	800	450	860	510	240	1670	88	87,5	105	1670	1240	430	430	360	360	432	420	250	45
300-360/9004	300	300	435	387	458	1100	660	555	243	800	450	860	510	240	1670	88	87,5	105	1780	1350	430	430	360	360	432	420	250	45
300-360/11004	300	300	435	387	458	1100	660	610	243	800	450	860	510	240	1670	88	87,5	105	1789	1359	430	430	360	360	495	427	250	45
300-360/13204	300	300	435	387	458	1100	660	610	243	800	450	860	510	240	1670	88	87,5	105	1949	1519	430	430	360	360	495	427	250	45
300-360/16004	300	300	435	387	458	1100	660	610	243	800	450	860	510	240	1670	88	87,5	105	1954	1519	430	430	360	360	495	427	250	45
300-360/20004	300	300	435	387	458	1100	660	610	243	800	450	860	510	240	1670	88	87,5	105	2094	1659	430	430	360	360	495	427	250	45
300-400/5504	350	300	410	425	439	1200	660	495	278	800	500	860	560	245	1720	90	87,5	95	1645	1235	490	430	420	360	392	418	250	53,5
300-400/7504	350	300	410	425	439	1200	660	555	278	800	500	860	560	245	1720	90	87,5	95	1748	1338	490	430	420	360	432	418	250	53,5
300-400/9004	350	300	410	425	439	1200	660	555	278	800	500	860	560	245	1720	90	87,5	95	1758	1348	490	430	420	360	432	418	250	53,5
300-400/11004	350	300	410	425	439	1200	660	610	278	800	500	860	560	245	1720	90	87,5	95	1767	1357	490	430	420	360	495	425	250	53,5
300-400/13204	350	300	410	425	439	1200	660	610	278	800	500	860	560	245	1720	90	87,5	95	1927	1517	490	430	420	360	495	425	250	53,5
300-400/16004	350	300	410	425	439	1200	660	610	278	800	500	860	560	245	1720	90	87,5	95	1927	1517	490	430	420	360	495	425	250	53,5
300-400/20004	350	300	410	425	439	1200	660	610	278	800	500	860	560	245	1720	90	87,5	95	2067	1657	490	430	420	360	495	425	250	53,5
300-400/25004	350	300	410	425	439	1200	800	610	278	800	500	860	560	245	1720	90	87,5	95	2156	1746	490	430	420	360	495	454	250	53,5
300-400/31504	350	300	410	425	439	1200	800	610	278	800	500	860	560	245	1720	90	87,5	95	2240	1830	490	430	420	360	495	454	250	53,5
300-500/1104	350	300	395	450	456	1235	660	610	278	800	500	860	560	255	1720	90	88	105	1747	1357	490	430	420	360	495	425	250	54
300-500/13204	350	300	395	450	456	1235	660	610	278	800	500	860	560	255	1720	90	88	105	1907	1517	490	430	420	360	495	425	250	54
300-500/16004	350	300	395	450	456	1235	660	610	278	800	500	860	560	255	1720	90	88	105	1912	1517	490	430	420	360	495	425	250	54
300-500/20004	350	300	395	450	456	1235	660	610	278	800	500	860	560	255	1720	90	88	105	2052	1657	490	430	420	360	495	425	250	54
300-500/25004	350	300	395	450	456	1235	800	710	278	800	500	860	560	255	1720	90	88	105	2141	1746	490	430	420	360	570	454	250	54
300-500/31504	350	300	395	450	456	1235	800	710	278	800	500	860	560	255	1720	90	88	105	2225	1830	490	430	420	360	570	454	250	54
350-340/2204	350	350	380	315	386	1075	450	363	278	750	450	810	510	235	1045	90	90	95	1469	1089	490	490	420	420	262	487	250	50
350-340/3004	350	350	380	315	386	1075	450	402	278	750	450	810	510	235	1045	90	90	95	1526	1146	490	490	420	420	300	487	250	50
350-340/3704	350	350	380	315	386	1075	450	442	278	750	450	810	510	235	1045	90	90	95	1690	1310	490	490	420	420	325	487	250	50
350-340/4504	350	350	380	315	386	1075	450	442	278	750	450	810	510	235	1045	90	90	95	1636	1256	490	490	420	420	325	496	250	50
350-340/5504	350	350	380	315	386	1075	660	495	278	750	450	810	510	235	1045	90	90	95	1750	1370	490	490	420	420	392	553	250	50
350-340/7504	350	350	380	315	386	1075	660	555	278	750	450	810	510	235	1045	90	90	95	1753	1373	490	490	420	420	432	553	250	50
350-340/9004	350	350	380	315	386	1075	660	555	278	750	450	810	510	235	1045	90	90	95	1863	1483	490	490	420	420	432	553	250	50
350-340/11004	350	350	380	315	386	1075	660	610	278	750	450	810	510	235	1045	90	90	95	1872	1492	490	490	420	420	495	560	250	50
350-340/13204	350	350	380	315	386	1075	660	610	278	750	450	810	510	235	1045	90	90	95	2032	1652	490	490	420	420	495	560	250	50

Connections

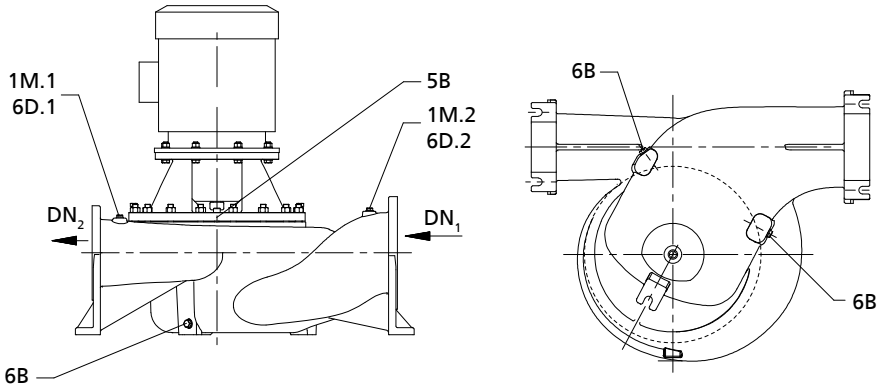


Fig. 261: Connections

Connection types

Connection	Description	Configuration	Position	Thread
1M.1/.2	Pressure gauge connection	Drilled and closed, or pressure sensor for PumpMeter (if selected)	Suction flange and discharge flange	G1/2
5B	Vent connection for the mechanical seal chamber	Plugged with vent plug	Casing cover	G1/4
6B	Fluid drain	Drilled and closed	Casing	G3/4
6D.1/.2	Fluid priming and venting	Drilled and closed	Casing	G1/2

Flange design

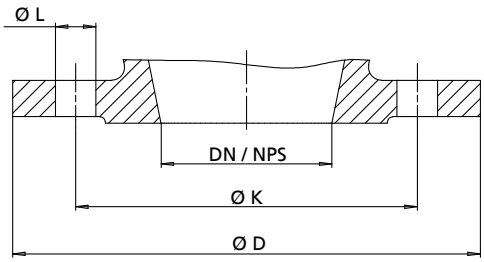


Fig. 262: Flange dimensions

Flange dimensions [mm]

DN/ NPS	Standard											
	EN 1092-2									ASME B 16.1		
	Material											
	S			G, M			G, M			G, M, S		
	PN 25			PN 16			PN 10			Class 125		
	Ø K	Ø D	Number of holes L	Ø K	Ø D	Number of holes L	Ø K	Ø D	Number of holes L	Ø K	Ø D	Number of holes L
150 / NPS6	250	300	8×∅28	240	285	8×∅23	240	285	8×∅23	241,3	279,4	8×∅22,4
200 / NPS8	310	360	12×∅28	295	340	12×∅23	295	340	8×∅23	298,5	342,9	8×∅22,4
250 / NPS10	370	425	12×∅31	355	405	12×∅28	350	395	12×∅23	362	406,4	12×∅25,4
300 / NPS12	430	485	16×∅31	410	460	12×∅28	400	445	12×∅23	431,8	482,6	12×∅25,4
350 / NPS14	490	555	16×∅34	470	520	16×∅28	460	505	16×∅23	476,3	533,4	12×∅28,4

Flange design by materials

Material variant	Standard	Nominal size	Pressure class
SN, SCN, SMN	EN 1092-2	DN 150 - DN 350	PN 25
	Drilled to ASME B16.1	DN 150 - DN 350	Class 125
GN, GCN, MN	Drilled to EN 1092-2	DN 150 - DN 350	PN 16
			PN 10
	Drilled to ASME B16.1	DN 150 - DN 350	Class 125

In-line Twin Pumps

Etaline DL

http://shop.ksb.com/catalog/k0/en/product/ES000926

Product benefits

- Improved efficiency and NPSHreq by experimentally verified hydraulic design of impellers (vanes)
- Little wear, low vibration levels and excellent smooth running characteristics thanks to good suction performance and virtually cavitation-free operation across a wide operating range
- Casing sealed reliably – even in varying operating conditions – by confined casing gasket
- Large variety of materials as standard for perfectly matching the pump to the fluid handled
- Low-noise low-vibration (2-pole and 4-pole) motors specially designed for Etaline DL.
- PumpDrive 2 Eco perfectly matched to pump and motor by default factory parameter settings
- Space-saving owing to motor-mounted variable speed system

Further information

Prices on request

Selection charts 598
Characteristic curves 600
Dimensions 604
Accessories 609

Further information

	PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
ErP 2015	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for water pumps with a maximum nominal shaft power of 150 kW as per Regulation (EU) No. 547/2012.

Main applications

- Service water supply systems
- Heating systems
- Industrial recirculation systems
- Air-conditioning systems
- Cooling circuits
- Water supply systems[252)]

Fluids handled

- Fluids not chemically or mechanically aggressive to the materials

Further information on fluids handled

Overview of fluids handled (⇨ Page 592)

252 No drinking water in acc. with UBA (German drinking water regulations to German Environment Agency)

Operating data

Operating properties

Characteristic		Value	
		Single-pump operation	Parallel operation
Flow rate	Q [m³/h]	≤ 95	≤ 150
	Q [l/s]	≤ 26,3	≤ 42
Head	H [m]	≤ 21	≤ 21
Fluid temperature	T [°C]	≥ -15	≥ -15
		≤ +120	≤ +120
Operating pressure	p [bar]	≤ 10 [253)]	≤ 10 [253)]

Design details

Design

- Close-coupled design / in-line design
- Single-stage
- Horizontal installation / vertical installation
- Rigid connection between pump and motor
- Fixed speed version (without PumpDrive 2 Eco) / variable speed version (with PumpDrive 2 Eco)

Pump casing

- Radially split volute casing
- In-line design

Drive (fixed speed version)

- Surface-cooled squirrel-cage motor to KSB standard
- Efficiency class IE3 to IEC 60034-30 (≥ 0.75 kW)
- Rated voltage (50 Hz) 1~ 220 - 240 V / 3~ 220 - 240 V 3~ 380 - 420 V ≤ 1.1 kW
- Rated voltage (50 Hz) 3~ 220 - 240 V / 3~ 380 - 420 V ≥ 1.8 kW
- Type of construction IM B14
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F

Drive (variable speed version)

- Surface-cooled squirrel-cage motor to KSB standard prepared for mounting a PumpDrive 2 Eco
- Efficiency class IE2 to IEC 60034-30 (≥ 0.75 kW)
- Rated voltage (50 Hz) 3~ 220 - 240 V / 3~ 380 - 420 V
- Type of construction IM B14
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F

PumpDrive 2 Eco:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals or the control panel
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains voltage 1~ 220 V AC -10 % to 240 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

Shaft seal

- KSB mechanical seal

Impeller type

- Closed radial impeller

Bearings

- Radial ball bearings in the motor housing
- Grease lubrication

253 The sum of inlet pressure and shut-off head must not exceed the value indicated.

Designation

Designation example

Position																																										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
E	T	L	L	0	2	5	-	0	2	5	-	0	6	3	-	G	G	S	A	V	1	1	D	2	0	0	1	2	2	C		A	A	T	B	I	E	3	P	D	2	E

See name plate and data sheet

Designation key

Position	Code	Description	
1-4	Pump type		
	ETLL	Etaline L	
	ETLD	Etaline DL	
5-16	Size, e.g.		
	025	Nominal suction nozzle diameter [mm]	
	025	Nominal discharge nozzle diameter [mm]	
	063	Nominal impeller diameter [mm]	
17	Pump casing material		
	B	Bronze	CC491K
	G	Grey cast iron	EN-GJL-200 / EN-GJL-250
18	Impeller material		
	B	Bronze	G-CuSn10Zn
	G	Grey cast iron	EN-GJL-150
	P	Polysulphone	PSU-GF30
19	Design		
	P	With casing cover made of polysulphone PSU-GF30	
	S	Standard	
	W	Approved for drinking water to WRAS	
	X	Non-standard (BT3D, BT3)	
20	Casing cover		
	A	Conical seal chamber	
21	Shaft seal type		
	V	Conical seal chamber with vent	
22-23	Seal code, single mechanical seal		
	11	BQ1EGG	≥ -15 - ≤ +120 [°C]
	12	BQ1PGG	Available upon request.
	13	BVPGG	Available upon request.
	14	Q5Q1EGG	Available upon request.
	15	Q5Q1PGG	Available upon request.
24	Scope of supply		
	D	Pump, motor	
25	Shaft unit		
	2	Shaft unit 12	
	4	Shaft unit 14	
	6	Shaft unit 16	
26-29	Motor rating P_N [kW] (basis 50 Hz)		
	0012	0,12	
	...	...	
	0300	3,00	
30	Number of motor poles		
31	Motor design		
	C	3-phase AC motor 230 V / 400 V	
	M	1-phase AC motor 230 V	
32	-		
33	Product generation		
	A	Etaline L / Etaline DL	
34-36	Motor manufacturer		
	ATB	ATB	
37-39	Efficiency class		
40-43	Design		

Position	Code	Description
40-43	-	Fixed speed version, without PumpDrive 2 Eco
	PD2E	Variable speed version, with PumpDrive 2 Eco

Materials

Symbols key

Symbol	Description
✘	Standard
-	Version not available / not feasible

Overview of available materials

Part No.	Description	Material	Material variant[254)]	
			GG	GP
102	Volute casing	Grey cast iron EN-GJL 200 / EN-GJL 250[255)]	✘	✘
230	Impeller	Grey cast iron EN-GJL-150	✘	-
		Polysulphone PSU-GF30	-	✘
341	Drive lantern	Aluminium AC-46500	✘	✘
412.50	O-ring	EPDM	✘	✘
554.03	Washer	CW508L	✘	✘
580	Cap, conical	Polyamide 66	✘	✘
914.21	Hexagon socket head cap screw	A4	✘	✘

254 Dependent on size
255 DN 80

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

Symbols key

Symbol	Description
✘	Standard
-	Version not available / not feasible

Excerpt from the overview of fluids handled with associated material variants

Fluid handled	T[256]		Material variant	Seal code	
			Grey cast iron / grey cast iron Grey cast iron / polysulphone	BQ1EGG	Q5Q1EGG
	Min.	Max.	GG GP	11	14[257]
	[°C]				
Service water	-	-	✘	✘	-
Heating water[258]	-	-	✘	✘	-
Condensate	-	-	✘	✘	-
Cooling water (without antifreeze)	-	≤ +60	✘	✘	-
Cooling water pH ≥ 7.5 (with antifreeze)	≥ -10	≤ +60	✘	✘	-
Cooling water pH ≥ 7.5 (with antifreeze)	≥ +60	≤ +110	✘	-	✘
Pure water	-	≤ +60	✘	✘	-
Partly desalinated water	-	≤ +120	✘	✘	-
Fully desalinated (deionised) water, boiler feed water	-	≤ +110	✘	✘	-
Cooling brine, inorganic; pH ≥ 7.5, inhibited	≥ -10	≤ +25	✘	✘	-
Water with antifreeze, pH ≥ 7.5	≥ -10	≤ +60	✘	✘	-
Water with antifreeze, pH ≥ 7.5	≥ +60	≤ +120	✘	-	✘

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

256 T = fluid temperature
257 Special design
258 Treatment to VdTÜV 1466; additional requirement: O2 t < 0.02 mg/l

Technical data

Motor (fixed speed version), n = 2900 rpm

50 Hz, technical data of the motor, n = 2900 rpm (fixed speed version)

Etaline DL	P_2 max.[259] IE3[260]	P_N IE3[260]	I_N 1~230 V	I_N 3~230 V	I_N 3~400 V	Motor	[kg]
n = 2900 rpm	[kW]	[kW]	[A]	[A]	[A]		
032-032-063	0,30	0,25	-	1,32	0,76	63	16,1
032-032-080	0,30	0,25	-	1,32	0,76	63	15,6
032-032-080	0,30	0,25	2,00	-	-	63	17,2
032-032-100	0,30	0,25	-	1,32	0,76	63	25,4
032-032-100	0,30	0,25	2,00	-	-	63	27,5
032-032-105	0,66	0,55	-	2,80	1,60	63	36
032-032-105	0,66	0,55	4,20	-	-	63	33
032-032-125	0,90	0,75	-	2,77	1,60	71	36
032-032-125	0,90	0,75	4,75	-	-	71	35,5
040-040-060	0,30	0,25	-	1,32	0,76	63	25,2
040-040-060	0,30	0,25	2,00	-	-	63	25,9
040-040-090	0,66	0,55	-	2,80	1,60	63	32,8
040-040-090	0,66	0,55	4,20	-	-	63	28,2
040-040-100	0,90	0,75	-	2,77	1,60	71	32,8
040-040-100	0,90	0,75	4,75	-	-	71	35,6
050-050-110	1,30	1,10	-	3,90	2,25	80	46,6
050-050-110	1,30	1,10	6,90	-	-	80	41,5
050-050-125	2,20	1,80	-	5,90	3,40	90S	54,6
065-065-100	1,30	1,10	-	3,90	2,25	80	58,6
065-065-100	1,30	1,10	6,90	-	-	80	50,5
065-065-115	2,20	1,80	-	5,90	3,40	90S	67,8
065-065-125	3,40	3,00	-	9,70	5,60	90L	80,8
080-080-105	1,30	1,10	-	3,90	2,25	80	63
080-080-115	2,20	1,80	-	5,90	3,40	90S	80,8
080-080-125	3,40	3,00	-	9,70	5,60	90L	93,7

259 Continuous duty S1
260 ≥ 0,75 kW = IE3

Motor (fixed speed version), n = 1450 rpm

50 Hz, technical data of the motor, n = 1450 rpm (fixed speed version)

Etaline DL	P_2 max.[261] IE3[262]	P_N IE3[262]	I_N 1~230 V	I_N 3~230 V	I_N 3~400 V	Motor	[kg]
n = 1450 rpm	[kW]	[kW]	[A]	[A]	[A]		
032-032-125	0,14	0,12	-	0,83	0,48	63	28,8
032-032-125	0,14	0,12	1,20	-	-	63	28,8
040-040-100	0,14	0,12	-	0,83	0,48	63	26,7
040-040-100	0,14	0,12	1,20	-	-	63	27,4
050-050-125	0,21	0,18	-	1,15	0,66	63	30,8
050-050-125	0,21	0,18	1,60	-	-	63	35
050-050-160	0,90	0,75	-	2,96	1,71	80	62,7
050-050-160	0,90	0,75	5,75	-	-	80	56,4
065-065-125	0,44	0,37	-	2,15	1,25	63	47,3
065-065-125	0,44	0,37	3,20	-	-	63	47,6
080-080-125	0,44	0,37	-	2,15	1,25	63	60,2
080-080-125	0,44	0,37	3,20	-	-	63	60,8

261 Continuous duty S1
262 ≥ 0.75 kW = IE3

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Motor (variable speed version), n = 2900 rpm

50 Hz, technical data of the motor, n = 2900 rpm (variable speed version)

Etaline DL PumpDrive 2 Eco	P_2 max.[263] IE2[264]	P_N IE2[264]	I_N 1~230 V	I_N 3~400 V	Motor	[kg]
n = 2900 rpm	[kW]	[kW]	[A]	[A]		
032-032-100	0,30	0,25	-	0,76	63	31,6
032-032-100	0,30	0,25	2,00	-	63	31,6
032-032-105	0,66	0,55	-	1,60	63	37,3
032-032-105	0,66	0,55	4,20	-	63	37,1
032-032-125	0,90	0,75	-	1,60	71	37,3
032-032-125	0,90	0,75	4,75	-	71	41,8
040-040-060	0,30	0,25	-	0,76	63	29,4
040-040-060	0,30	0,25	2,00	-	63	30,0
040-040-090	0,66	0,55	-	1,60	63	33,6
040-040-090	0,66	0,55	4,20	-	63	34,9
040-040-100	0,90	0,75	-	1,60	71	34,8
040-040-100	0,90	0,75	4,75	-	71	39,7
050-050-110	1,30	1,10	-	2,25	80	45,6
050-050-110	1,30	1,10	6,90	-	80	45,6
050-050-125	2,20	1,80	-	3,40	90S	50,6
065-065-100	1,30	1,10	-	2,25	80	54,6
065-065-100	1,30	1,10	6,90	-	80	54,6
065-065-115	2,20	1,80	-	3,40	90S	60,1
065-065-125	3,40	3,00	-	5,60	90L	68,1
080-080-105	1,30	1,10	-	2,25	80	67,1
080-080-115	2,20	1,80	-	3,40	90S	72,6
080-080-125	3,40	3,00	-	5,60	90L	81,1

263 Continuous duty S1
264 ≥ 0.75 kW = IE2

Motor (variable speed version), n = 1450 rpm

50 Hz, technical data of the motor, n = 1450 rpm (variable speed version)

Etaline DL PumpDrive 2 Eco	P_2 max.[265] IE2[266]	P_N IE2[266]	I_N 1~230 V	I_N 3~400 V	Motor	[kg]
n = 1450 rpm	[kW]	[kW]	[A]	[A]		
032-032-125	0,14	0,12	-	0,48	63	32,9
032-032-125	0,14	0,12	1,20	-	63	32,9
040-040-100	0,14	0,12	-	0,48	63	30,8
040-040-100	0,14	0,12	1,20	-	63	31,5
050-050-125	0,21	0,18	-	0,66	63	37,6
050-050-125	0,21	0,18	1,60	-	63	39,1
050-050-160	0,90	0,75	-	1,71	80	64,1
050-050-160	0,90	0,75	5,75	-	80	61,1
065-065-125	0,44	0,37	-	1,25	63	50,1
065-065-125	0,44	0,37	3,20	-	63	50,1
080-080-125	0,44	0,37	-	1,25	63	62,6
080-080-125	0,44	0,37	3,20	-	63	63,1

265 Continuous duty S1
266 ≥ 0.75 kW = IE2

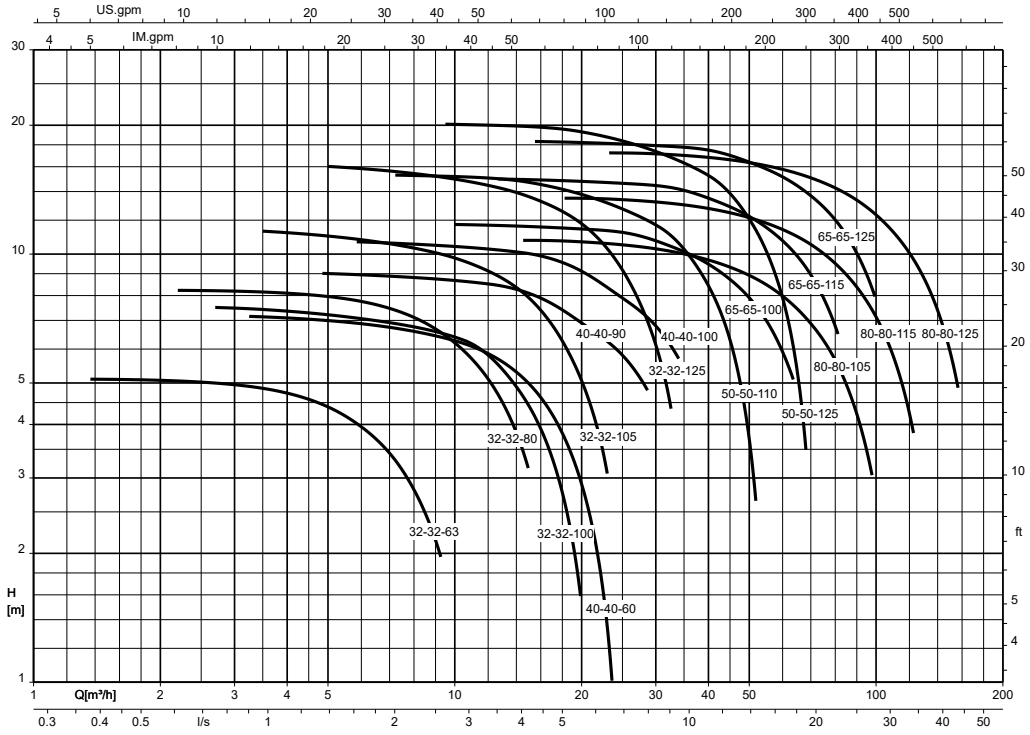
Pump

Technical data of the pump

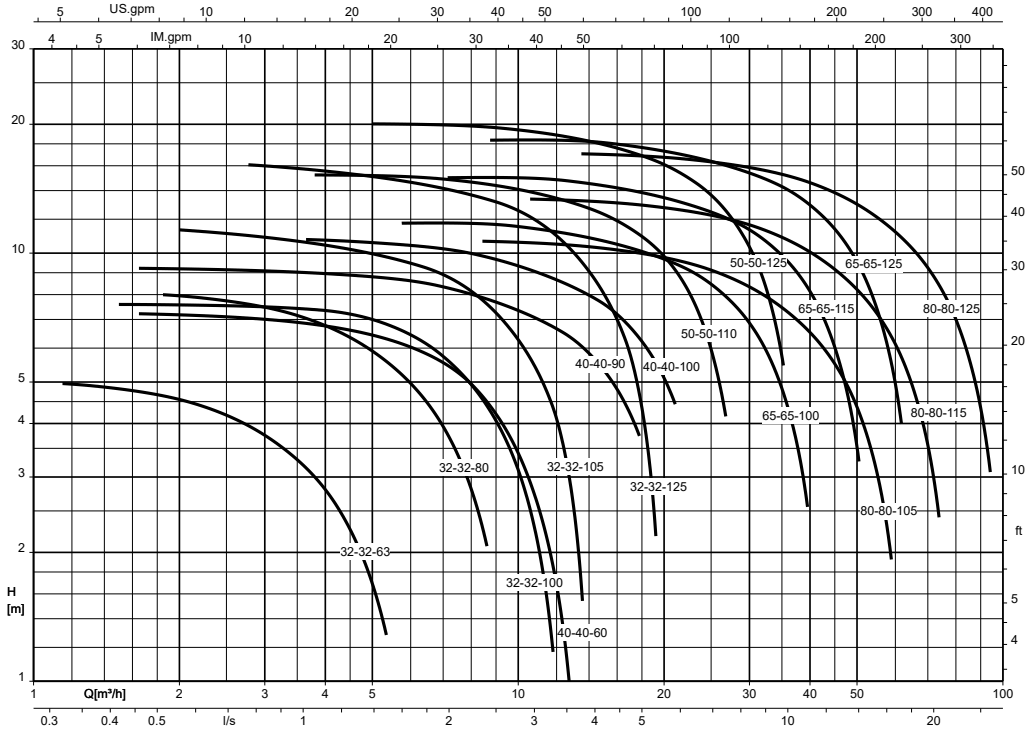
Etaline DL	Shaft unit	Impeller diameter	Speed limit	
			Minimum	Maximum
		[mm]	[rpm]	[rpm]
032-032-063	WE 12	63	500	3000
032-032-080	WE 12	80	500	3000
032-032-100	WE 12	80	500	3000
032-032-105	WE 12	105	500	3000
032-032-125	WE 12	125	500	3000
040-040-060	WE 12	80	500	3000
040-040-090	WE 12	90	500	3000
040-040-100	WE 12	98	500	3000
040-040-100	WE 14	98	500	3000
050-050-110	WE 14	109	500	3000
050-050-125	WE 12	125	500	3000
050-050-125	WE 14	125	500	3000
050-050-160	WE 14	159	500	3000
050-050-160	WE 16	159	500	3000
065-065-100	WE 14	100	500	3000
065-065-115	WE 16	113	500	3000
065-065-125	WE 12	125	500	3000
065-065-125	WE 16	125	500	3000
080-080-105	WE 14	100	500	3000
080-080-115	WE 16	112	500	3000
080-080-125	WE 12	126,5	500	3000
080-080-125	WE 16	126,5	500	3000

Selection charts

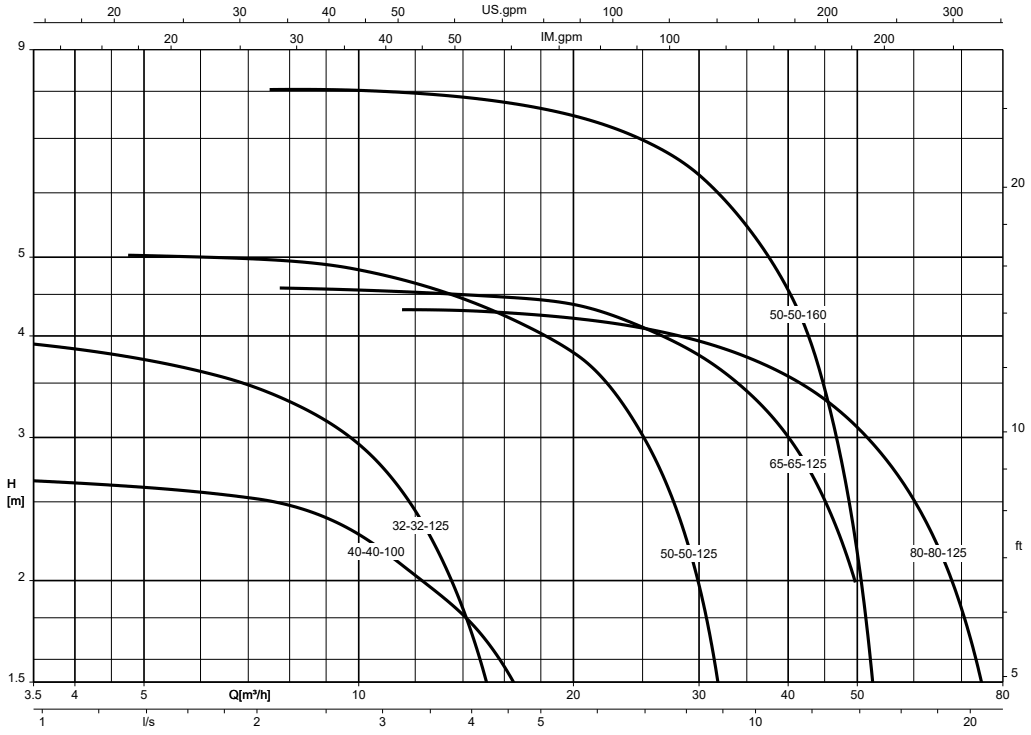
Etaline DL (fixed speed version, parallel operation), n = 2900 rpm



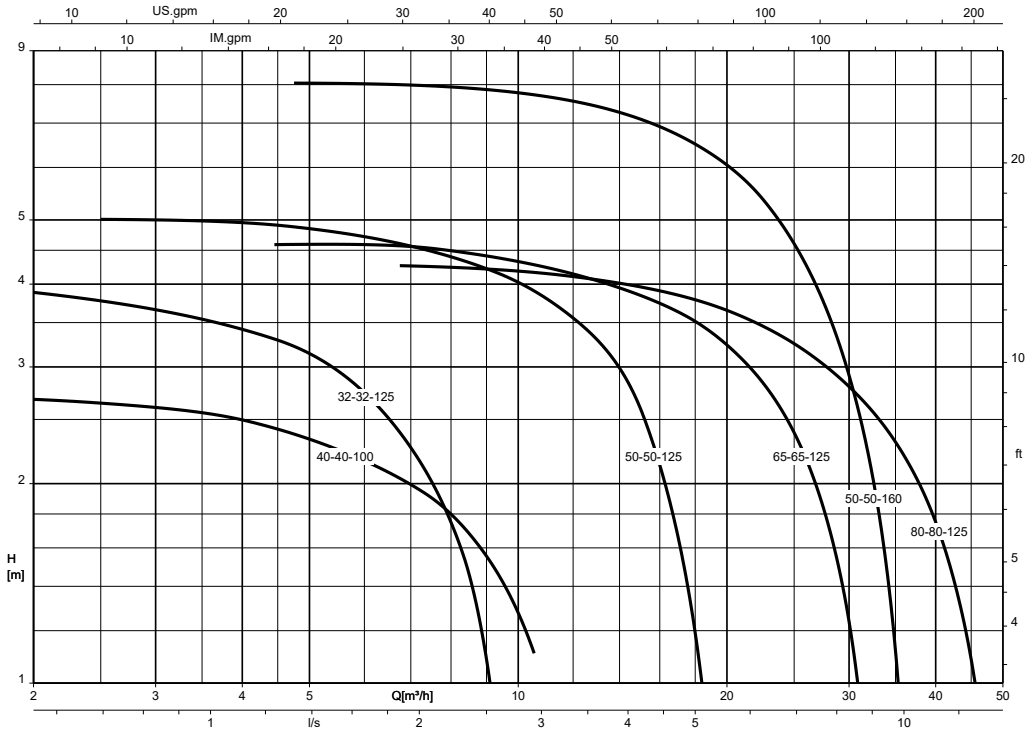
Etaline DL (fixed speed version, single-pump operation), n = 2900 rpm



Etaline DL (fixed speed version, parallel operation), n = 1450 rpm



Etaline DL (fixed speed version, single-pump operation), n = 1450 rpm



Characteristic curves

General

Test class
Characteristic curves to ISO 9906 Class 3B

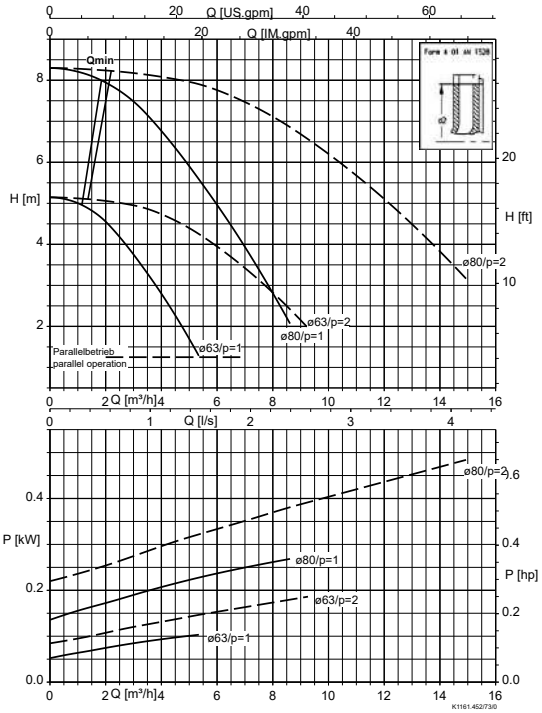
NPSH values
The NPSH values indicated in the characteristic curves correspond to a head drop of 3 %.

NPSH values in part-load conditions
NPSH values for flow rates below Q = 0.3 x Q_{BEP} can only be measured with intense technical efforts. Evidence of NPSH values in the part-load range cannot be provided.

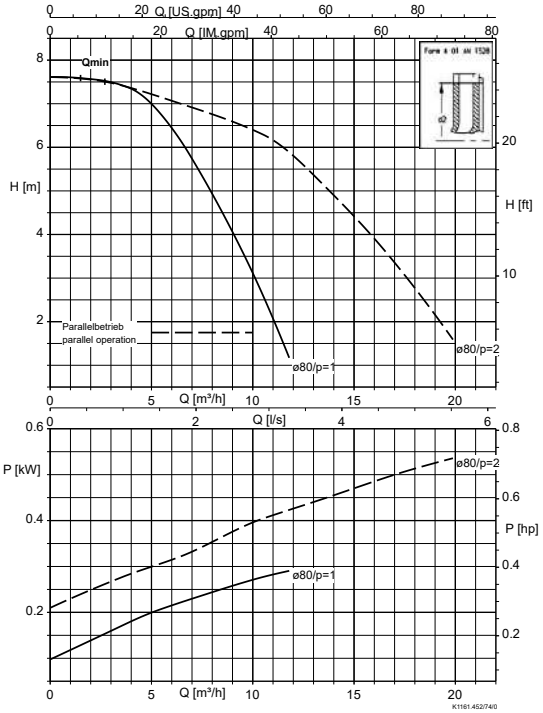
Density of the fluid handled
The indicated heads and performance data apply to pumped fluids with a density ρ = 1.0 kg/dm³ and a kinematic viscosity of up to 20 mm²/s max. If the density ≠ 1.0, the performance data must be multiplied by ρ. For a viscosity > 20 mm²/s the corresponding data for cold water has to be calculated and the impact on the pump's performance has to be determined.

Correction factors
The characteristic curves apply to pumps with cast iron impellers, plastic impellers and bronze impellers.

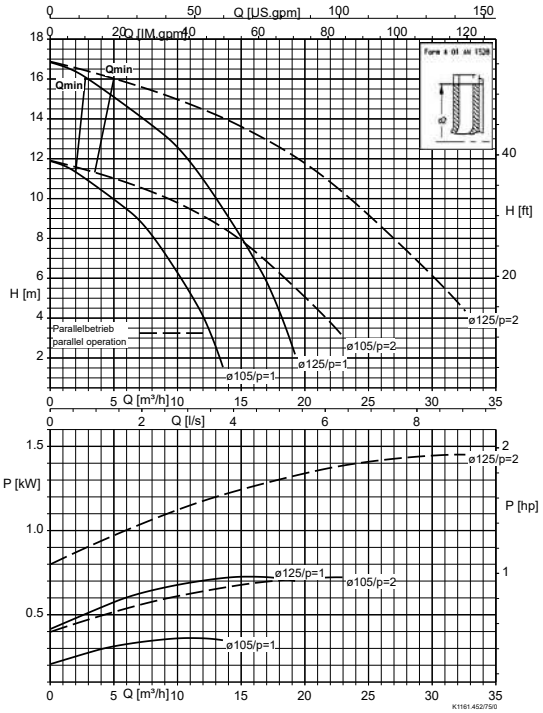
Etaline DL 032-032-080, n = 2900 rpm



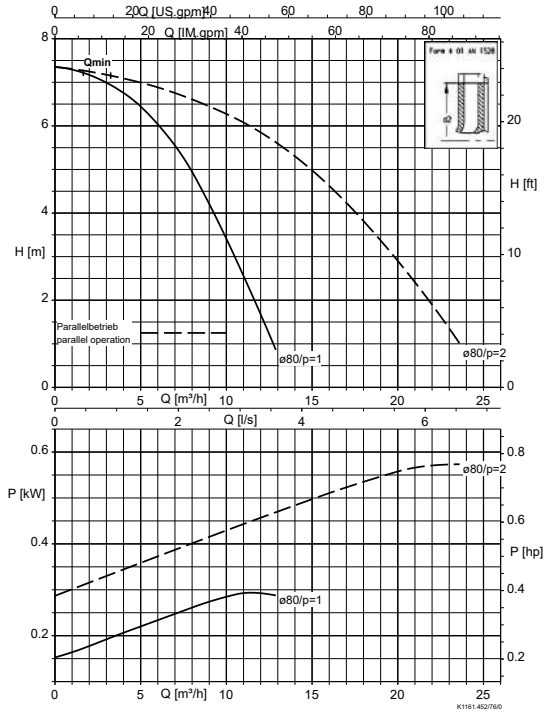
Etaline DL 032-032-100, n = 2900 rpm



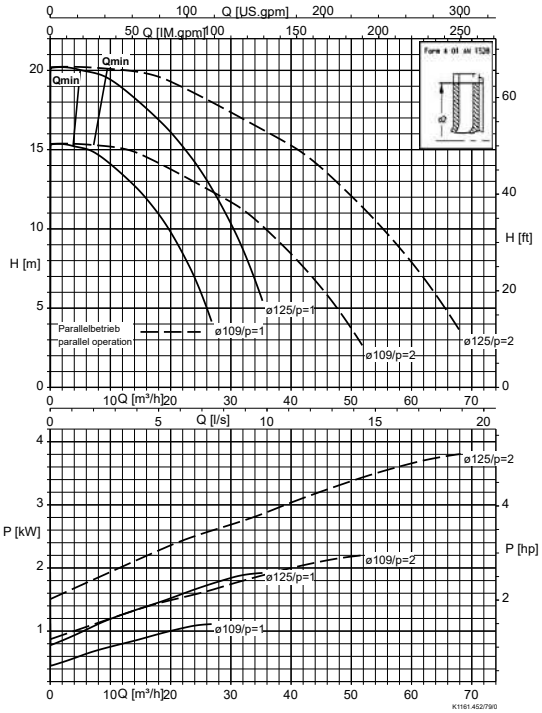
Etaline DL 032-032-125, n = 2900 rpm



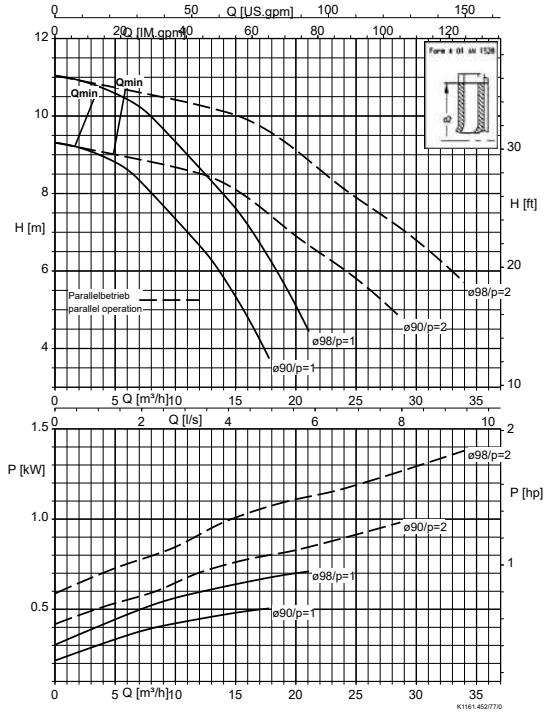
Etaline DL 040-040-060, n = 2900 rpm



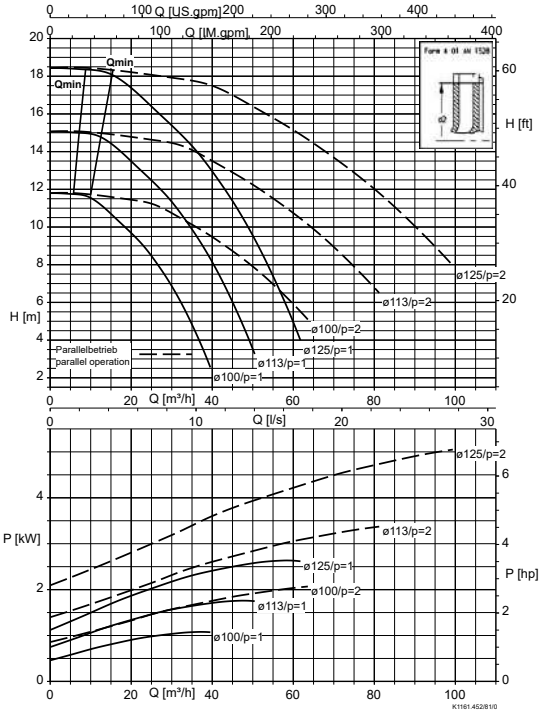
Etaline DL 050-050-125, n = 2900 rpm



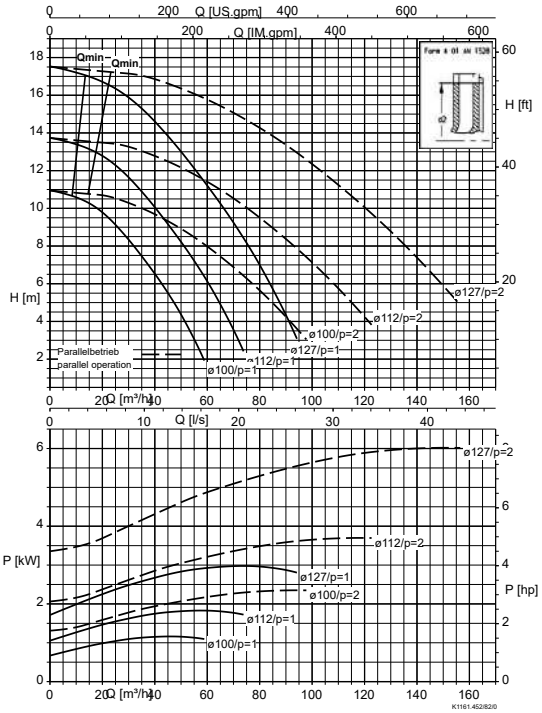
Etaline DL 040-040-100, n = 2900 rpm



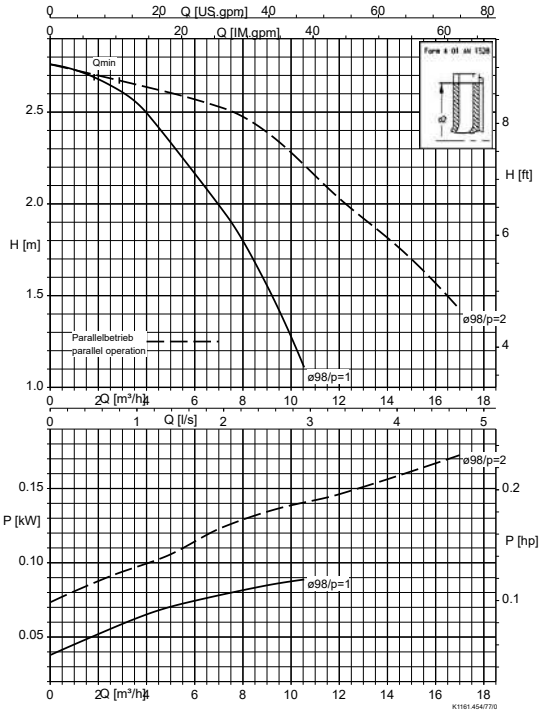
Etaline DL 065-065-125, n = 2900 rpm



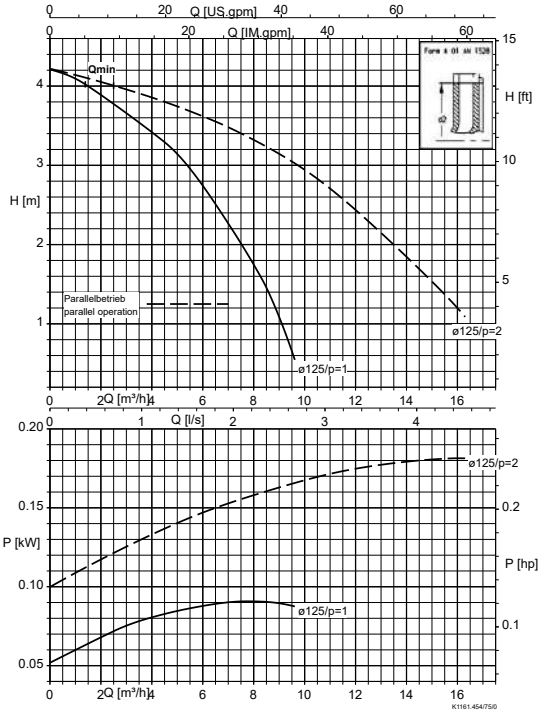
Etaline DL 080-080-125, n = 2900 rpm



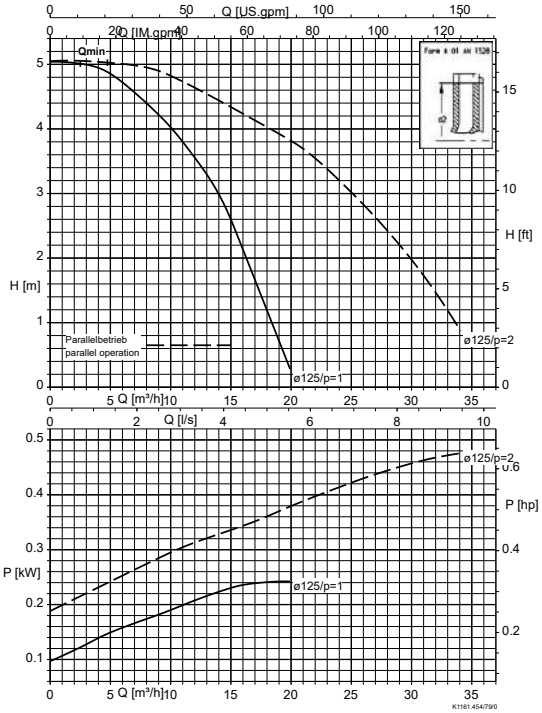
Etaline DL 040-040-100, n = 1450 rpm



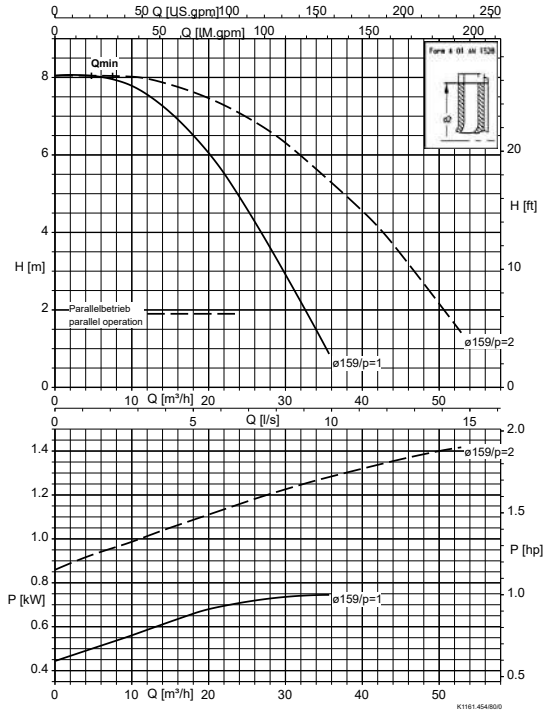
Etaline DL 032-032-125, n = 1450 rpm



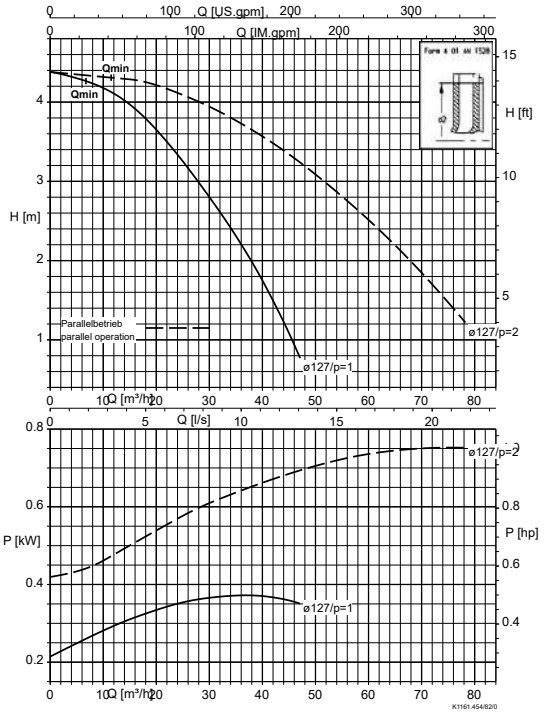
Etaline DL 050-050-125, n = 1450 rpm



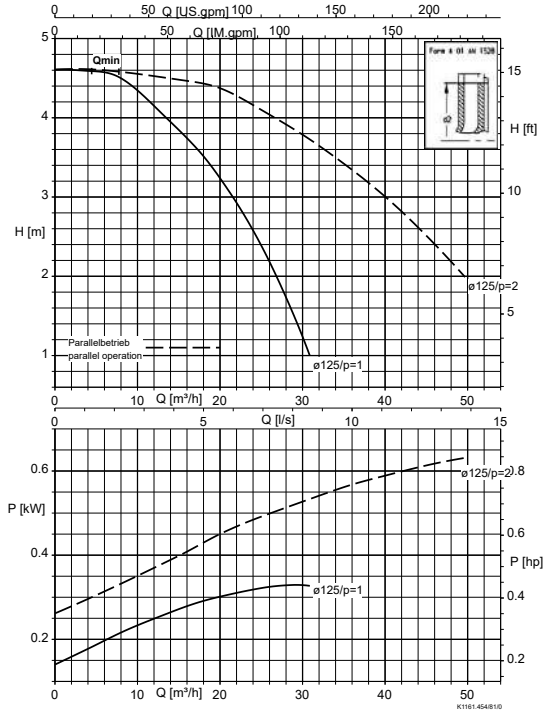
Etaline DL 050-050-160, n = 1450 rpm



Etaline DL 080-080-125, n = 1450 rpm



Etaline DL 065-065-125, n = 1450 rpm



Dimensions

Pump set dimensions (fixed speed version)

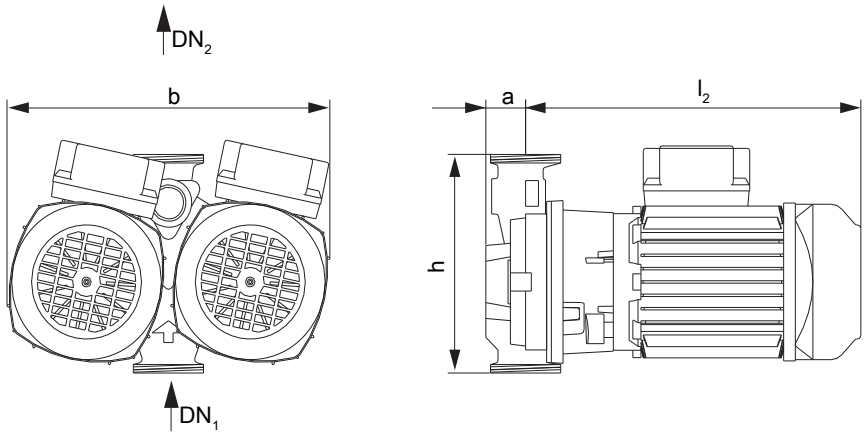


Fig. 263: Dimensions of screw-ended pump set, sizes ≤ 032-032-080

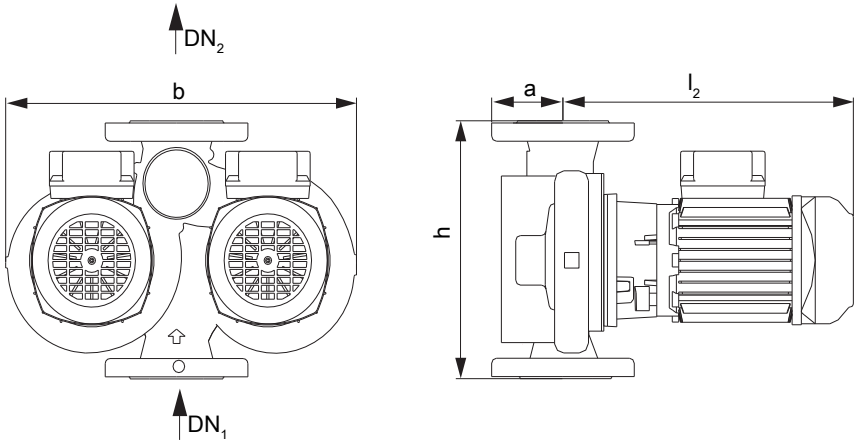


Fig. 264: Dimensions of flanged pump set, sizes ≥ 032-032-100

Pump set dimensions (fixed speed version), n = 2900 rpm

Etaline DL	P_2 max.[267)]	P_N	DN	Connection	a	h	b	l_2
n = 2900 rpm	[kW]	[kW]	[mm]	Thread	[mm]	[mm]	[mm]	[mm]
032-032-063	0,30	0,25	32	G 2	34	180	254	266
032-032-080	0,30	0,25	32	G 2	34	180	254	266
032-032-100	0,30	0,25	32	-	70	220	355	284
032-032-105	0,66	0,55	32	-	70	260	404	304
032-032-125	0,90	0,75	32	-	70	260	404	304
040-040-060	0,30	0,25	40	-	70	250	351	275
040-040-090	0,66	0,55	40	-	75	250	346	295
040-040-100	0,90	0,75	40	-	75	250	346	315
050-050-110	1,30	1,10	50	-	85	280	388	325
050-050-125	2,20	1,80	50	-	85	280	388	355
065-065-100	1,30	1,10	65	-	95	340	450	340
065-065-115	2,20	1,80	65	-	95	340	450	370
065-065-125	3,40	3,00	65	-	95	340	450	385
080-080-105	1,30	1,10	80	-	105	360	515	325
080-080-115	2,20	1,80	80	-	105	360	515	360
080-080-125	3,40	3,00	80	-	105	360	515	380

267 Continuous duty S1

Pump set dimensions (fixed speed version), n = 1450 rpm

Etaline DL	P_2 max.[268)]	P_N	DN	Connection	a	h	b	l_2
n = 1450 rpm	[kW]	[kW]	[mm]	Thread	[mm]	[mm]	[mm]	[mm]
032-032-125	0,14	0,12	32	-	70	260	404	304
040-040-100	0,14	0,12	40	-	75	250	346	295
050-050-125	0,21	0,18	50	-	85	280	388	280
050-050-160	0,90	0,75	50	-	87	340	492	355
065-065-125	0,44	0,37	65	-	95	340	450	291
080-080-125	0,44	0,37	80	-	105	360	515	275

268 Continuous duty S1

Pump set dimensions (variable speed version)

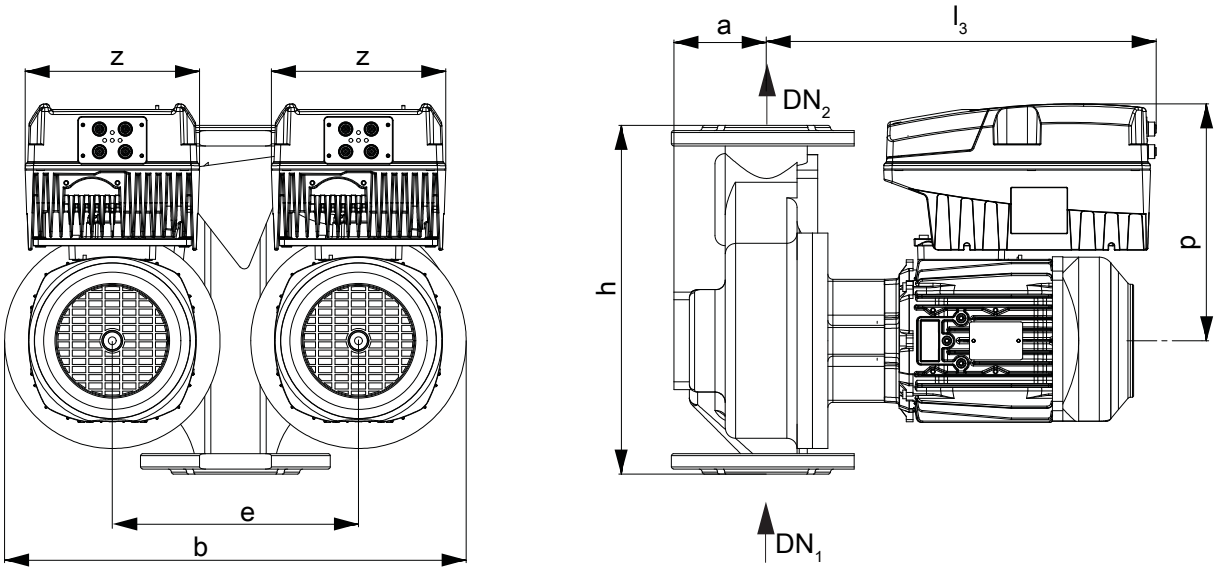


Fig. 265: Dimensions of pump set with PumpDrive 2 Eco

Dimensions of pump set with PumpDrive 2 Eco (variable speed version), n = 2900 rpm

Etaline DL PumpDrive 2 Eco	P_2 max.[269]	P_N	DN	a	b	e	h	l_3	p	z
n = 2900 rpm	[kW]	[kW]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
032-032-100	0,30	0,25	32	70	355	200	220	368	215	171
032-032-105	0,66	0,55	32	70	404	220	260	365	215	171
032-032-125	0,90	0,75	32	70	404	220	260	365	223	171
040-040-060	0,30	0,25	40	70	351	200	250	367	215	171
040-040-090	0,66	0,55	40	75	346	200	250	368	215	171
040-040-100	0,90	0,75	40	75	346	200	250	368	223	171
050-050-110	1,30	1,10	50	85	388	200	280	362	232	171
050-050-125	2,20	1,80	50	85	388	200	280	389	245	171
065-065-100	1,30	1,10	65	95	450	240	340	370	232	171
065-065-115	2,20	1,80	65	95	450	240	340	397	245	171
065-065-125	3,40	3,00	65	95	450	240	340	397	246	186
080-080-105	1,30	1,10	80	105	515	270	360	377	232	171
080-080-115	2,20	1,80	80	105	515	270	360	404	245	171
080-080-125	3,40	3,00	80	105	515	270	360	404	246	186

Dimensions of pump set with PumpDrive 2 Eco (variable speed version), n = 1450 rpm

Etaline DL PumpDrive 2 Eco	P_2 max.[270]	P_N	DN	a	b	e	h	l_3	p	z
n = 1450 rpm	[kW]	[kW]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
032-032-125	0,14	0,12	32	70	404	220	260	365	215	171
040-040-100	0,14	0,12	40	75	346	200	250	368	215	171
050-050-125	0,21	0,18	50	85	388	200	280	362	215	171
050-050-160	0,90	0,75	50	87	492	250	340	370	232	171
065-065-125	0,44	0,37	65	95	450	240	340	370	215	171
080-080-125	0,44	0,37	80	105	515	270	360	377	215	171

269 Continuous duty S1
270 Continuous duty S1

Connections

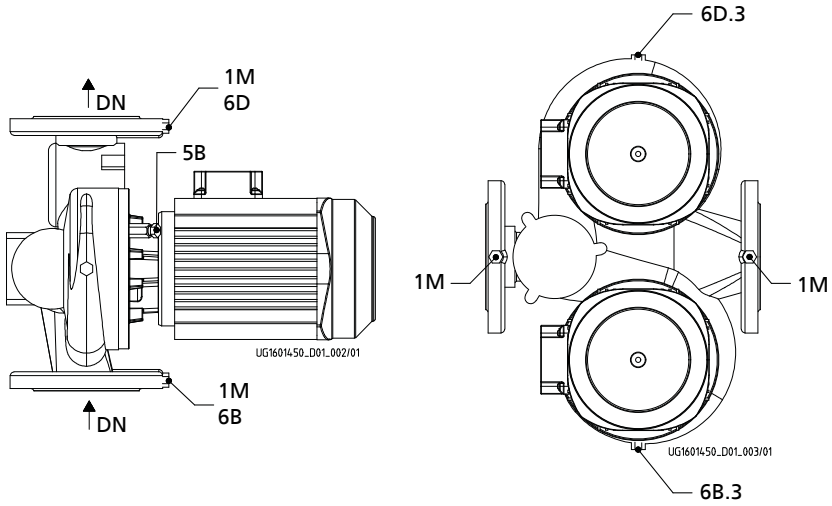


Fig. 266: Horizontal installation

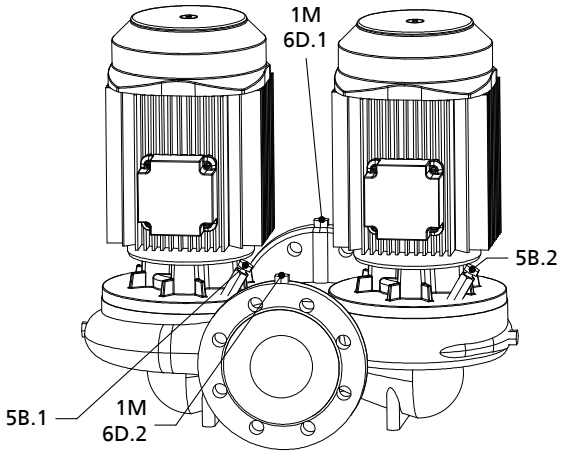


Fig. 267: Vertical installation

Connections

Connection	Design	Configuration	Position
1M	Connection for pressure gauge	Drilled and closed	Suction flange and discharge flange
5B, 5B.1, 5B.2	Vent connection for the mechanical seal chamber	Plugged with vent plug	Casing cover
6B, 6B.3	Fluid drain	Drilled and closed	Volute casing
6D, 6D.1, 6D.2, 6D.3	Fluid priming and venting	Drilled and closed	Volute casing

Connection

Etaline DL	1M, 6B, 6D, 6D.1, 6D.2	6B.3, 6D.3
032-032-063	-	G 1/8
032-032-080	-	G 1/8
032-032-100	G 1/4	G 1/8
032-032-105	G 1/4	G 1/8
032-032-125	G 1/4	G 1/8
040-040-060	G 1/4	G 1/8
040-040-090	G 1/4	G 1/8
040-040-100	G 1/4	G 1/8
050-050-110	G 1/4	G 1/8
050-050-125	G 1/4	G 1/8
050-050-160	G 1/4	G 1/8
065-065-100	G 1/4	G 1/8
065-065-115	G 1/4	G 1/8

Etaline DL	1M, 6B, 6D, 6D.1, 6D.2	6B.3, 6D.3
065-065-125	G 1/4	G 1/8
080-080-105	G 1/4	G 1/8
080-080-115	G 1/4	G 1/8
080-080-125	G 1/4	G 1/8

Flange design

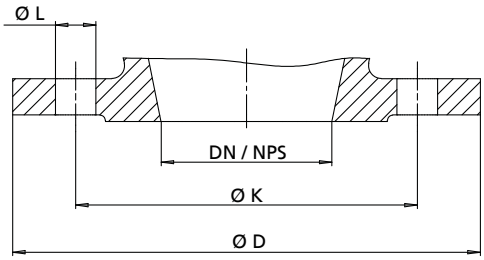


Fig. 268: Flange dimensions

Flange dimensions [mm]

DN / NPS	NORM							Comment
	EN 1092-2						DIN EN ISO 228-1	
	Material							
	G							
	PN 10			PN 6			Thread	
	Ø K	Ø D	Number of holes L	Ø K	Ø D	Number of holes L		
32 / NPS11/4	100	140	4×∅19	90	140	4×∅14	G 2[271)]	Adapter flange PN6/ PN10
40 / NPS11/2	110	150	4×∅19	100	150	4×∅14	-	
50 / NPS2	125	165	4×∅19	110	165	4×∅14	-	
65 / NPS21/2	145	185	4×∅19	130	185	4×∅14	-	
80 / NPS3	160	200	8×∅19	-	-	-	-	-

Flange design by materials

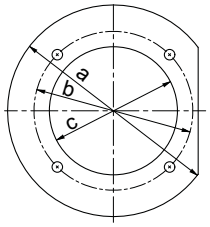
Material variant	NORM	Nominal diameter	Pressure class
GG, GP	DIN EN ISO 228-1	032-032-080	PN 10
	Drilled to EN 1092-2	DN 32 - DN 65	PN 6 / PN 10
	EN 1092-2	DN 80	PN 10

271 For sizes < 032-032-100 only

Accessories

Pump accessories

Pump accessories

Component	Ø a / Ø b / Ø c [mm]	For size	Mat. No.	[kg]
Blind flange with sealing element 	140 / 105 / 84,8	032-032-063	01734726	0,8
		032-032-080		
		040-040-060		
	140 / 122 / 101,8	032-032-100	01734727	0,9
		040-040-090		
		040-040-100		
	161 / 147 / 125,8	032-032-105	01734725	1,6
		032-032-125		
		050-050-110		
		050-050-125		
	210 / 171,5 / 160,8	050-050-160	01734723	3,2
	210 / 196 / 126,5	065-065-100	01734724	2,6
		065-065-115		
		065-065-125		
		080-080-105		
		080-080-115		
		080-080-125		
Pump foot			On request	

In-line Twin Pumps

Etaline Z

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000114

Product benefits

- Maximum energy efficiency through demand-driven operation in combination with KSB SuPremE IE4/IE5 motor[272)] to IEC TS 60034-30-2:2016
- PumpDrive 2 / PumpDrive 2 Eco perfectly matched to pump and motor by default factory parameter settings
- Motor-mounted variable speed system up to 45 kW saves space
- Pump operation made fully transparent with PumpMeter

Further information

Prices on request

Selection charts 624
Characteristic curves 625
Dimensions 630
Accessories 640

Further information

	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[273)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for water pumps with a maximum nominal shaft power of 150 kW as per Regulation (EU) No. 547/2012.

272 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.
273 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Main applications

- Service water supply systems
- Heating systems
- Industrial recirculation systems
- Air-conditioning systems
- Cooling circuits
- Water supply systems[274)]

Fluids handled

- Fluids not chemically or mechanically aggressive to the materials

Further information on fluids handled

Overview of fluids handled (⇨ Page 617)

Operating data

Operating properties

Characteristic		Value	
		Single-pump operation	Parallel operation
Flow rate	Q [m³/h]	≤ 602,5	≤ 1095
	Q [l/s]	≤ 167	≤ 304,5
Head	H [m]	≤ 38,5	≤ 38,5
Fluid temperature	T [°C]	≥ -30	≥ -30
		≤ +140	≤ +140
Operating pressure	p [bar]	≤ 16 [275)]	≤ 16 [275)]

Design details

Design

- In-line twin pump in closed-coupled design
- Single-stage
- Horizontal installation / vertical installation
- Rigid connection between pump and motor
- Back pull-out design
- Fixed speed version (without PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R) / variable speed version (with PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R)

Pump casing

- Radially split volute casing
- In-line design

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- II 3G Ex ec IIC T3 Gc
- II 2G Ex eb IIC T3 Gb
- II 2G Ex db (eb) IIB T4 Gb
- II 2G Ex db (eb) IIC T4 Gb

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[276)] (PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 0.55 kW to 45 kW
- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2 / PumpDrive 2 Eco:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for motor mounting, wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

274 No drinking water in acc. with UBA (German drinking water regulations to German Environment Agency)
275 The sum of inlet pressure and shut-off head must not exceed the value indicated.
276 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

PumpMeter:

- Intelligent pressure transmitter for pumps, with on-site display of measured values and operating data
- For recording the load profile of the pump
- Supplied completely assembled and parameterised for the individual pump

KSB Guard

- System for monitoring the pump's condition by means of temperature and vibration sensors
- Measured values and operating data may be retrieved via the KSB Guard app and the web portal at any time.

Shaft seal

- Standardised mechanical seal to EN 12756
- Shaft equipped with replaceable shaft protecting sleeve in the shaft seal area

Twin pump

- Two separate centrifugal pump hydraulic systems in one pump casing with a spring-loaded changeover flap located in the discharge nozzle
- Changeover flap housing made of Rilsan (nominal diameter 32 to 80)
- Changeover flap housing made of bronze (nominal diameter 100 to 200 inclusive)
- Flaps, springs, stems made of chrome steel
- Manual venting of the mechanical seal chamber through two integrated vent valves
- Single-pump operation (stand-by operation) / parallel operation (additional pump start-up in case of peak load)
- Redundant dual-pump operation through M12 module (accessory) without higher-level controller

Impeller type

- Closed radial impeller

Bearings

- Radial ball bearings in the motor housing
- Grease lubrication

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Designation

Designation example

Position																																											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
E	T	L	-	0	3	2	-	0	3	2	-	1	6	0	-	G	G	S	A	V	0	1	D	2	1	1	0	0	2	e	x	B	K	S	B	I	E	3	P	D	2	E	M
See name plate and data sheet																									See data sheet																		

Designation key

Position	Code	Description		
1-4	Pump type			
	ETL	Etaline		
	ETLZ	Etaline Z (refer to Etaline to select back pull-out unit)		
5-16	Size [mm], e.g.			
	032	Nominal suction nozzle diameter		
	032	Nominal discharge nozzle diameter		
	160	Nominal impeller diameter		
17	Pump casing material			
	G	Cast iron	EN-GJL-250 / A48CL35	
18	Impeller material			
	G	Cast iron	EN-GJL-250 / A48CL35	
	C	Stainless steel	1.4408 / A743CF8M	
	B	Bronze	CC480K-GS / B30 C90700	
19	Design			
	H	Approved for drinking water to ACS		
	K	Approved for drinking water to KSB standard		
	S	Standard		
	U	Approved for drinking water to UBA		
	W	Approved for drinking water to WRAS		
	X	Non-standard (BT3D, BT3)		
20	Casing cover			
	A	Conical seal chamber		
21	Shaft seal type			
	V	Single mechanical seal with vented chamber (A-type cover)		
22-23	Seal code, single mechanical seal			
	01	Q1Q1VGG	1 (ZN1181)	≥ -20 - ≤ +110 [°C]
	06	U3BEGG (shaft units 25, 35)	RMG13G606	≥ -30 - ≤ +140 [°C]
	07	Q1Q1EGG	1A (ZN1181)	≥ -30 - ≤ +110 [°C]
	09	U3U3VGG	MG13G60	≥ -20 - ≤ +110 [°C]
	10	Q1Q1X4GG	1 (ZN1181)	≥ -20 - ≤ +110 [°C]
	11	BQ1EGG-WA (WA = drinking water)	1 (ZN1181)	≥ -30 - ≤ +110 [°C]
	22	AQ1EGG (shaft unit 55)	M32N69	≥ -30 - ≤ +140 [°C]
	66	Q7Q7EGG	MG13G6	≥ -30 - ≤ +120 [°C]
24	Scope of supply			
	A	Pump only (Fig. 0)		
	D	Pump, motor		
	E	Back pull-out unit		
25	Shaft unit			
	2	Shaft unit 25		
	3	Shaft unit 35		
	5	Shaft unit 55		
26-29	Motor rating P_N [kW]			
	0002	0,25		
	...	...		
	0550	55,00		
30	Number of motor poles			
31-32	Explosion protection			
	ex	With explosion-proof motor		
	--	Without explosion-proof motor		
33	Product generation			

Position	Code	Description
33	B	Etaline / Etaline Z
34-36	Motor manufacturer	
	KSB	KSB (ISO 9001)
	SIE	Siemens
	LOH	Loher
	HAL	Halter
37-39	Efficiency class	
40-43	PumpDrive	
	PD2	PumpDrive 2
	PD2E	PumpDrive 2 Eco
	IFS	MyFlow Drive
44	PumpMeter	
	M	PumpMeter

Materials

Symbols key

Symbol	Description
✘	Standard
-	Version not available / not feasible

Overview of available materials

Part No.	Description	Material	Material variant		
			GG	GB	GC
102	Volute casing	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✘	✘	✘
161	Conical casing cover	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✘	✘	✘
210	Shaft	Tempered steel C45+N	✘	✘	✘
		Stainless steel 1.4571 (optional)	✘	✘	✘
230	Impeller	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✘	-	-
		Bronze CC480K-GS / B30 C90700	-	✘	-
		Stainless steel 1.4408 / A743 Gr. CF8 M	-	-	✘
341	Drive lantern	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✘	✘	✘
400	Sealing elements	DPAF, asbestos-free	✘	✘	✘
502.01	Casing wear ring, suction side	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✘	✘	✘
		Bronze CC495K-GS	-	✘	-
502.02	Casing wear ring, discharge side	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✘	✘	✘
		Bronze CC495K-GS	-	✘	-
523	Shaft sleeve	Stainless steel (CrNiMo steel)	✘	✘	✘
902	Studs	Steel 8.8	✘	✘	✘
903	Plug	Steel	✘	✘	✘
920	Nut	8+A2A / 8+B633 SC1 TP3	✘	✘	✘
920.95	Impeller nut	Stainless steel (CrNiMo steel)	✘	✘	✘
		Steel 8	✘	✘	-

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Overview of product features / selection tables

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

Symbols key

Symbol	Description
✘	Standard
-	Version not available / not feasible

Excerpt from the overview of fluids handled with associated material variants

Fluid handled	T[277]		Materials			Shaft seal							Comments
			Casing/impeller			Mechanical seal							
	Minimum	Maximum	Grey cast iron / grey cast iron	Grey cast iron / stainless steel	Grey cast iron / tin bronze	U3BEGG (WE 25, 35)	AQ1EGG (WE 55)	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG	Q7Q7EGG	
	[°C]		GG	GC	GB	6	22	7	9	10	11	66	
Water													
Service water	-	≤ +110	✘	-	-	-	-	-	-	✘	-	-	CrNiMo cast steel can be used.
Fire-fighting water[278]	-	≤ +60	-	-	✘	-	-	-	-	✘	-	-	Contact KSB for supply to VdS guidelines.
Heating water[279]	-	≤ +110	✘	-	-	-	-	-	-	-	✘	-	If used as circulating pump to DIN 4752: p max ≤ 10 bar
Heating water	-	≤ +140	✘	-	-	✘	✘	-	-	-	-	-	
Condensate	-	≤ +110	✘	-	-	-	-	-	-	-	✘	-	-
Cooling water without antifreeze	-	≤ +60	✘	-	-	-	-	-	-	✘	-	-	Open circuit: GB 10 required
Cooling water with antifreeze[280], pH ≥ 7.5	≥ -30	≤ +60	✘	-	-	-	-	-	-	-	✘	-	Open circuit: GB required
Cooling water pH ≥ 7.5 (with antifreeze [280])	≥ +60	≤ +110	✘	-	-	-	-	✘	-	-	-	-	Open circuit: GB required
Slightly contaminated water	-	≤ +60	✘	-	-	-	-	-	-	✘	-	-	-
Pure water[281]	-	≤ +60	✘	-	-	-	-	-	-	-	✘	-	-
Raw water	-	≤ +60	✘	-	-	-	-	-	-	✘	-	-	-
Swimming pool water (fresh water)	-	≤ +60	✘	-	-	-	-	-	-	✘	-	-	Also applies to requirements as per DIN 19643
Swimming pool water[282]: filtration	-	≤ +40	-	-	✘	-	-	-	-	✘	-	-	Variant GB Shaft C45+N, shaft sleeve CrNiMo steel, nut A4/AISI 316, key A2, casing wear ring (suction and discharge side) grey cast iron JL 1040/ CI
Swimming pool water[282]: water features; without turbulences and/ or air content	-	≤ +40	-	-	✘	-	-	-	-	✘	-	-	Variant GB Shaft C45+N, shaft sleeve CrNiMo steel, nut A4/ AISI 316, key A2, casing wear ring (suction and discharge side) CC495K-GS
Dam water	-	≤ +60	-	-	✘	-	-	-	-	✘	-	-	If solids are contained, contact KSB.
Drinking water[283]	-	≤ +60	-	-	✘	-	-	-	-	-	✘	-	-
Partly desalinated water	-	≤ +120	✘	-	-	-	-	-	-	-	✘	-	-
Fully desalinated water as boiler feed water	-	≤ +110	✘	-	-	-	-	-	-	-	✘	-	-
Refrigerants, cooling brines													

277 T = fluid temperature
278 General evaluation criteria for results of water analysis: pH ≥ 7; chlorides content (Cl) ≤ 250 mg/kg. Chlorine (Cl2) ≤ 0.6 mg/kg
279 Treatment to VdTÜV 1466, additional requirement: O2 t ≤ 0.02 mg/l
280 Antifreeze on ethylene glycol basis with inhibitors, content > 20 % to 50 % (e.g. Antifrogen N)
281 No pure water, electrical conductivity at 25 °C: ≤ 800 µS/cm, neutral with regard to chemical corrosion
282 France: Observe the rules as per ministerial order dated 18 January 2002.
283 For France, ACS approval is required.

Fluid handled	T[277]		Materials			Shaft seal							Comments
			Casing/impeller			Mechanical seal							
	Minimum	Maximum	Grey cast iron / grey cast iron	Grey cast iron / stainless steel	Grey cast iron / tin bronze	U3BEGG (WE 25, 35)	AQ1EGG (WE 55)	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG	Q7Q7EGG	
	[°C]		GG	GC	GB	6	22	7	9	10	11	66	
Cooling brine; inorganic, pH > 7.5, inhibited	≥ -30	≤ +25	✘	-	-	-	-	-	-	-	-	✘	-
Water with antifreeze, pH ≥ 7.5	≥ -30	≤ +60	✘	-	-	-	-	-	-	-	✘	-	-
Water with antifreeze, pH ≥ 7.5	≥ +60	≤ +110	✘	-	-	-	-	✘	-	-	-	-	-
Oils/emulsions													
Drilling emulsion, grinding emulsion	-	≤ +60	✘	-	-	-	-	-	✘	-	-	-	-
Oil-water emulsion	-	≤ +60	✘	-	-	-	-	-	✘	-	-	-	-

Overview of variants

Other designs on request

Symbols key

Symbol	Description
✗	Standard
-	Version not available / not feasible

Overview of Etaline / Etaline Z variants

Variant	102 / Volute casing	230 / Impeller	Mechanical seal	T [°C]	Main applications: Handling clean or aggressive fluids not chemically and mechanically aggressive to the pump materials	Main applications: Water supply systems	Main applications: Cooling circuits	Main applications: Heating systems	Main applications: Air-conditioning systems
GG06	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	SU 25, 35: mech. seal U3BEGG SU 55: mech. seal AQ1EGG	≥ -30 - ≤ +140	-	-	-	✗	-
GG10	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Mech. seal Q1Q1X4GG	≥ -20 - ≤ +110	-	✗	-	-	-
GG11	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Mech. seal BQ1EGG	≥ -30 - ≤ +110	✗	✗	✗ 284)	-	✗ 284)
GB06	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Bronze CC480K-DW / B30 C90700	SU 25, 35: mech. seal U3BEGG SU 55: mech. seal AQ1EGG	≥ -30 - ≤ +140	-	-	-	✗	-
GB10	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Bronze CC480K-DW / B30 C90700	Mech. seal Q1Q1X4GG	≥ -20 - ≤ +110	-	✗	-	-	-
GB11	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Bronze CC480K-DW / B30 C90700	Mech. seal BQ1EGG	≥ -30 - ≤ +110	✗	✗	✗ 284)	-	✗ 284)

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

284 Q1Q1EGG / Q7Q7EGG, fluid handled: water, glycol with inhibitors

Technical data

Motor (fixed speed version), n = 1450 rpm

50 Hz, technical data of the motor, n = 1450 rpm (fixed speed version)

Etaline Z	Efficiency class	P_N	I_N	Motor	[kg]
			3~400 V		
n = 1450 rpm		[kW]	[A]		
032-032-160	IE1	0,25	0,77	071M	62,7
032-032-160	IE1	0,37	1,06	071M	65,1
032-032-160	IE1	0,55	1,46	080M	71,9
032-032-160	IE1	0,75	1,66	080M	74,7
032-032-160	IE3	1,10	2,28	090S	80,5
032-032-160	IE3	1,50	2,99	090L	87,1
032-032-200	IE1	0,55	1,46	080M	92,7
032-032-200	IE1	0,75	1,66	080M	95,5
032-032-200	IE3	1,10	2,28	090S	101,4
032-032-200	IE3	1,50	2,99	090L	108
032-032-200	IE3	2,20	4,18	100L	123,5
032-032-200	IE3	3,00	6,21	100L	127,5
032-032-200	IE3	4,00	8,32	112M	137,5
040-040-160	IE1	0,25	0,77	071M	64,2
040-040-160	IE1	0,37	1,06	071M	66,6
040-040-160	IE1	0,55	1,46	080M	73,4
040-040-160	IE1	0,75	1,66	080M	76,2
040-040-160	IE3	1,10	2,28	090S	82
040-040-160	IE3	1,50	2,99	090L	88,6
040-040-250	IE1	0,55	1,46	080M	108,8
040-040-250	IE1	0,75	1,66	080M	114,7
040-040-250	IE3	1,10	2,28	090S	120,6
040-040-250	IE3	1,50	2,99	090L	127,2
040-040-250	IE3	2,20	4,18	100L	142,7
040-040-250	IE3	3,00	6,21	100L	146,7
040-040-250	IE3	4,00	8,32	112M	156,7
040-040-250	IE3	5,50	11,05	132S	181,5
040-040-250	IE3	7,50	15,05	132M	209,5
050-050-160	IE1	0,25	0,77	071M	66,1
050-050-160	IE1	0,37	1,06	071M	72,8
050-050-160	IE1	0,55	1,46	080M	79,5
050-050-160	IE1	0,75	1,66	080M	82,3
050-050-160	IE3	1,10	2,28	090S	88,2
050-050-160	IE3	1,50	2,99	090L	94,8
050-050-160	IE3	2,20	4,18	100L	110,3
050-050-160	IE3	3,00	6,21	100L	114,3
050-050-160	IE3	4,00	8,32	112M	124,3
050-050-250	IE3	1,10	2,28	090S	123,5
050-050-250	IE3	1,50	2,99	090L	130,1
050-050-250	IE3	2,20	4,18	100L	145,6
050-050-250	IE3	3,00	6,21	100L	149,6
050-050-250	IE3	4,00	8,32	112M	159,6
050-050-250	IE3	5,50	11,05	132S	184,4
050-050-250	IE3	7,50	15,05	132M	212,4
050-050-250	IE3	11,00	21,58	160M	264,8
065-065-160	IE1	0,25	0,77	071M	73,7
065-065-160	IE1	0,37	1,06	071M	80,4
065-065-160	IE1	0,55	1,46	080M	87,1
065-065-160	IE1	0,75	1,66	080M	89,9
065-065-160	IE3	1,10	2,28	090S	95,8
065-065-160	IE3	1,50	2,99	090L	102,4
065-065-160	IE3	2,20	4,18	100L	117,9

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Etaline Z	Efficiency class	P_N	I_N	Motor	[kg]
			3~400 V		
n = 1450 rpm		[kW]	[A]		
065-065-160	IE3	3,00	6,21	100L	121,9
065-065-160	IE3	4,00	8,32	112M	131,9
065-065-250	IE3	1,50	2,99	090L	143,4
065-065-250	IE3	2,20	4,18	100L	158,9
065-065-250	IE3	3,00	6,21	100L	162,9
065-065-250	IE3	4,00	8,32	112M	172,9
065-065-250	IE3	5,50	11,05	132S	197,7
065-065-250	IE3	7,50	15,05	132M	225,7
080-080-160	IE1	0,55	1,46	080M	91,8
080-080-160	IE1	0,75	1,66	080M	97,7
080-080-160	IE3	1,10	2,28	090S	103,6
080-080-160	IE3	1,50	2,99	090L	110,2
080-080-160	IE3	2,20	4,18	100L	125,6
080-080-160	IE3	3,00	6,21	100L	129,6
080-080-160	IE3	4,00	8,32	112M	139,6
080-080-160	IE3	5,50	11,05	132S	164,5
080-080-250	IE3	2,20	4,18	100L	184,7
080-080-250	IE3	3,00	6,21	100L	188,7
080-080-250	IE3	4,00	8,32	112M	198,7
080-080-250	IE3	5,50	11,05	132S	222,5
080-080-250	IE3	7,50	15,05	132M	250,5
080-080-250	IE3	11,00	21,58	160M	278,5
100-100-200	IE3	2,20	4,18	100L	218,1
100-100-200	IE3	3,00	6,21	100L	222,1
100-100-200	IE3	4,00	8,32	112M	232,1
100-100-200	IE3	5,50	11,05	132S	255,9
100-100-200	IE3	7,50	15,05	132M	283,9
100-100-200	IE3	11,00	21,58	160M	336,3
100-100-200	IE3	15,00	30,00	160L	368,3
100-100-200	IE3	18,50	37,37	180M	517,5
100-100-250	IE3	4,00	8,32	112M	260,9
100-100-250	IE3	5,50	11,05	132S	284,7
100-100-250	IE3	7,50	15,05	132M	312,7
100-100-250	IE3	11,00	21,58	160M	365,1
100-100-250	IE3	15,00	30,00	160L	397,1
100-100-250	IE3	18,50	37,37	180M	546,4
100-100-250	IE3	22,00	43,68	180L	576,4
100-100-250	IE3	30,00	56,84	200L	705
125-125-200	IE3	2,20	4,18	100L	234,6
125-125-200	IE3	3,00	6,21	100L	238,6
125-125-200	IE3	4,00	8,32	112M	248,6
125-125-200	IE3	5,50	11,05	132S	272,4
125-125-200	IE3	7,50	15,05	132M	300,4
125-125-200	IE3	11,00	21,58	160M	352,8
125-125-200	IE3	15,00	30,00	160L	384,8
125-125-200	IE3	18,50	37,37	180M	534
125-125-200	IE3	22,00	43,68	180L	564
125-125-250	IE3	4,00	8,32	112M	277,8
125-125-250	IE3	5,50	11,05	132S	301,6
125-125-250	IE3	7,50	15,05	132M	329,6
125-125-250	IE3	11,00	21,58	160M	382
125-125-250	IE3	15,00	30,00	160L	414
125-125-250	IE3	18,50	37,37	180M	563,2
125-125-250	IE3	22,00	43,68	180L	593,2
150-150-250	IE3	7,50	15,05	132M	391,5
150-150-250	IE3	11,00	21,58	160M	444

Etaline Z	Efficiency class	P_N	I_N	Motor	[kg]
			3~400 V		
n = 1450 rpm		[kW]	[A]		
150-150-250	IE3	15,00	30,00	160L	476
150-150-250	IE3	18,50	37,37	180M	625,2
150-150-250	IE3	22,00	43,68	180L	655,2
150-150-250	IE3	30,00	56,84	200L	783,8
150-150-250	IE3	37,00	69,47	225S	916,6
150-150-250	IE3	45,00	84,21	225M	976,6
200-200-250	IE3	11,00	21,58	160M	565,8
200-200-250	IE3	15,00	30,00	160L	597,8
200-200-250	IE3	18,50	37,37	180M	747
200-200-250	IE3	22,00	43,68	180L	777
200-200-250	IE3	30,00	56,84	200L	905,6
200-200-250	IE3	37,00	69,47	225S	1038,4
200-200-250	IE3	45,00	84,21	225M	1098,4
200-200-315	IE3	30,00	56,84	200L	997,1
200-200-315	IE3	37,00	69,47	225S	1129,6
200-200-315	IE3	45,00	84,21	225M	1189,6
200-200-315	IE3	55,00	101,05	250M	1416,4

Motor (variable speed version), n = 1500 rpm

50 Hz, technical data of the motor, n = 1500 rpm (variable speed version)

Etaline Z PumpDrive 2	Efficiency class	P_N	I_N	Motor	[kg]
			3~400 V		
n = 1500 rpm		[kW]	[A]		
032-032-160	IE5	0,55	1,6	080M	81,9
032-032-160	IE5	0,75	2,1	080M	84,7
032-032-160	IE5	1,10	3,0	090S	90,5
032-032-160	IE5	1,50	4,0	090L	97,1
032-032-200	IE5	0,55	1,6	080M	102,7
032-032-200	IE5	0,75	2,1	080M	105,5
032-032-200	IE5	1,10	3,0	090S	111,4
032-032-200	IE5	1,50	4,0	090L	118
032-032-200	IE5	2,20	5,7	100L	136,5
032-032-200	IE5	3,00	7,8	100L	140,5
032-032-200	IE5	4,00	9,6	112M	150,5
040-040-160	IE5	0,55	1,6	080M	83,4
040-040-160	IE5	0,75	2,1	080M	86,2
040-040-160	IE5	1,10	3,0	090S	92
040-040-160	IE5	1,50	4,0	090L	98,6
040-040-250	IE5	0,55	1,6	080M	118,8
040-040-250	IE5	0,75	2,1	080M	124,7
040-040-250	IE5	1,10	3,0	090S	130,6
040-040-250	IE5	1,50	4,0	090L	137,2
040-040-250	IE5	2,20	5,7	100L	155,7
040-040-250	IE5	3,00	7,8	100L	159,7
040-040-250	IE5	4,00	9,6	112M	169,7
040-040-250	IE5	5,50	13,5	132S	206,7
040-040-250	IE5	7,50	17,6	132M	234,7
050-050-160	IE5	0,55	1,6	080M	89,5
050-050-160	IE5	0,75	2,1	080M	92,3
050-050-160	IE5	1,10	3,0	090S	98,2
050-050-160	IE5	1,50	4,0	090L	104,8
050-050-160	IE5	2,20	5,7	100L	123,3
050-050-160	IE5	3,00	7,8	100L	127,3
050-050-160	IE5	4,00	9,6	112M	137,3
050-050-250	IE5	1,10	3,0	090S	133,5
050-050-250	IE5	1,50	4,0	090L	140,1
050-050-250	IE5	2,20	5,7	100L	158,6
050-050-250	IE5	3,00	7,8	100L	162,6
050-050-250	IE5	4,00	9,6	112M	172,6
050-050-250	IE5	5,50	13,5	132S	209,6
050-050-250	IE5	7,50	17,6	132M	237,6
050-050-250	IE5	11,00	24,2	160M	290
065-065-160	IE5	0,55	1,6	080M	97,1
065-065-160	IE5	0,75	2,1	080M	99,9
065-065-160	IE5	1,10	3,0	090S	105,8
065-065-160	IE5	1,50	4,0	090L	112,4
065-065-160	IE5	2,20	5,7	100L	130,9
065-065-160	IE5	3,00	7,8	100L	134,9
065-065-160	IE5	4,00	9,6	112M	144,9
065-065-250	IE5	1,50	4,0	090L	153,4
065-065-250	IE5	2,20	5,7	100L	171,9
065-065-250	IE5	3,00	7,8	100L	175,9
065-065-250	IE5	4,00	9,6	112M	185,9
065-065-250	IE5	5,50	13,5	132S	222,9
065-065-250	IE5	7,50	17,6	132M	250,9
080-080-160	IE5	0,55	1,6	080M	101,8
080-080-160	IE5	0,75	2,1	080M	107,7

Etaline Z PumpDrive 2	Efficiency class	P_N	I_N	Motor	[kg]
			3~400 V		
n = 1500 rpm		[kW]	[A]		
080-080-160	IE5	1,10	3,0	090S	113,6
080-080-160	IE5	1,50	4,0	090L	120,2
080-080-160	IE5	2,20	5,7	100L	138,6
080-080-160	IE5	3,00	7,8	100L	142,6
080-080-160	IE5	4,00	9,6	112M	152,6
080-080-160	IE5	5,50	13,5	132S	189,7
080-080-250	IE5	2,20	5,7	100L	197,7
080-080-250	IE5	3,00	7,8	100L	201,7
080-080-250	IE5	4,00	9,6	112M	211,7
080-080-250	IE5	5,50	13,5	132S	247,7
080-080-250	IE5	7,50	17,6	132M	275,7
100-100-200	IE5	2,20	5,7	100L	231,1
100-100-200	IE5	3,00	7,8	100L	235,1
100-100-200	IE5	4,00	9,6	112M	245,1
100-100-200	IE5	5,50	13,5	132S	281,1
100-100-200	IE5	7,50	17,6	132M	309,1
100-100-200	IE5	11,00	24,2	160M	361,5
100-100-200	IE5	15,00	33,0	160L	423,5
100-100-200	IE4	18,50	42,0	180M	589,5
100-100-250	IE5	4,00	9,6	112M	273,9
100-100-250	IE5	5,50	13,5	132S	309,9
100-100-250	IE5	7,50	17,6	132M	337,9
100-100-250	IE5	11,00	24,2	160M	390,3
100-100-250	IE5	15,00	33,0	160L	452,3
100-100-250	IE4	18,50	42,0	180M	618,4
100-100-250	IE4	22,00	48,5	180L	648,4
100-100-250	IE4	30,00	65,4	200L	777
125-125-200	IE5	2,20	5,7	100L	247,6
125-125-200	IE5	3,00	7,8	100L	251,6
125-125-200	IE5	4,00	9,6	112M	261,6
125-125-200	IE5	5,50	13,5	132S	297,6
125-125-200	IE5	7,50	17,6	132M	325,6
125-125-200	IE5	11,00	24,2	160M	378
125-125-200	IE5	15,00	33,0	160L	440
125-125-200	IE4	18,50	42,0	180M	606
125-125-200	IE4	22,00	48,5	180L	636
125-125-250	IE5	4,00	9,6	112M	290,8
125-125-250	IE5	5,50	13,5	132S	326,8
125-125-250	IE5	7,50	17,6	132M	354,8
125-125-250	IE5	11,00	24,2	160M	407,2
125-125-250	IE5	15,00	33,0	160L	469,2
125-125-250	IE4	18,50	42,0	180M	635,2
125-125-250	IE4	22,00	48,5	180L	665,2
150-150-250	IE5	7,50	17,6	132M	416,7
150-150-250	IE5	11,00	24,2	160M	469,2
150-150-250	IE5	15,00	33,0	160L	531,2
150-150-250	IE4	18,50	42,0	180M	697,2
150-150-250	IE4	22,00	48,5	180L	727,2
150-150-250	IE4	30,00	65,4	200L	855,8
150-150-250	IE4	37,00	80,9	225S	1031,8
150-150-250	IE4	45,00	99,3	225M	1096,6
200-200-250	IE5	11,00	24,2	160M	591
200-200-250	IE5	15,00	33,0	160L	653
200-200-250	IE4	18,50	42,0	180M	819
200-200-250	IE4	22,00	48,5	180L	849
200-200-250	IE4	30,00	65,4	200L	977,6
200-200-250	IE4	37,00	80,9	225S	1153,6

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Etaline Z PumpDrive 2	Efficiency class	P_N	I_N	Motor	[kg]
			3~400 V		
n = 1500 rpm		[kW]	[A]		
200-200-250	IE4	45,00	99,3	225M	1218,4
200-200-315	IE4	30,00	65,4	200L	1069,1
200-200-315	IE4	37,00	80,9	225S	1244,8
200-200-315	IE4	45,00	99,3	225M	1309,6

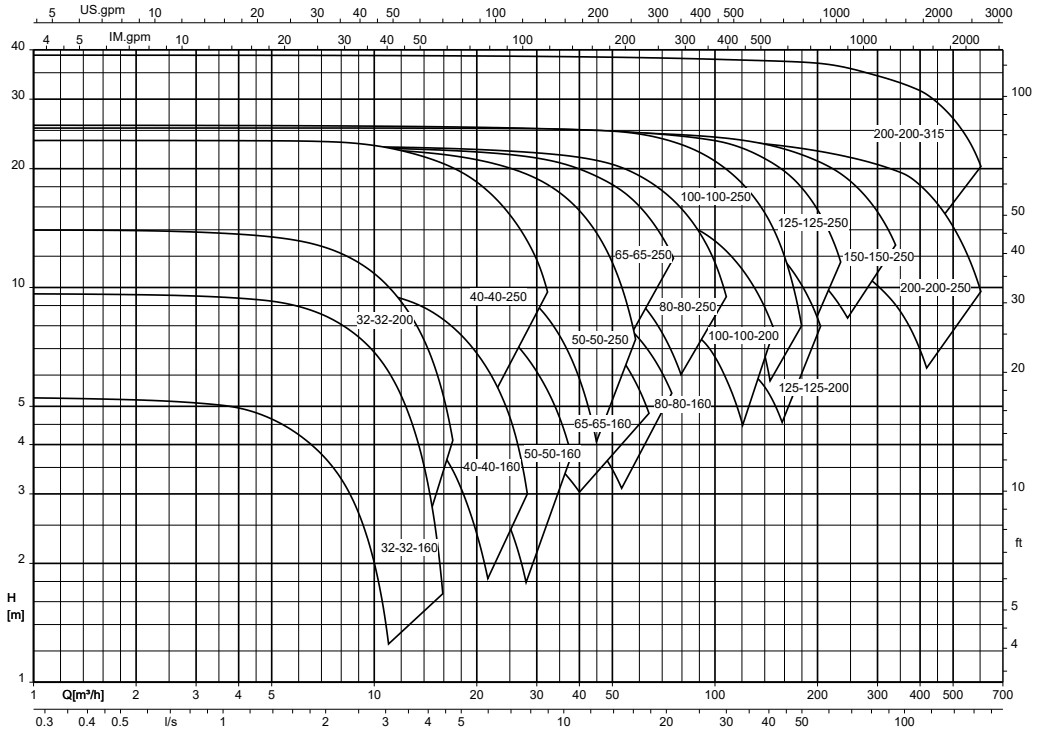
Pump

Technical data of the pump

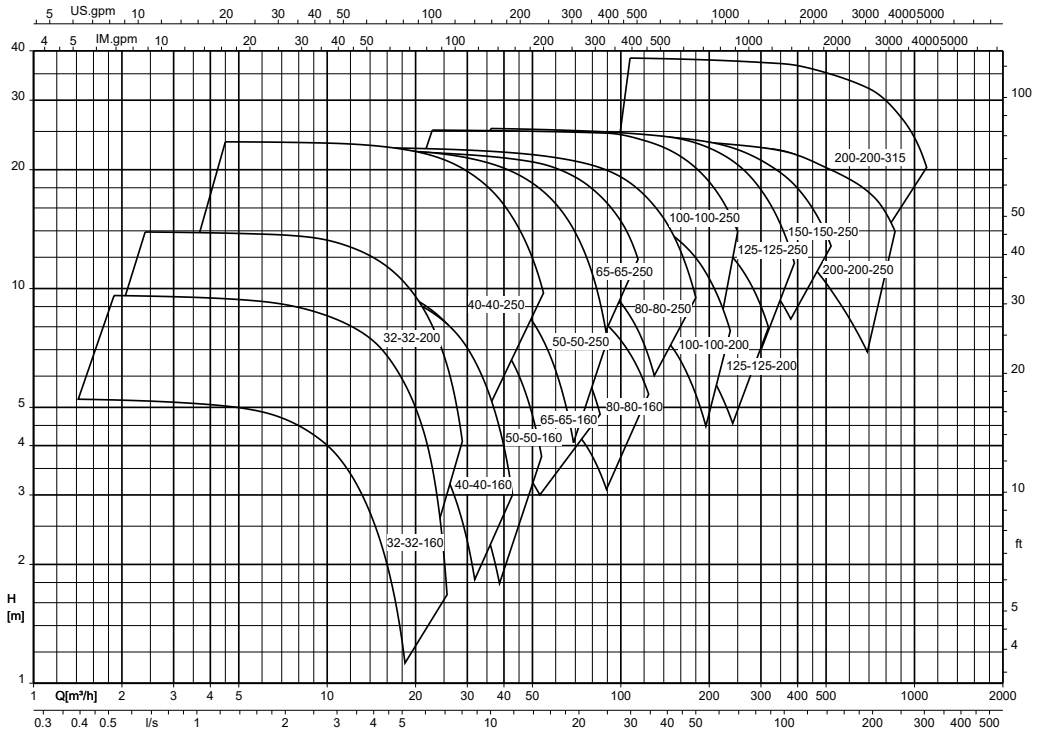
Etaline Z	Shaft unit	Impeller				Speed limit	
		Impeller outlet width	Impeller inlet diameter	Nominal impeller diameter		Minimum	Maximum
				Minimum	Maximum		
		[mm]				[rpm]	
032-032-160	WS_25	5,7	52,7	112	170	800	2100
032-032-200	WS_25	5,6	54,0	165	204	800	2100
040-040-160	WS_25	8,5	60,6	136	174	800	1800
040-040-250	WS_25	7,5	62,6	197	261	800	2000
050-050-160	WS_25	13,0	70,0	120	174	800	2100
050-050-250	WS_25	8,4	74,1	198	260	800	2100
065-065-160	WS_25	16,9	86,9	108	174	800	1900
065-065-250	WS_25	10,5	84,0	196	260	800	1800
080-080-160	WS_25	21,0	92,0	132	174	800	2000
080-080-250	WS_35	15,1	101,0	190	260	800	1800
100-100-200	WS_35	24,5	115,0	178	219	800	2100
100-100-250	WS_35	19,0	115,0	215	269	800	2000
125-125-200	WS_35	32,5	142,0	179	219	800	2000
125-125-250	WS_35	27,0	145,0	210	269	800	1750
150-150-250	WS_35	37,0	162,4	218	269	800	2000
200-200-250	WS_35	48,8	191,0	220	269	800	1700
200-200-315	WS_55	39,7	191,5	264	334	800	1500

Selection charts

Etaline Z (fixed speed version, single-pump operation), n = 1450 rpm



Etaline Z (fixed speed version, parallel operation), n = 1450 rpm



Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Characteristic curves

General

Test class
Characteristic curves to ISO 9906 Class 3B

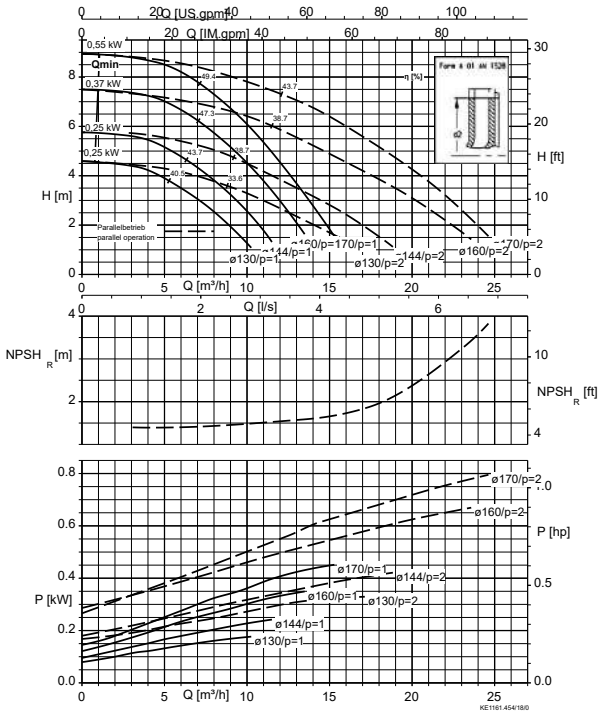
NPSH values
The NPSH values indicated in the characteristic curves correspond to a head drop of 3 %.

NPSH values in part-load conditions
NPSH values for flow rates below Q = 0.3 x Q_{BEP} can only be measured with intense technical efforts. Evidence of NPSH values in the part-load range cannot be provided.

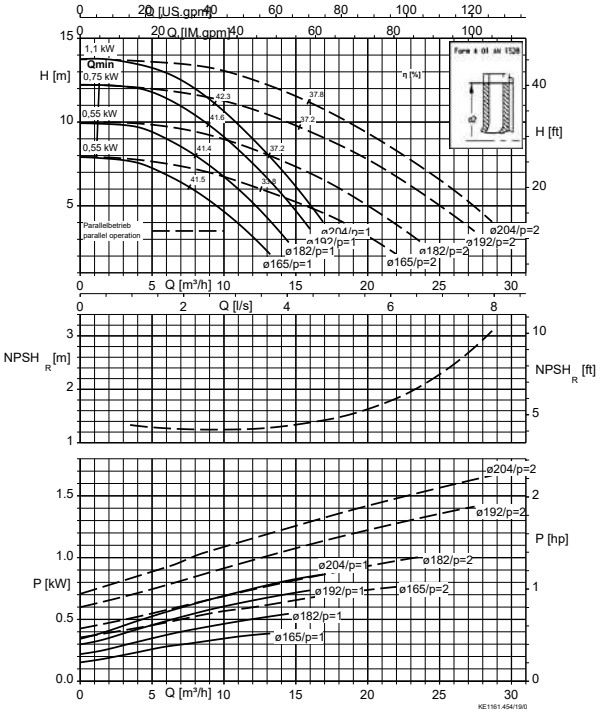
Density of the fluid handled
The indicated heads and performance data apply to pumped fluids with a density ρ = 1.0 kg/dm³ and a kinematic viscosity of up to 20 mm²/s max. If the density ≠ 1.0, the performance data must be multiplied by ρ. For a viscosity > 20 mm²/s the corresponding data for cold water has to be calculated and the impact on the pump's performance has to be determined.

Correction factors
The characteristic curves apply to pumps with cast iron or bronze impellers. When using an impeller made of cast steel materials the efficiency and pump power of the corresponding pump sizes have to be multiplied by the correction factors indicated in the characteristic curves.

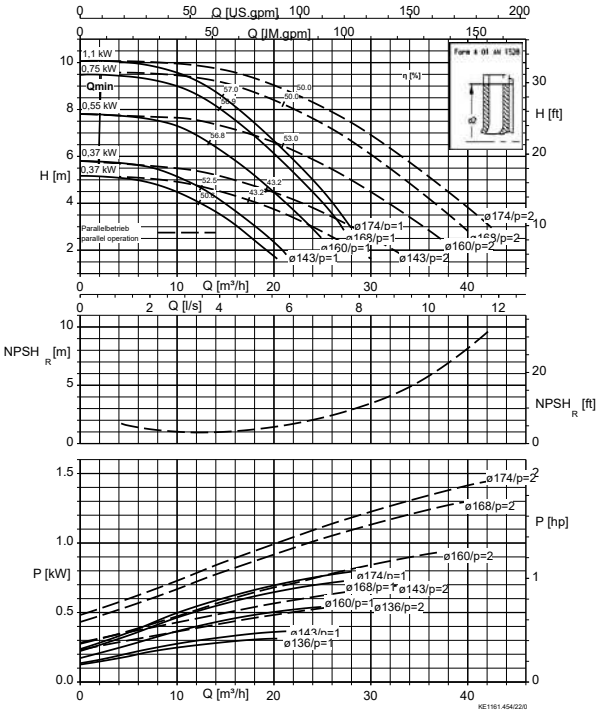
Etaline Z 032-032-160, n = 1450 rpm



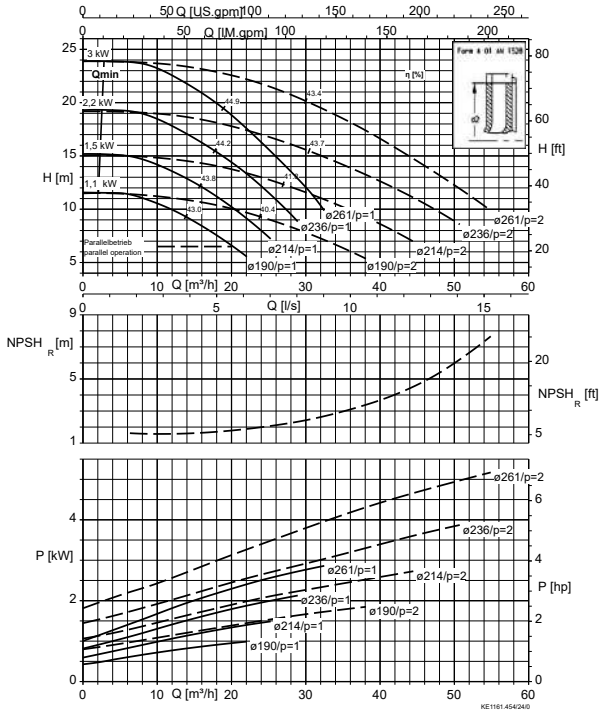
Etaline Z 032-032-200, n = 1450 rpm



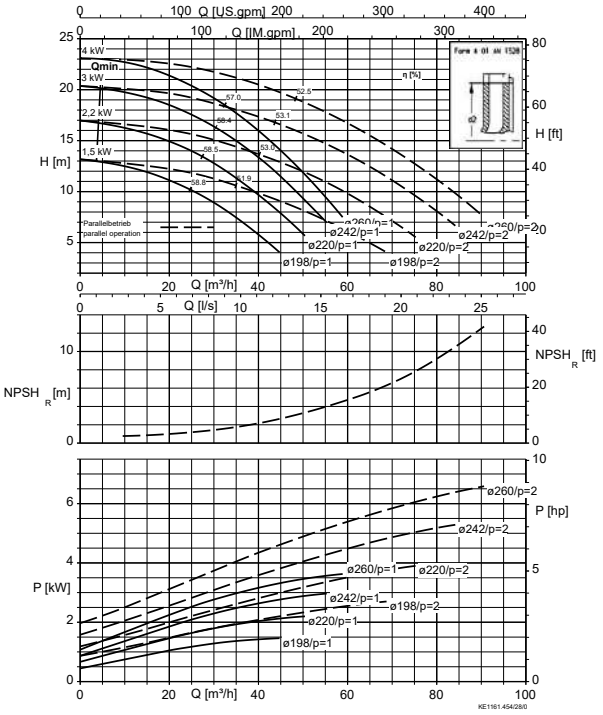
Etaline Z 040-040-160, n = 1450 rpm



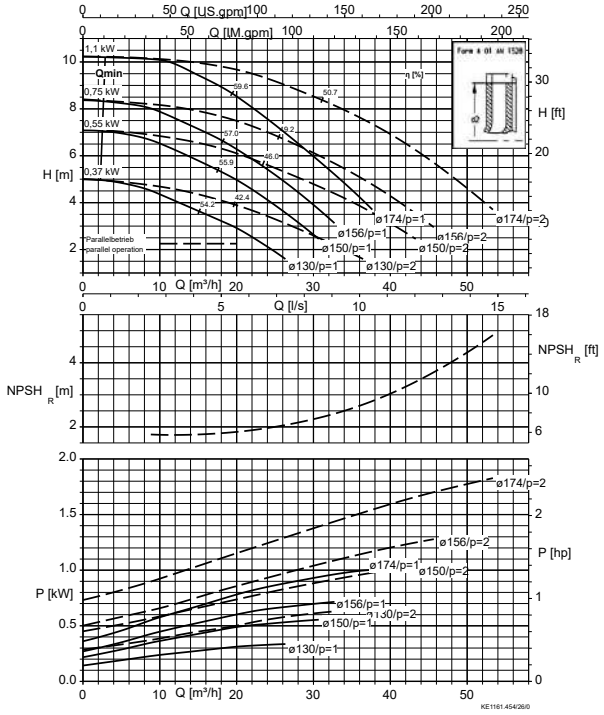
Etaline Z 040-040-250, n = 1450 rpm



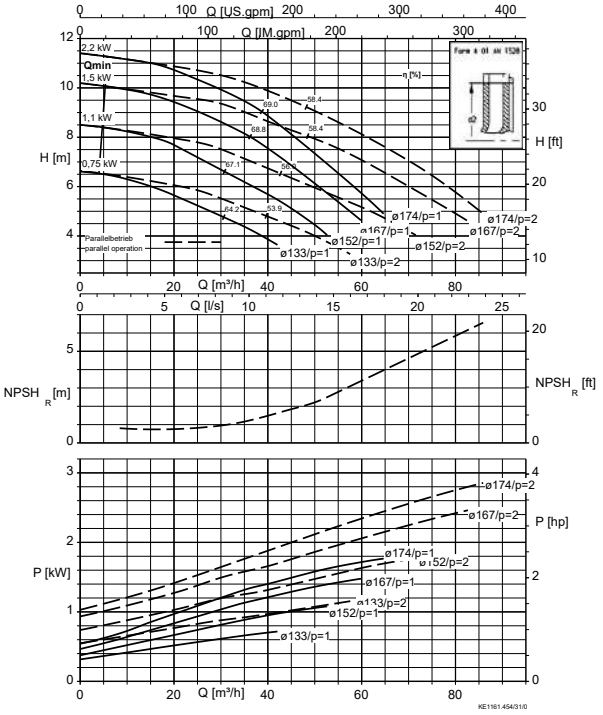
Etaline Z 050-050-250, n = 1450 rpm



Etaline Z 050-050-160, n = 1450 rpm

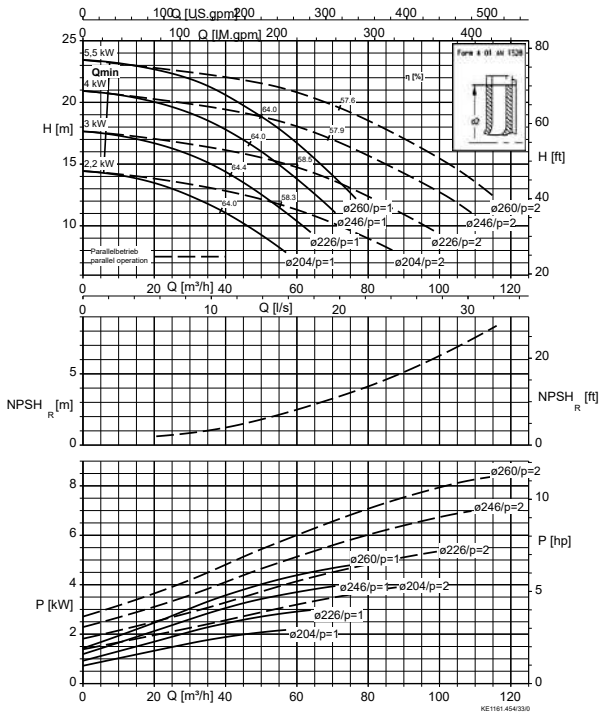


Etaline Z 065-065-160, n = 1450 rpm

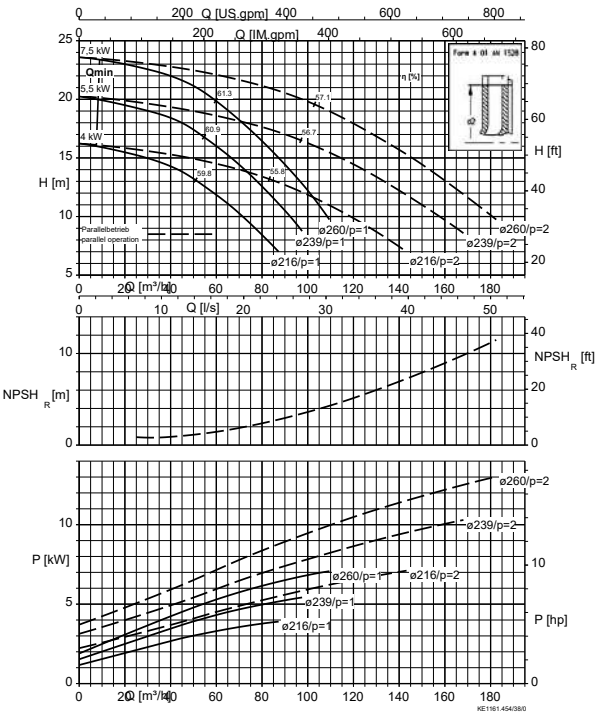


Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

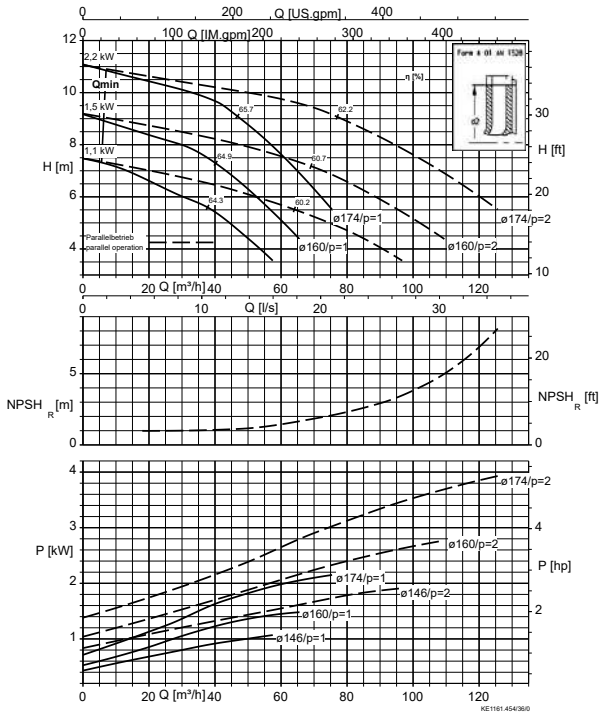
Etaline Z 065-065-250, n = 1450 rpm



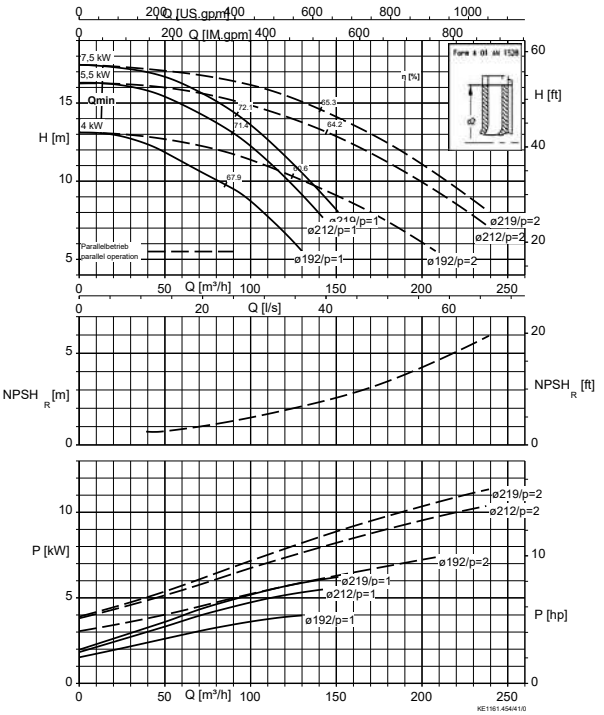
Etaline Z 080-080-250, n = 1450 rpm



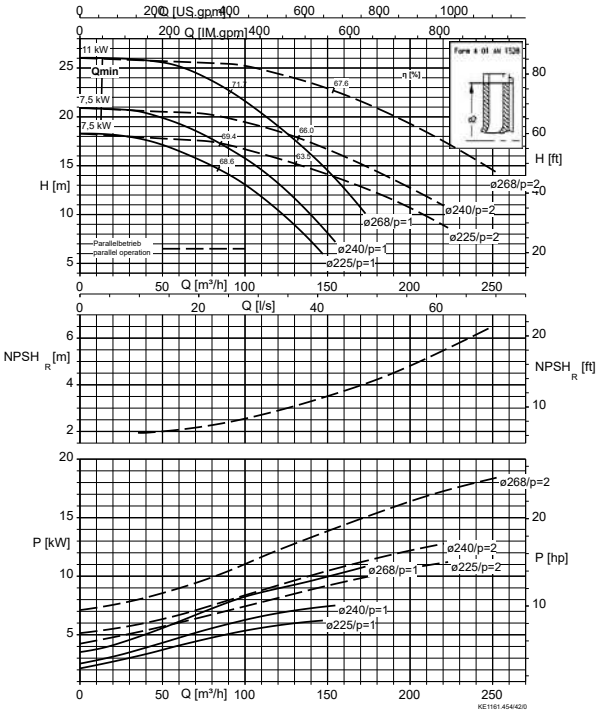
Etaline Z 080-080-160, n = 1450 rpm



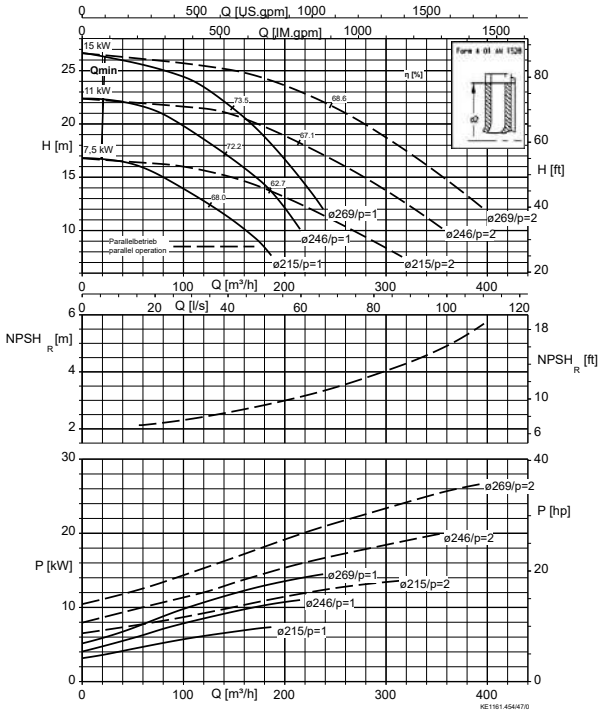
Etaline Z 100-100-200, n = 1450 rpm



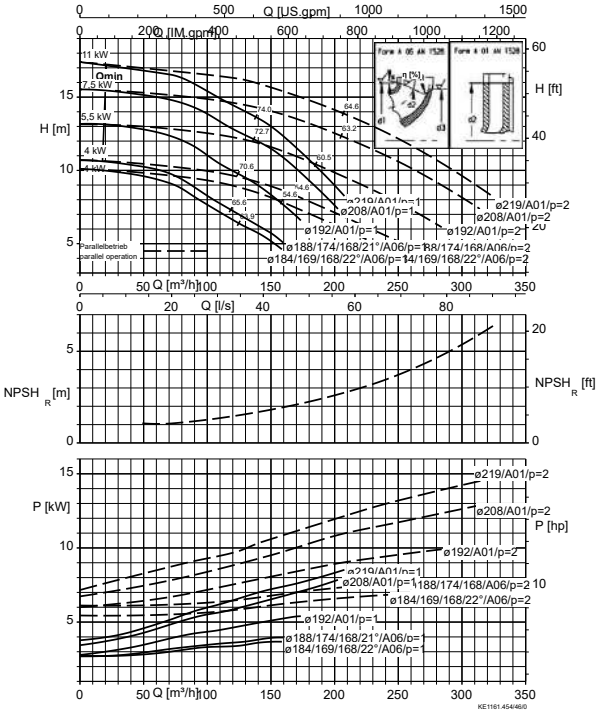
Etaline Z 100-100-250, n = 1450 rpm



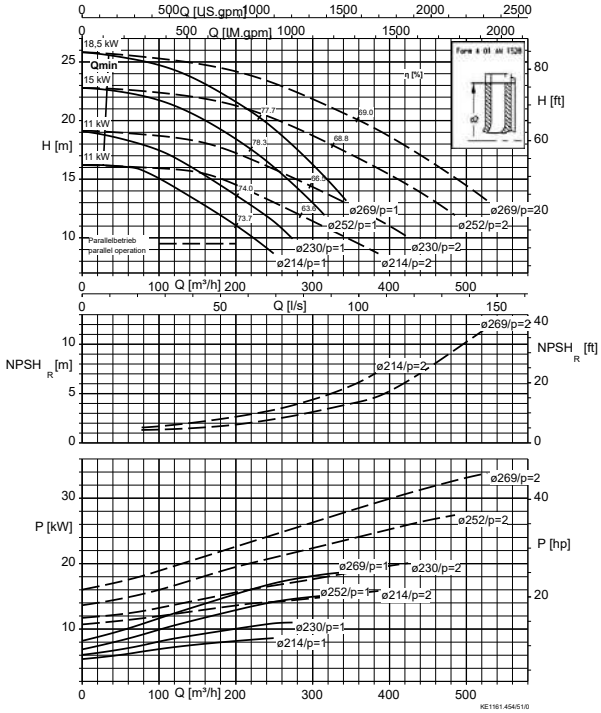
Etaline Z 125-125-250, n = 1450 rpm



Etaline Z 125-125-200, n = 1450 rpm

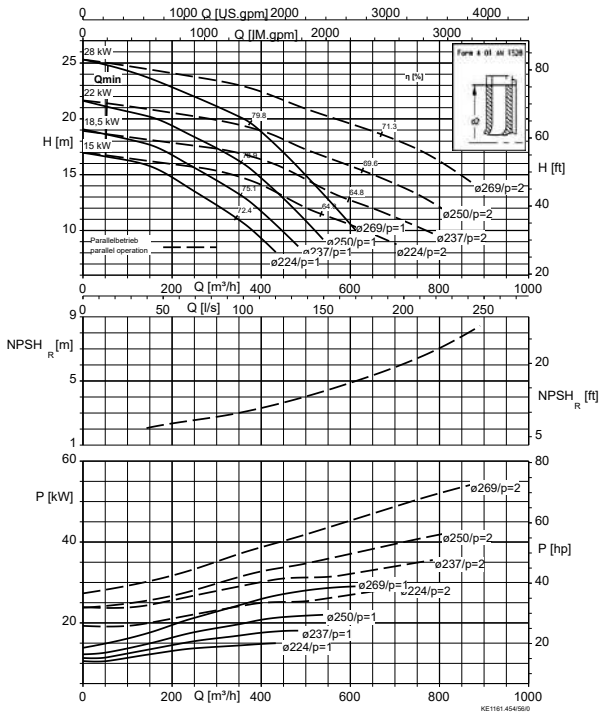


Etaline Z 150-150-250, n = 1450 rpm

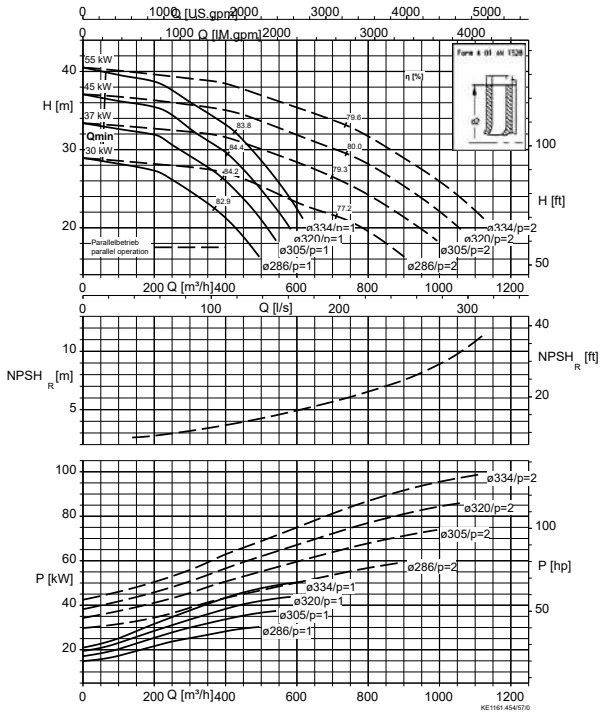


Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Etaline Z 200-200-250, n = 1450 rpm



Etaline Z 200-200-315, n = 1450 rpm



Dimensions

Pump set (fixed speed version), n = 1450 rpm, sizes 032-032-160 to 080-080-250

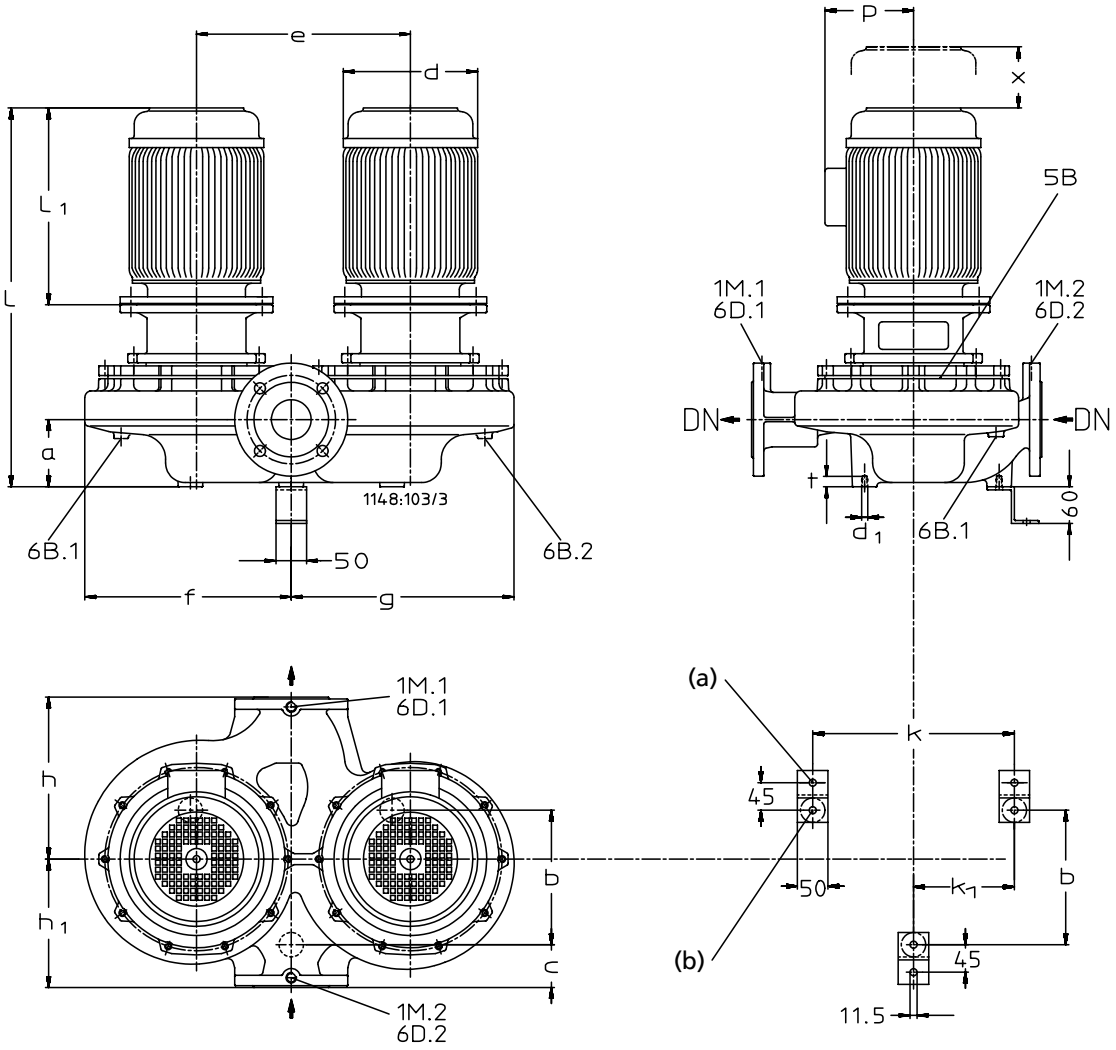


Fig. 269: Pump set dimensions

(a)	Foundation fastening elements Ø 11.5 mm	1M.1./2	Pressure gauge connection
(b)	Pump fastening elements M10	6B.1/.2	Drain connection
6D.1/.2	Vent connection / drain connection	5B	Vent connection for the mechanical seal chamber

Pump set dimensions (fixed speed version), n = 1450 rpm

Etaline Z	P_N	DN [285]	a	b	c	≈d [286]	d_1	e	≈f [286]	≈g [286]	h	h_1	k	k_1	≈L [286]	≈L_1 [286]	≈p [286]	t	x
n = 1450 rpm	[kW]	[mm]																	
032-032-160	0,25	32	75	140	70	145	M10	235	236	236	170	150	235	117,5	460	237	111	13	100
032-032-160	0,37	32	75	140	70	145	M10	235	236	236	170	150	235	117,5	460	237	111	13	100
032-032-160	0,55	32	75	140	70	162	M10	235	236	236	170	150	235	117,5	498	255	120	13	100
032-032-160	0,75	32	75	140	70	162	M10	235	236	236	170	150	235	117,5	498	255	120	13	100
032-032-160	1,10	32	75	140	70	190	M10	235	236	236	170	150	235	117,5	525	282	128	13	100
032-032-160	1,50	32	75	140	70	190	M10	235	236	236	170	150	235	117,5	551	308	128	13	100
032-032-200	0,37	32	105	180	70	145	M10	285	287	287	190	190	285	142,5	478	237	111	13	100
032-032-200	0,55	32	105	180	70	162	M10	285	287	287	190	190	285	142,5	516	255	120	13	100
032-032-200	0,75	32	105	180	70	162	M10	285	287	287	190	190	285	142,5	516	255	120	13	100
032-032-200	1,10	32	105	180	70	190	M10	285	287	287	190	190	285	142,5	543	282	128	13	100

285 DN = EN 1092-2, PN 16

286 For the exact motor-related dimensions refer to the general arrangement drawing.

Etaline Z	P_N	DN 285)	a	b	c	≈d 286)	d_1	e	≈f 286)	≈g 286)	h	h_1	k	k_1	≈L 286)	≈L_1 286)	≈p 286)	t	x
n = 1450 rpm	[kW]	[mm]																	
032-032-200	1,50	32	105	180	70	190	M10	285	287	287	190	190	285	142,5	569	308	128	13	100
032-032-200	2,20	32	105	180	70	213	M10	285	287	287	190	190	285	142,5	622	347	135	13	100
032-032-200	3,00	32	105	180	70	213	M10	285	287	287	190	190	285	142,5	657	382	135	13	100
032-032-200	4,00	32	105	180	70	234	M10	285	287	287	190	190	285	142,5	646	371	148	13	100
040-040-160	0,25	40	99	140	70	145	M10	250	243	243	170	150	250	125	472	237	111	13	100
040-040-160	0,37	40	99	140	70	145	M10	250	243	243	170	150	250	125	472	237	111	13	100
040-040-160	0,55	40	99	140	70	162	M10	250	243	243	170	150	250	125	510	255	120	13	100
040-040-160	0,75	40	99	140	70	162	M10	250	243	243	170	150	250	125	510	255	120	13	100
040-040-160	1,10	40	99	140	70	190	M10	250	243	243	170	150	250	125	537	282	128	13	100
040-040-160	1,50	40	99	140	70	190	M10	250	243	243	170	150	250	125	563	308	128	13	100
040-040-250	0,55	40	101	224	70	162	M10	330	310	360	220	220	330	190	521	255	120	13	100
040-040-250	0,75	40	101	224	70	162	M10	330	310	360	220	220	330	190	521	255	120	13	100
040-040-250	1,10	40	101	224	70	190	M10	330	310	360	220	220	330	190	548	282	128	13	100
040-040-250	1,50	40	101	224	70	190	M10	330	310	360	220	220	330	190	574	308	128	13	100
040-040-250	2,20	40	101	224	70	213	M10	330	310	360	220	220	330	190	627	347	135	13	100
040-040-250	3,00	40	101	224	70	213	M10	330	310	360	220	220	330	190	662	382	135	13	100
040-040-250	4,00	40	101	224	70	234	M10	330	310	360	220	220	330	190	651	371	148	13	100
040-040-250	5,50	40	101	224	70	266	M10	330	310	360	220	220	330	190	716	413	167	13	100
040-040-250	7,50	40	101	224	70	298	M10	330	310	360	220	220	330	190	744	441	167	13	100
050-050-160	0,25	50	110	160	70	145	M10	270	254	253	180	160	270	135	484	237	111	13	100
050-050-160	0,37	50	110	160	70	145	M10	270	254	253	180	160	270	135	484	237	111	13	100
050-050-160	0,55	50	110	160	70	162	M10	270	254	253	180	160	270	135	522	255	120	13	100
050-050-160	0,75	50	110	160	70	162	M10	270	254	253	180	160	270	135	522	255	120	13	100
050-050-160	1,10	50	110	160	70	190	M10	270	254	253	180	160	270	135	549	282	128	13	100
050-050-160	1,50	50	110	160	70	190	M10	270	254	253	180	160	270	135	575	308	128	13	100
050-050-160	2,20	50	110	160	70	213	M10	270	254	253	180	160	270	135	628	347	135	13	100
050-050-160	3,00	50	110	160	70	213	M10	270	254	253	180	160	270	135	663	382	135	13	100
050-050-160	4,00	50	110	160	70	234	M10	270	254	253	180	160	270	135	652	371	148	13	100
050-050-250	1,10	50	110	220	70	190	M10	380	361	360	220	220	380	190	548	282	128	13	100
050-050-250	1,50	50	110	220	70	190	M10	380	361	360	220	220	380	190	574	308	128	13	100
050-050-250	2,20	50	110	220	70	213	M10	380	361	360	220	220	380	190	627	347	135	13	100
050-050-250	3,00	50	110	220	70	213	M10	380	361	360	220	220	380	190	662	382	135	13	100
050-050-250	4,00	50	110	220	70	234	M10	380	361	360	220	220	380	190	651	371	148	13	100
050-050-250	5,50	50	110	220	70	266	M10	380	361	360	220	220	380	190	716	413	167	13	100
050-050-250	7,50	50	110	220	70	298	M10	380	361	360	220	220	380	190	744	441	167	13	100
050-050-250	11,00	50	110	220	70	325	M10	380	361	360	220	220	380	190	882	546	197	13	100
065-065-160	0,25	65	133	170	70	145	M10	285	263	260	180	160	285	142,5	506	237	111	13	100
065-065-160	0,37	65	133	170	70	145	M10	285	263	260	180	160	285	142,5	506	237	111	13	100
065-065-160	0,55	65	133	170	70	162	M10	285	263	260	180	160	285	142,5	544	255	120	13	100
065-065-160	0,75	65	133	170	70	162	M10	285	263	260	180	160	285	142,5	544	255	120	13	100
065-065-160	1,10	65	133	170	70	190	M10	285	263	260	180	160	285	142,5	571	282	128	13	100
065-065-160	1,50	65	133	170	70	190	M10	285	263	260	180	160	285	142,5	597	308	128	13	100
065-065-160	2,20	65	133	170	70	213	M10	285	263	260	180	160	285	142,5	650	347	135	13	100
065-065-160	3,00	65	133	170	70	213	M10	285	263	260	180	160	285	142,5	685	382	135	13	100
065-065-160	4,00	65	133	170	70	234	M10	285	263	260	180	160	285	142,5	674	371	148	13	100
065-065-250	1,50	65	110	220	70	190	M10	350	339	366	265	210	330	165	599	308	128	13	100
065-065-250	2,20	65	110	220	70	213	M10	350	339	366	265	210	330	165	652	347	135	13	100
065-065-250	3,00	65	110	220	70	213	M10	350	339	366	265	210	330	165	687	382	135	13	100
065-065-250	4,00	65	110	220	70	234	M10	350	339	366	265	210	330	165	676	371	148	13	100
065-065-250	5,50	65	110	220	70	266	M10	350	339	366	265	210	330	165	741	413	167	13	100
065-065-250	7,50	65	110	220	70	298	M10	350	339	366	265	210	330	165	769	441	167	13	100
080-080-160	0,55	80	120	175	70	162	M10	324	290	280	195	165	324	162	546	255	120	13	100
080-080-160	0,75	80	120	175	70	162	M10	324	290	280	195	165	324	162	546	255	120	13	100
080-080-160	1,10	80	120	175	70	190	M10	324	290	280	195	165	324	162	573	282	128	13	100
080-080-160	1,50	80	120	175	70	190	M10	324	290	280	195	165	324	162	599	308	128	13	100
080-080-160	2,20	80	120	175	70	213	M10	324	290	280	195	165	324	162	652	347	135	13	100
080-080-160	3,00	80	120	175	70	213	M10	324	290	280	195	165	324	162	687	382	135	13	100

Etaline Z	P_N	DN 285)	a	b	c	≈d 286)	d_1	e	≈f 286)	≈g 286)	h	h_1	k	k_1	≈L 286)	≈L_1 286)	≈p 286)	t	x
n = 1450 rpm	[kW]	[mm]																	
080-080-160	4,00	80	120	175	70	234	M10	324	290	280	195	165	324	162	676	371	148	13	100
080-080-160	5,50	80	120	175	70	266	M10	324	290	280	195	165	324	162	741	413	167	13	100
080-080-250	2,20	80	109	224	70	213	M10	345	333	364	290	210	345	172,5	667	347	135	13	140
080-080-250	3,00	80	109	224	70	213	M10	345	333	364	290	210	345	172,5	702	382	135	13	140
080-080-250	4,00	80	109	224	70	234	M10	345	333	364	290	210	345	172,5	691	371	148	13	140
080-080-250	5,50	80	109	224	70	266	M10	345	333	364	290	210	345	172,5	756	413	167	13	140
080-080-250	7,50	80	109	224	70	298	M10	345	333	364	290	210	345	172,5	784	441	167	13	140

Pump set (fixed speed version), n = 1450 rpm, sizes 100-100-200 to 200-200-315

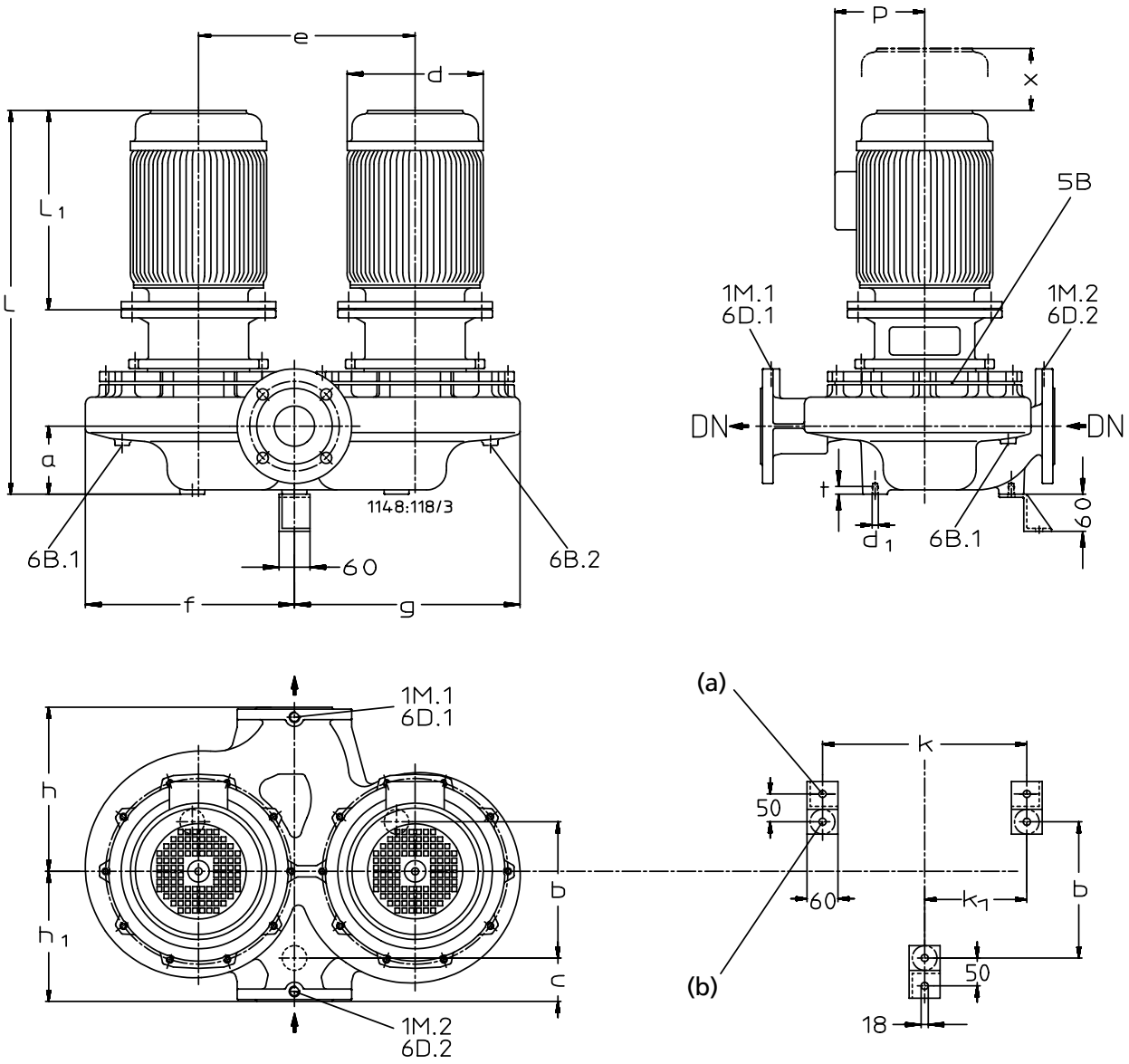


Fig. 270: Pump set dimensions

(a)	Foundation fastening elements Ø 18	1M.1./2	Pressure gauge connection
(b)	Pump fastening elements M16	6B.1/.2	Drain connection
6D.1/.2	Vent connection / drain connection	5B	Vent connection for the mechanical seal chamber

Pump set dimensions (fixed speed version), n = 1450 rpm

Etaline Z	P_N	DN [287]	a	b	c	≈d [288]	d_1	e	≈f [288]	≈g [288]	h	h_1	k	k_1	≈L [288]	≈L_1 [288]	≈p [288]	t	x
n = 1450 rpm	[kW]	[mm]																	
100-100-200	2,20	100	196	280	98	213	M16	410	394	376	280	270	410	205	733	347	135	20	150
100-100-200	3,00	100	196	280	98	213	M16	410	394	376	280	270	410	205	768	382	135	20	150
100-100-200	4,00	100	196	280	98	234	M16	410	394	376	280	270	410	205	757	371	148	20	150
100-100-200	5,50	100	196	280	98	266	M16	410	394	376	280	270	410	205	822	413	167	20	150
100-100-200	7,50	100	196	280	98	298	M16	410	394	376	280	270	410	205	850	441	167	20	150
100-100-200	11,00	100	196	280	98	325	M16	410	394	376	280	270	410	205	988	546	197	20	150
100-100-200	15,00	100	196	280	98	325	M16	410	394	376	280	270	410	205	994	552	197	20	150
100-100-200	18,50	100	196	280	98	370	M16	410	394	376	280	270	410	205	1052	610	262	20	150
100-100-250	4,00	100	175	270	105	234	M16	480	453	439	295	255	480	240	760	371	148	20	140

287 DN = EN 1092-2, PN 16

288 For the exact motor-related dimensions refer to the general arrangement drawing.

Etaline Z	P_N	DN 287)	a	b	c	≈d 288)	d_1	e	≈f 288)	≈g 288)	h	h_1	k	k_1	≈L 288)	≈L_1 288)	≈p 288)	t	x
n = 1450 rpm	[kW]	[mm]																	
100-100-250	5,50	100	175	270	105	266	M16	480	453	439	295	255	480	240	825	413	167	20	140
100-100-250	7,50	100	175	270	105	298	M16	480	453	439	295	255	480	240	853	441	167	20	140
100-100-250	11,00	100	175	270	105	325	M16	480	453	439	295	255	480	240	991	546	197	20	140
100-100-250	15,00	100	175	270	105	325	M16	480	453	439	295	255	480	240	997	552	197	20	140
100-100-250	18,50	100	175	270	105	370	M16	480	453	439	295	255	480	240	1055	610	262	20	140
100-100-250	22,00	100	175	270	105	370	M16	480	453	439	295	255	480	240	1055	610	262	20	140
100-100-250	30,00	100	175	270	105	422	M16	480	453	439	295	255	480	240	1114	669	305	20	140
125-125-200	2,20	125	221	265	95	213	M16	380	394	366	345	275	550	275	758	347	135	20	155
125-125-200	3,00	125	221	265	95	213	M16	380	394	366	345	275	550	275	793	382	135	20	155
125-125-200	4,00	125	221	265	95	234	M16	380	394	366	345	275	550	275	782	371	148	20	155
125-125-200	5,50	125	221	265	95	266	M16	380	394	366	345	275	550	275	847	413	167	20	155
125-125-200	7,50	125	221	265	95	298	M16	380	394	366	345	275	550	275	875	441	167	20	155
125-125-200	11,00	125	221	265	95	325	M16	380	394	366	345	275	550	275	1013	546	197	20	155
125-125-200	15,00	125	221	265	95	325	M16	380	394	366	345	275	550	275	1019	552	197	20	155
125-125-200	18,50	125	221	265	95	370	M16	380	394	366	345	275	550	275	1077	610	262	20	155
125-125-200	22,00	125	221	265	95	370	M16	380	394	366	345	275	550	275	1077	610	262	20	155
125-125-250	4,00	125	226	300	85	234	M16	400	409	389	360	260	400	200	787	371	148	20	145
125-125-250	5,50	125	226	300	85	266	M16	400	409	389	360	260	400	200	852	413	167	20	145
125-125-250	7,50	125	226	300	85	298	M16	400	409	389	360	260	400	200	880	441	167	20	145
125-125-250	11,00	125	226	300	85	325	M16	400	409	389	360	260	400	200	1018	546	197	20	145
125-125-250	15,00	125	226	300	85	325	M16	400	409	389	360	260	400	200	1024	552	197	20	145
125-125-250	18,50	125	226	300	85	370	M16	400	409	389	360	260	400	200	1082	610	262	20	145
125-125-250	22,00	125	226	300	85	370	M16	400	409	389	360	260	400	200	1082	610	262	20	145
150-150-250	7,50	150	256	320	120	298	M16	600	560	534	400	300	600	300	910	441	167	20	155
150-150-250	11,00	150	256	320	120	325	M16	600	560	534	400	300	600	300	1048	546	197	20	155
150-150-250	15,00	150	256	320	120	325	M16	600	560	534	400	300	600	300	1054	552	197	20	155
150-150-250	18,50	150	256	320	120	370	M16	600	560	534	400	300	600	300	1112	610	262	20	155
150-150-250	22,00	150	256	320	120	370	M16	600	560	534	400	300	600	300	1112	610	262	20	155
150-150-250	30,00	150	256	320	120	422	M16	600	560	534	400	300	600	300	1171	669	305	20	155
150-150-250	37,00	150	256	320	120	460	M16	600	560	534	400	300	600	300	1228	695	325	20	155
150-150-250	45,00	150	256	320	120	468	M16	600	560	534	400	300	600	300	1258	725	325	20	155
200-200-250	11,00	200	281	410	210	325	M16	600	585	537	530	470	600	300	1073	546	197	20	160
200-200-250	15,00	200	281	410	210	325	M16	600	585	537	530	470	600	300	1079	552	197	20	160
200-200-250	18,50	200	281	410	210	370	M16	600	585	537	530	470	600	300	1137	610	262	20	160
200-200-250	22,00	200	281	410	210	370	M16	600	585	537	530	470	600	300	1137	610	262	20	160
200-200-250	30,00	200	281	410	210	422	M16	600	585	537	530	470	600	300	1196	669	305	20	160
200-200-250	37,00	200	281	410	210	460	M16	600	585	537	530	470	600	300	1253	695	325	20	160
200-200-250	45,00	200	281	410	210	468	M16	600	585	537	530	470	600	300	1283	725	325	20	160
200-200-315	30,00	200	287	410	220	422	M16	580	593	554	520	480	580	290	1202	669	305	20	185
200-200-315	37,00	200	287	410	220	460	M16	580	593	554	520	480	580	290	1259	695	325	20	185
200-200-315	45,00	200	287	410	220	468	M16	580	593	554	520	480	580	290	1289	725	325	20	185
200-200-315	55,00	200	287	410	220	520	M16	580	593	554	520	480	580	290	1393	817	392	20	185

Pump set (variable speed version), n = 1500 rpm, sizes 032-032-160 to 080-080-250

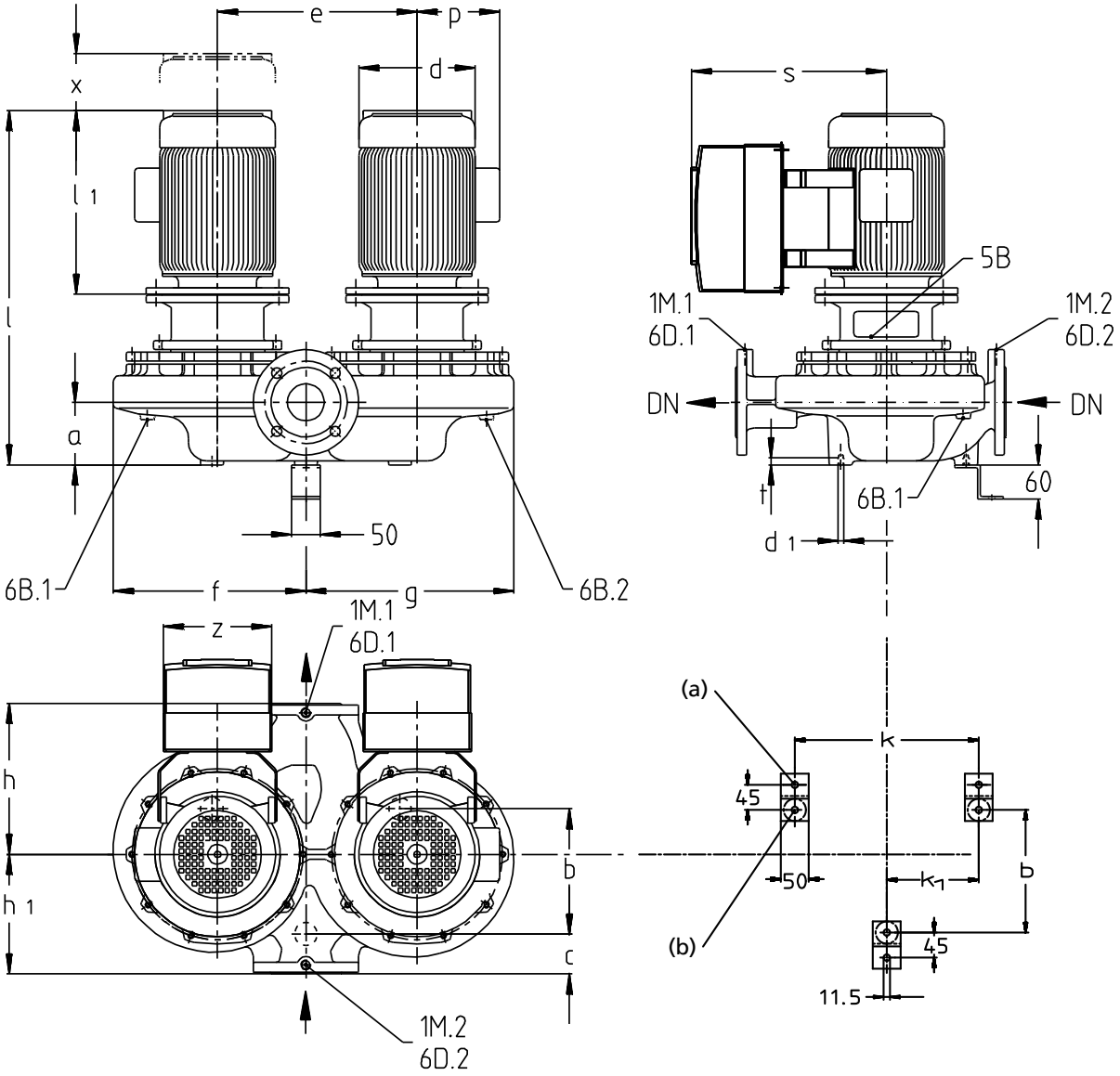


Fig. 271: Pump set dimensions with PumpDrive 2

(a)	Foundation fastening elements Ø 11.5	1M.1./2	Connection for pressure gauge
(b)	Pump fastening elements M10	6B.1/.2	Drain connection
6D.1/.2	Vent connection / drain connection	5B	Vent connection for the mechanical seal chamber

Dimensions of pump set with PumpDrive 2 (variable speed version), n = 1500 rpm

Etaline Z PumpDrive 2	P_N	DN [289]	a	b	c	≈d [290]	d_1	e	≈f [290]	≈g [290]	h	h_1	k	k_1	≈L [290]	≈L_1 [290]	≈p [290]	≈s [290]	t	x	z
n = 1500 rpm	[kW]	[mm]																			
032-032-160	0,55	32	75	140	70	162	M10	235	236	236	170	150	235	117,5	498	255	120	294	13	100	190
032-032-160	0,75	32	75	140	70	162	M10	235	236	236	170	150	235	117,5	498	255	120	294	13	100	190
032-032-160	1,10	32	75	140	70	190	M10	235	236	236	170	150	235	117,5	525	282	128	299	13	100	190
032-032-160	1,50	32	75	140	70	190	M10	235	236	236	170	150	235	117,5	551	308	128	299	13	100	190
032-032-200	0,55	32	105	180	70	162	M10	285	287	287	190	190	285	142,5	516	255	120	294	13	100	190
032-032-200	0,75	32	105	180	70	162	M10	285	287	287	190	190	285	142,5	516	255	120	294	13	100	190
032-032-200	1,10	32	105	180	70	190	M10	285	287	287	190	190	285	142,5	543	282	128	299	13	100	190
032-032-200	1,50	32	105	180	70	190	M10	285	287	287	190	190	285	142,5	569	308	128	299	13	100	190
032-032-200	2,20	32	105	180	70	213	M10	285	287	287	190	190	285	142,5	622	347	135	338	13	100	211
032-032-200	3,00	32	105	180	70	213	M10	285	287	287	190	190	285	142,5	657	382	135	338	13	100	211

289 DN = EN 1092-2, PN 16

290 For the exact motor-related dimensions refer to the general arrangement drawing in KSB EasySelect.

Etaline Z PumpDrive 2	P_N	DN [289]	a	b	c	≈d [290]	d_1	e	≈f [290]	≈g [290]	h	h_1	k	k_1	≈L [290]	≈L_1 [290]	≈p [290]	≈s [290]	t	x	z
n = 1500 rpm	[kW]	[mm]																			
032-032-200	4,00	32	105	180	70	234	M10	285	287	287	190	190	285	142,5	646	371	148	353	13	100	211
040-040-160	0,55	40	99	140	70	162	M10	250	243	243	170	150	250	125	510	255	120	294	13	100	190
040-040-160	0,75	40	99	140	70	162	M10	250	243	243	170	150	250	125	510	255	120	294	13	100	190
040-040-160	1,10	40	99	140	70	190	M10	250	243	243	170	150	250	125	537	282	128	299	13	100	190
040-040-160	1,50	40	99	140	70	190	M10	250	243	243	170	150	250	125	563	308	128	299	13	100	190
040-040-250	0,75	40	101	224	70	162	M10	330	310	360	220	220	330	190	521	255	120	294	13	100	190
040-040-250	1,10	40	101	224	70	190	M10	330	310	360	220	220	330	190	548	282	128	299	13	100	190
040-040-250	1,50	40	101	224	70	190	M10	330	310	360	220	220	330	190	574	308	128	299	13	100	190
040-040-250	2,20	40	101	224	70	213	M10	330	310	360	220	220	330	190	627	347	135	338	13	100	211
040-040-250	3,00	40	101	224	70	213	M10	330	310	360	220	220	330	190	662	382	135	338	13	100	211
040-040-250	4,00	40	101	224	70	234	M10	330	310	360	220	220	330	190	651	371	148	353	13	100	211
040-040-250	5,50	40	101	224	70	266	M10	330	310	360	220	220	330	190	716	413	167	374	13	100	255
040-040-250	7,50	40	101	224	70	298	M10	330	310	360	220	220	330	190	744	441	167	374	13	100	255
050-050-160	0,55	50	110	160	70	162	M10	270	254	253	180	160	270	135	522	255	120	294	13	100	190
050-050-160	0,75	50	110	160	70	162	M10	270	254	253	180	160	270	135	522	255	120	294	13	100	190
050-050-160	1,10	50	110	160	70	190	M10	270	254	253	180	160	270	135	549	282	128	299	13	100	190
050-050-160	1,50	50	110	160	70	190	M10	270	254	253	180	160	270	135	575	308	128	299	13	100	190
050-050-160	2,20	50	110	160	70	213	M10	270	254	253	180	160	270	135	628	347	135	338	13	100	211
050-050-160	3,00	50	110	160	70	213	M10	270	254	253	180	160	270	135	663	382	135	338	13	100	211
050-050-160	4,00	50	110	160	70	234	M10	270	254	253	180	160	270	135	652	371	148	353	13	100	211
050-050-250	1,10	50	110	220	70	190	M10	380	361	360	220	220	380	190	548	282	128	299	13	100	190
050-050-250	1,50	50	110	220	70	190	M10	380	361	360	220	220	380	190	574	308	128	299	13	100	190
050-050-250	2,20	50	110	220	70	213	M10	380	361	360	220	220	380	190	627	347	135	338	13	100	211
050-050-250	3,00	50	110	220	70	213	M10	380	361	360	220	220	380	190	662	382	135	338	13	100	211
050-050-250	4,00	50	110	220	70	234	M10	380	361	360	220	220	380	190	651	371	148	353	13	100	211
050-050-250	5,50	50	110	220	70	266	M10	380	361	360	220	220	380	190	716	413	167	374	13	100	255
050-050-250	7,50	50	110	220	70	298	M10	380	361	360	220	220	380	190	744	441	167	374	13	100	255
050-050-250	11,00	50	110	220	70	325	M10	380	361	360	220	220	380	190	882	546	197	405	13	100	255
065-065-160	0,55	65	133	170	70	162	M10	285	263	260	180	160	285	142,5	544	255	120	294	13	100	190
065-065-160	0,75	65	133	170	70	162	M10	285	263	260	180	160	285	142,5	544	255	120	294	13	100	190
065-065-160	1,10	65	133	170	70	190	M10	285	263	260	180	160	285	142,5	571	282	128	299	13	100	190
065-065-160	1,50	65	133	170	70	190	M10	285	263	260	180	160	285	142,5	597	308	128	299	13	100	190
065-065-160	2,20	65	133	170	70	213	M10	285	263	260	180	160	285	142,5	650	347	135	338	13	100	211
065-065-160	3,00	65	133	170	70	213	M10	285	263	260	180	160	285	142,5	685	382	135	338	13	100	211
065-065-160	4,00	65	133	170	70	234	M10	285	263	260	180	160	285	142,5	674	371	148	353	13	100	211
065-065-250	1,50	65	110	220	70	190	M10	350	339	366	265	210	330	165	599	308	128	299	13	100	190
065-065-250	2,20	65	110	220	70	213	M10	350	339	366	265	210	330	165	652	347	135	338	13	100	211
065-065-250	3,00	65	110	220	70	213	M10	350	339	366	265	210	330	165	687	382	135	338	13	100	211
065-065-250	4,00	65	110	220	70	234	M10	350	339	366	265	210	330	165	676	371	148	353	13	100	211
065-065-250	5,50	65	110	220	70	266	M10	350	339	366	265	210	330	165	741	413	167	374	13	100	255
065-065-250	7,50	65	110	220	70	298	M10	350	339	366	265	210	330	165	769	441	167	374	13	100	255
080-080-160	0,75	80	120	175	70	162	M10	324	290	280	195	165	324	162	546	255	120	294	13	100	190
080-080-160	1,10	80	120	175	70	190	M10	324	290	280	195	165	324	162	573	282	128	299	13	100	190
080-080-160	1,50	80	120	175	70	190	M10	324	290	280	195	165	324	162	599	308	128	299	13	100	190
080-080-160	2,20	80	120	175	70	213	M10	324	290	280	195	165	324	162	652	347	135	338	13	100	211
080-080-160	3,00	80	120	175	70	213	M10	324	290	280	195	165	324	162	687	382	135	338	13	100	211
080-080-160	4,00	80	120	175	70	234	M10	324	290	280	195	165	324	162	676	371	148	353	13	100	211
080-080-160	5,50	80	120	175	70	266	M10	324	290	280	195	165	324	162	741	413	167	374	13	100	255
080-080-250	2,20	80	109	224	70	213	M10	345	333	364	290	210	345	172,5	667	347	135	338	13	140	211
080-080-250	3,00	80	109	224	70	213	M10	345	333	364	290	210	345	172,5	702	382	135	338	13	140	211
080-080-250	4,00	80	109	224	70	234	M10	345	333	364	290	210	345	172,5	691	371	148	353	13	140	211
080-080-250	5,50	80	109	224	70	266	M10	345	333	364	290	210	345	172,5	756	413	167	374	13	140	255
080-080-250	7,50	80	109	224	70	298	M10	345	333	364	290	210	345	172,5	784	441	167	374	13	140	255

Pump set (variable speed version), n = 1500 rpm, sizes 100-100-200 to 200-200-315

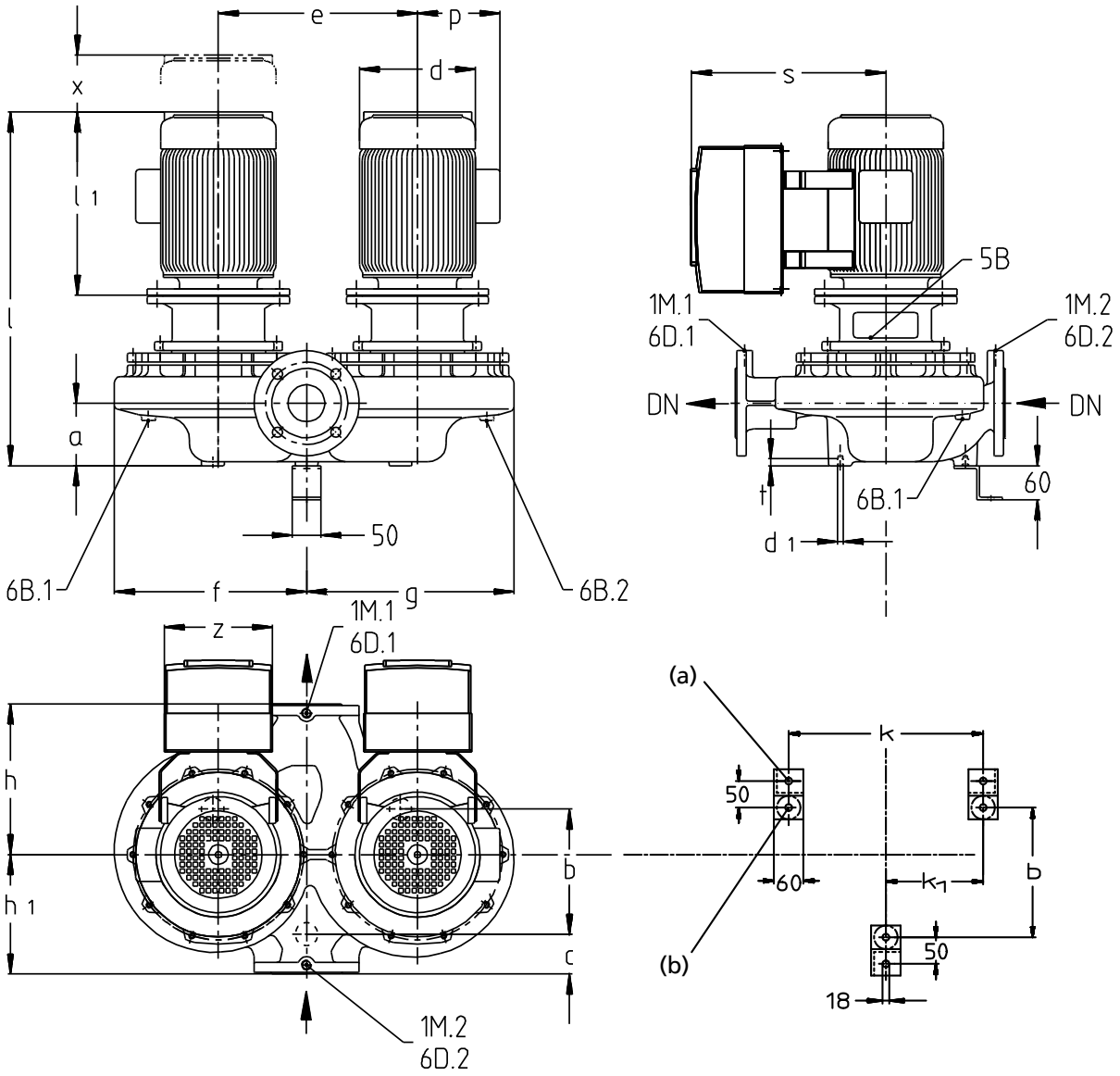


Fig. 272: Pump set dimensions with PumpDrive 2

(a)	Foundation fastening elements Ø 18	1M.1./2	Connection for pressure gauge
(b)	Pump fastening elements M16	6B.1/.2	Drain connection
6D.1/.2	Vent connection / drain connection	5B	Vent connection for the mechanical seal chamber

Dimensions of pump set with PumpDrive 2 (variable speed version), n = 1500 rpm

Etaline Z PumpDrive 2	P_N	DN [291]	a	b	c	≈d [292]	d_1	e	≈f [292]	≈g [292]	h	h_1	k	k_1	≈L [292]	≈L_1 [292]	≈p [292]	≈s [292]	t	x	z
n = 1500 rpm	[kW]	[mm]																			
100-100-200	2,20	100	196	280	98	213	M16	410	394	376	280	270	410	205	733	347	135	338	20	150	211
100-100-200	3,00	100	196	280	98	213	M16	410	394	376	280	270	410	205	768	382	135	338	20	150	211
100-100-200	4,00	100	196	280	98	234	M16	410	394	376	280	270	410	205	757	371	148	353	20	150	211
100-100-200	5,50	100	196	280	98	266	M16	410	394	376	280	270	410	205	822	413	167	374	20	150	255
100-100-200	7,50	100	196	280	98	298	M16	410	394	376	280	270	410	205	850	441	167	374	20	150	255
100-100-200	11,00	100	196	280	98	325	M16	410	394	376	280	270	410	205	988	546	197	405	20	150	255
100-100-200	15,00	100	196	280	98	325	M16	410	394	376	280	270	410	205	994	552	197	457	20	150	325
100-100-200	18,50	100	196	280	98	370	M16	410	394	376	280	270	410	205	1052	610	262	509	20	150	325
100-100-250	4,00	100	175	270	105	234	M16	480	453	439	295	255	480	240	760	371	148	353	20	140	211
100-100-250	5,50	100	175	270	105	266	M16	480	453	439	295	255	480	240	825	413	167	374	20	140	255

291 DN = EN 1092-2, PN 16

292 For the exact motor-related dimensions refer to the general arrangement drawing in KSB EasySelect.

Etaline Z PumpDrive 2	P_N	DN [291]	a	b	c	≈d [292]	d_1	e	≈f [292]	≈g [292]	h	h_1	k	k_1	≈L [292]	≈L_1 [292]	≈p [292]	≈s [292]	t	x	z
n = 1500 rpm	[kW]	[mm]																			
100-100-250	7,50	100	175	270	105	298	M16	480	453	439	295	255	480	240	853	441	167	374	20	140	255
100-100-250	11,00	100	175	270	105	325	M16	480	453	439	295	255	480	240	991	546	197	405	20	140	255
100-100-250	15,00	100	175	270	105	325	M16	480	453	439	295	255	480	240	997	552	197	457	20	140	325
100-100-250	18,50	100	175	270	105	370	M16	480	453	439	295	255	480	240	1055	610	262	509	20	140	325
100-100-250	22,00	100	175	270	105	370	M16	480	453	439	295	255	480	240	1055	610	262	509	20	140	325
100-100-250	30,00	100	175	270	105	422	M16	480	453	439	295	255	480	240	1114	669	305	558	20	140	325
125-125-200	2,20	125	221	265	95	213	M16	380	394	366	345	275	550	275	758	347	135	338	20	155	211
125-125-200	3,00	125	221	265	95	213	M16	380	394	366	345	275	550	275	793	382	135	338	20	155	211
125-125-200	4,00	125	221	265	95	234	M16	380	394	366	345	275	550	275	782	371	148	353	20	155	211
125-125-200	5,50	125	221	265	95	266	M16	380	394	366	345	275	550	275	847	413	167	374	20	155	255
125-125-200	7,50	125	221	265	95	298	M16	380	394	366	345	275	550	275	875	441	167	374	20	155	255
125-125-200	11,00	125	221	265	95	325	M16	380	394	366	345	275	550	275	1013	546	197	405	20	155	255
125-125-200	15,00	125	221	265	95	325	M16	380	394	366	345	275	550	275	1019	552	197	457	20	155	255
125-125-200	18,50	125	221	265	95	370	M16	380	394	366	345	275	550	275	1077	610	262	509	20	155	325
125-125-200	22,00	125	221	265	95	370	M16	380	394	366	345	275	550	275	1077	610	262	509	20	155	325
125-125-250	4,00	125	226	300	85	234	M16	400	409	389	360	260	400	200	787	371	148	353	20	145	211
125-125-250	5,50	125	226	300	85	266	M16	400	409	389	360	260	400	200	852	413	167	374	20	145	255
125-125-250	7,50	125	226	300	85	298	M16	400	409	389	360	260	400	200	880	441	167	374	20	145	255
125-125-250	11,00	125	226	300	85	325	M16	400	409	389	360	260	400	200	1018	546	197	405	20	145	255
125-125-250	15,00	125	226	300	85	325	M16	400	409	389	360	260	400	200	1024	552	197	457	20	145	325
125-125-250	18,50	125	226	300	85	370	M16	400	409	389	360	260	400	200	1082	610	262	509	20	145	325
125-125-250	22,00	125	226	300	85	370	M16	400	409	389	360	260	400	200	1082	610	262	509	20	145	325
150-150-250	7,50	150	256	320	120	298	M16	600	560	534	400	300	600	300	910	441	167	374	20	155	255
150-150-250	11,00	150	256	320	120	325	M16	600	560	534	400	300	600	300	1048	546	197	405	20	155	255
150-150-250	15,00	150	256	320	120	325	M16	600	560	534	400	300	600	300	1054	552	197	457	20	155	325
150-150-250	18,50	150	256	320	120	370	M16	600	560	534	400	300	600	300	1112	610	262	509	20	155	325
150-150-250	22,00	150	256	320	120	370	M16	600	560	534	400	300	600	300	1112	610	262	509	20	155	325
150-150-250	30,00	150	256	320	120	422	M16	600	560	534	400	300	600	300	1171	669	305	558	20	155	325
150-150-250	37,00	150	256	320	120	460	M16	600	560	534	400	300	600	300	1228	695	325	597	20	155	425
150-150-250	45,00	150	256	320	120	468	M16	600	560	534	400	300	600	300	1258	725	325	597	20	155	425
200-200-250	11,00	200	281	410	210	325	M16	600	585	537	530	470	600	300	1073	546	197	405	20	160	255
200-200-250	15,00	200	281	410	210	325	M16	600	585	537	530	470	600	300	1079	552	197	457	20	160	325
200-200-250	18,50	200	281	410	210	370	M16	600	585	537	530	470	600	300	1137	610	262	509	20	160	325
200-200-250	22,00	200	281	410	210	370	M16	600	585	537	530	470	600	300	1137	610	262	509	20	160	325
200-200-250	30,00	200	281	410	210	422	M16	600	585	537	530	470	600	300	1196	669	305	558	20	160	325
200-200-250	37,00	200	281	410	210	460	M16	600	585	537	530	470	600	300	1253	695	325	597	20	160	425
200-200-250	45,00	200	281	410	210	468	M16	600	585	537	530	470	600	300	1283	725	325	597	20	160	425
200-200-315	30,00	200	287	410	220	422	M16	580	593	554	520	480	580	290	1202	669	305	558	20	185	325
200-200-315	37,00	200	287	410	220	460	M16	580	593	554	520	480	580	290	1259	695	325	597	20	185	425
200-200-315	45,00	200	287	410	220	468	M16	580	593	554	520	480	580	290	1289	725	325	597	20	185	425

Connections

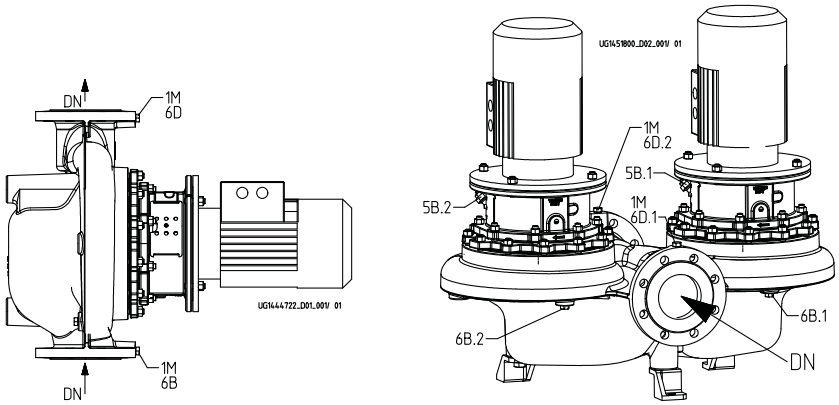


Fig. 273: Connections

Connections

Connection	Description	Configuration	Position
1M	Connection for pressure gauge	Drilled and closed, or pressure sensor for PumpMeter (if selected)	Suction flange and discharge flange
5B.1, 5B.2	Vent connection for the mechanical seal chamber	Plugged with vent plug	Casing cover
6B, 6B.1, 6B.2	Fluid drain	Drilled and closed	Volute casing
6D, 6D.1, 6D.2	Fluid priming and venting	Drilled and closed	Volute casing

Connection [mm]

Etaline Z	1M, 6B, 6D	5B
032-032-160	Rc 1/4	G 1/4
032-032-200	Rc 1/4	G 1/4
040-040-160	Rc 1/4	G 1/4
040-040-250	Rc 1/4	G 1/4
050-050-160	Rc 1/4	G 1/4
050-050-250	Rc 1/4	G 1/4
065-065-160	Rc 1/4	G 1/4
065-065-250	Rc 1/4	G 1/4
080-080-160	Rc 3/8	G 1/4
080-080-250	Rc 3/8	G 1/4
100-100-200	Rc 3/8	G 1/4
100-100-250	Rc 3/8	G 1/4
125-125-200	Rc 1/2	G 1/4
125-125-250	Rc 1/2	G 1/4
150-150-250	Rc 1/2	G 1/4
200-200-250	Rc 1/2	G 1/4
200-200-315	Rc 1/2	G 1/4

Flange design

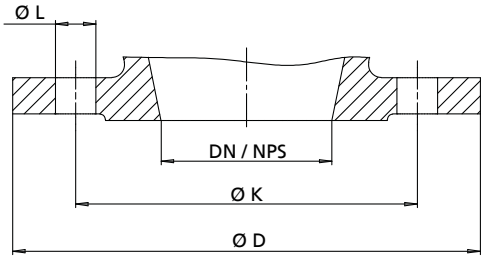


Fig. 274: Flange dimensions

Flange dimensions [mm]

DN / NPS	Standard					
	EN 1092-2			ASME B 16.1		
	Material					
	G			G		
	PN 16			Class 125		
	Ø K	Ø D	Number of holes L	Ø K	Ø D	Number of holes L
32 / NPS 1 1/4	100	140	4×∅19	88,9	140	4×∅15,7
40 / NPS 1 1/2	110	150	4×∅19	98,6	150	4×∅15,7
50 / NPS 2	125	165	4×∅19	120,7	165	4×∅19,1
65 / NPS 2 1/2	145	185	4×∅19	139,7	185	4×∅19,1
80 / NPS 3	160	200	8×∅19	152,4	200	4×∅19,1
100 / NPS 4	180	220	8×∅19	190,5	220	8×∅19,1
125 / NPS 5	210	250	8×∅19	-	-	-
150 / NPS 6	240	285	8×∅23	241,3	285	8×∅22,4
200 / NPS 8	295	340	12×∅23	298,5	340	8×∅22,4

Flange design by materials

Material variant	Standard	Nominal size	Pressure class
GG, GB, GC	EN 1092-2	DN 32 - DN 200	PN 16
	Drilled to ASME B16.1[293)]	DN 32 - DN 100, DN 150 and DN 200	Class 125

Accessories

Pump accessories

Pump accessories

Item		Description	Connection	Mat. No.	[kg]
-	-	Pump foot	Etaline Z 032-032-160 to 080-080-250[294)]	47077960	1,5
			Etaline Z 100-100–200 to 200-200–315[294)]	47089180	3
	-	Blind flange with sealing element	Etaline Z 032/040/050/065/080/100-160, 100-125	01621012	6,7
			ETLZ 032/080/100/125/150-200, 125-160	01621013	12,4
			Etaline Z 040/050/065/080/100/125/150/200-250	01621014	14,7
			Etaline Z 200-315	01621015	22,2

293 DN 80 machined like DN 100
294 3 pump feet with bolts

Standardised Pumps to EN 733

Etanorm

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000062

Product benefits

- Improved efficiency and NPSHreq by experimentally verified hydraulic design of impellers (vanes)
- Operating costs reduced by trimming the nominal impeller diameter to match the specified duty point
- Little wear, low vibration levels and excellent smooth running characteristics thanks to good suction performance and virtually cavitation-free operation across a wide operating range
- Large variety of materials as standard for perfectly matching the pump to the fluid handled
- PumpDrive perfectly matched to pump and motor by default factory parameter settings
- Motor-mounted variable speed system up to 45 kW saves space
- Pump operation made fully transparent with PumpMeter
- The efficiency of the motor also exceeds 95 % of the nominal efficiency when the motor runs at 25 % of its nominal power on a quadratic torque-speed curve.
- Sustainable and environmentally friendly because no magnets based on “rare earth elements” such as NdFeB are used

Further information

Prices on request

Selection charts 654
Dimensions 656

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[295)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

295 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for water pumps with a maximum nominal shaft power of 150 kW as per Regulation (EU) No. 547/2012.

Main applications

- Handling clean or aggressive fluids not chemically and mechanically aggressive to the pump materials.
- Water supply systems
- Cooling circuits
- Swimming pools
- Fire-fighting systems
- General irrigation systems
- Drainage systems
- Heating systems
- Air-conditioning systems
- Spray irrigation systems

Fluids handled

- Seawater
- Brackish water
- Drinking water
- High-temperature hot water
- Service water
- Fire-fighting water
- Brine
- Cleaning agents
- Condensate
- Oils

Operating data

Operating properties

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q m³/h]	≤ 640	≤ 740
Head	H [m]	≤ 160	≤ 160
Fluid temperature	T [°C]	≥ -30	≥ -30
		≤ +140	≤ +140
Operating pressure	p [bar]	≤ 16	≤ 16

Design details

Design

- Volute casing pump
- Horizontal installation
- Back pull-out design
- Single-stage
- Dimensions and ratings to EN 733
- Requirements to 2009/125/EC Directive
- Fixed speed version (without PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R) / variable speed version (with PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R)

Pump casing

- Radially split volute casing
- Volute casing with integrally cast pump feet
- Replaceable casing wear rings (optional for pump casing material C)

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM B3
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM B3
- Enclosure IP55
- Duty type: continuous duty S1
- II 3G Ex ec IIC T3 Gc
- II 2G Ex eb IIC T3 Gb
- II 2G Ex db (eb) IIB T4 Gb
- II 2G Ex db (eb) IIC T4 Gb

Drive (variable speed version)

KSB SuPremE motor:

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[296)] (PumpDrive required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM B3
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 0.55 kW to 45 kW
- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2 / PumpDrive 2 Eco:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for motor mounting, wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

PumpMeter:

- Intelligent pressure transmitter for pumps, with on-site display of measured values and operating data
- For recording the load profile of the pump
- Supplied completely assembled and parameterised for the individual pump

KSB Guard

- System for monitoring the pump's condition by means of temperature and vibration sensors
- Measured values and operating data may be retrieved via the KSB Guard app and the web portal at any time.

Shaft seal

- Gland packing
- Single mechanical seals and double mechanical seals to EN 12756
- Shaft equipped with replaceable shaft sleeve in the shaft seal area

Impeller type

- Closed radial impeller with multiply curved vanes

Bearings

Standard:

- Deep groove ball bearing (floating bearing assembly)

Reinforced:

- Deep groove ball bearing (floating bearing assembly)

296 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Designation

Designation example

Position																																		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
E	T	N		0	5	0	-	0	3	2	-	1	2	5	1	G	G	S	A	S	1	1	G	B	2	1	3	2	0	2	B	P	D	2	E	M
See name plate and data sheet																										See data sheet										

Designation key

Position	Code	Description	
1-4	Pump type		
	ETN	Etanorm	
	ETNF	Etanorm Feuerlöschpumpe	
5-16	Size, e.g.		
	050	Nominal suction nozzle diameter [mm]	
	032	Nominal discharge nozzle diameter [mm]	
	1251	Nominal impeller diameter [mm]	
17	Pump casing material		
	B	Bronze	CC480K-GS / B30 C90700
	C	Stainless steel	1.4408 / A743CF8M
	G	Cast iron	EN-GJL-250 / A48CL35
	S	Nodular cast iron	EN-GJS-400-15 / A536 Gr. 60-40-18
18	Impeller material		
	B	Bronze	CC480K-GS / B30 C90700
	C	Stainless steel	1.4408 / A743CF8M
	G	Cast iron	EN-GJL-250 / A48CL35
	I	Bronze[297)]	IS318 LTB
	O	Cast steel	1.4008 / A743CF8M
	S	Nodular cast iron	EN-GJS-400-15 / A536 Gr. 60-40-18
19	Variant		
	A	Fire-fighting variant to APSAD	
	H	Approved for drinking water to ACS	
	K	Approved for drinking water to KSB standard	
	M	Fire-fighting variant to FM or UL	
	N	Fire-fighting variant, non-listed	
	S	Standard	
	U	Approved for drinking water to UBA	
	V	Fire-fighting variant to VDS	
	W	Approved for drinking water to WRAS	
	X	Non-standard (BT3D, BT3)	
20	Casing cover		
	A	Conical cover for version with single mechanical seal	
	C	Cylindrical cover for version with gland packing or double mechanical seal	
21	Shaft seal type		
	A	Single mechanical seal, conical cover without internal circulation	
	D	Double mechanical seal in back-to-back arrangement	
	E	Single mechanical seal, external circulation	
	F	Single mechanical seal, external flushing	
	I	Single mechanical seal, internal circulation (only for version with conical cover)	
	P	Gland packing	
	S	Single mechanical seal, internal circulation, discharge cover with anti-swirl baffles (only for version with conical cover)	
	T	Double mechanical seal in tandem arrangement with internal circulation	
22-23	Seal code of gland packing		
	1A	P1, with internal barrier fluid (Na), material RT/P (for hot water of up to 120 °C)	
	1B	P2, without barrier fluid (Nb), material RT/P (for hot water of up to 120 °C)	

297 Only applicable to Indian sites

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Position	Code	Description		
22-23	1C	P3, with external barrier fluid (Nc), material RT/P (for hot water of up to 110 °C)		
	1D	P4, with external flushing liquid (VSH), material RT/P (for hot water of up to 110 °C)		
	3B	P2, without barrier fluid (Nb), material BUP901/B5 (for hot water of up to 140 °C)		
	4A	P1, with internal barrier fluid (Na), material BU5426 (for drinking water to ACS, for example)		
	4B	P2, without barrier fluid (Nb), material BU5426 (for drinking water to ACS, for example)		
	5A	P1, with internal barrier fluid (Na), material HE1727 (surface treatment technology)		
	5B	P2, without barrier fluid (Nb), material HE1727 (surface treatment technology)		
	Seal code, single mechanical seal			
	01	Q1Q1VGG	1 (ZN1181)	≥ -20 - ≤ +110 [°C]
	06	U3BEGG	RMG13G606	≥ -30 - ≤ +140 [°C]
	07	Q1Q1EGG	1A (ZN1181)	≥ -30 - ≤ +110 [°C]
	08	AQ1VGG	M32N69	≥ -30 - ≤ +110 [°C]
	09	U3U3VGG	MG13G60	≥ -20 - ≤ +110 [°C]
	10	Q1Q1X4GG	1 (ZN1181)	≥ -20 - ≤ +110 [°C]
	11	BQ1EGG-WA	1 (ZN1181)	≥ -30 - ≤ +110 [°C]
	12	Q12Q1M1GG1	M37GN83	≥ -20 - ≤ +100 [°C]
	13	BQ1VGG	1 (ZN1181)	≥ -20 - ≤ +110 [°C]
	14	Q1Q1KY7G	KMB13S2G9	≥ -20 - ≤ +120 [°C]
	15	Q1Q1KGG	M7G49	≥ -20 - ≤ +110 [°C]
	16	BVPGG	MG1S20	≥ -20 - ≤ +110 [°C]
	17	Q1BVGG	M7N / 5A	≥ -20 - ≤ +110 [°C]
	22	AQ1EGG	M32N69	≥ -30 - ≤ +140 [°C]
	66	Q7Q7EGG	MG13G6	≥ -30 - ≤ +120 [°C]
	67	Q6Q6X4GG	MG13G60 / MG1G61S6	≥ -20 - ≤ +110 [°C]
	Seal code, double mechanical seal in tandem arrangement			
	18	Q1Q1EGG/G	MG12G6-E1	≥ -30 - ≤ +110 [°C]
		Q1Q1EGG-G	MG12G6-E1	≥ -30 - ≤ +110 [°C]
	19	Q1Q1M1GG	HN400N	≥ -30 - ≤ +110 [°C]
		Q1Q1EGG-G	MG12G6-E1	≥ -30 - ≤ +110 [°C]
	20	Q12Q1M1GG1	M37GN85	≥ -20 - ≤ +110 [°C]
		Q1Q1EGG-G	MG12G6-E1	≥ -20 - ≤ +110 [°C]
	23	Q12Q1M1GG1	M37GN92	≥ -20 - ≤ +110 [°C]
		Q1Q1EGG-G	MG12G6-E1	≥ -20 - ≤ +110 [°C]
	Seal code, double mechanical seal in back-to-back arrangement			
	21	Q1Q1KGG	M7G49	≥ -20 - ≤ +110 [°C]
		Q1Q1KGG	M7G49	≥ -20 - ≤ +110 [°C]
	24	Q1Q1KGG	M7G49	≥ -20 - ≤ +110 [°C]
		Q1BVGG	M7N	≥ -20 - ≤ +110 [°C]
24	Bearing bracket			
	G	Grease lubrication		
	O	Oil lubrication		
25	Scope of supply			
	A	Pump only (Fig. 0)		
	B	Pump, baseplate		
	C	Pump, baseplate, coupling, coupling guard		
	D	Pump, baseplate, coupling, coupling guard, motor		
	E	Back pull-out unit		
26	Shaft unit			
	2	Shaft unit 25, bearing bracket LS (standard)		
	3	Shaft unit 35, bearing bracket LS (standard)		
	4	Shaft unit 50, bearing bracket LR (reinforced)		
	5	Shaft unit 55, bearing bracket LS (standard)		
	6	Shaft unit 60, bearing bracket LR (reinforced)		
	7	Shaft unit 60.1, bearing bracket LR (reinforced)		

Position	Code	Description
27-30	Motor rating P_N [kW]	
	0007	0,75
	...	...
	1320	132,00
31	Number of motor poles	
32	Product generation	
	B	Etanorm 2013
33-36	Variant	
	-	Fixed speed version
	PD2	Variable speed version, with PumpDrive 2
	PD2E	Variable speed version, with PumpDrive 2 Eco
	IFS	MyFlow Drive
37	PumpMeter	
	M	PumpMeter

Materials

Symbols key

Symbol	Description
✗	Standard
o	Optional
-	Version not available / not feasible

Overview of available materials

Part No.	Description	Material	Material variant							
			GG	GB	GC	BB	SG	SB	SC	CC
102	Volute casing	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	✗	✗	-	-	-	-	-
		Bronze CC480K-GS / B30 C90700	-	-	-	✗	-	-	-	-
		Nodular cast iron EN-GJS-400-15 / A536 Gr. 60-40-18	-	-	-	-	✗	✗	✗	-
		Stainless steel 1.4408 / A743 Gr. CF8 M	-	-	-	-	-	-	-	✗
161	Conical casing cover	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	✗	✗	-	-	-	-	-
		Bronze CC480K-GS / B30 C90700	-	-	-	✗	-	-	-	-
		Nodular cast iron EN-GJS-400-15 / A536 Gr. 60-40-18	-	-	-	-	✗	✗	✗	-
		Stainless steel 1.4408 / A743 Gr. CF8 M	-	-	-	-	-	-	-	✗
161	Cylindrical casing cover	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	o	o	o	-	-	-	-	-
		Stainless steel 1.4408 / A743 Gr. CF8 M	-	-	-	-	-	-	-	o
		Bronze CC480K-GS / B30 C90700	-	-	-	o	-	-	-	-
210	Shaft	Tempered steel C45+N	✗	✗	✗	-	✗	✗	✗	-
		Chrome steel 1.4057+QT800	o	o	o	-	o	o	o	-
		Duplex stainless steel 1.4462 / UNS S31803	o	o	o	✗	o	o	o	✗
230	Impeller	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	-	-	-	✗	-	-	-
		Bronze CC480K DW	-	✗	-	✗	-	✗	-	-
		Stainless steel 1.4408 / A743 Gr. CF8 M	-	-	✗	-	-	-	✗	✗
330	Bearing bracket	Grey cast iron EN-GJL-250 / A 48 Cl. 35B[298]	✗	✗	✗	✗	✗	✗	✗	✗
		Nodular cast iron EN-GJS-400-18-LT[299]	✗	✗	✗	✗	✗	✗	✗	✗
400	Gaskets	DPAF, asbestos-free	✗	✗	✗	✗	✗	✗	✗	✗
502.01	Casing wear ring, suction side	JL / lamellar graphite cast iron	✗	✗	✗	-	✗	✗	✗	-
		Stainless steel (CrNiMoST)[300]	o	-	o	-	-	-	-	o
		Bronze CC495K-GS	-	o	-	✗	-	o	-	-
502.02	Casing wear ring, discharge side	JL / lamellar graphite cast iron	✗	✗	✗	-	✗	✗	✗	-
		Stainless steel (CrNiMoST)[300]	o	-	o	-	-	-	-	o
		Bronze CC495K-GS	-	o	-	✗	-	o	-	-
523	Shaft sleeve[301]	Stainless steel (CrNiMoST)[300]	✗	✗	✗	✗	✗	✗	✗	✗
524	Shaft protecting sleeve[302]	Stainless steel (CrNiMoST)[300]	-	-	-	✗	-	-	-	✗
		Chrome steel 1.4122+QT750	✗	✗	✗	-	-	-	-	-
902	Studs	Steel 8.8	✗	✗	✗	-	✗	✗	✗	-
		A4-70/ A193 Gr. B8M Cl. 2	o	o	o	✗	o	o	o	✗
903	Screw plugs	Steel	✗	✗	✗	-	✗	✗	✗	-
		A4/ AISI 316	o	o	o	✗	o	o	o	✗
920	Nut	8+A2A/ 8+B633 SC1 TP3	✗	✗	✗	-	✗	✗	✗	-
		A4/ AISI 316	o	o	o	✗	o	o	o	✗
920.95	Impeller nut	A4/ AISI 316	o	✗	✗	✗	o	✗	✗	✗
		Steel 8	✗	-	-	-	✗	-	-	-

298 Valid for shaft units WS25, WS35, WS55 - bearing bracket LS (standard)

299 Valid for shaft units WS50, WS60 - bearing bracket LR (reinforced)

300 Possible materials for material group CrNiMo steel INT (material identification code 7605): 1.4401, 1.4404, 1.4408, 1.4571, AISI 316, AISI 316TI, A743 Gr. CF8M, A479 TYPE 316L.

301 For versions with mechanical seal

302 For versions with gland packing

Overview of product features / selection tables

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

Symbols key

Symbol	Description
✗	Standard
-	Version not available / not feasible

Excerpt from the overview of fluids handled with associated material variants

Fluid handled	T[303]		Materials					Shaft seal								Comments
			Casing/impeller							Mechanical seal						
	Minimum	Maximum	Grey cast iron / grey cast iron	Grey cast iron / tin bronze	Nodular cast iron / grey cast iron	Tin bronze / tin bronze	CrNiMo cast steel / CrNiMo cast steel	Gland packing RT/P	Gland packing, pure graphite	U3BEGG	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG	Q12Q1M1GG1	
	[°C]		GG	GB	SG	BB	CC	1	3B	6	7	9	10	11	12	
Water																
Brackish water[304]	-	≤ 25	-	-	-	✗	-	✗	-	-	-	-	✗	-	-	CrNiMo cast steel can be used.
Fire-fighting water[305]	-	≤ 60	-	✗	-	-	-	✗	-	-	-	-	✗	-	-	Contact KSB for supply to VdS guideline.
Heating water[306]	-	≤ 110	✗	-	-	-	-	✗	-	-	-	-	-	✗	-	If used as circulating pump to DIN 4752: p ≤ 10 bar. If ductile material has been specified: "S"
Heating water	-	≤ 140	✗	-	-	-	-	-	✗	✗	-	-	-	-	-	
Heating water	-	≥ 110	✗	-	-	-	-	✗	-	-	-	-	✗	-	-	
Condensate	-	≤ 110	✗	-	-	-	-	✗	-	-	-	-	-	✗	-	-
Condensate, not conditioned	-	≤ 110	-	-	-	-	✗	✗	-	-	-	-	-	✗	-	-
Cooling water without antifreeze	-	≤ 60	✗	-	-	-	-	✗	-	-	-	-	✗	-	-	Open circuit: GB 1 / GB 10 required.
Cooling water with antifreeze[307], pH ≥ 7.5	≥ 30	≤ 60	✗	-	-	-	-	✗	-	-	-	-	-	✗	-	Open circuit: GB required
Cooling water with antifreeze[307], pH ≥ 7.5	≥ 60	≤ 110	✗	-	-	-	-	✗	-	-	✗	-	-	-	-	Open circuit: GB required
Slightly contaminated water	-	≤ 60	✗	-	-	-	-	✗	-	-	-	-	✗	-	-	-
Seawater	-	≤ 25	-	-	-	✗	-	✗	-	-	-	-	✗	-	-	CrNiMo cast steel can be used.
Pure water[308]	-	≤ 60	✗	-	-	-	-	✗	-	-	-	-	-	✗	-	-
Raw water	-	≤ 60	✗	-	-	-	-	✗	-	-	-	-	✗	-	-	-

303 T = fluid temperature

304 For components made of bronze: ammonia (NH3) ≤ 5 mg/kg, free from hydrogen sulphide (H2S); no limitation of Cl content required in this case. Please contact KSB if limits are exceeded.

305 General evaluation criteria for results of water analysis: pH ≥ 7, chlorides content (Cl) ≤ 250 mg/kg, chlorine (Cl2) ≤ 0.6 mg/kg.

306 Treatment to VdTÜV 1466, additional requirement: O2 t ≤ 0.02 mg/l

307 Antifreeze on ethylene glycol basis with inhibitors, content > 20 % to 50 % (e.g. Antifrogen N)

308 No ultra-pure water, electrical conductivity at 25 °C: ≤ 800 µS/cm, neutral with regard to chemical corrosion

Fluid handled	T[303]		Materials					Shaft seal								Comments
			Casing/impeller							Mechanical seal						
	Minimum	Maximum	Grey cast iron / grey cast iron	Grey cast iron / tin bronze	Nodular cast iron / grey cast iron	Tin bronze / tin bronze	CrNiMo cast steel / CrNiMo cast steel	Gland packing RT/P	Gland packing, pure graphite	U3BEGG	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG	Q12Q1M1GG1	
	[°C]		GG	GB	SG	BB	CC	1	3B	6	7	9	10	11	12	
Swimming pool water (fresh water)	-	≤ 60	✘	-	-	-	-	✘	-	-	-	-	✘	-	-	Also applies to requirements as per DIN 19643
Swimming pool water[309]: filtration	-	≤ 40	-	✘	-	-	-	-	-	-	-	-	✘	-	-	Variant GB; shaft C45+N, shaft sleeve CrNiMo steel, nut A4/ AISI 316, key A2, casing wear ring (suction side and discharge side) JL / lamellar graphite cast iron
Swimming pool water[309]: water features; without turbulences and/or air content	-	≤ 40	-	✘	-	-	-	-	-	-	-	-	✘	-	-	Variant GB; shaft C45+N, shaft sleeve CrNiMo steel, nut A4/ AISI 316, key A2, casing wear ring (suction side and discharge side) CC495K-GS
Swimming pool water[309]: water features; with turbulences and/or air content	-	≤ 40	-	-	-	✘	-	-	-	-	-	-	✘	-	-	Variant B; shaft 1.4571, shaft sleeve CrNiMo steel, nut A4/ AISI 316, key A2, casing wear ring (suction side and discharge side) CC495K-GS
Swimming pool water (seawater)	-	≤ 40	-	-	-	✘	-	✘	-	-	-	-	✘	-	-	CrNiMo cast steel for t ≤ 25 °C
Dam water	-	≤ 60	-	✘	-	-	-	✘	-	-	-	-	✘	-	-	If solids are contained, contact KSB.
Drinking water[310]	-	≤ 60	-	✘	-	-	-	✘	-	-	-	-	-	✘	-	-
Partly desalinated water	-	≤ 110	✘	-	-	-	-	✘	-	-	-	-	-	✘	-	-
Fully desalinated water	-	≤ 110	-	-	-	-	✘	✘	-	-	-	-	-	✘	-	Purity requirements cannot be met.
Fully desalinated water as boiler feed water	-	≤ 110	✘	-	-	-	-	✘	-	-	-	-	-	✘	-	-
Refrigerants, cooling brines																
Cooling brine; inorganic, pH > 7.5, inhibited	≥ 30	≤ 25	✘	-	-	-	-	✘	-	-	-	-	-	✘	-	-
Water with antifreeze, pH ≥ 7.5	≥ 30	≤ 60	✘	-	-	-	-	✘	-	-	-	-	-	✘	-	-
Water with antifreeze, pH ≥ 7.5	≥ 60	≤ 110	✘	-	-	-	-	✘	-	-	✘	-	-	-	-	-
Oils/emulsions																
Diesel oil, extra light fuel oil	-	≤ 60	-	-	✘	-	-	-	-	-	-	-	✘	-	-	GG possible, unless specific standards have to be observed
Lubricating oil, turbine oil, does not apply to SF-D oils (hardly flammable)	-	≤ 80	-	-	✘	-	-	-	-	-	-	-	✘	-	-	If specified without internal primer contact KSB. GG possible, unless specific standards have to be observed
Drilling emulsion, grinding emulsion	-	≤ 60	✘	-	-	-	-	-	-	-	-	✘	-	-	-	-
Oil-water emulsion	-	≤ 60	✘	-	-	-	-	-	-	-	-	✘	-	-	-	-

309 France: Observe the rules as per ministerial order dated 18 January 2002.
310 For France, ACS approval is required.

Fluid handled	T[303]		Materials					Shaft seal								Comments
			Casing/impeller							Mechanical seal						
	Minimum	Maximum	Grey cast iron / grey cast iron	Grey cast iron / tin bronze	Nodular cast iron / grey cast iron	Tin bronze / tin bronze	CrNiMo cast steel / CrNiMo cast steel	Gland packing RT/P	Gland packing, pure graphite	U3BEGG	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG	Q12Q1M1GG1	
	[°C]		GG	GB	SG	BB	CC	1	3B	6	7	9	10	11	12	
Brewery applications																
Beer mash	-	≤ 100	✗	-	-	-	-	-	-	-	-	-	-	-	✗	If there is a risk of the pump running dry due to excessive emptying of the tank, use an Etanorm with double mechanical seal in tandem arrangement.
Beer wort	-	≤ 100	✗	-	-	-	-	-	-	-	-	-	-	-	✗	

Overview of material variants

Other designs on request

Symbols key

Symbol	Description
✗	Standard
-	Version not available / not feasible

Overview of Etanorm variants

Variant	102 / Volute casing	230 / Impeller	Gland packing / mechanical seal	T [°C]	Main applications									
					Handling clean or aggressive fluids not chemically and mechanically aggressive to the pump materials	Water supply systems	Cooling circuits	Swimming pool applications	Fire-fighting systems	General irrigations systems	Drainage systems	Heating systems	Air-conditioning systems	Spray irrigation systems
GG01	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Gland packing RT/P	≥ -20 - ≤ +110	-	-	✗	-	-	-	-	✗	✗	-
GG06	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	SU 25, 35: mech. seal U3BEGG SU 55: mech. seal AQ1EGG	≥ -30 - ≤ +140	-	-	-	-	-	-	-	✗	-	-
GG10	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Mech. seal Q1Q1X4GG	≥ -20 - ≤ +110	-	✗	-	✗ 311)	✗	✗	✗	-	-	✗
GG11	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Mech. seal BQ1EGG	≥ -30 - ≤ +110	✗	✗	✗ 312)	-	✗	-	-	-	✗ 312)	-
GB01	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Bronze CC480K-GS/ B30 C90700	Gland packing RT/P	≥ -20 - ≤ +110	-	-	✗	-	-	-	-	✗	✗	-
GB06	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Bronze CC480K-GS/ B30 C90700	SU 25, 35: mech. seal U3BEGG SU 55: mech. seal AQ1EGG	≥ -30 - ≤ +140	-	-	-	-	-	-	-	✗	-	-
GB10	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Bronze CC480K-GS/ B30 C90700	Mech. seal Q1Q1X4GG	≥ -20 - ≤ +110	-	✗	-	✗ 311)	✗	✗	✗	-	-	✗
GB11	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Bronze CC480K-GS/ B30 C90700	Mech. seal BQ1EGG	≥ -30 - ≤ +110	✗	✗	✗ 312)	-	✗	-	-	-	✗ 312)	-
SG10	Nodular cast iron EN-GJS-400-15 / A536 Gr. 60-40-18	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Mech. seal Q1Q1X4GG	≥ -20 - ≤ +110	-	✗	-	✗ 311)	✗	✗	✗	-	-	✗
SG11	Nodular cast iron EN-GJS-400-15 / A536 Gr. 60-40-18	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Mech. seal BQ1EGG	≥ -30 - ≤ +110	✗	✗	✗ 312)	-	✗	-	-	-	✗ 312)	-
BB01	Bronze CC480K-GS / B30 C90700	Bronze CC480K-GS/ B30 C90700	Gland packing RT/P	≥ -20 - ≤ +110	-	-	✗	-	-	-	-	✗	✗	-
BB10	Bronze CC480K-GS / B30 C90700	Bronze CC480K-GS/ B30 C90700	Mech. seal Q1Q1X4GG	≥ -20 - ≤ +110	-	✗	-	✗ 311)	✗	✗	✗	-	-	✗
BB11	Bronze CC480K-GS / B30 C90700	Bronze CC480K-GS/ B30 C90700	Mech. seal BQ1EGG	≥ -30 - ≤ +110	✗	✗	✗ 312)	-	✗	-	-	-	✗ 312)	-
CC01	Stainless steel 1.4408 / A743 Gr. CF8 M	Stainless steel 1.4408 / A743 Gr. CF8 M	Gland packing RT/P	≥ -20 - ≤ +110	-	-	✗	-	-	-	-	✗	✗	-
CC10	Stainless steel 1.4408 / A743 Gr. CF8 M	Stainless steel 1.4408 / A743 Gr. CF8 M	Mech. seal Q1Q1X4GG	≥ -20 - ≤ +110	-	✗	-	✗ 311)	✗	✗	✗	-	-	✗
CC11	Stainless steel 1.4408 / A743 Gr. CF8 M	Stainless steel 1.4408 / A743 Gr. CF8 M	Mech. seal BQ1EGG	≥ -30 - ≤ +110	✗	✗	✗ 312)	-	✗	-	-	-	✗ 312)	-

311 Q1Q1VGG

312 Q1Q1EGG / Q7Q7EGG, fluid handled: water, glycol with inhibitors

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Technical data

Etanorm

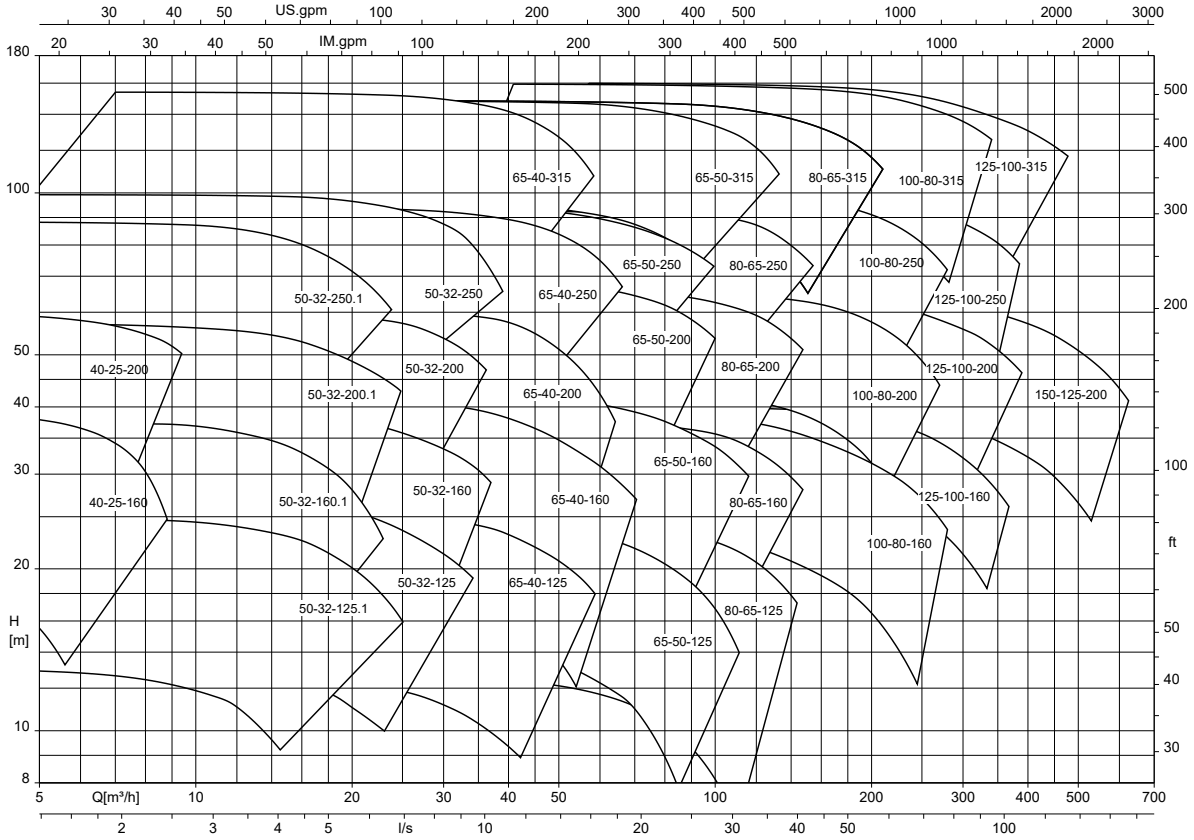
Technical data

Etanorm	Shaft unit		Impeller					Speed limit	
	Bearing bracket LS (standard)	Bearing bracket LR (reinforced)	Impeller outlet width	Free passage diameter	Impeller inlet diameter	Nominal impeller diameter		Maximum	Minimum
						Maximum	Minimum		
			[mm]					[rpm]	
040-025-160	WS_25_LS	-	6,0	5,7	45,2	169	135	3600	500
040-025-200	WS_25_LS	-	6,0	5,7	45,2	209	165	3600	500
050-032-125.1	WS_25_LS	-	6,8	6,0	52,4	139	104	3600	500
050-032-160.1	WS_25_LS	-	5,7	5,4	52,7	170	135	4400	500
050-032-200.1	WS_25_LS	-	5,6	5,3	54,0	204	168	3800	500
050-032-250.1	WS_25_LS	-	5,5	5,2	58,3	254	200	3600	500
050-032-125	WS_25_LS	-	9,8	5,7	63,4	139	104	3600	500
050-032-160	WS_25_LS	-	8,5	5,8	60,6	174	132	3600	500
050-032-200	WS_25_LS	-	7,0	6,7	62,9	209	170	3700	500
050-032-250	WS_25_LS	-	7,5	7,1	62,6	261	205	3600	500
065-040-125	WS_25_LS	-	14,0	9,6	73,9	139	104	3600	500
065-040-160	WS_25_LS	-	13,0	11,5	70,0	174	128	4400	500
065-040-200	WS_25_LS	-	9,4	8,9	69,4	209	160	3700	500
065-040-250	WS_25_LS	-	8,4	8,0	74,1	260	195	3600	500
065-040-315	WS_35_LS	-	7,5	7,1	75,3	326	260	2300	500
065-040-315	-	WS_50_LR	7,5	7,1	75,3	326	260	3000	500
065-050-125	WS_25_LS	-	19,9	11,6	87,9	142	112	4500	500
065-050-160	WS_25_LS	-	16,9	11,6	86,9	174	128	4400	500
065-050-200	WS_25_LS	-	13,8	11,9	83,6	219	170	3600	500
065-050-250	WS_25_LS	-	10,5	10,0	84,0	260	215	3600	500
065-050-315	WS_35_LS	-	10,0	9,5	87,0	323	265	2400	500
065-050-315	-	WS_50_LR	10,0	9,5	87,0	323	265	3000	500
080-065-125	WS_25_LS	-	25,8	12,9	99,0	141	109	3900	500
080-065-160	WS_25_LS	-	21,0	12,2	91,9	174	132	3900	500
080-065-200	WS_25_LS	-	17,0	13,3	99,7	219	165	3600	500
080-065-250	WS_35_LS	-	15,1	14,3	101,0	260	215	3600	500
080-065-315	WS_35_LS	-	13,7	14,0	108,2	320	245	1900	500
080-065-315	-	WS_60_LR	13,7	14,0	108,2	320	245	3000	500
100-080-160	WS_25_LS	-	31,6	15,1	124,0	174	138	3600	500
100-080-200	WS_35_LS	-	24,5	15,2	115,3	219	165	3600	500
100-080-250	WS_35_LS	-	19,0	15,8	115,1	269	215	3600	500
100-080-315	WS_35_LS	-	18,7	17,8	115,6	334	265	1900	500
100-080-315	-	WS_60_LR	18,7	17,8	115,6	334	265	3000	500
100-080-400	WS_55_LS	-	15,0	14,3	129,9	398	315	1900	500
125-100-160	WS_35_LS	-	37,6	16,4	124,0	185	162	3600	500
125-100-200	WS_35_LS	-	32,5	17,9	115,3	219	170	3600	500
125-100-250	WS_35_LS	-	27,0	18,8	115,1	269	210	3600	500
125-100-315	WS_35_LS	-	23,0	19,9	115,6	334	250	1900	500
125-100-315	-	WS_60_LR	23,0	19,9	115,6	334	250	3000	500
125-100-400	WS_55_LS	-	18,0	17,1	129,9	401	317	1900	500
150-125-200	WS_35_LS	-	40,7	21,1	159,2	224	182	3600	500
150-125-250	WS_35_LS	-	37,0	22,4	162,4	269	218	2000	500
150-125-315	WS_55_LS	-	30,9	22,6	162,3	334	270	1900	500
150-125-400	WS_55_LS	-	25,9	20,9	162,4	419	330	1800	500

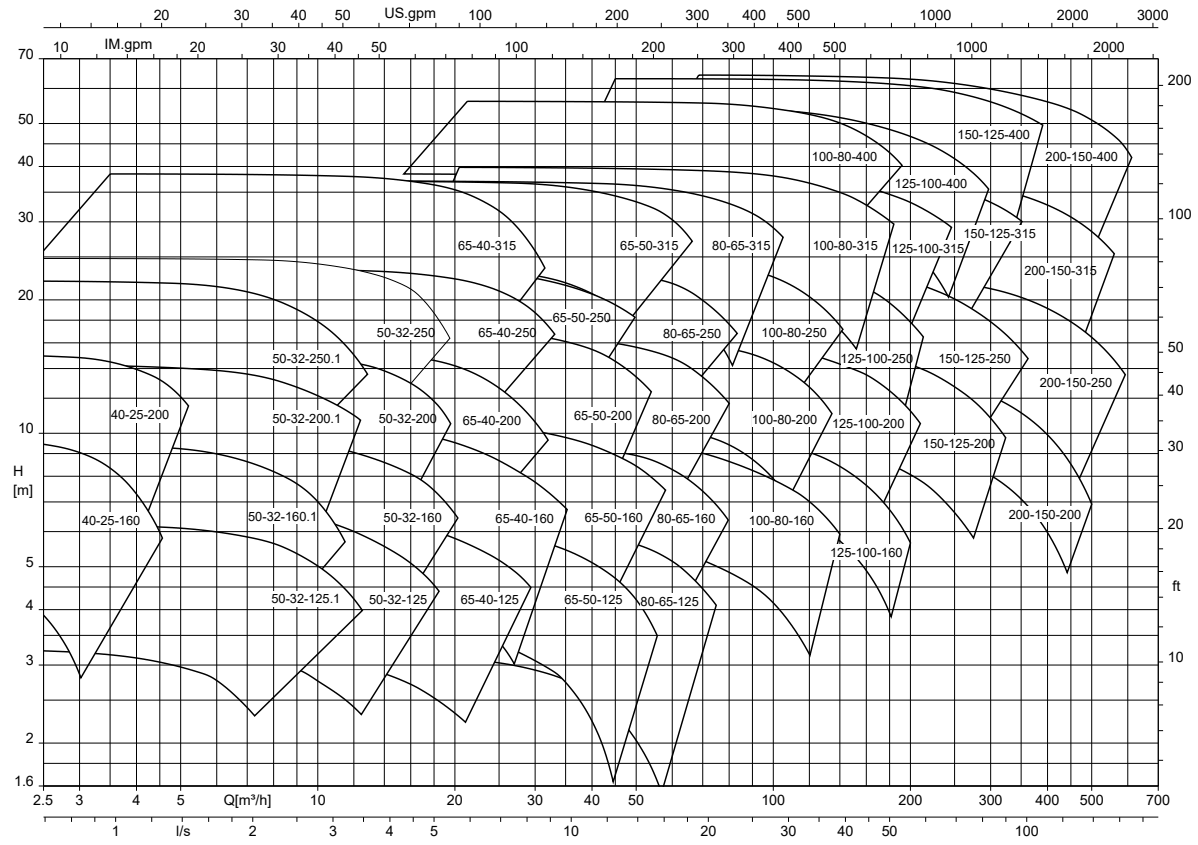
Etanorm	Shaft unit		Impeller					Speed limit	
	Bearing bracket LS (standard)	Bearing bracket LR (reinforced)	Impeller outlet width	Free passage diameter	Impeller inlet diameter	Nominal impeller diameter		Maximum	Minimum
						Maximum	Minimum		
			[mm]					[rpm]	
200-150-200	WS_35_LS	-	59,5	25,2	179,4	224	188	2100	500
200-150-250	WS_35_LS	-	48,8	23,0	191,0	269	220	1800	500
200-150-315	WS_55_LS	-	39,7	26,9	191,5	334	264	1800	500
200-150-400	WS_55_LS	-	33,0	23,8	191,4	419	330	1800	500

Selection charts

Etanorm (fixed speed version), n = 2900 rpm



Etanorm (fixed speed version), n = 1450 rpm



Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Related documents

Information/documents

Document	Reference number
Characteristic curves booklet (50 Hz) Fixed speed version	1311.45
Characteristic curves booklet Variable speed version	1311.452

Dimensions

Dimensions of pump with bearing bracket

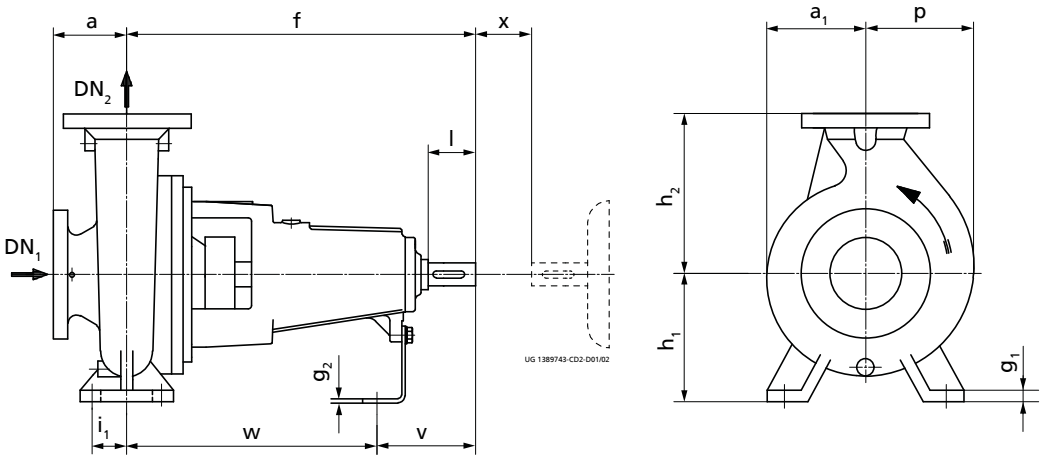


Fig. 275: Pump dimensions

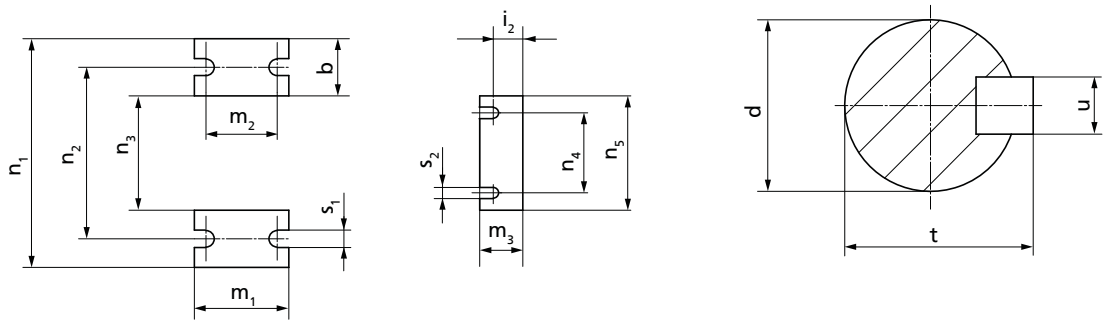


Fig. 276: Dimensions of shaft end and pump feet

Dimensions (a to m_2) of pump with bearing bracket [mm]

Size	Bearing bracket		DN_1[313]	DN_2[313]	a[313]	a_1	b[313]	d[313]	f[313]	g_1	g_2	h_1[313]	h_2[313]	i_1	i_2	l[313]	m_1[313]	m_2
	Standard	Reinforced																
040-025-160	WS_25_LS	-	40	25	80	118	50	24	360	15	4	132	160	35	23	50	100	70
040-025-200	WS_25_LS	-	40	25	80	142	50	24	360	15	4	160	180	35	23	50	100	70
050-032-125.1	WS_25_LS	-	50	32	80	116	50	24	360	15	4	112	140	35	23	50	100	70
050-032-160.1	WS_25_LS	-	50	32	80	116	50	24	360	15	4	132	160	35	23	50	100	70
050-032-200.1	WS_25_LS	-	50	32	80	142	50	24	360	18	4	160	180	35	23	50	100	70
050-032-250.1	WS_25_LS	-	50	32	100	168	65	24	360	18	6	180	225	47,5	25	50	125	95
050-032-125	WS_25_LS	-	50	32	80	115	50	24	360	15	4	112	140	35	23	50	100	70
050-032-160	WS_25_LS	-	50	32	80	118	50	24	360	15	4	132	160	35	23	50	100	70
050-032-200	WS_25_LS	-	50	32	80	142	50	24	360	18	4	160	180	35	23	50	100	70
050-032-250	WS_25_LS	-	50	32	100	169	65	24	360	18	6	180	225	47,5	25	50	125	95
065-040-125	WS_25_LS	-	65	40	80	117	50	24	360	15	4	112	140	35	23	50	100	70
065-040-160	WS_25_LS	-	65	40	80	119	50	24	360	15	4	132	160	35	23	50	100	70
065-040-200	WS_25_LS	-	65	40	100	142	50	24	360	18	4	160	180	35	23	50	100	70
065-040-250	WS_25_LS	-	65	40	100	169	65	24	360	18	6	180	225	47,5	25	50	125	95
065-040-315	WS_35_LS	-	65	40	125	207	65	32	470	18	6	225	250	47,5	24	80	125	95
065-040-315	-	WS_50_LR	65	40	125	207	65	32	500[314]	18	6	225	250	47,5	26	80	125	95
065-050-125	WS_25_LS	-	65	50	100	117	50	24	360	18	4	132	160	35	23	50	100	70
065-050-160	WS_25_LS	-	65	50	100	128	50	24	360	18	4	160	180	35	23	50	100	70
065-050-200	WS_25_LS	-	65	50	100	144	50	24	360	18	4	160	200	35	23	50	100	70
065-050-250	WS_25_LS	-	65	50	100	170	65	24	360	18	6	180	225	47,5	25	50	125	95
065-050-315	WS_35_LS	-	65	50	125	207	65	32	470	18	6	225	280	47,5	24	80	125	95
065-050-315	-	WS_50_LR	65	50	125	207	65	32	500[314]	18	6	225	280	47,5	26	80	125	95
080-065-125	WS_25_LS	-	80	65	100	117	65	24	360	18	4	160	180	47,5	23	50	125	95
080-065-160	WS_25_LS	-	80	65	100	132	65	24	360	18	4	160	200	47,5	23	50	125	95
080-065-200	WS_25_LS	-	80	65	100	155	65	24	360	18	6	180	225	47,5	25	50	125	95

313 Dimensions to EN 733
314 Dimensions differ from those specified in EN 733

Size	Bearing bracket		DN_1[313]	DN_2[313]	a[313]	a_1	b[313]	d[313]	f[313]	g_1	g_2	h_1[313]	h_2[313]	i_1	i_2	l[313]	m_1[313]	m_2
	Standard	Reinforced																
080-065-250	WS_35_LS	-	80	65	100	179	80	32	470	20	6	200	250	60	24	80	160	120
080-065-315	WS_35_LS	-	80	65	125	209	80	32	470	20	6	225	280	60	24	80	160	120
080-065-315	-	WS_60_LR	80	65	125	209	80	42[314]	530[314]	20	6	225	280	60	26	110	160	120
100-080-160	WS_25_LS	-	100	80	125	138	65	24	360	18	6	180	225	47,5	25	50	125	95
100-080-200	WS_35_LS	-	100	80	125	159	65	32	470	18	4	180	250	47,5	22	80	125	95
100-080-250	WS_35_LS	-	100	80	125	183	80	32	470	18	6	200	280	60	24	80	160	120
100-080-315	WS_35_LS	-	100	80	125	218	80	32	470	20	6	250	315	60	24	80	160	120
100-080-315	-	WS_60_LR	100	80	125	218	80	42[314]	530[314]	20	6	250	315	60	26	110	160	120
100-080-400	WS_55_LS	-	100	80	125	257	80	42	530	20	6	280	355	60	25	110	160	120
125-100-160	WS_35_LS	-	125	100	125	178	80	32	470	18	6	200	280	60	24	80	160	120
125-100-200	WS_35_LS	-	125	100	125	173	80	32	470	18	6	200	280	60	24	80	160	120
125-100-250	WS_35_LS	-	125	100	140	188	80	32	470	18	6	225	280	60	24	80	160	120
125-100-315	WS_35_LS	-	125	100	140	225	80	32	470	18	6	250	315	60	24	80	160	120
125-100-315	-	WS_60_LR	125	100	140	225	80	42[314]	530[314]	18	6	250	315	60	26	110	160	120
125-100-400	WS_55_LS	-	125	100	140	255	100	42	530	20	6	280	355	75	25	110	200	150
150-125-200	WS_35_LS	-	150	125	140	189	80	32	470	20	6	250	315	60	24	80	160	120
150-125-250	WS_35_LS	-	150	125	140	226	80	32	470	20	6	250	355	60	24	80	160	120
150-125-315	WS_55_LS	-	150	125	140	243	100	42	530	20	6	280	355	75	25	110	200	150
150-125-400	WS_55_LS	-	150	125	140	277	100	42	530	20	6	315	400	75	25	110	200	150
200-150-200	WS_35_LS	-	200	150	160	240	100	32	470	20	6	280	400	75	24	80	200	150
200-150-250	WS_35_LS	-	200	150	160	230	100	32	470	20	6	280	400	75	24	80	200	150
200-150-315	WS_55_LS	-	200	150	160	255	100	42	530	20	6	280	400	75	25	110	200	150
200-150-400	WS_55_LS	-	200	150	160	289	100	42	530	20	6	315	450	75	25	110	200	150

Dimensions (m_3 to x) of pump with bearing bracket [mm]

Size	Bearing bracket		DN_1[313]	DN_2[313]	m_3[313]	n_1[313]	n_2[313]	n_3[313]	n_4	n_5	p	s_1[313]	s_2[313]	t	u	v	w[313]	x[313]
	Standard	Reinforced																
040-025-160	WS_25_LS	-	40	25	48	240	190	140	110	160	118	14	14	27	8	100	260	100
040-025-200	WS_25_LS	-	40	25	48	240	190	140	110	160	142	14	14	27	8	100	260	100
050-032-125.1	WS_25_LS	-	50	32	48	190	140	90	110	160	116	14	14	27	8	100	260	100
050-032-160.1	WS_25_LS	-	50	32	48	240	190	140	110	160	121	14	14	27	8	100	260	100
050-032-200.1	WS_25_LS	-	50	32	48	240	190	140	110	160	142	14	14	27	8	100	260	100
050-032-250.1	WS_25_LS	-	50	32	48	320	250	190	110	160	168	14	14	27	8	100	260	100
050-032-125	WS_25_LS	-	50	32	48	190	140	90	110	160	115	14	14	27	8	100	260	100
050-032-160	WS_25_LS	-	50	32	48	240	190	140	110	160	128	14	14	27	8	100	260	100
050-032-200	WS_25_LS	-	50	32	48	240	190	140	110	160	143	14	14	27	8	100	260	100
050-032-250	WS_25_LS	-	50	32	48	320	250	190	110	160	178	14	14	27	8	100	260	100
065-040-125	WS_25_LS	-	65	40	48	210	160	110	110	160	117	14	14	27	8	100	260	100
065-040-160	WS_25_LS	-	65	40	48	240	190	140	110	160	134	14	14	27	8	100	260	100
065-040-200	WS_25_LS	-	65	40	48	265	212	165	110	160	155	14	14	27	8	100	260	100
065-040-250	WS_25_LS	-	65	40	48	320	250	190	110	160	179	14	14	27	8	100	260	100
065-040-315	WS_35_LS	-	65	40	48	345	280	215	110	160	207	14	14	35	10	130	340	100
065-040-315	-	WS_50_LR	65	40	48	345	280	215	110	160	207	14	14	35	10	130	370	100
065-050-125	WS_25_LS	-	65	50	48	240	190	140	110	160	130	14	14	27	8	100	260	100
065-050-160	WS_25_LS	-	65	50	48	265	212	165	110	160	149	14	14	27	8	100	260	100
065-050-200	WS_25_LS	-	65	50	48	265	212	165	110	160	163	14	14	27	8	100	260	100
065-050-250	WS_25_LS	-	65	50	48	320	250	190	110	160	186	14	14	27	8	100	260	100
065-050-315	WS_35_LS	-	65	50	48	345	280	215	110	160	215	14	14	35	10	130	340	100
065-050-315	-	WS_50_LR	65	50	48	345	280	215	110	160	215	14	14	35	10	130	370	100
080-065-125	WS_25_LS	-	80	65	48	280	212	150	110	160	150	14	14	27	8	100	260	100
080-065-160	WS_25_LS	-	80	65	48	280	212	150	110	160	160	14	14	27	8	100	260	100
080-065-200	WS_25_LS	-	80	65	48	320	250	190	110	160	178	14	14	27	8	100	260	140
080-065-250	WS_35_LS	-	80	65	48	360	280	200	110	160	199	19	14	35	10	130	340	140
080-065-315	WS_35_LS	-	80	65	48	400	315	240	110	160	229	19	14	35	10	130	340	140
080-065-315	-	WS_60_LR	80	65	48	400	315	240	110	160	229	19	14	45	12	160	370	140
100-080-160	WS_25_LS	-	100	80	48	320	250	190	110	160	174	14	14	27	8	100	260	140
100-080-200	WS_35_LS	-	100	80	48	345	280	215	110	160	188	14	14	35	10	130	340	140
100-080-250	WS_35_LS	-	100	80	48	400	315	240	110	160	209	19	14	35	10	130	340	140
100-080-315	WS_35_LS	-	100	80	48	400	315	240	110	160	242	19	14	35	10	130	340	140
100-080-315	-	WS_60_LR	100	80	48	400	315	240	110	160	242	19	14	45	12	160	370	140
100-080-400	WS_55_LS	-	100	80	48	435	355	275	110	160	280	19	14	45	12	160	370	140
125-100-160	WS_35_LS	-	125	100	48	360	280	200	110	160	225	19	14	35	10	130	340	140
125-100-200	WS_35_LS	-	125	100	48	360	280	200	110	160	212	19	14	35	10	130	340	140
125-100-250	WS_35_LS	-	125	100	48	400	315	240	110	160	219	19	14	35	10	130	340	140
125-100-315	WS_35_LS	-	125	100	48	400	315	240	110	160	255	19	14	35	10	130	340	140
125-100-315	-	WS_60_LR	125	100	48	400	315	240	110	160	255	19	14	45	12	160	370	140

Size	Bearing bracket		DN_1 [313]	DN_2 [313]	m_3 [313]	n_1 [313]	n_2 [313]	n_3 [313]	n_4	n_5	p	s_1 [313]	s_2 [313]	t	u	v	w [313]	x [313]
	Standard	Reinforced																
125-100-400	WS_55_LS	-	125	100	48	500	400	300	110	160	283	24	14	45	12	160	370	140
150-125-200	WS_35_LS	-	150	125	48	400	315	240	110	160	242	19	14	35	10	130	340	140
150-125-250	WS_35_LS	-	150	125	48	400	315	240	110	160	275	19	14	35	10	130	340	140
150-125-315	WS_55_LS	-	150	125	48	500	400	300	110	160	280	24	14	45	12	160	370	140
150-125-400	WS_55_LS	-	150	125	48	500	400	300	110	160	309	24	14	45	12	160	370	140
200-150-200	WS_35_LS	-	200	150	48	550	450	350	110	160	316	24	14	35	10	130	340	140
200-150-250	WS_35_LS	-	200	150	48	500	400	300	110	160	300	24	14	35	10	130	340	140
200-150-315	WS_55_LS	-	200	150	48	550	450	350	110	160	304	24	14	45	12	160	370	140
200-150-400	WS_55_LS	-	200	150	48	550	450	350	110	160	331	24	14	45	12	160	370	140

Pump set dimensions

Etanorm, fixed speed version

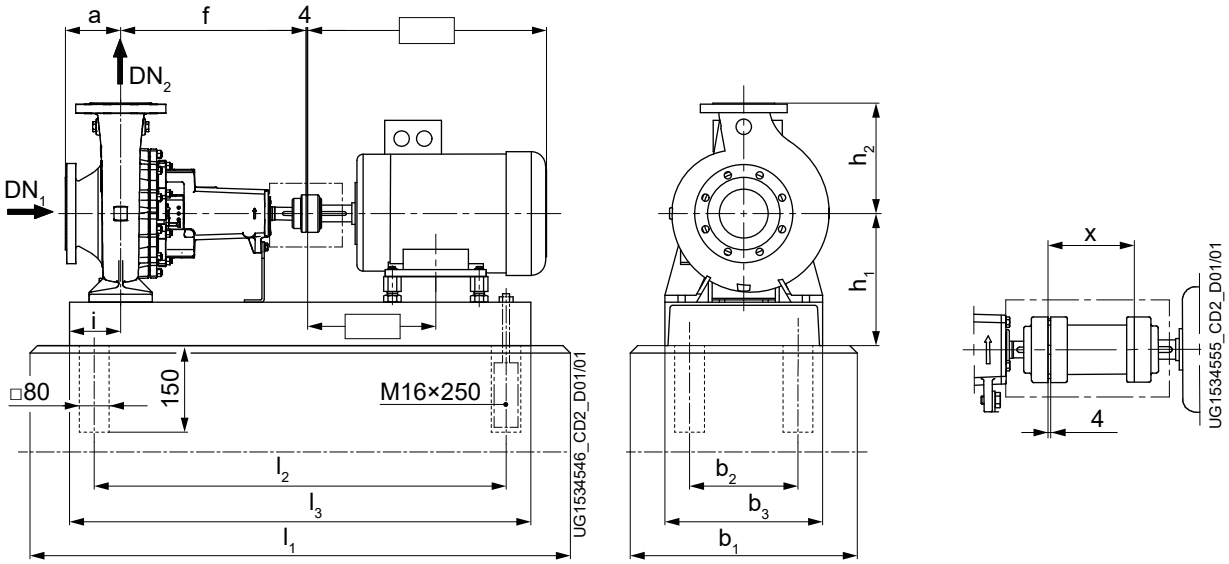


Fig. 277: Dimensions of the pump set with coupling (Fig. A)

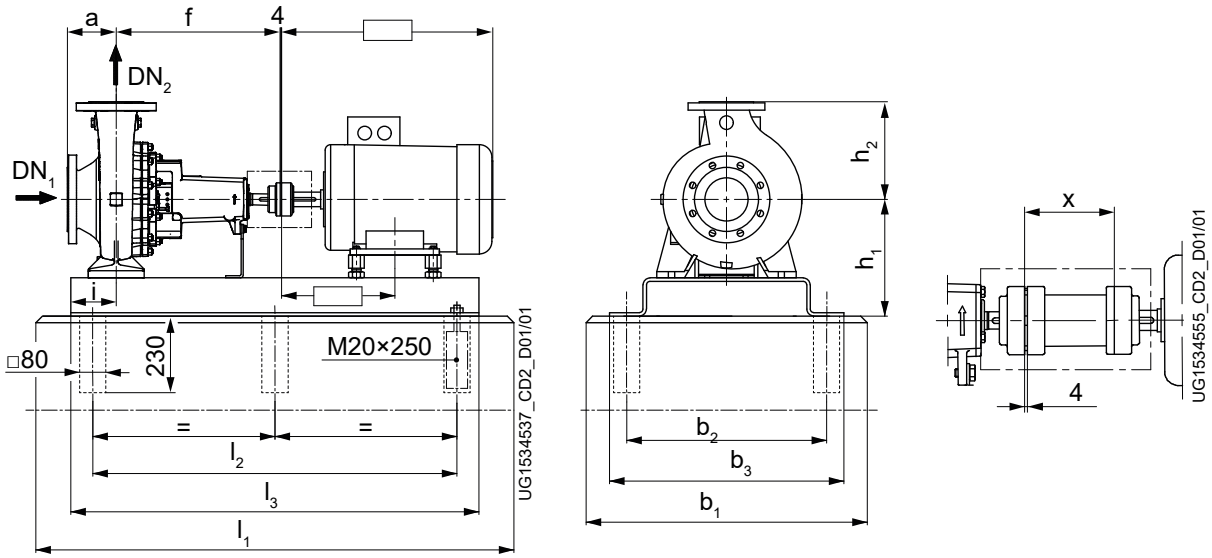


Fig. 278: Dimensions of the pump set with spacer-type coupling (Fig. B)

Etanorm variable speed version

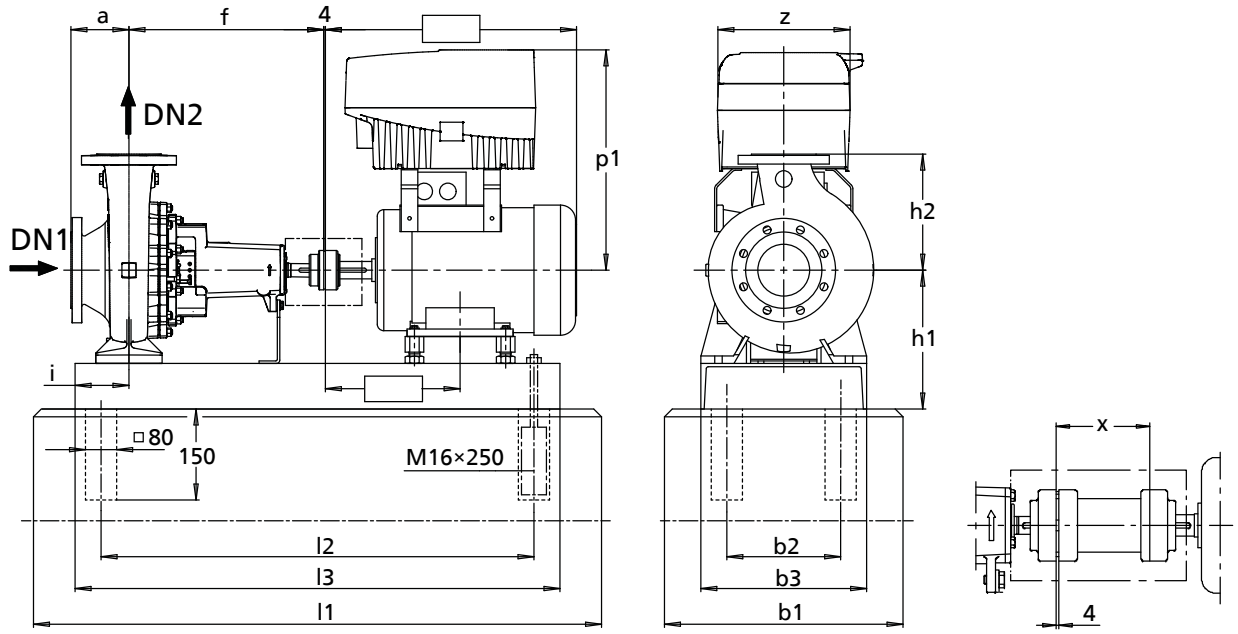


Fig. 279: Dimensions of the pump set with coupling (Fig. A)

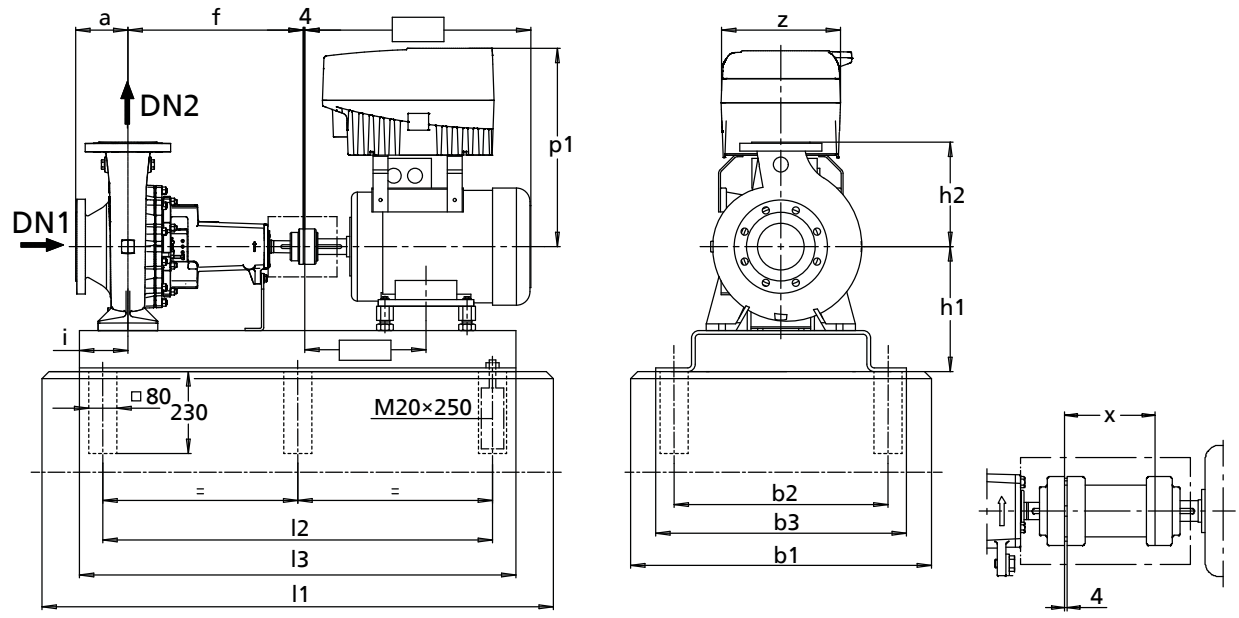


Fig. 280: Dimensions of the pump set with spacer-type coupling (Fig. B)

Pump set dimensions [mm]

Size	Motor rating [kW]				Motor	Fig.	DN_1	DN_2	a	b_1	b_2	b_3	f	h_1	h_2	i	p_1	z	Coupling			Spacer-type coupling			
	1450 rpm	1750 rpm	2900 rpm	3500 rpm															l_1	l_2	l_3	l_1	l_2	l_3	x
040-025-160	0,55	0,63	-	-	80M	A	40	25	80	450	240	300	360	232	160	100	294	190	860	650	710	950	740	800	100
040-025-160	-	-	0,75	-	80M	A	40	25	80	450	240	300	360	232	160	100	294	190	860	650	710	950	740	800	100
040-025-160	-	-	1,1	-	80M	A	40	25	80	450	240	300	360	232	160	100	294	190	860	650	710	950	740	800	100
040-025-160	-	-	1,5	1,75	90S	A	40	25	80	450	240	300	360	232	160	100	299	190	860	650	710	950	740	800	100
040-025-160	-	-	2,2	2,55	90L	A	40	25	80	450	240	300	360	232	160	100	299	211	950	740	800	1050	840	900	100
040-025-160	-	-	3,0	3,45	100L	A	40	25	80	450	240	300	360	232	160	100	338	211	1050	840	900	1150	940	1000	100
040-025-160	-	-	-	4,55	112M	A	40	25	80	450	240	300	360	232	160	100	353	211	1050	840	900	1150	940	1000	100
040-025-200	0,55	0,63	-	-	80M	A	40	25	80	450	240	300	360	260	180	100	294	190	860	650	710	950	740	800	100
040-025-200	0,75	0,86	-	-	80M	A	40	25	80	450	240	300	360	260	180	100	294	190	860	650	710	950	740	800	100

Size	Motor rating [kW]				Motor	Fig.	DN_1	DN_2	a	b_1	b_2	b_3	f	h_1	h_2	i	p_1	z	Coupling			Spacer-type coupling			
	1450 rpm	1750 rpm	2900 rpm	3500 rpm															l_1	l_2	l_3	l_1	l_2	l_3	x
040-025-200	-	1,27	-	-	90S	A	40	25	80	450	240	300	360	260	180	100	299	190	860	650	710	950	740	800	100
040-025-200	-	-	1,5	-	90S	A	40	25	80	450	240	300	360	260	180	100	299	190	860	650	710	950	740	800	100
040-025-200	-	-	2,2	-	90L	A	40	25	80	450	240	300	360	260	180	100	299	211	950	740	800	1050	840	900	100
040-025-200	-	-	3,0	3,45	100L	A	40	25	80	450	240	300	360	260	180	100	338	211	1050	840	900	1150	940	1000	100
040-025-200	-	-	4,0	4,55	112M	A	40	25	80	450	240	300	360	260	180	100	353	211	1050	840	900	1150	940	1000	100
040-025-200	-	-	5,5	6,3	132S	A	40	25	80	450	240	300	360	260	180	100	413	280	1050	840	900	1150	940	1000	100
040-025-200	-	-	-	8,6	132S	A	40	25	80	450	240	300	360	260	180	100	413	280	1050	840	900	1150	940	1000	100
050-032-125.1	0,55	0,63	-	-	80M	A	50	32	80	450	240	300	360	212	140	100	294	190	860	650	710	950	740	800	100
050-032-125.1	-	-	0,75	-	80M	A	50	32	80	450	240	300	360	212	140	100	294	190	860	650	710	950	740	800	100
050-032-125.1	-	-	1,1	1,27	80M	A	50	32	80	450	240	300	360	212	140	100	294	190	860	650	710	950	740	800	100
050-032-125.1	-	-	1,5	1,75	90S	A	50	32	80	450	240	300	360	212	140	100	299	190	860	650	710	950	740	800	100
050-032-125.1	-	-	2,2	2,55	90L	A	50	32	80	450	240	300	360	212	140	100	299	211	950	740	800	1050	840	900	100
050-032-125.1	-	-	-	3,45	100L	A	50	32	80	450	240	300	360	212	140	100	338	211	1050	840	900	1150	940	1000	100
050-032-125.1	-	-	-	4,55	112M	A	50	32	80	450	240	300	360	212	140	100	353	211	1050	840	900	1150	940	1000	100
050-032-125.1	-	-	-	6,3	132S	A	50	32	80	450	240	300	360	232	140	100	413	280	1050	840	900	1150	940	1000	100
050-032-160.1	0,55	0,63	-	-	80M	A	50	32	80	450	240	300	360	232	160	100	-	-	860	650	710	950	740	800	100
050-032-160.1	-	0,86	-	-	80M	A	50	32	80	450	240	300	360	232	160	100	-	-	860	650	710	950	740	800	100
050-032-160.1	-	1,27	-	-	90S	A	50	32	80	450	240	300	360	232	160	100	-	-	860	650	710	950	740	800	100
050-032-160.1	-	-	1,5	-	90S	A	50	32	80	450	240	300	360	232	160	100	-	-	860	650	710	950	740	800	100
050-032-160.1	-	-	2,2	-	90L	A	50	32	80	450	240	300	360	232	160	100	-	-	950	740	800	1050	840	900	100
050-032-160.1	-	-	3,0	3,45	100L	A	50	32	80	450	240	300	360	232	160	100	-	-	1050	840	900	1150	940	1000	100
050-032-160.1	-	-	4,0	4,55	112M	A	50	32	80	450	240	300	360	232	160	100	-	-	1050	840	900	1150	940	1000	100
050-032-160.1	-	-	-	6,3	132S	A	50	32	80	450	240	300	360	232	160	100	-	-	1050	840	900	1150	940	1000	100
050-032-160.1	-	-	-	8,6	132S	A	50	32	80	450	240	300	360	232	160	100	-	-	1050	840	900	1150	940	1000	100
050-032-160.1	-	-	-	12,6	160M	A	50	32	80	500	280	350	360	260	160	100	-	-	1270	1060	1120	1270	1060	1120	100
050-032-200.1	0,55	-	-	-	80M	A	50	32	80	450	240	300	360	260	180	100	294	190	860	650	710	950	740	800	100
050-032-200.1	0,75	0,86	-	-	80M	A	50	32	80	450	240	300	360	260	180	100	294	190	860	650	710	950	740	800	100
050-032-200.1	1,1	1,27	-	-	90S	A	50	32	80	450	240	300	360	260	180	100	299	190	860	650	710	950	740	800	100
050-032-200.1	-	1,75	-	-	90L	A	50	32	80	450	240	300	360	260	180	100	299	190	950	740	800	1050	840	900	100
050-032-200.1	-	2,55	-	-	100L	A	50	32	80	450	240	300	360	260	180	100	338	211	1050	840	900	1150	940	1000	100
050-032-200.1	-	-	3,0	-	100L	A	50	32	80	450	240	300	360	260	180	100	338	211	1050	840	900	1150	940	1000	100
050-032-200.1	-	-	4,0	-	112M	A	50	32	80	450	240	300	360	260	180	100	353	211	1050	840	900	1150	940	1000	100
050-032-200.1	-	-	5,5	6,3	132S	A	50	32	80	450	240	300	360	260	180	100	413	280	1050	840	900	1150	940	1000	100
050-032-200.1	-	-	7,5	8,6	132S	A	50	32	80	450	240	300	360	260	180	100	413	280	1050	840	900	1150	940	1000	100
050-032-200.1	-	-	-	12,6	160M	A	50	32	80	500	280	350	360	260	180	100	444	280	1270	1060	1120	1270	1060	1120	100
050-032-200.1	-	-	-	17,3	160M	A	50	32	80	500	280	350	360	260	180	100	525	350	1270	1060	1120	1270	1060	1120	100
050-032-250.1	0,75	-	-	-	80M	A	50	32	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
050-032-250.1	1,1	1,27	-	-	90S	A	50	32	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
050-032-250.1	1,5	1,75	-	-	90L	A	50	32	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
050-032-250.1	2,2	2,55	-	-	100L	A	50	32	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
050-032-250.1	-	3,45	-	-	100L	A	50	32	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
050-032-250.1	-	-	5,5	-	132S	A	50	32	100	500	280	350	360	280	225	112	-	-	1050	840	900	1150	940	1000	100
050-032-250.1	-	-	7,5	8,6	132S	A	50	32	100	500	280	350	360	280	225	112	-	-	1050	840	900	1150	940	1000	100
050-032-250.1	-	-	11,0	12,6	160M	A	50	32	100	500	280	350	360	280	225	112	-	-	1270	1060	1120	1270	1060	1120	100
050-032-250.1	-	-	15,0	17,3	160M	A	50	32	100	500	280	350	360	280	225	112	-	-	1270	1060	1120	1270	1060	1120	100
050-032-125	0,55	0,63	-	-	80M	A	50	32	80	450	240	300	360	212	140	100	294	190	860	650	710	950	740	800	100
050-032-125	-	0,86	-	-	80M	A	50	32	80	450	240	300	360	212	140	100	294	190	860	650	710	950	740	800	100
050-032-125	-	-	1,1	-	80M	A	50	32	80	450	240	300	360	212	140	100	294	190	860	650	710	950	740	800	100
050-032-125	-	-	1,5	-	90S	A	50	32	80	450	240	300	360	212	140	100	299	190	860	650	710	950	740	800	100
050-032-125	-	-	2,2	2,55	90L	A	50	32	80	450	240	300	360	212	140	100	299	211	950	740	800	1050	840	900	100
050-032-125	-	-	3,0	3,45	100L	A	50	32	80	450	240	300	360	212	140	100	338	211	1050	840	900	1150	940	1000	100
050-032-125	-	-	4,0	4,55	112M	A	50	32	80	450	240	300	360	212	140	100	353	211	1050	840	900	1150	940	1000	100
050-032-125	-	-	-	6,3	132S	A	50	32	80	450	240	300	360	232	140	100	413	280	1050	840	900	1150	940	1000	100
050-032-160	0,55	0,63	-	-	80M	A	50	32	80	450	240	300	360	232	160	100	-	-	860	650	710	950	740	800	100
050-032-160	0,75	0,86	-	-	80M	A	50	32	80	450	240	300	360	232	160	100	-	-	860	650	710	950	740	800	100
050-032-160	-	1,27	-	-	90S	A	50	32	80	450	240	300	360	232	160	100	-	-	860	650	710	950	740	800	100
050-032-160	-	-	2,2	-	90L	A	50	32	80	450	240	300	360	232	160	100	-	-	950	740	800	1050	840	900	100
050-032-160	-	-	3,0	3,45	100L	A	50	32	80	450	240	300	360	232	160	100	-	-	1050	840	900	1150	940	1000	100
050-032-160	-	-	4,0	4,55	112M	A	50	32	80	450	240	300	360	232	160	100	-	-	1050	840	900	1150	940	1000	100
050-032-160	-	-	5,5	6,3	132S	A	50	32	80	450	240	300	360	232	160	100	-	-	1050	840	900	1150	940	1000	100
050-032-160	-	-	-	8,6	132S	A	50	32	80	450	240	300	360	232	160	100	-	-	1050	840	900	1150	940	1000	100
050-032-200	0,55	-	-	-	80M	A	50	32	80	450	240	300	360	260	180	100	294	190	860	650	710	950	740	800	100
050-032-200	0,75	-	-	-	80M	A	50	32	80	450	240	300	360	260	180	100	294	190	860	650	710	950	740	800	100
050-032-200	1,1	1,27	-	-	90S	A	50	32	80	450	240	300	360	260	180	100	299	190	860	650	710	950	740	800	100
050-032-200	1,5	1,75	-	-	90L	A	50	32	80	450	240	300	360	260	180	100	299	190	950	740	800	1050	840	900	100

Size	Motor rating [kW]				Motor	Fig.	DN_1	DN_2	a	b_1	b_2	b_3	f	h_1	h_2	i	p_1	z	Coupling			Spacer-type coupling			
	1450 rpm	1750 rpm	2900 rpm	3500 rpm															l_1	l_2	l_3	l_1	l_2	l_3	x
050-032-200	-	2,55	-	-	100L	A	50	32	80	450	240	300	360	260	180	100	338	211	1050	840	900	1150	940	1000	100
050-032-200	-	-	4,0	-	112M	A	50	32	80	450	240	300	360	260	180	100	353	211	1050	840	900	1150	940	1000	100
050-032-200	-	-	5,5	-	132S	A	50	32	80	450	240	300	360	260	180	100	413	280	1050	840	900	1150	940	1000	100
050-032-200	-	-	7,5	8,6	132S	A	50	32	80	450	240	300	360	260	180	100	413	280	1050	840	900	1150	940	1000	100
050-032-200	-	-	11,0	12,6	160M	A	50	32	80	500	280	350	360	260	180	100	444	280	1270	1060	1120	1270	1060	1120	100
050-032-200	-	-	-	17,3	160M	A	50	32	80	500	280	350	360	260	180	100	525	350	1270	1060	1120	1270	1060	1120	100
050-032-250	1,1	-	-	-	90S	A	50	32	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
050-032-250	1,5	1,75	-	-	90L	A	50	32	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
050-032-250	2,2	2,55	-	-	100L	A	50	32	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
050-032-250	3,0	3,45	-	-	100L	A	50	32	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
050-032-250	-	4,55	-	-	112M	A	50	32	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
050-032-250	-	6,3	-	-	132S	A	50	32	100	500	280	350	360	280	225	112	-	-	1050	840	900	1150	940	1000	100
050-032-250	-	-	7,5	-	132S	A	50	32	100	500	280	350	360	280	225	112	-	-	1050	840	900	1150	940	1000	100
050-032-250	-	-	11,0	12,6	160M	A	50	32	100	500	280	350	360	280	225	112	-	-	1270	1060	1120	1270	1060	1120	100
050-032-250	-	-	15,0	17,3	160M	A	50	32	100	500	280	350	360	280	225	112	-	-	1270	1060	1120	1270	1060	1120	100
065-040-125	0,55	0,63	-	-	80M	A	65	40	80	450	240	300	360	212	140	100	294	190	860	650	710	950	740	800	100
065-040-125	0,75	0,86	-	-	80M	A	65	40	80	450	240	300	360	212	140	100	294	190	860	650	710	950	740	800	100
065-040-125	-	1,27	-	-	90S	A	65	40	80	450	240	300	360	212	140	100	299	190	860	650	710	950	740	800	100
065-040-125	-	-	1,5	-	90S	A	65	40	80	450	240	300	360	212	140	100	299	190	860	650	710	950	740	800	100
065-040-125	-	-	2,2	-	90L	A	65	40	80	450	240	300	360	212	140	100	299	211	950	740	800	1050	840	900	100
065-040-125	-	-	3,0	3,45	100L	A	65	40	80	450	240	300	360	212	140	100	338	211	1050	840	900	1150	940	1000	100
065-040-125	-	-	4,0	4,55	112M	A	65	40	80	450	240	300	360	212	140	100	353	211	1050	840	900	1150	940	1000	100
065-040-125	-	-	5,5	6,3	132S	A	65	40	80	450	240	300	360	232	140	100	413	280	1050	840	900	1150	940	1000	100
065-040-125	-	-	-	8,6	132S	A	65	40	80	450	240	300	360	232	140	100	413	280	1050	840	900	1150	940	1000	100
065-040-125	-	-	-	12,6	160M	A	65	40	80	500	280	350	360	260	140	100	444	280	1270	1060	1120	1270	1060	1120	100
065-040-160	0,55	-	-	-	80M	A	65	40	80	450	240	300	360	232	160	100	-	-	860	650	710	950	740	800	100
065-040-160	0,75	0,86	-	-	80M	A	65	40	80	450	240	300	360	232	160	100	-	-	860	650	710	950	740	800	100
065-040-160	1,1	1,27	-	-	90S	A	65	40	80	450	240	300	360	232	160	100	-	-	860	650	710	950	740	800	100
065-040-160	1,5	1,75	-	-	90L	A	65	40	80	450	240	300	360	232	160	100	-	-	950	740	800	1050	840	900	100
065-040-160	-	2,55	-	-	100L	A	65	40	80	450	240	300	360	232	160	100	-	-	1050	840	900	1150	940	1000	100
065-040-160	-	-	3,0	-	100L	A	65	40	80	450	240	300	360	232	160	100	-	-	1050	840	900	1150	940	1000	100
065-040-160	-	-	4,0	-	112M	A	65	40	80	450	240	300	360	232	160	100	-	-	1050	840	900	1150	940	1000	100
065-040-160	-	-	5,5	6,3	132S	A	65	40	80	450	240	300	360	232	160	100	-	-	1050	840	900	1150	940	1000	100
065-040-160	-	-	7,5	8,6	132S	A	65	40	80	450	240	300	360	232	160	100	-	-	1050	840	900	1150	940	1000	100
065-040-160	-	-	11,0	12,6	160M	A	65	40	80	500	280	350	360	260	160	100	-	-	1270	1060	1120	1270	1060	1120	100
065-040-160	-	-	-	17,3	160M	A	65	40	80	500	280	350	360	260	160	100	-	-	1270	1060	1120	1270	1060	1120	100
065-040-200	0,75	-	-	-	80M	A	65	40	100	450	240	300	360	260	180	100	294	190	860	650	710	950	740	800	100
065-040-200	1,1	0,86	-	-	90S	A	65	40	100	450	240	300	360	260	180	100	299	190	860	650	710	950	740	800	100
065-040-200	1,5	1,75	-	-	90L	A	65	40	100	450	240	300	360	260	180	100	299	190	860	650	710	950	740	800	100
065-040-200	2,2	2,55	-	-	100L	A	65	40	100	450	240	300	360	260	180	100	338	211	1050	840	900	1150	940	1000	100
065-040-200	-	3,45	-	-	100L	A	65	40	100	450	240	300	360	260	180	100	338	211	1050	840	900	1150	940	1000	100
065-040-200	-	-	5,5	-	132S	A	65	40	100	450	240	300	360	260	180	100	413	280	1050	840	900	1150	940	1000	100
065-040-200	-	-	7,5	-	132S	A	65	40	100	450	240	300	360	260	180	100	413	280	1050	840	900	1150	940	1000	100
065-040-200	-	-	11,0	12,6	160M	A	65	40	100	500	280	350	360	260	180	100	444	280	1270	1060	1120	1270	1060	1120	100
065-040-200	-	-	15,0	17,3	160M	A	65	40	100	500	280	350	360	260	180	100	525	350	1270	1060	1120	1270	1060	1120	100
065-040-200	-	-	-	21,3	160L	A	65	40	100	500	280	350	360	260	180	100	525	350	1270	1060	1120	1400	1190	1250	100
065-040-200	-	-	-	24,5	180M	A	65	40	100	550	320	400	360	290	180	100	577	350	1400	1190	1250	1400	1190	1250	100
065-040-250	1,1	-	-	-	90S	A	65	40	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
065-040-250	1,5	-	-	-	90L	A	65	40	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
065-040-250	2,2	2,55	-	-	100L	A	65	40	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
065-040-250	3,0	3,45	-	-	100L	A	65	40	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
065-040-250	4,0	4,55	-	-	112M	A	65	40	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
065-040-250	-	6,3	-	-	132S	A	65	40	100	500	280	350	360	280	225	112	-	-	1050	840	900	1150	940	1000	100
065-040-250	-	-	11,0	-	160M	A	65	40	100	500	280	350	360	280	225	112	-	-	1270	1060	1120	1270	1060	1120	100
065-040-250	-	-	15,0	17,3	160M	A	65	40	100	500	280	350	360	280	225	112	-	-	1270	1060	1120	1270	1060	1120	100
065-040-250	-	-	18,5	21,3	160L	A	65	40	100	500	280	350	360	280	225	112	-	-	1270	1060	1120	1400	1190	1250	100
065-040-250	-	-	22,0	24,5	180M	A	65	40	100	550	320	400	360	290	225	112	-	-	1400	1190	1250	1400	1190	1250	100
065-040-250	-	-	30,0	33,5	200L	A	65	40	100	550	320	400	360	310	225	112	-	-	1400	1190	1250	1400	1190	1250	100
065-040-315	2,2	-	-	-	100L	A	65	40	125	500	280	350	470	325	250	112	-	-	1050	840	900	1150	940	1000	100
065-040-315	3,0	-	-	-	100L	A	65	40	125	500	280	350	470	325	250	112	-	-	1050	840	900	1150	940	1000	100
065-040-315	4,0	4,55	-	-	112M	A	65	40	125	500	280	350	470	325	250	112	-	-	1150	940	1000	1270	1060	1120	100
065-040-315	5,5	6,3	-	-	132S	A	65	40	125	500	280	350	470	325	250	112	-	-	1150	940	1000	1270	1060	1120	100
065-040-315	7,5	8,6	-	-	132M	A	65	40	125	500	280	350	470	325	250	112	-	-	1270	1060	1120	1270	1060	1120	100
065-040-315	-	12,6	-	-	160M	A	65	40	125	550	320	400	470	335	250	112	-	-	1400	1190	1250	1400	1190	1250	100
065-040-315	-	-	18,5	-	160L	A	65	40	125	550	320	400	500	335	250	112	-	-	1400	1190	1250	1400	1190	1250	100
065-040-315	-	-	22,0	-	180M	A	65	40	125	550	320	400	500	335	250	112	-	-	1400	1190	1250	1570	1360	1420	100

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Size	Motor rating [kW]				Motor	Fig.	DN_1	DN_2	a	b_1	b_2	b_3	f	h_1	h_2	i	p_1	z	Coupling			Spacer-type coupling			
	1450 rpm	1750 rpm	2900 rpm	3500 rpm															l_1	l_2	l_3	l_1	l_2	l_3	x
065-040-315	-	-	30,0	-	200L	A	65	40	125	550	320	400	500	335	250	112	-	-	1400	1190	1250	1570	1360	1420	100
065-040-315	-	-	37,0	-	200L	A	65	40	125	550	320	400	500	335	250	112	-	-	1400	1190	1250	1570	1360	1420	100
065-040-315	-	-	45,0	-	225M	B	65	40	125	750	550	590	500	365	250	112	-	-	1550	940	1400	1550	940	1400	100
065-050-125	0,55	-	-	-	80M	A	65	50	100	450	240	300	360	232	160	100	294	190	860	650	710	950	740	800	100
065-050-125	0,75	0,86	-	-	80M	A	65	50	100	450	240	300	360	232	160	100	294	190	860	650	710	950	740	800	100
065-050-125	1,1	1,27	-	-	90S	A	65	50	100	450	240	300	360	232	160	100	299	190	860	650	710	950	740	800	100
065-050-125	-	1,75	-	-	90L	A	65	50	100	450	240	300	360	232	160	100	299	190	950	740	800	1050	840	900	100
065-050-125	-	-	3,0	-	100L	A	65	50	100	450	240	300	360	232	160	100	338	211	1050	840	900	1150	940	1000	100
065-050-125	-	-	4,0	-	112M	A	65	50	100	450	240	300	360	232	160	100	353	211	1050	840	900	1150	940	1000	100
065-050-125	-	-	5,5	6,3	132S	A	65	50	100	450	240	300	360	232	160	100	413	280	1050	840	900	1150	940	1000	100
065-050-125	-	-	7,5	8,6	132S	A	65	50	100	450	240	300	360	232	160	100	413	280	1050	840	900	1150	940	1000	100
065-050-125	-	-	-	12,6	160M	A	65	50	100	500	280	350	360	260	160	100	444	280	1270	1060	1120	1270	1060	1120	100
065-050-125	-	-	-	17,3	160M	A	65	50	100	500	280	350	360	260	160	100	525	350	1270	1060	1120	1270	1060	1120	100
065-050-160	0,75	-	-	-	80M	A	65	50	100	450	240	300	360	260	180	100	-	-	860	650	710	950	740	800	100
065-050-160	1,1	1,27	-	-	90S	A	65	50	100	450	240	300	360	260	180	100	-	-	860	650	710	950	740	800	100
065-050-160	1,5	1,75	-	-	90L	A	65	50	100	450	240	300	360	260	180	100	-	-	860	650	710	950	740	800	100
065-050-160	2,2	2,55	-	-	100L	A	65	50	100	450	240	300	360	260	180	100	-	-	1050	840	900	1150	940	1000	100
065-050-160	-	3,45	-	-	100L	A	65	50	100	450	240	300	360	260	180	100	-	-	1050	840	900	1150	940	1000	100
065-050-160	-	-	5,5	-	132S	A	65	50	100	450	240	300	360	260	180	100	-	-	1050	840	900	1150	940	1000	100
065-050-160	-	-	7,5	8,6	132S	A	65	50	100	450	240	300	360	260	180	100	-	-	1050	840	900	1150	940	1000	100
065-050-160	-	-	11,0	12,6	160M	A	65	50	100	500	280	350	360	260	180	100	-	-	1270	1060	1120	1270	1060	1120	100
065-050-160	-	-	15,0	17,3	160M	A	65	50	100	500	280	350	360	260	180	100	-	-	1270	1060	1120	1270	1060	1120	100
065-050-160	-	-	-	21,3	160L	A	65	50	100	500	280	350	360	260	180	100	-	-	1270	1060	1120	1400	1190	1250	100
065-050-160	-	-	-	24,5	180M	A	65	50	100	550	320	400	360	290	180	100	-	-	1400	1190	1250	1400	1190	1250	100
065-050-200	1,5	-	-	-	90L	A	65	50	100	450	240	300	360	260	200	100	299	190	950	740	800	1050	840	900	100
065-050-200	2,2	2,55	-	-	100L	A	65	50	100	450	240	300	360	260	200	100	338	211	1050	840	900	1150	940	1000	100
065-050-200	3,0	3,45	-	-	100L	A	65	50	100	450	240	300	360	260	200	100	338	211	1050	840	900	1150	940	1000	100
065-050-200	4,0	4,55	-	-	112M	A	65	50	100	450	240	300	360	260	200	100	353	211	1050	840	900	1150	940	1000	100
065-050-200	-	6,3	-	-	132S	A	65	50	100	450	240	300	360	260	200	100	413	280	1050	840	900	1150	940	1000	100
065-050-200	-	-	11,0	-	160M	A	65	50	100	500	280	350	360	260	200	100	444	280	1270	1060	1120	1270	1060	1120	100
065-050-200	-	-	15,0	-	160M	A	65	50	100	500	280	350	360	260	200	100	525	350	1270	1060	1120	1270	1060	1120	100
065-050-200	-	-	18,5	21,3	160L	A	65	50	100	500	280	350	360	260	200	100	525	350	1270	1060	1120	1400	1190	1250	100
065-050-200	-	-	22,0	24,5	180M	A	65	50	100	550	320	400	360	290	200	100	577	350	1400	1190	1250	1400	1190	1250	100
065-050-200	-	-	30,0	33,5	200L	A	65	50	100	550	320	400	360	310	200	100	626	350	1400	1190	1250	1400	1190	1250	100
065-050-200	-	-	-	41,5	200L	A	65	50	100	550	320	400	360	310	200	100	675	455	1400	1190	1250	1400	1190	1250	100
065-050-250	2,2	-	-	-	100L	A	65	50	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
065-050-250	3,0	-	-	-	100L	A	65	50	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
065-050-250	4,0	4,55	-	-	112M	A	65	50	100	500	280	350	360	280	225	112	-	-	1050	840	900	1050	840	900	100
065-050-250	5,5	6,3	-	-	132S	A	65	50	100	500	280	350	360	280	225	112	-	-	1050	840	900	1150	940	1000	100
065-050-250	-	8,6	-	-	132M	A	65	50	100	500	280	350	360	280	225	112	-	-	1150	940	1000	1270	1060	1120	100
065-050-250	-	12,6	-	-	160M	A	65	50	100	500	280	350	360	280	225	112	-	-	1270	1060	1120	1270	1060	1120	100
065-050-250	-	-	15,0	-	160M	A	65	50	100	500	280	350	360	280	225	112	-	-	1270	1060	1120	1270	1060	1120	100
065-050-250	-	-	18,5	-	160L	A	65	50	100	500	280	350	360	280	225	112	-	-	1270	1060	1120	1400	1190	1250	100
065-050-250	-	-	22,0	-	180M	A	65	50	100	550	320	400	360	290	225	112	-	-	1400	1190	1250	1400	1190	1250	100
065-050-250	-	-	30,0	33,5	200L	A	65	50	100	550	320	400	360	310	225	112	-	-	1400	1190	1250	1400	1190	1250	100
065-050-250	-	-	37,0	41,5	200L	A	65	50	100	550	320	400	360	310	225	112	-	-	1400	1190	1250	1400	1190	1250	100
065-050-315	3,0	-	-	-	100L	A	65	50	125	500	280	350	470	325	280	112	-	-	1050	840	900	1150	940	1000	100
065-050-315	4,0	-	-	-	112M	A	65	50	125	500	280	350	470	325	280	112	-	-	1150	940	1000	1270	1060	1120	100
065-050-315	5,5	-	-	-	132S	A	65	50	125	500	280	350	470	325	280	112	-	-	1150	940	1000	1270	1060	1120	100
065-050-315	7,5	8,6	-	-	132M	A	65	50	125	500	280	350	470	325	280	112	-	-	1270	1060	1120	1270	1060	1120	100
065-050-315	11,0	12,6	-	-	160M	A	65	50	125	550	320	400	470	335	280	112	-	-	1400	1190	1250	1400	1190	1250	100
065-050-315	-	17,3	-	-	160L	A	65	50	125	550	320	400	470	335	280	112	-	-	1400	1190	1250	1400	1190	1250	100
065-050-315	-	-	22,0	-	180M	A	65	50	125	550	320	400	500	335	280	112	-	-	1400	1190	1250	1570	1360	1420	100
065-050-315	-	-	30,0	-	200L	A	65	50	125	550	320	400	500	335	280	112	-	-	1400	1190	1250	1570	1360	1420	100
065-050-315	-	-	37,0	-	200L	A	65	50	125	550	320	400	500	335	280	112	-	-	1400	1190	1250	1570	1360	1420	100
065-050-315	-	-	45,0	-	225M	B	65	50	125	750	550	590	500	365	280	112	-	-	1550	940	1400	1550	940	1400	100
065-050-315	-	-	55,0	-	250M	B	65	50	125	810	600	650	500	390	280	112	-	-	1750	1060	1600	1750	1060	1600	100
065-050-315	-	-	75,0	-	280S	B	65	50	125	880	670	720	500	420	280	112	-	-	1750	1060	1600	1750	1060	1600	100
080-065-125	0,55	-	-	-	80M	A	80	65	100	450	240	300	360	260	180	112	294	190	860	650	710	950	740	800	100
080-065-125	0,75	0,86	-	-	80M	A	80	65	100	450	240	300	360	260	180	112	294	190	860	650	710	950	740	800	100
080-065-125	1,1	1,27	-	-	90S	A	80	65	100	450	240	300	360	260	180	112	299	190	950	740	800	1050	840	900	100
080-065-125	1,5	1,75	-	-	90L	A	80	65	100	450	240	300	360	260	180	112	299	190	950	740	800	1050	840	900	100
080-065-125	-	2,55	-	-	100L	A	80	65	100	450	240	300	360	260	180	112	338	211	1050	840	900	1150	940	1000	100
080-065-125	-	-	4,0	-	112M	A	80	65	100	450	240	300	360	260	180	112	353	211	1050	840	900	1150	940	1000	100
080-065-125	-	-	5,5	-	132S	A	80	65	100	450	240	300	360	260	180	112	370	280	1050	840	900	1150	940	1000	100
080-065-125	-	-	7,5	8,6	132S	A	80	65	100	450	240	300	360	260	180	112	370	280	1050	840	900	1150	940	1000	100

Size	Motor rating [kW]				Motor	Fig.	DN_1	DN_2	a	b_1	b_2	b_3	f	h_1	h_2	i	p_1	z	Coupling			Spacer-type coupling			
	1450 rpm	1750 rpm	2900 rpm	3500 rpm															l_1	l_2	l_3	l_1	l_2	l_3	x
080-065-125	-	-	11,0	12,6	160M	A	80	65	100	500	280	350	360	260	180	112	444	280	1270	1060	1120	1270	1060	1120	100
080-065-125	-	-	-	17,3	160M	A	80	65	100	500	280	350	360	260	180	112	525	350	1270	1060	1120	1270	1060	1120	100
080-065-160	1,1	1,27	-	-	90S	A	80	65	100	450	240	300	360	260	200	112	-	-	860	650	710	950	740	800	100
080-065-160	1,5	1,75	-	-	90L	A	80	65	100	450	240	300	360	260	200	112	-	-	950	740	800	1050	840	900	100
080-065-160	2,2	2,55	-	-	100L	A	80	65	100	450	240	300	360	260	200	112	-	-	1050	840	900	1150	940	1000	100
080-065-160	-	3,45	-	-	100L	A	80	65	100	450	240	300	360	260	200	112	-	-	1050	840	900	1150	940	1000	100
080-065-160	-	4,55	-	-	112M	A	80	65	100	450	240	300	360	260	200	112	-	-	1050	840	900	1150	940	1000	100
080-065-160	-	-	7,5	-	132S	A	80	65	100	450	240	300	360	260	200	112	-	-	1050	840	900	1150	940	1000	100
080-065-160	-	-	11,0	12,6	160M	A	80	65	100	500	280	350	360	260	200	112	-	-	1270	1060	1120	1270	1060	1120	100
080-065-160	-	-	15,0	17,3	160M	A	80	65	100	500	280	350	360	260	200	112	-	-	1270	1060	1120	1270	1060	1120	100
080-065-160	-	-	18,5	21,3	160L	A	80	65	100	500	280	350	360	260	200	112	-	-	1270	1060	1120	1400	1190	1250	100
080-065-160	-	-	-	24,5	180M	A	80	65	100	550	320	400	360	290	200	112	-	-	1400	1190	1250	1400	1190	1250	100
080-065-160	-	-	-	33,5	200L	A	80	65	100	550	320	400	360	310	200	112	-	-	1400	1190	1250	1400	1190	1250	100
080-065-200	2,2	2,55	-	-	100L	A	80	65	100	500	280	350	360	280	225	112	338	211	1050	840	900	1150	940	1000	140
080-065-200	3,0	3,45	-	-	100L	A	80	65	100	500	280	350	360	280	225	112	338	211	1050	840	900	1150	940	1000	140
080-065-200	4,0	4,55	-	-	112M	A	80	65	100	500	280	350	360	280	225	112	353	211	1050	840	900	1150	940	1000	140
080-065-200	5,5	6,3	-	-	132S	A	80	65	100	500	280	350	360	280	225	112	413	280	1050	840	900	1150	940	1000	140
080-065-200	-	8,6	-	-	132M	A	80	65	100	500	280	350	360	280	225	112	413	280	1150	940	1000	1270	1060	1120	140
080-065-200	-	-	15,0	-	160M	A	80	65	100	500	280	350	360	280	225	112	525	350	1270	1060	1120	1400	1190	1250	140
080-065-200	-	-	18,5	21,3	160L	A	80	65	100	500	280	350	360	280	225	112	525	350	1270	1060	1120	1400	1190	1250	140
080-065-200	-	-	22,0	24,5	180M	A	80	65	100	550	320	400	360	290	225	112	577	350	1400	1190	1250	1400	1190	1250	140
080-065-200	-	-	30,0	33,5	200L	A	80	65	100	550	320	400	360	310	225	112	626	350	1400	1190	1250	1400	1190	1250	140
080-065-200	-	-	37,0	41,5	200L	A	80	65	100	550	320	400	360	310	225	112	675	455	1400	1190	1250	1400	1190	1250	140
080-065-250	3,0	-	-	-	100L	A	80	65	100	550	320	400	470	310	250	130	-	-	1150	940	1000	1400	1190	1250	140
080-065-250	4,0	-	-	-	112M	A	80	65	100	550	320	400	470	310	250	130	-	-	1150	940	1000	1400	1190	1250	140
080-065-250	5,5	6,3	-	-	132S	A	80	65	100	550	320	400	470	310	250	130	-	-	1150	940	1000	1400	1190	1250	140
080-065-250	7,5	8,6	-	-	132M	A	80	65	100	550	320	400	470	310	250	130	-	-	1150	940	1000	1400	1190	1250	140
080-065-250	-	12,6	-	-	160M	A	80	65	100	550	320	400	470	310	250	130	-	-	1400	1190	1250	1570	1360	1420	140
080-065-250	-	-	22,0	-	180M	A	80	65	100	550	320	400	470	310	250	130	-	-	1400	1190	1250	1570	1360	1420	140
080-065-250	-	-	30,0	-	200L	A	80	65	100	550	320	400	470	310	250	130	-	-	1400	1190	1250	1570	1360	1420	140
080-065-250	-	-	37,0	41,5	200L	A	80	65	100	550	320	400	470	310	250	130	-	-	1400	1190	1250	1570	1360	1420	140
080-065-250	-	-	45,0	51,0	225M	B	80	65	100	750	550	590	470	365	250	130	-	-	1550	940	1400	1550	940	1400	140
080-065-315	5,5	-	-	-	132S	A	80	65	125	550	320	400	470	335	280	130	-	-	1150	940	1000	1400	1190	1250	140
080-065-315	7,5	-	-	-	132M	A	80	65	125	550	320	400	470	335	280	130	-	-	1150	940	1000	1400	1190	1250	140
080-065-315	11,0	12,6	-	-	160M	A	80	65	125	550	320	400	470	335	280	130	-	-	1400	1190	1250	1570	1360	1420	140
080-065-315	15,0	17,3	-	-	160L	A	80	65	125	550	320	400	470	335	280	130	-	-	1400	1190	1250	1570	1360	1420	140
080-065-315	-	21,3	-	-	180M	A	80	65	125	550	320	400	470	335	280	130	-	-	1400	1190	1250	1570	1360	1420	140
080-065-315	-	25,3	-	-	180L	A	80	65	125	550	320	400	470	335	280	130	-	-	1400	1190	1250	1570	1360	1420	140
080-065-315	-	-	30,0	-	200L	B	80	65	125	750	550	590	530	365	280	130	-	-	1550	940	1400	1550	940	1400	140
080-065-315	-	-	37,0	-	200L	B	80	65	125	750	550	590	530	365	280	130	-	-	1550	940	1400	1550	940	1400	140
080-065-315	-	-	45,0	-	225M	B	80	65	125	810	600	650	530	365	280	130	-	-	1750	1060	1600	1750	1060	1600	140
080-065-315	-	-	55,0	-	250M	B	80	65	125	810	600	650	530	390	280	130	-	-	1750	1060	1600	1750	1060	1600	140
080-065-315	-	-	75,0	-	280S	B	80	65	125	880	670	720	530	420	280	130	-	-	1750	1060	1600	1800	1100	1650	140
080-065-315	-	-	90,0	-	280M	B	80	65	125	880	670	720	530	420	280	130	-	-	1750	1060	1600	1800	1100	1650	140
080-065-315	-	-	110,0	-	315S	B	80	65	125	940	730	780	530	455	280	130	-	-	1800	1100	1650	2150	1340	2000	140
100-080-160	1,5	-	-	-	90L	A	100	80	125	500	280	350	360	280	225	112	299	190	1050	840	900	1050	840	900	140
100-080-160	2,2	-	-	-	100L	A	100	80	125	500	280	350	360	280	225	112	338	211	1050	840	900	1150	940	1000	140
100-080-160	3,0	3,45	-	-	100L	A	100	80	125	500	280	350	360	280	225	112	338	211	1050	840	900	1150	940	1000	140
100-080-160	4,0	4,55	-	-	112M	A	100	80	125	500	280	350	360	280	225	112	353	211	1050	840	900	1150	940	1000	140
100-080-160	-	6,3	-	-	132S	A	100	80	125	500	280	350	360	280	225	112	413	280	1050	840	900	1150	940	1000	140
100-080-160	-	-	15,0	-	160M	A	100	80	125	500	280	350	360	280	225	112	525	350	1270	1060	1120	1400	1190	1250	140
100-080-160	-	-	18,5	21,3	160L	A	100	80	125	500	280	350	360	280	225	112	525	350	1270	1060	1120	1400	1190	1250	140
100-080-160	-	-	22,0	24,5	180M	A	100	80	125	550	320	400	360	290	225	112	577	350	1400	1190	1250	1400	1190	1250	140
100-080-160	-	-	30,0	33,5	200L	A	100	80	125	550	320	400	360	310	225	112	626	350	1400	1190	1250	1400	1190	1250	140
100-080-160	-	-	-	41,5	200L	A	100	80	125	550	320	400	360	310	225	112	675	455	1400	1190	1250	1400	1190	1250	140
100-080-200	2,2	-	-	-	100L	A	100	80	125	500	280	350	470	280	250	112	338	211	1150	940	1000	1270	1060	1120	140
100-080-200	3,0	-	-	-	100L	A	100	80	125	500	280	350	470	280	250	112	338	211	1150	940	1000	1270	1060	1120	140
100-080-200	4,0	4,55	-	-	112M	A	100	80	125	500	280	350	470	280	250	112	353	211	1150	940	1000	1270	1060	1120	140
100-080-200	5,5	6,3	-	-	132S	A	100	80	125	500	280	350	470	280	250	112	413	280	1150	940	1000	1270	1060	1120	140
100-080-200	7,5	8,6	-	-	132M	A	100	80	125	500	280	350	470	280	250	112	413	280	1270	1060	1120	1400	1190	1250	140
100-080-200	-	12,6	-	-	160M	A	100	80	125	500	280	350	470	280	250	112	444	280	1270	1060	1120	1400	1190	1250	140
100-080-200	-	-	18,5	-	160L	A	100	80	125	550	320	400	470	290	250	112	525	350	1400	1190	1250	1570	1360	1420	140
100-080-200	-	-	22,0	-	180M	A	100	80	125	550	320	400	470	290	250	112	577	350	1400	1190	1250	1570	1360	1420	140
100-080-200	-	-	30,0	33,5	200L	A	100	80	125	550	320	400	470	310	250	112	626	350	1400	1190	1250	1570	1360	1420	140
100-080-200	-	-	37,0	41,5	200L	A	100	80	125	550	320	400	470	310	250	112	675	455	1400	1190	1250	1570	1360	1420	140
100-080-200	-	-	45,0	51,0	225M	B	100	80	125	750	550	590	470	365	250	112	699	455	1550	940	1400	1550	940	1400	140

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Size	Motor rating [kW]				Motor	Fig.	DN_1	DN_2	a	b_1	b_2	b_3	f	h_1	h_2	i	p_1	z	Coupling			Spacer-type coupling			
	1450 rpm	1750 rpm	2900 rpm	3500 rpm															l_1	l_2	l_3	l_1	l_2	l_3	x
100-080-200	-	-	55,0	62,0	250M	B	100	80	125	810	600	650	470	390	250	112	-	-	1750	1060	1600	1750	1060	1600	140
100-080-200	-	-	75,0	84,0	280S	B	100	80	125	880	670	720	470	420	250	112	-	-	1750	1060	1600	1750	1060	1600	140
100-080-250	4,0	-	-	-	112M	A	100	80	125	550	320	400	470	310	280	130	-	-	1150	940	1000	1400	1190	1250	140
100-080-250	5,5	-	-	-	132S	A	100	80	125	550	320	400	470	310	280	130	-	-	1150	940	1000	1400	1190	1250	140
100-080-250	7,5	8,6	-	-	132M	A	100	80	125	550	320	400	470	310	280	130	-	-	1150	940	1000	1400	1190	1250	140
100-080-250	11,0	12,6	-	-	160M	A	100	80	125	550	320	400	470	310	280	130	-	-	1400	1190	1250	1570	1360	1420	140
100-080-250	-	17,3	-	-	160L	A	100	80	125	550	320	400	470	310	280	130	-	-	1400	1190	1250	1570	1360	1420	140
100-080-250	-	21,3	-	-	180M	A	100	80	125	550	320	400	470	310	280	130	-	-	1400	1190	1250	1570	1360	1420	140
100-080-250	-	-	30,0	-	200L	A	100	80	125	550	320	400	470	310	280	130	-	-	1400	1190	1250	1570	1360	1420	140
100-080-250	-	-	37,0	-	200L	A	100	80	125	550	320	400	470	310	280	130	-	-	1400	1190	1250	1570	1360	1420	140
100-080-250	-	-	45,0	-	225M	B	100	80	125	750	550	590	470	365	280	130	-	-	1550	940	1400	1550	940	1400	140
100-080-250	-	-	55,0	62,0	250M	B	100	80	125	810	600	650	470	390	280	130	-	-	1750	1060	1600	1750	1060	1600	140
100-080-250	-	-	75,0	84,0	280S	B	100	80	125	880	670	720	470	420	280	130	-	-	1750	1060	1600	1750	1060	1600	140
100-080-315	7,5	-	-	-	132M	A	100	80	125	550	320	400	470	360	315	130	-	-	1150	940	1000	1400	1190	1250	140
100-080-315	11,0	-	-	-	160M	A	100	80	125	550	320	400	470	360	315	130	-	-	1400	1190	1250	1570	1360	1420	140
100-080-315	15,0	17,3	-	-	160L	A	100	80	125	550	320	400	470	360	315	130	-	-	1400	1190	1250	1570	1360	1420	140
100-080-315	18,5	21,3	-	-	180M	A	100	80	125	550	320	400	470	360	315	130	-	-	1400	1190	1250	1570	1360	1420	140
100-080-315	22,0	25,3	-	-	180L	A	100	80	125	550	320	400	470	360	315	130	-	-	1400	1190	1250	1570	1360	1420	140
100-080-315	-	34,5	-	-	200L	B	100	80	125	750	550	590	470	390	315	130	-	-	1550	940	1400	1550	940	1400	140
100-080-315	-	42,5	-	-	225S	B	100	80	125	750	550	590	470	390	315	130	-	-	1550	940	1400	1550	940	1400	140
100-080-315	-	-	55,0	-	250M	B	100	80	125	810	600	650	530	390	315	130	-	-	1750	1060	1600	1750	1060	1600	140
100-080-315	-	-	75,0	-	280S	B	100	80	125	880	670	720	530	420	315	130	-	-	1750	1060	1600	1800	1100	1650	140
100-080-315	-	-	90,0	-	280M	B	100	80	125	880	670	720	530	420	315	130	-	-	1750	1060	1600	1800	1100	1650	140
100-080-315	-	-	110,0	-	315S	B	100	80	125	940	730	780	530	455	315	130	-	-	1800	1100	1650	2150	1340	2000	140
100-080-315	-	-	132,0	-	315M	B	100	80	125	940	730	780	530	455	315	130	-	-	1800	1100	1650	2150	1340	2000	140
100-080-315	-	-	160,0	-	315L	B	100	80	125	940	730	780	530	455	315	130	-	-	1800	1100	1650	2150	1340	2000	140
100-080-400	11,0	-	-	-	160M	B	100	80	125	750	550	590	530	420	355	112	-	-	1550	940	1400	1550	940	1400	140
100-080-400	15,0	-	-	-	160L	B	100	80	125	750	550	590	530	420	355	112	-	-	1550	940	1400	1550	940	1400	140
100-080-400	18,5	-	-	-	180M	B	100	80	125	750	550	590	530	420	355	112	-	-	1550	940	1400	1550	940	1400	140
100-080-400	22,0	25,3	-	-	180L	B	100	80	125	750	550	590	530	420	355	112	-	-	1550	940	1400	1550	940	1400	140
100-080-400	30,0	34,5	-	-	200L	B	100	80	125	750	550	590	530	420	355	112	-	-	1550	940	1400	1550	940	1400	140
100-080-400	37,0	42,5	-	-	225S	B	100	80	125	750	550	590	530	420	355	112	-	-	1550	940	1400	1550	940	1400	140
100-080-400	-	52,0	-	-	225M	B	100	80	125	810	600	650	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
100-080-400	-	63,0	-	-	250M	B	100	80	125	810	600	650	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
125-100-160	3,0	-	-	-	100L	A	125	100	125	550	320	400	470	310	280	130	338	211	1150	940	1000	1400	1190	1250	140
125-100-160	4,0	-	-	-	112M	A	125	100	125	550	320	400	470	310	280	130	353	211	1150	940	1000	1400	1190	1250	140
125-100-160	5,5	6,3	-	-	132S	A	125	100	125	550	320	400	470	310	280	130	413	280	1150	940	1000	1400	1190	1250	140
125-100-160	-	8,6	-	-	132M	A	125	100	125	550	320	400	470	310	280	130	413	280	1150	940	1000	1400	1190	1250	140
125-100-160	-	-	22,0	-	180M	A	125	100	125	550	320	400	470	310	280	130	577	350	1400	1190	1250	1570	1360	1420	140
125-100-160	-	-	30,0	-	200L	A	125	100	125	550	320	400	470	310	280	130	626	350	1400	1190	1250	1570	1360	1420	140
125-100-160	-	-	37,0	41,5	200L	A	125	100	125	550	320	400	470	310	280	130	675	455	1400	1190	1250	1570	1360	1420	140
125-100-160	-	-	-	51,0	225M	B	125	100	125	750	550	590	470	365	280	130	699	455	1550	940	1400	1550	940	1400	140
125-100-160	-	-	-	62,0	250M	B	125	100	125	810	600	650	470	390	280	130	-	-	1750	1060	1600	1750	1060	1600	140
125-100-160	-	-	-	84,0	280S	B	125	100	125	880	670	720	470	420	280	130	-	-	1750	1060	1600	1750	1060	1600	140
125-100-200	4,0	-	-	-	112M	A	125	100	125	550	320	400	470	310	280	130	353	211	1150	940	1000	1400	1190	1250	140
125-100-200	5,5	6,3	-	-	132S	A	125	100	125	550	320	400	470	310	280	130	413	280	1150	940	1000	1400	1190	1250	140
125-100-200	7,5	8,6	-	-	132M	A	125	100	125	550	320	400	470	310	280	130	413	280	1150	940	1000	1400	1190	1250	140
125-100-200	11,0	12,6	-	-	160M	A	125	100	125	550	320	400	470	310	280	130	444	280	1400	1190	1250	1570	1360	1420	140
125-100-200	-	17,3	-	-	160L	A	125	100	125	550	320	400	470	310	280	130	525	350	1400	1190	1250	1570	1360	1420	140
125-100-200	-	-	30,0	-	200L	A	125	100	125	550	320	400	470	310	280	130	626	350	1400	1190	1250	1570	1360	1420	140
125-100-200	-	-	37,0	-	200L	A	125	100	125	550	320	400	470	310	280	130	675	455	1400	1190	1250	1570	1360	1420	140
125-100-200	-	-	45,0	51,0	225M	B	125	100	125	750	550	590	470	365	280	130	699	455	1550	940	1400	1550	940	1400	140
125-100-200	-	-	55,0	62,0	250M	B	125	100	125	810	600	650	470	390	280	130	-	-	1750	1060	1600	1750	1060	1600	140
125-100-200	-	-	75,0	84,0	280S	B	125	100	125	880	670	720	470	420	280	130	-	-	1750	1060	1600	1750	1060	1600	140
125-100-200	-	-	-	101,0	280M	B	125	100	125	880	670	720	470	420	280	130	-	-	1750	1060	1600	1750	1060	1600	140
125-100-200	-	-	-	123,0	315S	B	125	100	125	940	730	780	470	455	280	130	-	-	1800	1100	1650	2150	1340	2000	140
125-100-250	7,5	-	-	-	132M	A	125	100	140	550	320	400	470	335	280	130	-	-	1150	940	1000	1400	1190	1250	140
125-100-250	11,0	12,6	-	-	160M	A	125	100	140	550	320	400	470	335	280	130	-	-	1400	1190	1250	1570	1360	1420	140
125-100-250	15,0	17,3	-	-	160L	A	125	100	140	550	320	400	470	335	280	130	-	-	1400	1190	1250	1570	1360	1420	140
125-100-250	-	21,3	-	-	180M	A	125	100	140	550	320	400	470	335	280	130	-	-	1400	1190	1250	1570	1360	1420	140
125-100-250	-	25,3	-	-	180L	A	125	100	140	550	320	400	470	335	280	130	-	-	1400	1190	1250	1570	1360	1420	140
125-100-250	-	-	55,0	-	250M	B	125	100	140	810	600	650	470	390	280	130	-	-	1750	1060	1600	1750	1060	1600	140
125-100-250	-	-	75,0	84,0	280S	B	125	100	140	880	670	720	470	420	280	130	-	-	1750	1060	1600	1750	1060	1600	140
125-100-250	-	-	90,0	101,0	280M	B	125	100	140	880	670	720	470	420	280	130	-	-	1750	1060	1600	1750	1060	1600	140
125-100-250	-	-	110,0	123,0	315S	B	125	100	140	940	730	780	470	455	280	130	-	-	1800	1100	1650	2150	1340	2000	140

Size	Motor rating [kW]				Motor	Fig.	DN_1	DN_2	a	b_1	b_2	b_3	f	h_1	h_2	i	p_1	z	Coupling			Spacer-type coupling			
	1450 rpm	1750 rpm	2900 rpm	3500 rpm															l_1	l_2	l_3	l_1	l_2	l_3	x
125-100-315	15,0	-	-	-	160L	A	125	100	140	550	320	400	470	360	315	130	-	-	1400	1190	1250	1570	1360	1420	140
125-100-315	18,5	-	-	-	180M	A	125	100	140	550	320	400	470	360	315	130	-	-	1400	1190	1250	1570	1360	1420	140
125-100-315	22,0	-	-	-	180L	A	125	100	140	550	320	400	470	360	315	130	-	-	1400	1190	1250	1570	1360	1420	140
125-100-315	30,0	34,5	-	-	200L	B	125	100	140	750	550	590	470	390	315	130	-	-	1550	940	1400	1550	940	1400	140
125-100-315	-	42,5	-	-	225S	B	125	100	140	750	550	590	470	390	315	130	-	-	1550	940	1400	1550	940	1400	140
125-100-315	-	52,0	-	-	225M	B	125	100	140	750	550	590	470	390	315	130	-	-	1550	940	1400	1550	940	1400	140
125-100-315	-	-	90,0	-	280M	B	125	100	140	880	670	720	530	420	315	130	-	-	1750	1060	1600	1800	1100	1650	140
125-100-315	-	-	110,0	-	315S	B	125	100	140	940	730	780	530	455	315	130	-	-	1800	1100	1650	2150	1340	2000	140
125-100-315	-	-	132,0	-	315M	B	125	100	140	940	730	780	530	455	315	130	-	-	1800	1100	1650	2150	1340	2000	140
125-100-315	-	-	160,0	-	315L	B	125	100	140	940	730	780	530	455	315	130	-	-	1800	1100	1650	2150	1340	2000	140
125-100-315	-	-	200,0	-	315L	B	125	100	140	940	730	780	530	455	315	130	-	-	1800	1100	1650	2150	1340	2000	140
125-100-400	22,0	-	-	-	180L	B	125	100	140	810	600	650	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
125-100-400	30,0	-	-	-	200L	B	125	100	140	810	600	650	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
125-100-400	37,0	42,5	-	-	225S	B	125	100	140	810	600	650	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
125-100-400	45,0	52,0	-	-	225M	B	125	100	140	810	600	650	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
125-100-400	55,0	63,0	-	-	250M	B	125	100	140	810	600	650	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
125-100-400	-	86,0	-	-	280S	B	125	100	140	880	670	720	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
150-125-200	7,5	-	-	-	132M	A	150	125	140	550	320	400	470	360	315	130	413	280	1150	940	1000	1400	1190	1250	140
150-125-200	11,0	12,6	-	-	160M	A	150	125	140	550	320	400	470	360	315	130	444	280	1400	1190	1250	1570	1360	1420	140
150-125-200	15,0	17,3	-	-	160L	A	150	125	140	550	320	400	470	360	315	130	525	350	1400	1190	1250	1570	1360	1420	140
150-125-200	-	21,3	-	-	180M	A	150	125	140	550	320	400	470	360	315	130	577	350	1400	1190	1250	1570	1360	1420	140
150-125-200	-	25,3	-	-	180L	A	150	125	140	550	320	400	470	360	315	130	577	350	1400	1190	1250	1570	1360	1420	140
150-125-200	-	-	55,0	-	250M	B	150	125	140	810	600	650	470	390	315	130	-	-	1750	1060	1600	1750	1060	1600	140
150-125-200	-	-	75,0	84,0	280S	B	150	125	140	880	670	720	470	420	315	130	-	-	1750	1060	1600	1750	1060	1600	140
150-125-200	-	-	90,0	101,0	280M	B	150	125	140	880	670	720	470	420	315	130	-	-	1750	1060	1600	1750	1060	1600	140
150-125-200	-	-	110,0	123,0	315S	B	150	125	140	940	730	780	470	455	315	130	-	-	1800	1100	1650	2150	1340	2000	140
150-125-250	11,0	-	-	-	160M	A	150	125	140	550	320	400	470	360	355	130	-	-	1400	1190	1250	1570	1360	1420	140
150-125-250	15,0	17,3	-	-	160L	A	150	125	140	550	320	400	470	360	355	130	-	-	1400	1190	1250	1570	1360	1420	140
150-125-250	18,5	21,3	-	-	180M	A	150	125	140	550	320	400	470	360	355	130	-	-	1400	1190	1250	1570	1360	1420	140
150-125-250	22,0	25,3	-	-	180L	A	150	125	140	550	320	400	470	360	355	130	-	-	1400	1190	1250	1570	1360	1420	140
150-125-250	-	34,5	-	-	200L	B	150	125	140	750	550	590	470	390	355	130	-	-	1550	940	1400	1550	940	1400	140
150-125-250	-	42,5	-	-	225S	B	150	125	140	750	550	590	470	390	355	130	-	-	1550	940	1400	1550	940	1400	140
150-125-315	18,5	-	-	-	180M	B	150	125	140	810	600	650	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
150-125-315	22,0	-	-	-	180L	B	150	125	140	810	600	650	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
150-125-315	30,0	34,5	-	-	200L	B	150	125	140	810	600	650	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
150-125-315	37,0	42,5	-	-	225S	B	150	125	140	810	600	650	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
150-125-315	45,0	52,0	-	-	225M	B	150	125	140	810	600	650	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
150-125-315	-	63,0	-	-	250M	B	150	125	140	810	600	650	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
150-125-315	-	86,0	-	-	280S	B	150	125	140	880	670	720	530	420	355	112	-	-	1750	1060	1600	1750	1060	1600	140
150-125-400	30,0	-	-	-	200L	B	150	125	140	810	600	650	530	455	400	112	-	-	1750	1060	1600	1750	1060	1600	140
150-125-400	37,0	-	-	-	225S	B	150	125	140	810	600	650	530	455	400	112	-	-	1750	1060	1600	1750	1060	1600	140
150-125-400	45,0	-	-	-	225M	B	150	125	140	810	600	650	530	455	400	112	-	-	1750	1060	1600	1750	1060	1600	140
150-125-400	55,0	63,0	-	-	250M	B	150	125	140	810	600	650	530	455	400	112	-	-	1750	1060	1600	1750	1060	1600	140
150-125-400	75,0	86,0	-	-	280S	B	150	125	140	880	670	720	530	455	400	112	-	-	1750	1060	1600	1750	1060	1600	140
150-125-400	-	104,0	-	-	280M	B	150	125	140	880	670	720	530	455	400	112	-	-	1750	1060	1600	1750	1060	1600	140
150-125-400	-	127,0	-	-	315S	B	150	125	140	940	730	780	530	455	400	112	-	-	1800	1100	1650	2150	1340	2000	140
200-150-200	11,0	-	-	-	160M	B	200	150	160	880	670	720	470	420	400	112	444	280	1750	1060	1600	1750	1060	1600	140
200-150-200	15,0	17,3	-	-	160L	B	200	150	160	880	670	720	470	420	400	112	525	350	1750	1060	1600	1750	1060	1600	140
200-150-200	-	21,3	-	-	180M	B	200	150	160	880	670	720	470	420	400	112	577	350	1750	1060	1600	1750	1060	1600	140
200-150-200	-	25,3	-	-	180L	B	200	150	160	880	670	720	470	420	400	112	577	350	1750	1060	1600	1750	1060	1600	140
200-150-250	15,0	-	-	-	160L	B	200	150	160	810	600	650	470	420	400	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-250	18,5	-	-	-	180M	B	200	150	160	810	600	650	470	420	400	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-250	22,0	25,3	-	-	180L	B	200	150	160	810	600	650	470	420	400	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-250	30,0	34,5	-	-	200L	B	200	150	160	810	600	650	470	420	400	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-250	-	42,5	-	-	225S	B	200	150	160	810	600	650	470	420	400	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-250	-	52,0	-	-	225M	B	200	150	160	810	600	650	470	420	400	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-250	-	63,0	-	-	250M	B	200	150	160	810	600	650	470	420	400	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-315	22,0	-	-	-	180L	B	200	150	160	880	670	720	530	420	400	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-315	30,0	-	-	-	200L	B	200	150	160	880	670	720	530	420	400	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-315	37,0	42,5	-	-	225S	B	200	150	160	880	670	720	530	420	400	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-315	45,0	52,0	-	-	225M	B	200	150	160	880	670	720	530	420	400	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-315	55,0	63,0	-	-	250M	B	200	150	160	880	670	720	530	420	400	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-315	-	86,0	-	-	280S	B	200	150	160	880	670	720	530	420	400	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-315	-	104,0	-	-	280M	B	200	150	160	880	670	720	530	420	400	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-400	37,0	-	-	-	225S	B	200	150	160	880	670	720	530	455	450	112	-	-	1750	1060	1600	1750	1060	1600	140

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Size	Motor rating [kW]				Motor	Fig.	DN_1	DN_2	a	b_1	b_2	b_3	f	h_1	h_2	i	p_1	z	Coupling			Spacer-type coupling			
	1450 rpm	1750 rpm	2900 rpm	3500 rpm															l_1	l_2	l_3	l_1	l_2	l_3	x
200-150-400	45,0	-	-	-	225M	B	200	150	160	880	670	720	530	455	450	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-400	55,0	-	-	-	250M	B	200	150	160	880	670	720	530	455	450	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-400	75,0	86,0	-	-	280S	B	200	150	160	880	670	720	530	455	450	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-400	90,0	104,0	-	-	280M	B	200	150	160	880	670	720	530	455	450	112	-	-	1750	1060	1600	1750	1060	1600	140
200-150-400	110,0	127,0	-	-	315S	B	200	150	160	940	730	780	530	455	450	112	-	-	1800	1100	1650	2150	1340	2000	140

Related documents

Information/documents

Document	Reference number
General arrangement drawings booklet	1311.391

Connections

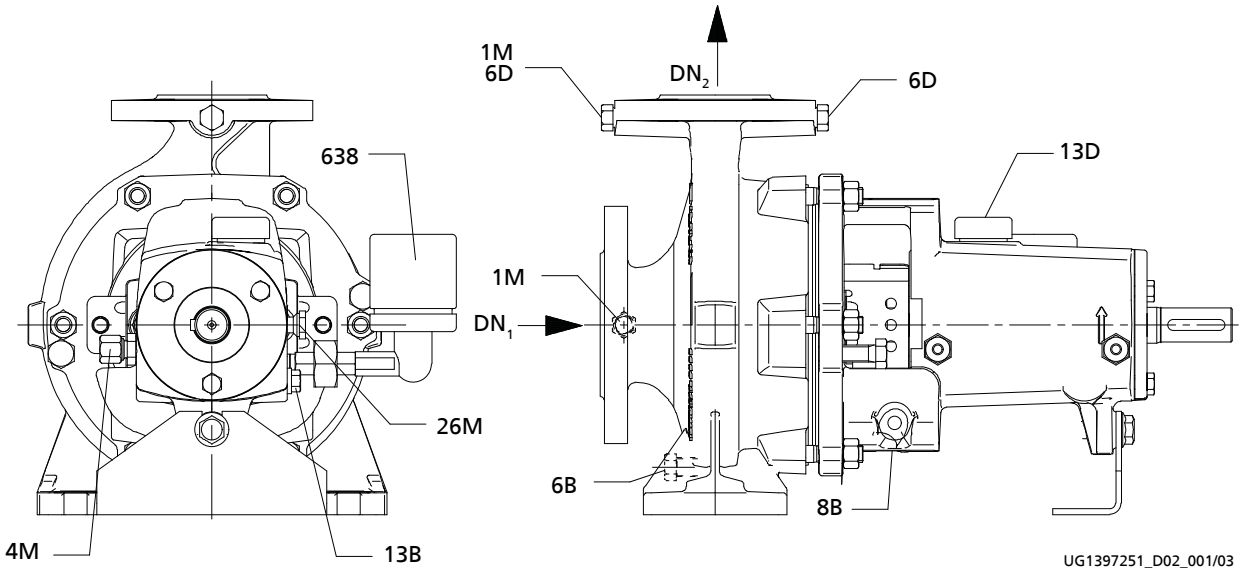


Fig. 281: Version with constant level oiler

P1	Na – Gland packing with internal barrier fluid
P2	Nb – Gland packing without barrier fluid
A	Single mechanical seal, A-type cover
IA	Single mechanical seal, A-type cover with internal circulation

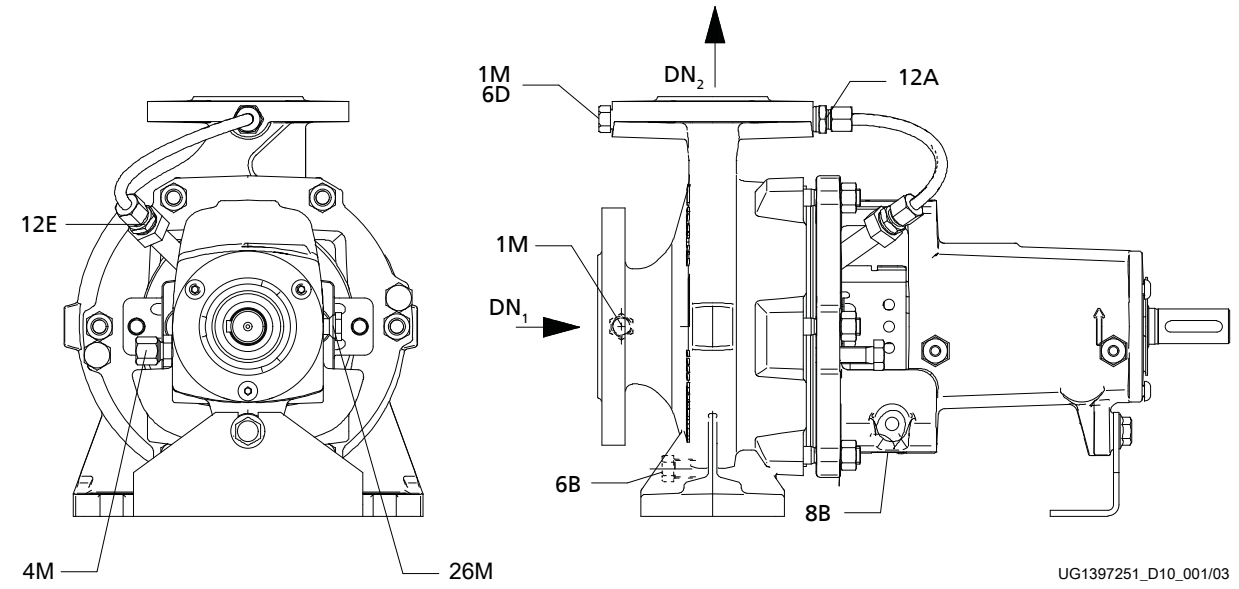


Fig. 282: Grease-lubricated version

EA	External circulation, A-type cover

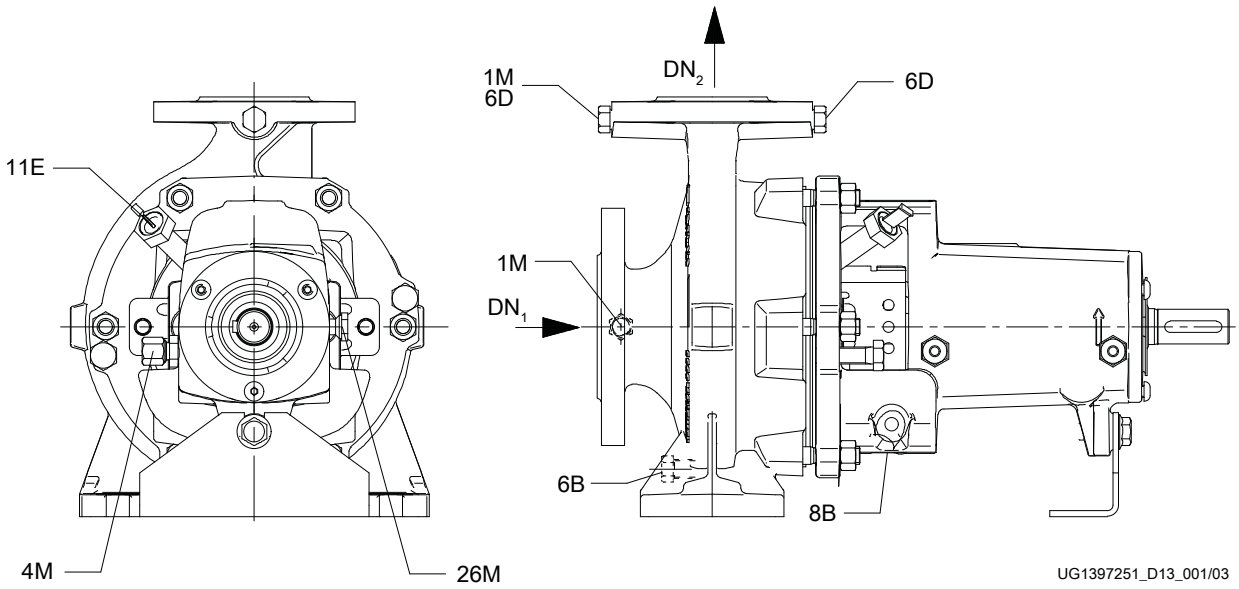


Fig. 283: Grease-lubricated version

FA	External flushing, A-type cover

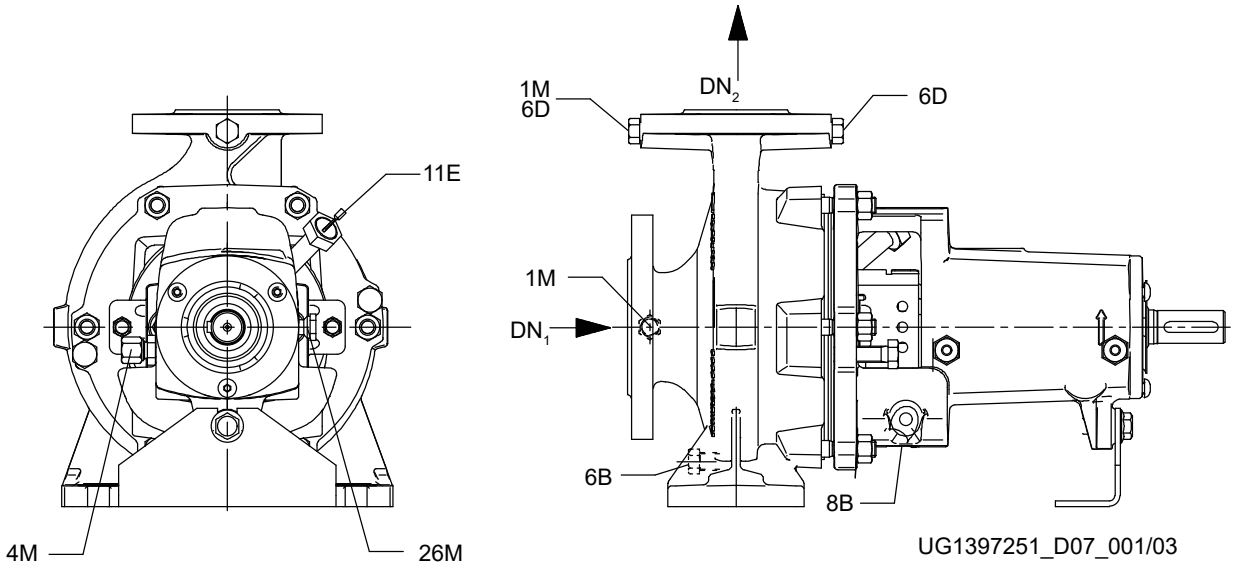


Fig. 284: Grease-lubricated version

P4	VSH – Gland packing, external flushing liquid

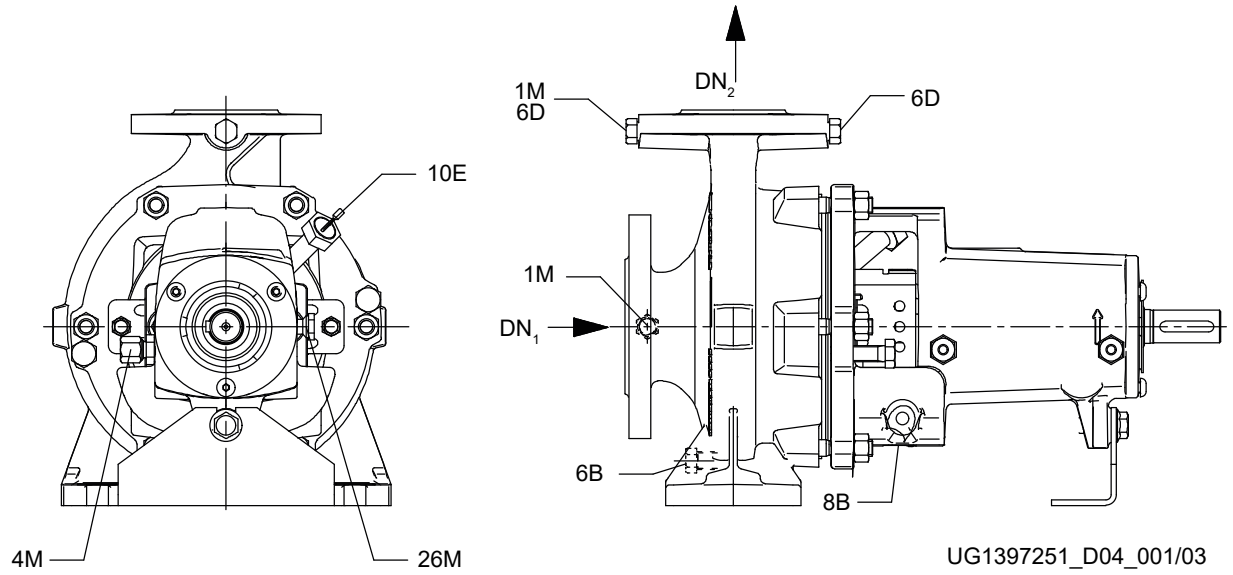


Fig. 285: Grease-lubricated version

P3	Nc – Gland packing, external barrier fluid

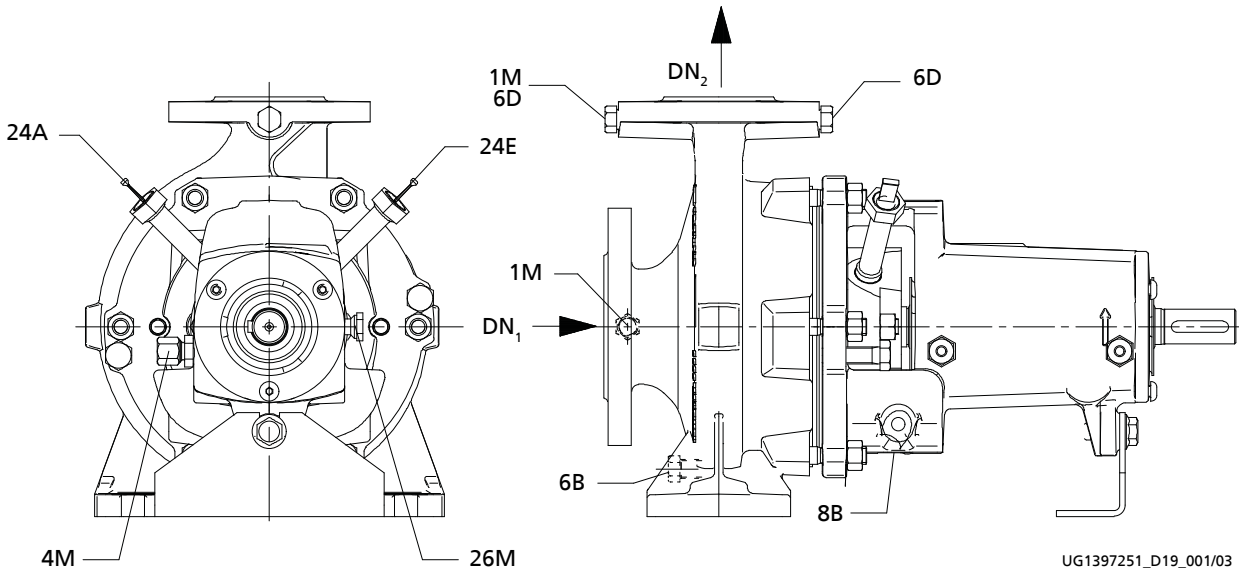


Fig. 286: Grease-lubricated version

TI	Double mechanical seal in tandem arrangement with internal circulation

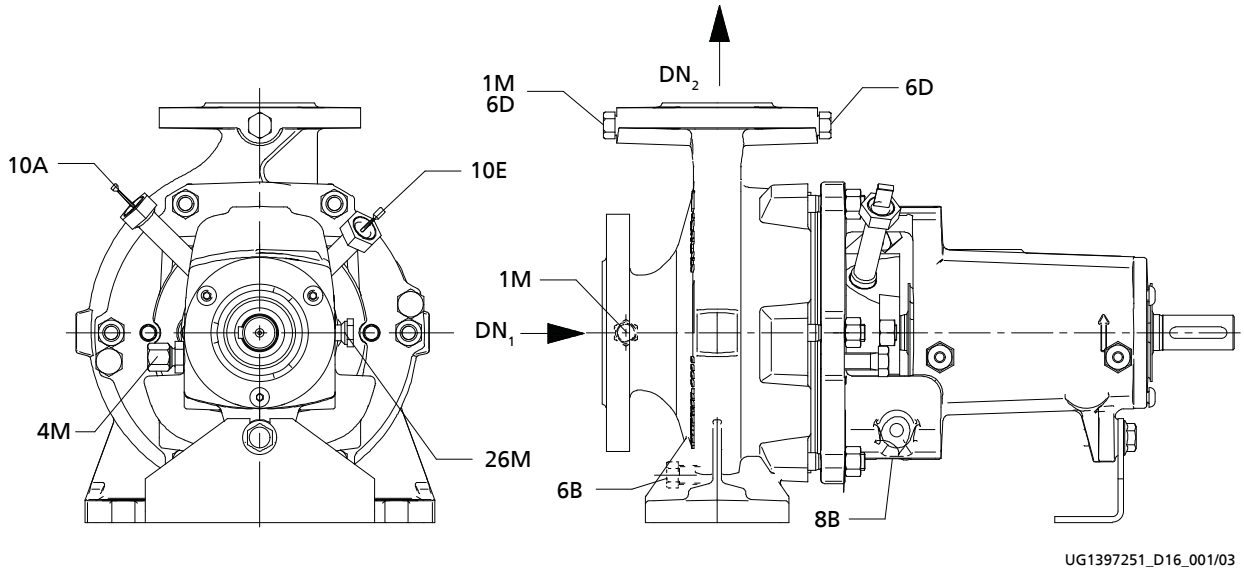


Fig. 287: Grease-lubricated version

DB	Double mechanical seal in back-to-back arrangement

Connections

Connection	Variant	Configuration	Position
1M	Connection for pressure gauge	On pump set with pressure sensor	DN_2
1M optional	Connection for pressure gauge	Drilled and closed or with pressure sensor	DN_1
4M optional	Connection for temperature measuring instrument	Drilled and closed	-
6B	Fluid drain	Drilled and closed	-
6D	Fluid filling and venting	Drilled and closed	DN_2, suction side
6D optional	Fluid filling and venting	Drilled and closed	DN_2, drive end
8B	Leakage drain	Drilled and closed[315)]	-
10A optional	External barrier fluid outlet	Connection G 1/4 fitting, closed	-
10E optional	External barrier fluid inlet	Connection G 1/4 fitting, closed	-
11E optional	Flushing liquid inlet	Connection G 1/4 fitting, closed	-
12A optional	Circulation liquid outlet	Drilled and connected	-
12E optional	Circulation liquid inlet	Drilled and connected	-
13B optional	Oil drain	Drilled and closed	-
13D optional	Oil filling and venting	Drilled and closed	-
24A optional	Quench liquid outlet	Connection G 1/4 fitting, closed	-
24E optional	Quench liquid inlet	Connection G 1/4 fitting, closed	-
26M optional	Connection for vibration measurement	Drilled and closed	-

315 For bearing bracket LS only

Connections

Etanorm	Bearing bracket	Casing material								
		G, B, C, S								
		Connection								
		1M.1/6D/ 1M.2/6B/6D	8B	10A/ 10E	11E	12A	12E	13B	13D	24A/ 24E
040-025-160	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
040-025-200	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
050-032-125.1	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
050-032-160.1	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
050-032-200.1	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
050-032-250.1	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
050-032-125	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
050-032-160	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
050-032-200	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
050-032-250	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
065-040-125	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
065-040-160	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
065-040-200	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
065-040-250	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
065-040-315	35	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
065-040-315	50	G 1/4	-	G 1/4	G 1/4	G 1/4	G 1/4	G 3/8	DN 20	G 1/4
065-050-125	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
065-050-160	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
065-050-200	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
065-050-250	25	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
065-050-315	35	G 1/4	G 1/2	G 1/4	G 1/4	G 1/4	G 1/4	G 1/4	DN 20	G 1/4
065-050-315	50	G 1/4	-	G 1/4	G 1/4	G 1/4	G 1/4	G 3/8	DN 20	G 1/4
080-065-125	25	G 3/8	G 1/2	G 1/4	G 1/4	G 3/8	G 1/4	G 1/4	DN 20	G 1/4
080-065-160	25	G 3/8	G 1/2	G 1/4	G 1/4	G 3/8	G 1/4	G 1/4	DN 20	G 1/4
080-065-200	25	G 3/8	G 1/2	G 1/4	G 1/4	G 3/8	G 1/4	G 1/4	DN 20	G 1/4
080-065-250	35	G 3/8	G 1/2	G 1/4	G 1/4	G 3/8	G 1/4	G 1/4	DN 20	G 1/4
080-065-315	35	G 3/8	G 1/2	G 1/4	G 1/4	G 3/8	G 1/4	G 1/4	DN 20	G 1/4
080-065-315	60	G 3/8	-	G 1/4	G 1/4	G 3/8	G 1/4	G 3/8	DN 20	G 1/4
100-080-160	25	G 3/8	G 1/2	G 1/4	G 1/4	G 3/8	G 1/4	G 1/4	DN 20	G 1/4
100-080-200	35	G 3/8	G 1/2	G 1/4	G 1/4	G 3/8	G 1/4	G 1/4	DN 20	G 1/4
100-080-250	35	G 3/8	G 1/2	G 1/4	G 1/4	G 3/8	G 1/4	G 1/4	DN 20	G 1/4
100-080-315	35	G 3/8	G 1/2	G 1/4	G 1/4	G 3/8	G 1/4	G 1/4	DN 20	G 1/4
100-080-315	60	G 3/8	-	G 1/4	G 1/4	G 3/8	G 1/4	G 3/8	DN 20	G 1/4
100-080-400	55	G 3/8	G 1/2	G 1/4	G 1/4	G 3/8	G 1/4	G 1/4	DN 20	G 1/4
125-100-160	35	G 1/2	G 1/2	G 1/4	G 1/4	G 1/2	G 1/4	G 1/4	DN 20	G 1/4
125-100-200	35	G 1/2	G 1/2	G 1/4	G 1/4	G 1/2	G 1/4	G 1/4	DN 20	G 1/4
125-100-250	35	G 1/2	G 1/2	G 1/4	G 1/4	G 1/2	G 1/4	G 1/4	DN 20	G 1/4
125-100-315	35	G 1/2	G 1/2	G 1/4	G 1/4	G 1/2	G 1/4	G 1/4	DN 20	G 1/4
125-100-315	60	G 1/2	-	G 1/4	G 1/4	G 1/2	G 1/4	G 3/8	DN 20	G 1/4
125-100-400	55	G 1/2	G 1/2	G 1/4	G 1/4	G 1/2	G 1/4	G 1/4	DN 20	G 1/4
150-125-200	35	G 1/2	G 1/2	G 1/4	G 1/4	G 1/2	G 1/4	G 1/4	DN 20	G 1/4
150-125-250	35	G 1/2	G 1/2	G 1/4	G 1/4	G 1/2	G 1/4	G 1/4	DN 20	G 1/4
150-125-250	60	G 1/2	-	G 1/4	G 1/4	G 1/2	G 1/4	G 3/8	DN 20	G 1/4
150-125-315	55	G 1/2	G 1/2	G 1/4	G 1/4	G 1/2	G 1/4	G 1/4	DN 20	G 1/4
150-125-400	55	G 1/2	G 1/2	G 1/4	G 1/4	G 1/2	G 1/4	G 1/4	DN 20	G 1/4
200-150-200	35	G 1/2	G 1/2	G 1/4	G 1/4	G 1/2	G 1/4	G 1/4	DN 20	G 1/4
200-150-250	35	G 1/2	G 1/2	G 1/4	G 1/4	G 1/2	G 1/4	G 1/4	DN 20	G 1/4
200-150-250	60	G 1/2	-	G 1/4	G 1/4	G 1/2	G 1/4	G 3/8	DN 20	G 1/4
200-150-315	55	G 1/2	G 1/2	G 1/4	G 1/4	G 1/2	G 1/4	G 1/4	DN 20	G 1/4
200-150-400	55	G 1/2	G 1/2	G 1/4	G 1/4	G 1/2	G 1/4	G 1/4	DN 20	G 1/4

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Flange design

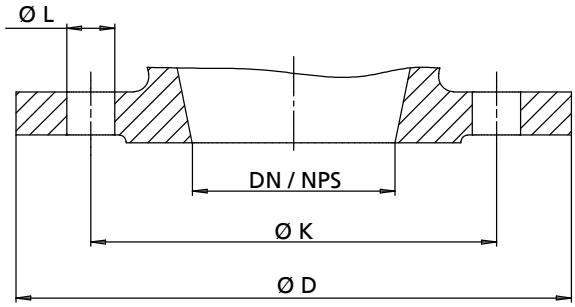


Fig. 288: Flange dimensions

Flange dimensions to EN 1092-1, EN 1092-2, EN 1092-3

Flange dimensions [mm]

Nominal size	Standard																		
	EN 1092-3			EN 1092-1						EN 1092-2									
	Material variant volute casing																		
	B			C						G						S			
	PN 10			PN 10			PN 16			PN 10			PN 16			PN 16		
	Ø D	Ø K	Number × Ø of holes (Ø L)	Ø D	Ø K	Number × Ø of holes (Ø L)	Ø D	Ø K	Number × Ø of holes (Ø L)	Ø D	Ø K	Number × Ø of holes (Ø L)	Ø D	Ø K	Number × Ø of holes (Ø L)	Ø D	Ø K	Number × Ø of holes (Ø L)
25	115	85	4 × ∅ 14	-	-	-	115	85	4 × ∅ 14	-	-	-	115	85	4 × ∅ 14	115	85	4 × ∅ 14
32	140	100	4 × ∅ 18	-	-	-	140	100	4 × ∅ 18	-	-	-	140	100	4 × ∅ 19	140	100	4 × ∅ 19
40	150	110	4 × ∅ 18	-	-	-	150	110	4 × ∅ 18	-	-	-	150	110	4 × ∅ 19	150	110	4 × ∅ 19
50	165	125	4 × ∅ 18	-	-	-	165	125	4 × ∅ 18	-	-	-	165	125	4 × ∅ 19	165	125	4 × ∅ 19
65	185	145	4 × ∅ 18	-	-	-	185	145	4 × ∅ 18	-	-	-	185	145	4 × ∅ 19	185	145	4 × ∅ 19
80 (DN_1[316])	229	160	8 × ∅ 18	-	-	-	230	160	8 × ∅ 18	-	-	-	229	160	8 × ∅ 19	229	160	8 × ∅ 19
80 (DN_2[317])	200	160	8 × ∅ 18	-	-	-	200	160	8 × ∅ 18	-	-	-	200	160	8 × ∅ 19	229	160	8 × ∅ 19
100	229	180	8 × ∅ 18	-	-	-	230	180	8 × ∅ 18	-	-	-	229	180	8 × ∅ 19	229	180	8 × ∅ 19
125	254	210	8 × ∅ 18	-	-	-	255	210	8 × ∅ 18	-	-	-	254	210	8 × ∅ 19	254	210	8 × ∅ 19
150	285	240	8 × ∅ 22	-	-	-	285	240	8 × ∅ 22	-	-	-	285	240	8 × ∅ 23	285	240	8 × ∅ 23
200	343	295	8 × ∅ 22	345	295	8 × ∅ 22	-	-	-	343	295	8 × ∅ 23	-	-	-	343	295	12 × ∅ 23

Flange drilled to: ASME B 16.1, Class 125 or ASME B 16.5, Class 150

Flange dimensions [mm]

Nominal size	Standard					
	ASME B 16.1, Class 125 or ASME B 16.5, Class 150					
	Material variant volute casing					
	B, G, S			C		
	Ø D	Ø K	Number × Ø of holes (Ø L)	Ø D	Ø K	Number × Ø of holes (Ø L)
25/ NPS 1	115	79,2	4 × ∅ 15.7	115	79,2	4 × ∅ 15.9
32/ NPS 1 1/4	140	88,9	4 × ∅ 15.7	140	88,9	4 × ∅ 15.9
40/ NPS 1 1/2	150	98,6	4 × ∅ 15.7	150	98,6	4 × ∅ 15.9
50/ NPS 2	165	120,7	4 × ∅ 19.1	165	120,7	4 × ∅ 19.1
65/ NPS 2 1/2	185	139,7	4 × ∅ 19.1	185	139,7	4 × ∅ 19.1
80/ NPS 3 (DN_1[316])	229	190,5	8 × ∅ 19.1	230	190,5	8 × ∅ 19.1
80/ NPS 3 (DN_2[317])	200	152,4	4 × ∅ 19.1	200	152,4	4 × ∅ 19.1
100/ NPS 4	229	190,5	8 × ∅ 19.1	230	190,5	8 × ∅ 19.1

316 Suction flange
317 Discharge flange

Nominal size	Standard					
	ASME B 16.1, Class 125 or ASME B 16.5, Class 150					
	Material variant volute casing					
	B, G, S			C		
	Ø D	Ø K	Number × Ø of holes (Ø L)	Ø D	Ø K	Number × Ø of holes (Ø L)
125/ NPS 5	254	215,9	8 × ∅ 22.4	255	215,9	8 × ∅ 22.2
150/ NPS 6	285	241,3	8 × ∅ 22.4	285	241,3	8 × ∅ 22.2
200/ NPS 8	343	298,5	8 × ∅ 22.4	345	298,5	8 × ∅ 22.2

Flange design by materials

Material variant	Standard	Nominal size	Pressure class
GG, GB, GC	EN 1092-2	DN 25 - DN 150	PN 16
GG, GB, GC	EN 1092-2	DN 200	PN 10
GG, GB, GC	Drilled to ASME B16.1[318)]	DN 25 - DN 200	Class 125[319)]
SG, SB, SC	EN 1092-2	DN 25 - DN 200	PN 16
SG, SB, SC	Drilled to ASME B16.1[318)]	DN 25 - DN 200	Class 125[319)]
BB	EN 1092-3	DN 25 - DN 200	PN 10
BB	Drilled to ASME B16.1[318)]	DN 25 - DN 200	Class 125[320)]
CC	EN 1092-1	DN 25 - DN 150	PN 16
CC	EN 1092-1	DN 200	PN 10
CC	Drilled to ASME B16.5[318)]	DN 25 - DN 200	Class 150

Scope of supply

Depending on the model, the following items are included in the scope of supply:

- Pump
- Baseplate
- Coupling
- Coupling guard
- Drive

Recommended spare parts stock

Spare parts list on request!

318 Suction-side DN 80 machined like DN 100
319 Nozzle drilled to Class 125 with pressure class PN 16.
320 Nozzle drilled to Class 125 with pressure class PN 10.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Standardised Pumps to EN 733

Etachrom L

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000065

Product benefits

- Maintenance-free mechanical seal ensures operating reliability
- Easy to dismantle due to back pull-out design; no need to remove the pump casing from the piping
- Optimised hydraulic components for high efficiency help reduce energy consumption
- Corrosion-resistant: wetted components made of stainless steel (1.4571)
- Long service life, maintenance-free with high-quality standardised mechanical seal to EN 12756

Further information

Prices on request

Selection charts 683
Dimensions 684

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[321)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

321 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for water pumps with a maximum nominal shaft power of 150 kW as per Regulation (EU) No. 547/2012.

Certifications

Overview

Label	Effective in:	Comment
	All countries	Certified quality management to ISO 9001

Main applications

- Cleaning systems (bottle rinsing, crate washing and similar systems)
- Water treatment systems
- Water supply systems
- Fire-fighting systems
- Spray irrigation systems
- General irrigation systems
- Drainage systems
- Hot-water heating systems
- Air-conditioning systems
- Industrial washing machines
- General industry
- Disposal of paint sludge
- Surface treatment systems

Operating data

Operating properties

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q [m³/h]	≤ 260	≤ 210
	Q [l/s]	≤ 72,2	≤ 58,3
Head	H [m]	≤ 105	≤ 104
Fluid temperature	T [°C]	≥ -30	≥ -30
		≤ +110	≤ +110
Operating pressure	p [bar]	≤ 12 [323)]	≤ 12 [323)]

Fluids handled

- Service water
- Drinking water
- High-temperature hot water
- Cooling water
- Swimming pool water[322)]
- Process water
- Fire-fighting water
- Condensate
- Oil

Further information on fluids handled

Overview of fluids handled (⇨ Page 680)

322 Swimming pool water (0.4 to 1.4 mg/l free chlorine, max. 0.6 mg/l combined chlorine, pH 6.9 to 7.7, water hardness 10 to 30 °dH, max. salt content 7 g/l)

323 The sum of inlet pressure and shut-off head must not exceed the value indicated.

Design details

Design

- Design with materials to Regulation (EC) No. 1935/2004 can be provided.
- Design to ATEX

Design

- Circular casing pumps
- Back pull-out design
- Flanges to EN 1092-1
- Horizontal installation
- Single-stage
- Dimensions and ratings to EN 733
- Pump and motor connected by shaft coupling
- Fixed speed version (without PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R) / variable speed version (with PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R)

Pump casing

- Circular casing with welded-on or bolted-on pump feet
- Replaceable casing wear rings

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM B3
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM B3
- Enclosure IP55
- Duty type: continuous duty S1
- Type of protection EEx eb II
- Temperature class T3

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[324)] (PumpDrive required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM B3
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 0.55 kW to 45 kW
- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2 / PumpDrive 2 Eco:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for motor mounting, wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

PumpMeter:

- Intelligent pressure transmitter for pumps, with on-site display of measured values and operating data
- For recording the load profile of the pump
- Supplied completely assembled and parameterised for the individual pump

Shaft seal

- Single mechanical seal to EN 12756
- The shaft is fitted with a replaceable shaft sleeve in the shaft seal area (sizes 080-065-250, 100-080-200, 100-080-250)

Impeller type

- Closed radial impeller with multiply curved vanes

Bearings

- Grease-packed radial ball bearing

324 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Designation

Designation example

Position																																											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
E	T	C	L	0	5	0	-	0	2	5	-	1	2	5		C	C	S	A	A	0	7	D	1	0	1	0	0	2	e	x	B	P	D	2		M	K	S	B	I	E	4
See name plate and data sheet																									See data sheet																		

Designation key

Position	Code	Description	
1-4	Pump type		
	ETCL	Etachrom L	
5-16	Size, e.g.		
	050	Nominal suction nozzle diameter [mm]	
	025	Nominal discharge nozzle diameter [mm]	
	125	Nominal impeller diameter [mm]	
17	Pump casing material		
	C	Stainless steel	1.4571
18	Impeller material		
	C	Stainless steel	1.4571/1.4408
19	Design		
	E	Materials in contact with food to Regulation (EC) 1935/2005	
	F	Bottle rinser variant	
	H	Approved for drinking water to ACS	
	K	Approved for drinking water to KSB standard	
	S	Standard	
	U	Approved for drinking water to UBA	
	W	Approved for drinking water to WRAS	
	X	Non-standard (BT3D, BT3)	
20-21	Casing cover		
	AA	Internal circulation (seal chamber only)	
	AS	Internal circulation (seal chamber only), casing cover with anti-swirl baffles	
22-23	Seal code, single mechanical seal		
	01	Q1Q1VGG	1A (ZN1181)
	07	Q1Q1EGG	1A (ZN1181)
	09	U3U3VGG	MG13G60
	10	Q1Q1X4GG	1 (ZN1181)
	11	BQ1EGG-WA (WA = drinking water)	1 (ZN1181)
	12	Q12Q1M1GG1	M37GN83
	17	Q1BVGG	M7N
	26	XYHY2VY	Roten Uniten 3
	45	BQ7E1GG/Y10	KU 022 S0 - eMG12G6
	46	Q7Q7E1GG/Y10	KU 022 S0 - eMG12G6
	66	Q7Q7EGG/Y10-WA	eMG13G6
	67	Q6Q6X4GG	MG13G60
	68	BQ7V16GG/Y10	KU 022 S0 - eMG12G6
	69	Q7Q7V16GG/Y10	KU 022 S0 - eMG12G6
24	Scope of supply		
	A	Pump, without motor (figure 0 bare-shaft pump)	
	B	Pump, baseplate, without motor	
	C	Pump, baseplate, coupling, coupling guard, without motor	
	D	Pump, baseplate, coupling, coupling guard, motor	
25	Shaft unit		
	1	Shaft unit 25.1	
	2	Shaft unit 25.2	
	3	Shaft unit 35	
26-29	Motor rating P_N [kW]		
	0750	7,50	
	...	...	
	0110	11,00	

Position	Code	Description
30	Number of motor poles	
31-32	Explosion protection	
	ex	With explosion-proof motor
	--	Without explosion-proof motor
33	Product generation	
	B	Etachrom L 08/2015
34-37	PumpDrive	
	PD2	PumpDrive 2
	PD2E	PumpDrive 2 Eco
38	PumpMeter	
	M	PumpMeter
39-41	Motor manufacturer	
	KSB	KSB
	SIE	Siemens
	LOH	Loher
	HAL	Halter
42-44	Efficiency class	

Materials

Overview of available materials

Part No.	Description	Material	Fluid temperature [°C]	
			T_{min}	T_{max}
101	Pump casing	CrNiMo steel 1.4571	-30	+110
132.01	Intermediate piece	Grey cast iron EN-GJL-250 / cataphoresis	-30	+110
163	Discharge cover	CrNiMo steel 1.4571	-30	+110
183	Foot	S235 JR	-30	+110
210	Shaft	CrNiMo steel 1.4571	-30	+110
230	Impeller	CrNiMo steel 1.4571	-30	+110
		CrNi steel 1.4308	-30	+110
		CrNiMo steel 1.4408	-30	+110
330	Bearing bracket	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	-30	+110
		Grey cast iron EN-GJL-250 / cataphoresis	-30	+110
412.35	O-ring	EPDM 70/ 80	-30	+110
		ENM-Therban	-30	+110
		FKM80	-30	+110
502.01	Casing wear ring	CrNiMo steel 1.4571	-30	+110
502.02	Casing wear ring	CrNiMo steel 1.4571	-30	+110
523	Shaft sleeve	CrNiMo steel 1.4571	-30	+110
901.99	Hexagon head bolt	Steel 8.8 A2A	-30	+110
903.01	Screw plug	CrNiMo steel A4	-30	+110
920.01	Nut	CrNiMo steel A4	-30	+110

The pumps are free from substances impairing the adhesive strength of the paint, such as silicone.

Overview of product features / selection tables

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

Symbols key

Symbol	Description
✗	Standard
-	Version not available / not feasible

The table of fluids handled is a selection aid for different applications. It serves as guidance and is based on long-standing experience. The data are reference values and are not to be considered generally binding recommendations. They shall not be the basis for warranty claims. Please contact your nearest sales branch for in-depth advice.

Example: Pure water 15 °C, Q = 40 m³/h, H = 51 m
Selection: Etachrom L 065-040-200 CC A11D2
065-040-200 Size (as per characteristic curve for 2900 rpm)
11 Variant code (according to selection table)
Motor rating required: 11 kW

Selection table

Fluids handled	Fluid	Variant	Application limits		Shaft seal (mechanical seal)												
			Percentage	Temperature	Q1Q1VGG	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG-WA[325]	Q12Q1M1GG1	Q1BVGG	BQ7E1GG/Y10[326]	Q7Q7E1GG/Y10[326]	Q7Q7EGG/Y10-WA	Q6Q6X4GG	BQ7V16GG/Y10[326]	Q7Q7V16GG/Y10[326]
					Design code												
			[%]	[°C]	01	07	09	10	11	12	17	45	46	66	67	68	69
Alkaline cleaning agents	10120	50120	-	-	-	✗	-	✗	-	✗	-	-	-	-	-	-	-
Alkaline degreasing solution	10120	51134	≤ 10 NaOH	80	-	✗	-	-	-	-	-	-	-	-	-	-	-
Alcohol (ethanol)	10171	50171	-	-	-	-	-	-	✗	-	-	✗	✗	-	-	-	-
Ammonia water (ammonia solution)	10113	50113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonium bicarbonate	10116	50116	≤ 10	≤ 40	-	-	-	-	✗	-	-	-	-	-	-	-	-
Cider	10327	50338	-	-	-	-	-	-	✗	-	-	✗	✗	-	-	-	-
Ethanol (alcohol)	10171	50171	-	-	-	-	-	-	✗	-	-	✗	✗	-	-	-	-
Ethylene glycol[327]	10205	50207	-	-	-	✗	-	-	✗	-	-	-	-	✗	-	-	-
Petrol	10301	50301	-	-	-	-	-	-	-	-	✗	-	-	-	-	-	-
Beer mash	10328	50328	-	-	-	-	-	-	-	✗	-	-	-	-	-	-	-
Beer wort	10329	50329	-	-	-	-	-	-	-	✗	-	-	-	-	-	-	-
Spirits	10327	50330	-	-	-	-	-	-	✗	-	-	✗	✗	-	-	-	-
Butanol	10170	50170	-	-	-	-	-	-	✗	-	-	-	-	-	-	-	-
Butanoic acid	10436	50436	100	≤ 30	-	-	-	-	✗	✗	-	-	-	-	-	-	-
Calcium acetate	10386	50386	10	-	-	-	-	-	✗	-	-	-	-	-	-	-	-
Calcium nitrate	10389	50389	≤ 10	≤ 30	-	-	-	✗	-	-	-	-	-	-	-	-	-

325 Combinations of soft/hard seal face materials (BQ1) can only be used for fluids up to a total solids content of 50 mg/l. Higher total solids contents will result in leakage and a shorter service life.
326 FDA-approved
327 Antifreeze agent on ethylene glycol basis with inhibitors. Content: > 20 % to 50 % (e.g. Antifrogen N)

Fluids handled	Fluid	Variant	Application limits		Shaft seal (mechanical seal)												
			Percentage	Temperature	Q1Q1VGG	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG-WA[325]	Q12Q1M1GG1	Q1BVGG	BQ7E1GG/Y10[326]	Q7Q7E1GG/Y10[326]	Q7Q7EGG/Y10-WA	Q6Q6X4GG	BQ7V16GG/Y10[326]	Q7Q7V16GG/Y10[326]
					Design code												
			[%]	[°C]	01	07	09	10	11	12	17	45	46	66	67	68	69
Cleaning in place (CIP) without further specifications	10861	50861	-	-	-	✗	-	-	-	✗	-	-	-	-	-	-	-
Deionised water (fully desalinated)[328]	10669	50669	-	≤ 110	-	-	-	-	✗	-	-	-	-	-	✗	-	-
Distilled water	10669	50669	-	≤ 60	-	-	-	-	✗	-	-	-	-	-	-	-	-
Diesel oil	10304	50304	-	-	-	-	-	✗	-	-	✗	-	-	-	-	-	-
Decarbonised water[329]	10669	50673	-	≤ 60	-	-	-	-	✗	-	-	-	-	-	-	-	-
Peanut oil	10350	50364	-	≤ 90	-	-	-	✗	-	-	✗	-	-	-	-	✗	✗
Vinegar (= 5 % acetic acid)	10439	50439	≤ 5	-	-	-	-	-	✗	-	-	-	-	-	-	-	-
Ethanol	10171	51987	-	-	-	-	-	-	✗	-	-	✗	✗	-	-	-	-
Condenser water (sugar production)	10332	50332	-	-	-	-	-	-	-	-	-	✗	✗	-	-	-	-
Fire-fighting water[329]	10199	50204	-	≤ 25[330]	-	-	-	✗	-	-	✗	-	-	-	-	-	-
Lye for bottle rinsers	10111	Var.[331]	≤ 10	≤ 80	-	✗	-	-	-	✗	-	-	-	-	-	-	-
Antifreeze agent (ethylene glycol)[327]	10214	Var.[331]	See [327]	≤ 110	-	✗	-	-	✗	-	-	-	-	✗	-	-	-
Ethylene glycol base anti-freeze, inhibited	10270	Var.[331]	See [327]	≤ 110	-	✗	-	-	✗	-	-	-	-	✗	-	-	-
Antifreeze agent (propylene glycol)[327]	10962	Var.[331]	See [327]	≤ 110	-	✗	-	-	✗	-	-	-	-	✗	-	-	-
Propylene glycol base anti-freeze, inhibited	10963	Var.[331]	See [327]	≤ 110	-	✗	-	-	✗	-	-	-	-	✗	-	-	-
Tannic acid	10445	Var.[331]	≤ 50	-	-	-	-	-	-	-	✗	-	-	-	-	-	-
Beverages containing carbon dioxide	10846	50846	≤ 00	-	-	-	-	-	-	-	-	✗	✗	-	-	-	-
Glycerine	10311	Var.[331]	≤ 90	-	-	-	-	-	-	-	✗	-	-	-	-	-	-
Fuel oil, light	10308	50308	-	≤ 60	-	-	-	✗	-	-	✗	-	-	-	-	-	-
Heating water[332]	10499	50499	-	≤ 110	-	-	-	✗	✗	-	-	-	-	-	-	-	-
Hydraulic oil	10346	50351	-	-	-	-	-	✗	-	-	✗	-	-	-	-	-	-
Potassium hydroxide	10121	Var.[331]	≤ 10	≤ 80	-	✗	-	✗	-	-	-	-	-	-	-	-	-
Potassium carbonate	10123	50122	≤ 10	≤ 80	-	✗	-	-	✗	-	-	-	-	-	-	-	-
Aluminium potassium sulphate	10381	50381	≤ 3	≤ 20	✗	-	-	-	-	-	-	-	-	-	-	-	-
Potassium sulphate	10401	50402	≤ 3	-	-	-	-	-	-	-	✗	-	-	-	-	-	-
Kerosene (jet fuel)	10317	51168	-	≤ 60	-	-	-	✗	-	-	✗	-	-	-	-	-	-
Condensate[328]	10495	50660	-	≤ 110	-	-	-	-	✗	-	-	-	-	-	-	-	-
Cooling water (without antifreeze)	10668	Var.[331]	-	≤ 90[330]	-	-	-	✗	-	-	-	-	-	-	-	-	-
Cooling water pH ≧ 7.5 (with antifreeze)[327]	10214	Var.[331]	-	≤ 110	-	✗	-	-	✗	-	-	-	-	✗	-	-	-
Cooling lubricant (Cimcool)	10188	50188	-	≤ 60	-	-	✗	-	-	-	-	-	-	-	-	-	-
Copper sulphate	10407	50407	≤ 5	RT[333]	-	-	-	-	✗	-	-	-	-	-	-	-	-
Slightly contaminated water[329]	10484	50696	-	≤ 60[330]	-	-	-	✗	-	-	-	-	-	-	-	-	-
Linseed oil	10350	50368	-	≤ 90	-	-	-	✗	-	-	✗	-	-	-	-	✗	✗
Corn oil	10350	50369	-	≤ 90	-	-	-	✗	-	-	✗	-	-	-	-	✗	✗
Maleic acid	10445	51684	≤ 10	-	-	-	-	-	-	-	✗	-	-	-	-	-	-
Methyl alcohol (methanol)	10174	50174	-	-	-	-	-	-	✗	-	-	-	-	-	-	-	-

328 Conductivity at 25 °C: < 250 µS/cm, SiO_2 silicate content ≤ 10 mg/l
329 Chloride content ≤ 300 mg/l; if the value is exceeded, water analysis is required.
330 Mechanical seal suitable for t ≤ 110 °C
331 Var. = various
332 Conductivity at 25 °C: 100 to 800 µS/cm
333 RT = room temperature

Fluids handled	Fluid	Variant	Application limits		Shaft seal (mechanical seal)												
			Percentage	Temperature	Q1Q1VGG	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG-WA[325]	Q12Q1M1GG1	Q1BVGG	BQ7E1GG/Y10[326]	Q7Q7E1GG/Y10[326]	Q7Q7EGG/Y10-WA	Q6Q6X4GG	BQ7V16GG/Y10[326]	Q7Q7V16GG/Y10[326]
					Design code												
			[%]	[°C]	01	07	09	10	11	12	17	45	46	66	67	68	69
Lactic acid	10449	Var.[331]	≤ 50	-	-	-	-	-	-	-	✘	-	-	-	-	-	-
Mineral oil	10346	50352	-	-	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Sodium hydrogen carbonate	10151	50151	≤ 6	≤ 20	-	-	-	✘	-	-	-	-	-	-	-	-	-
Sodium hydroxide (caustic soda)	10111	51673	≤ 10	≤ 80	✘	-	-	-	-	✘	-	-	-	-	-	-	-
Sodium carbonate	10146	50146	≤ 6	≤ 60	-	-	-	-	✘	-	-	-	-	-	-	-	-
Sodium nitrate	10423	50423	≤ 10	≤ 90	-	-	-	-	✘	-	-	-	-	-	-	-	-
Sodium sulphate	10395	50395	≤ 5	≤ 60	-	-	-	-	✘	-	-	-	-	-	-	-	-
Caustic soda (sodium hydroxide)	10158	50158	≤ 20	≤ 60	-	-	-	-	✘	-	-	-	-	-	-	-	-
Paraffin	10319	51687	-	-	-	-	-	-	-	-	✘	-	-	-	-	-	-
Kerosene	10310	50310	-	-	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Vegetable oil, pure	10350	Var.[331]	-	≤ 90	-	-	-	✘	-	-	✘	-	-	-	-	✘	✘
Phosphoric acid	10452	50947	≤ 5	≤ 40	✘	-	-	-	-	-	✘	-	-	-	-	-	-
Phosphoric acid	10452	50452	≤ 10	≤ 40	✘	-	-	-	-	-	✘	-	-	-	-	-	-
Propanol (propyl alcohol)	10170	51096	-	-	-	-	-	-	✘	-	-	-	-	-	-	-	-
Rapeseed oil	10350	50370	-	≤ 90	-	-	-	✘	-	-	✘	-	-	-	-	✘	✘
Raw water[329]	10658	50658	-	≤ 60[330]	-	-	-	✘	-	-	-	-	-	-	-	-	-
Lubricating oil	10347	Var.[331]	-	-	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Cutting oil	10346	50356	-	-	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Sulphuric acid	10455	50455	≤ 5	20	✘	-	-	-	-	-	-	-	-	-	-	-	-
Sulphuric acid	10455	50456	≤ 2,5	≤ 50	✘	-	-	-	-	-	-	-	-	-	-	-	-
Sulphurous acid	10456	51129	≤ 10	25	✘	-	-	-	-	-	-	-	-	-	-	-	-
Swimming pool water (fresh water)	10655	50725	-	≤ 60	-	-	-	✘	-	-	-	-	-	-	-	-	-
Silicone oil	10346	50357	-	-	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Soy-bean oil	10350	50371	-	≤ 90	-	-	-	✘	-	-	✘	-	-	-	-	✘	✘
Edible oil	10350	Var.[331]	-	≤ 90	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Surface water	10683	Var.[331]	-	≤ 60[330]	-	-	-	✘	-	-	-	-	-	-	-	-	-
Partly desalinated water	10669	50736	-	≤ 110	-	-	-	-	✘	-	-	-	-	-	-	-	-
Drinking water[329]	10665	Var.[331]	-	≤ 60[330]	-	-	-	-	✘	-	-	-	-	-	-	-	-
Turbine oil (does not apply to SFD oils)	10347	50347	-	≤ 80	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Water / bathing water (fresh water)[329]	10665	50725	-	≤ 60	-	-	-	-	✘	-	-	-	-	-	-	-	-
Water, desalinated[334]	10669	50837	-	-	-	-	-	-	✘	-	-	-	-	-	✘	-	-
Water/oil emulsion	10192	51166	95%/5%	≤ 60	-	-	✘	-	-	-	✘	-	-	-	-	-	-
Tartaric acid	10460	50460	≤ 50	-	-	-	-	-	-	-	✘	-	-	-	-	-	-
Citric acid	10438	50438	≤ 50	RT[333]	-	-	-	-	✘	-	✘	-	-	-	-	-	-
Sugar juice (sugar production)	19005	50333	20	≤ 100	-	-	-	-	-	✘	✘	-	-	-	-	-	-

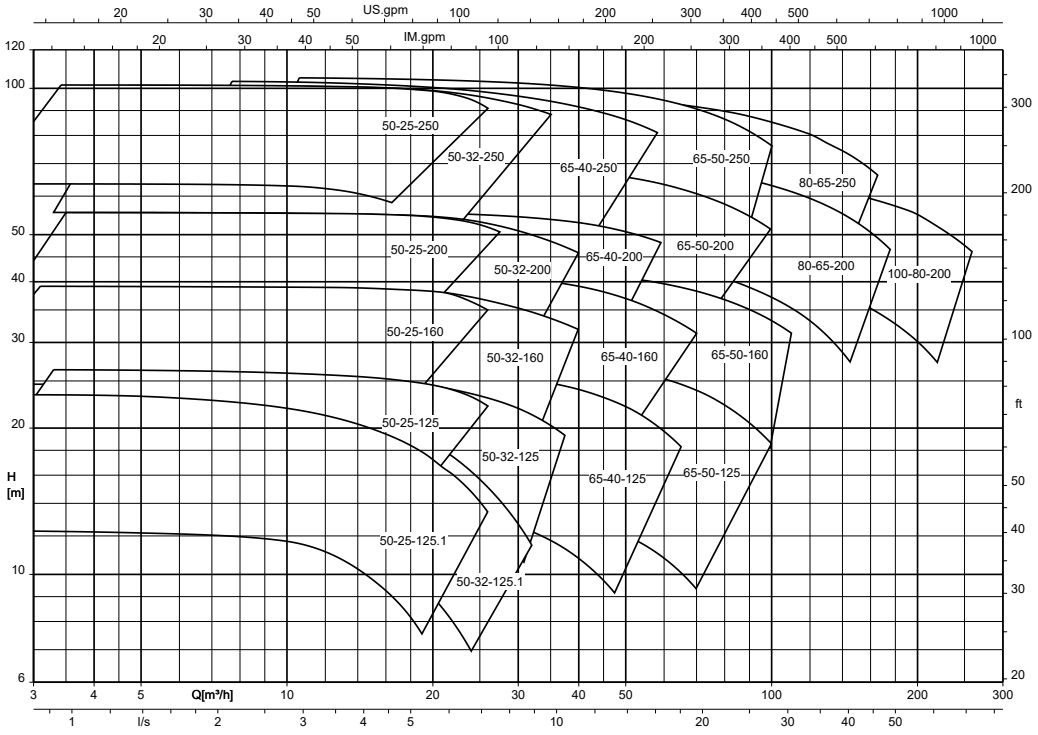
Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

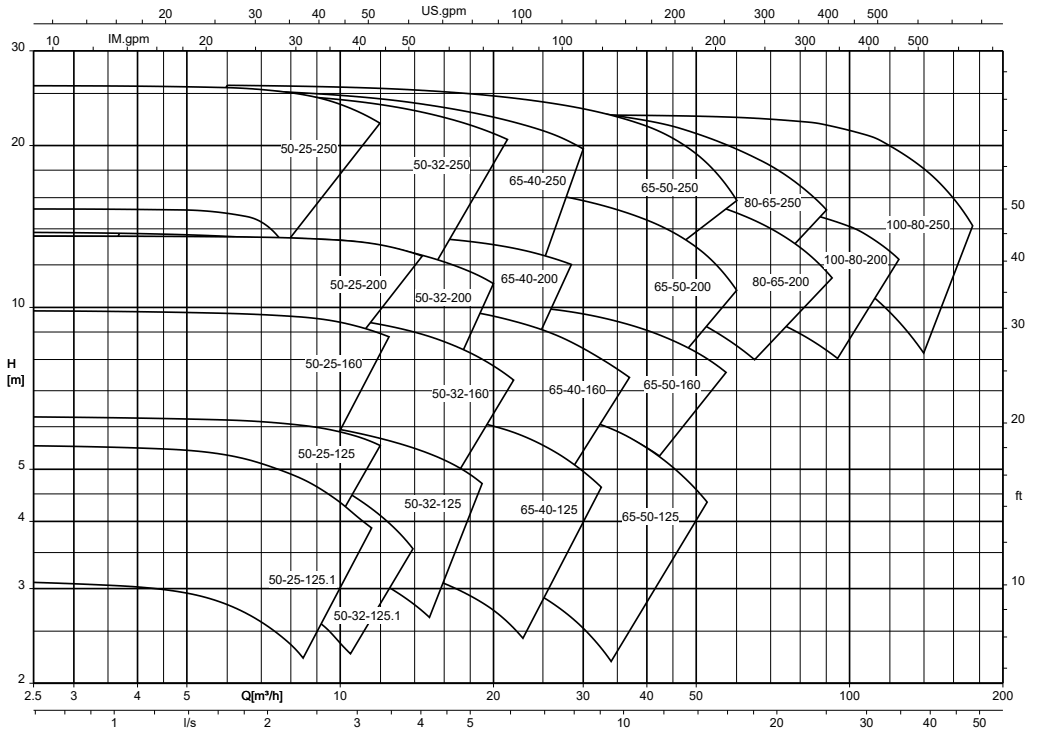
334 Conductivity > 2 µS/cm < 10 µS/cm, SiO2 < 10 mg/l, solids max. 5 mg/l

Selection charts

Etachrom L, n = 2900 rpm



Etachrom L, n = 1450 rpm



Related documents

Information/documents

Document	Reference number
Characteristic curves booklet (50 Hz/60 Hz) Fixed speed version	1212.56
Characteristic curves booklet Variable speed version	1212.57

Dimensions

Related documents

Information/documents

Document	Reference number
Type series booklet Etachrom L	1212.5

Interchangeability of Etachrom L and Etachrom B pump components

Pump components[335] Etachrom L

Size	Pump casing	Intermediate piece	Discharge cover	Foot	Support foot	Shaft	Impeller	Radial ball bearing Drive end	Radial ball bearing Pump end	Bearing bracket	Bearing cover Drive end	Bearing cover Pump end	Gasket	Joint ring	Joint ring	O-ring	Mechanical seal	Casing wear ring Suction side	Casing wear ring Discharge side	Shaft sleeve
	101	132.01	163	182	183	210	230	321.02	321.01	330	360.02	360.01	400.75	411.77	411.78	412.35	433	502.01	502.02	523
050-025-125.1	1	✗	1*	1	1	1	1*	1	1	1	1	1	✗	✗	✗	1*	1*	1*	✗	✗
050-025-125	1	✗	1*	1	1	1	2*	1	1	1	1	1	✗	✗	✗	1*	1*	1*	✗	✗
050-025-160	○	✗	5*	2	2	1	3*	1	1	2	1	1	✗	✗	✗	2*	1*	1*	✗	✗
050-025-200	○	✗	2*	3	3	1	4*	1	1	3	1	1	✗	✗	✗	3*	1*	7*	1*	✗
050-025-250	○	1*	3*	✗	4	2	5*	1	3	4	1	3	✗	✗	✗	4*	2*	6*	2*	✗
050-032-125.1	2	✗	1*	1	1	1	1*	1	1	1	1	1	✗	✗	✗	1*	1*	1*	✗	✗
050-032-125	2	✗	1*	1	1	1	2*	1	1	1	1	1	✗	✗	✗	1*	1*	1*	✗	✗
050-032-160	○	✗	5*	2	2	1	3*	1	1	2	1	1	✗	✗	✗	2*	1*	1*	✗	✗
050-032-200	○	✗	2*	3	3	1	4*	1	1	3	1	1	✗	✗	✗	3*	1*	7*	1*	✗
050-032-250	○	1*	3*	✗	4	2	5*	1	3	4	1	3	✗	✗	✗	4*	2*	6*	2*	✗
065-040-125	○	✗	1*	○	1	1	○*	1	1	1	1	1	✗	✗	✗	1*	1*	2*	✗	✗
065-040-160	○	✗	○*	2	2	1	○*	1	1	2	1	1	✗	✗	✗	2*	1*	8*	1*	✗
065-040-200	○	✗	2*	○	3	1	○*	1	1	3	1	1	✗	✗	✗	3*	1*	8*	1*	✗
065-040-250	○	1*	3*	✗	4	2	○*	1	3	4	1	3	✗	✗	✗	4*	2*	3*	2*	✗
065-050-125	○	✗	○*	2	2	1	○*	1	1	2	1	1	✗	✗	✗	2*	1*	2*	✗	✗
065-050-160	○	✗	○*	○	3	1	○*	1	1	2	1	1	✗	✗	✗	2*	1*	8*	1*	✗
065-050-200	○	○*	○*	✗	3	2	○*	1	3	4	1	3	✗	✗	✗	○*	2*	3*	2*	✗
065-050-250	○	1*	3*	✗	4	2	○*	1	3	4	1	3	✗	✗	✗	4*	2*	3*	2*	✗
080-065-200	○	1*	○*	✗	4	2	○*	1	3	4	1	3	✗	✗	✗	4*	2*	4*	○*	✗
080-065-250	○	2*	4*	✗	5	3	○*	2	2	5	2	2	1*	1	1	4*	3*	4*	3*	1*
100-080-200	○	2*	4*	✗	○	3	○*	2	2	5	2	2	1*	1	1	4*	3*	5*	3*	1*
100-080-250	○	2*	4*	✗	5	3	○*	2	2	5	2	2	1*	1	1	4*	3*	5*	3*	1*

Symbols key

Symbol	Description
*	Component interchangeable with Etachrom B
○	Components differ
✗	Component not fitted

335 Pump components featuring the same number in a column are interchangeable, i.e. same number = same component

Recommended spare parts stock for 2 years' operation to DIN 24296

Quantity of spare parts for recommended spare parts stock

Part No.	Description	Number of pumps (including stand-by pumps)						
		2	3	4	5	6 and 7	8 and 9	10 and more
210	Shaft	1	1	1	2	2	2	20 %
230	Impeller	1	1	1	2	2	2	20 %
321.01/.02	Radial ball bearing (set)	1	1	2	2	2	3	25 %
330	Bearing bracket	-	-	-	-	-	1	2 pcs.
400.75[336)]	Gasket	4	6	8	8	9	10	100 %
412.35	O-ring	4	6	8	8	9	12	150 %
433	Mechanical seal	1	1	2	2	2	3	25 %
502.01	Casing wear ring, suction side	2	2	2	3	3	4	50 %
502.02[337)]	Casing wear ring, discharge side	2	2	2	3	3	4	50 %
502.06[338)]	Casing wear ring, impeller	2	2	2	3	3	4	50 %
523[336)]	Shaft sleeve	2	2	2	3	3	4	50 %

336 Only for Etachrom L 080-065-250, 100-080-200, 100-080-250

337 Not for Etachrom L 050-025-125.1, 050-025-125, 050-025-160, 050-032-125.1, 050-032-125, 050-032-160, 065-040-125, 065-050-125

338 Only for Etachrom L 080-065-250, 100-080-250

Vertical Low-pressure Pumps

Etanorm V

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000015

Product benefits

- Improved efficiency and NPSHreq by experimentally verified hydraulic design of impellers (vanes)
- Operating costs reduced by trimming the nominal impeller diameter to match the specified duty point
- Cover plate serves as tank cover and for mounting the pump.
- Robust deep groove ball bearings greased for life
- Vertical design with small footprint

Design D:

- Variable immersion depth up to 535 mm
- Ingress of fluid handled into the deep groove ball bearing prevented by V-ring and/or lip seal
- No need for additional bearing in the fluid handled thanks to cantilever design

Design W:

- Variable immersion depth up to 2000 mm
- Wear-resistant, product-lubricated SiC/SiC plain bearing
- Resistant to short flooding of the cover plate thanks to design without rolling element bearing above the cover plate

Further information

Prices on request

Selection charts 696
Dimensions 698

Further information

	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[339)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

339 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Main applications

- Pumping neutral degreasing solutions and phosphating solutions
- Lubricating oil supply and sealing oil supply for turbines, generators, large compressors, large gear units

Fluids handled

- Water
- Wash water with degreasing agents
- Lubricating oils and sealing oils
- Phosphating solutions and electrophoretic coating paint (e.g. cataphoretic dip paint)[340)]
- Hydraulic oils

Further information on fluids handled

Overview of fluids handled (⇨ Page 693)

Operating data

Operating properties

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q [m³/h]	≤ 625	≤ 675
Head	H [m]	≤ 100	≤ 100
Fluid temperature Design D	T [°C]	≤ +70	≤ +70
Fluid temperature Design W		≤ +95	≤ +95

340 Only for design D

Design details

Design

- Volute casing pump
- For vertical installation in closed tanks under atmospheric pressure
- Single-stage
- Ratings to EN 733
- Rigid connection between pump and motor

Pump casing

- Radially split volute casing

Stainless steel variant / grey cast iron variant for design with shaft unit WS 55:

- Volute casing with integrally cast pump feet
- Replaceable casing wear rings

Contact guard

Design D:

- Cover plates at bearing lantern to EN 294

Design W:

- Cover plates at drive lantern to EN 294

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[341)] (PumpDrive required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 0.55 kW to 45 kW
- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2 / PumpDrive 2 Eco:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types motor mounting (only for fluid temperature ≤ 110 °C), wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

For operating an Etanorm V on a frequency inverter which has not been configured via the KSB selection tool consultation with KSB is required.

For operating an Etanorm V on a frequency inverter at immersion depths > 1000 mm selection requires consultation with KSB.

Shaft seal

- Controlled gap

Impeller type

- Closed radial impeller with multiply curved vanes

Bearings

Design D:

- Deep groove ball bearings greased for life in a bearing lantern above the cover plate, pump shaft cantilevered below the cover plate

Design W:

- Product-lubricated SiC/SiC plain bearing (pump end), rigid coupling between pump shaft and motor shaft

341 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Designation

Designation example

Position																																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
E	T	N	V	0	5	0	-	0	3	2	-	1	2	5	1	G	G	S	D	D	B	0	4	2	2	0	0	7	5	2	B	P	D	2	E
See name plate and data sheet																										See data sheet									

Designation key

Position	Code	Description	
1-4	Pump type		
	ETNV	Etanorm V	
5-16	Size, e.g.		
	050	Nominal suction nozzle diameter [mm]	
	032	Nominal discharge nozzle diameter [mm]	
	1251	Nominal impeller diameter [mm]	
17	Pump casing material		
	C	Stainless steel	1.4408 / A743CF8M
	G	Cast iron	EN-GJL-250/A48 CL 35B
18	Impeller material		
	B	Bronze	CC480K-GS / B30 C90700
	C	Stainless steel	1.4408 / A743CF8M
	G	Cast iron	EN-GJL-250/A48 CL 35B
19	Design		
	S	Standard	
	X	Non-standard (BT3D, BT3)	
20	Shaft design		
	D	Dry	
	V	Vacuum	
	W	Wet	
21	Scope of supply		
	A	Pump only (Fig. 0 bare-shaft pump)	
	C	Pump, coupling	
	D	Pump set	
22	Cover plate		
	B	Cover plate	
	H	Halter	
23-25	Immersion depth [mm]		
	037	375	
	039	398	
	042	425	
	044	448	
	050	504	
	052	529	
	053	535	
	075	750	
	100	1000	
	125	1250	
	150	1500	
	170	1750	
	200	2000	
26	Shaft unit		
	2	Shaft unit 25	
	3	Shaft unit 35	
	5	Shaft unit 55	
27-30	Motor rating P_N [kW]		
	0007	0,75	
	...	...	
	1320	132,00	
	----	Without motor	

Position	Code	Description
31	Number of motor poles	
	-	Without motor
32	Product generation	
	B	Etanorm V 2013
33-36	Variant	
	-	Fixed speed version (without PumpDrive)
	PD2	Variable speed version, with PumpDrive 2
	PD2E	Variable speed version, with PumpDrive 2 Eco

Materials

Symbols key

Symbol	Description
✗	Standard
o	Optional
-	Version not available / not feasible

Overview of available materials

Part No.	Description	Material	Material variant			
			GG	GB	GC	CC
68-3.01	Cover plate	Steel	✗	✗	✗	-
		Stainless steel 1.4408 / A743 Gr. CF8 M	o	o	o	✗
102	Volute casing	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	✗	✗	-
		Stainless steel 1.4408 / A743 Gr. CF8 M	-	-	-	✗
146	Intermediate lantern	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	✗	✗	✗
161	Casing cover	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	✗	✗	-
		Stainless steel 1.4408 / A743 Gr. CF8 M	-	-	-	✗
210	Shaft	Tempered steel C45+N	✗	✗	✗	-
		Duplex steel 1.4462 / UNS S31803	o	o	o	✗
230	Impeller	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	-	-	-
		Stainless steel 1.4408 / A743 Gr. CF8 M	-	-	✗	✗
		Bronze CC480K-GS / B30 C90700	-	✗	-	-
340	Bearing lantern	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	✗	✗	✗
341	Drive lantern	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	✗	✗	✗
350	Bearing housing	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	✗	✗	✗
381	Plain bearing	SiC / SiC	✗	✗	✗	✗
502.01	Casing wear ring, suction side	Grey cast iron EN-GJL-250 / CI	✗	✗	✗	-
		Stainless steel (CrNiMoST)	o	-	o	✗
		Bronze CC495K-GS	-	o	-	-
		Without	-	-	-	✗
502.02	Casing wear ring, discharge side	Grey cast iron EN-GJL-250 / CI	✗	✗	✗	-
		Stainless steel (CrNiMoST)	o	-	o	✗
		Bronze CC495K-GS	-	o	-	-
		Without	-	-	-	✗
711	Discharge pipe	Steel	✗	✗	✗	-
		Stainless steel 1.4404	-	-	-	✗
712	Support column	Steel	✗	✗	✗	-
		Stainless steel 1.4404	-	-	-	✗
732	Holder	Steel	✗	✗	✗	o
		Stainless steel 1.4571	-	-	-	✗
902.01	Stud	Steel 8.8	✗	✗	✗	-
		A4 / AISI 316	o	o	o	✗
903	Screw plug	Steel 8.8	✗	✗	✗	-
		A4 / AISI 316	o	o	o	✗
905	Tie bolt	Steel 8.8	✗	✗	✗	-
		A4 / AISI 316	o	o	o	✗
920.95	Impeller nut	Steel 8.8	✗	✗	-	-
		A4 / AISI 316	o	o	✗	✗
940	Key	Steel 8.8	✗	✗	-	-
		A4 / AISI 316	o	o	✗	✗

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Overview of product features / selection tables

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

Symbols key

Symbol	Description
✗	Standard
-	Version not available / not feasible

Excerpt from the overview of fluids handled with associated material variants

Fluid handled	Casing/impeller materials		Bearings		Fluid properties			
	Grey cast iron / grey cast iron	Cast CrNiMo steel / cast CrNiMo steel	Design W Plain bearing	Design D Cantilever	Specific concentration [%]	Temperature [°C]	Density [g/cm²]	pH
Water								
Cooling water[342] (without antifreeze)	✗	-	✗	✗	-	-	-	-
Cooling water pH ≥ 7.5 (with antifreeze)	✗	-	✗	✗	-	-	-	-
Slightly contaminated water[342]	✗	-	✗	✗	-	-	-	-
Pure water[343]	✗	-	✗	✗	-	-	-	-
Raw water[342]	✗	-	✗	✗	-	-	-	-
Swimming pool water, fresh water[342]	✗	-	✗	✗	-	-	-	-
Dam water[342][344]	✗	-	✗	✗	-	-	-	-
Partly desalinated water[345]	✗	-	✗	✗	-	-	-	-
Surface treatment – pre-treatment								
Fully desalinated water, free of solids	-	✗	✗	✗	-	≤ 60	1,0	~ 7,0
Silicate-free, alkaline degreasing or cleaning solution	✗	✗	✗	✗	0,3 - 5,0	≤ 80	1,1	8,5 - 13,0
Activation	-	✗	✗	✗	0,3 - 5,0	≤ 40	1,1	7,5 - 10,5
Zinc phosphating solution (bath)	-	✗	-	✗	~ 5,0	≤ 65	1,05	2,0 - 5,0
Iron phosphating solution (alkaline phosphate solution)	✗	-	-	✗	~ 5,0	≤ 70	1,05	4,0 - 6,0
Passivating	-	✗	✗	✗	≥ 1,0	≤ 50	1,0	3,0 - 6,0
Sodium hydroxide	✗	-	✗	✗	15 - 20	≤ 20	1,18	14,0
Surface treatment – painting								
Conventional paint on solvent basis	✗	-	✗	✗	10 - 40	25 - 35	~ 1,5	7,0
Cataphoretic dip paint	-	✗	-	✗	10 - 21	25 - 35	1,05 - 1,1	6,0 - 6,7
Anaphoretic dip paint	-	✗	-	✗	10 - 15	20 - 30	1,05 - 1,1	7,7
Ultrafiltrate = permeate. Pure filtrate, solids content < 3 %	✗	✗	✗	✗	-	20 - 30	1,0	5,5 - 6,0
Recirculated fluid, solids content < 3 %	✗	✗	✗	✗	-	20 - 30	1,1	6,0

342 General evaluation criteria for results of water analysis: pH ≥ 7; chlorides content (Cl) ≤ 250 mg/kg. Chlorine (Cl2) ≤ 0.6 mg/kg.
343 No ultra-pure water! Conductivity at 25 °C: ≤ 800 µS/cm, neutral with regard to chemical corrosion
344 If solids are contained, contact KSB.
345 Treatment to VdTÜV 1466; additional requirement: O2 ≤ 0.02 mg/l

Fluid handled	Casing/impeller materials		Bearings		Fluid properties			
	Grey cast iron / grey cast iron	Cast CrNiMo steel / cast CrNiMo steel	Design W Plain bearing	Design D Cantilever	Specific concentration	Temperature	Density	pH
					[%]	[°C]	[g/cm²]	
Paint-laden water containing residues of metal, plastic or wood paints	✗	-	✗	✗	-	20 - 30	1,0 - 1,05	~ 7,0
Anolyte (dialyte) with acetic acid or formic acid, free of solids	-	✗	✗	✗	-	20 - 30	1	2,5 - 3,0
Accelerator (as preparation)	-	✗	✗	✗	-	-	1,05 - 1,1	-

Overview of variants

Other designs on request

Symbols key

Symbol	Description
✗	Standard
-	Version not available / not feasible

Overview of Etanorm V variants

Variant	102 / Volute casing	230 / Impeller	T	Main applications	
			[°C]	Pumping neutral degreasing solutions and phosphating solutions	Lubricating oil supply and sealing oil supply for turbines, generators, large compressors, large gear units
V-D GG	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	≤ +70	-	✗
V-D CC	Stainless steel 1.4408 / A743 Gr. CF8 M	Stainless steel 1.4408 / A743 Gr. CF8 M	≤ +70	-	✗
V-W GG	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	≤ +95	-	✗
V-W CC	Stainless steel 1.4408 / A743 Gr. CF8 M	Stainless steel 1.4408 / A743 Gr. CF8 M	≤ +95	✗	✗

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Technical data

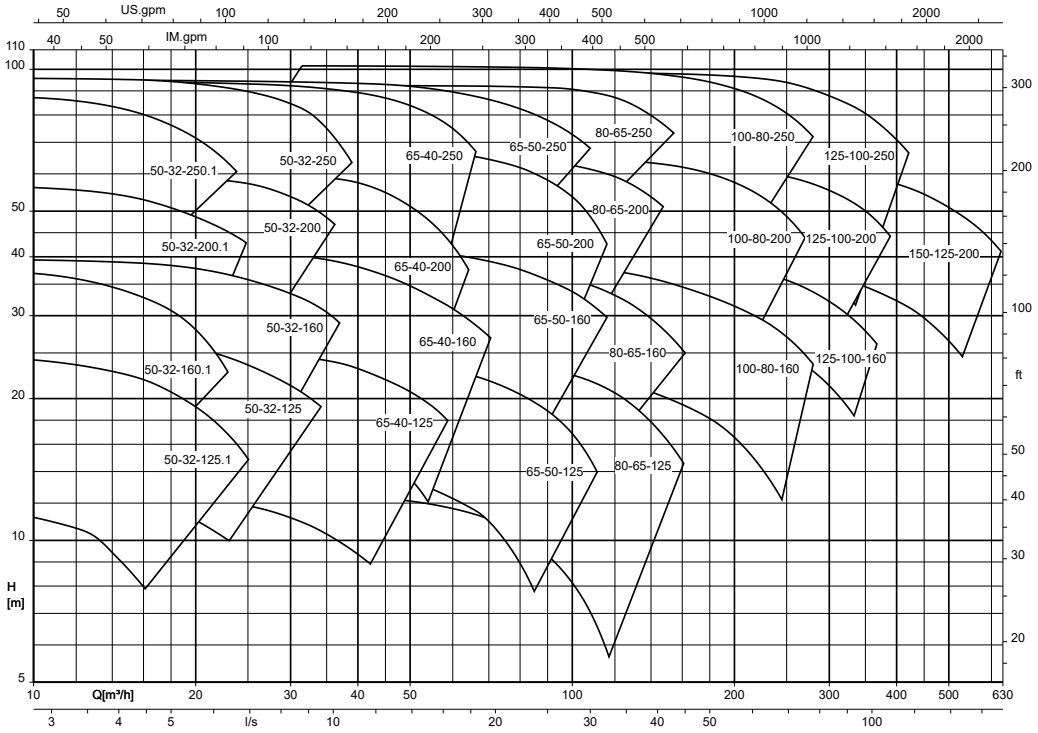
Pump

Technical data

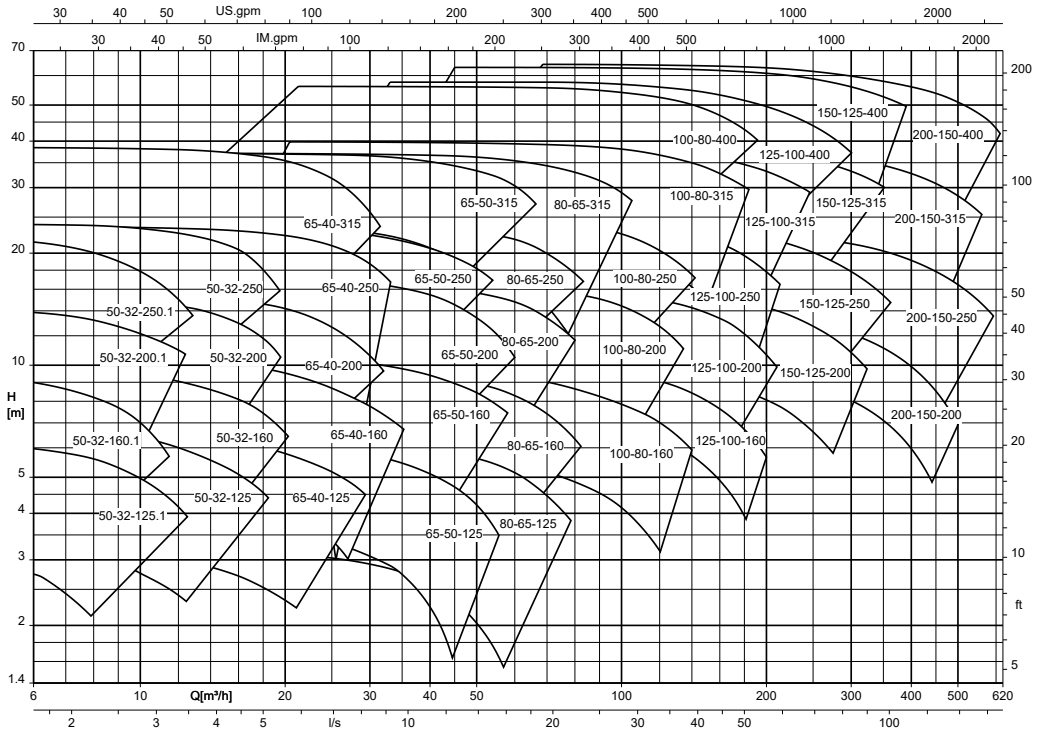
Etanorm V	Bearing bracket	Number of blades	Impeller					Speed limit (immersion depth ≤ 750 mm)			
						Nominal impeller diameter		Design W		Design D	
			Impeller outlet width	Free passage diameter	Impeller inlet diameter	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
			[mm]					[rpm]			
050-032-125.1	WS_25	6	6	6,0	52	139	104	3600	800	3600	800
050-032-160.1	WS_25	6	10	5,4	63	170	136	3600	800	3600	800
050-032-200.1	WS_25	6	7	5,3	62	204	170	3600	800	3600	800
050-032-250.1	WS_25	6	13	5,2	70	254	200	3500	800	3600	800
050-032-125	WS_25	6	7	5,7	52	139	104	3600	800	3600	800
050-032-160	WS_25	6	6	5,8	54	174	136	3600	800	3600	800
050-032-200	WS_25	6	9	6,7	63	209	170	3600	800	3600	800
050-032-250	WS_25	6	14	7,1	74	261	209	3500	800	3600	800
065-040-125	WS_25	6	9	9,6	69	139	104	3500	800	3600	800
065-040-160	WS_25	6	20	11,5	88	174	128	3600	800	3600	800
065-040-200	WS_25	6	17	8,9	87	209	165	3600	800	3600	800
065-040-250	WS_25	6	14	8,0	83	260	200	3500	800	3600	800
065-040-315	WS_35	6	26	7,1	99	326	260	2900	800	2300	800
065-050-125	WS_25	6	6	11,6	58	142	112	3500	800	3600	800
065-050-160	WS_25	6	8	11,6	63	174	128	3600	800	3600	800
065-050-200	WS_25	6	8	11,9	73	219	170	3500	800	3600	800
065-050-250	WS_25	6	8	10,0	75	260	215	3500	800	3600	800
065-050-315	WS_35	6	11	9,5	84	323	265	2900	800	2400	800
080-065-125	WS_25	6	10	12,9	86	141	130	3500	800	3600	800
080-065-160	WS_25	6	21	12,2	92	174	132	3600	800	3600	800
080-065-200	WS_25	6	17	13,3	100	219	175	3500	800	3600	800
080-065-250	WS_35	6	15	14,3	101	260	215	3500	800	3600	800
080-065-315	WS_35	6	32	14,0	124	320	260	2900	800	1900	800
100-080-160	WS_25	6	25	15,1	115	174	154	3500	800	3600	800
100-080-200	WS_35	6	19	15,2	115	219	180	3500	800	3600	800
100-080-250	WS_35	6	38	15,8	135	269	215	3500	800	3600	800
100-080-315	WS_35	6	33	17,8	142	334	269	2900	800	1900	800
100-080-400	WS_55	6	14	14,3	107	398	330	1800	800	1900	800
125-100-160	WS_35	6	19	16,4	115	185	177	3600	800	3600	800
125-100-200	WS_35	6	15	17,9	129	219	179	3500	800	3600	800
125-100-250	WS_35	6	27	18,8	145	269	210	3500	800	3600	800
125-100-315	WS_35	6	23	19,9	142	334	270	2900	800	1900	800
125-100-400	WS_55	6	18	17,1	142	401	329	1800	800	1900	800
150-125-200	WS_35	6	41	21,1	160	224	205	3500	800	3600	800
150-125-250	WS_35	6	37	22,4	162	269	218	2000	800	2000	800
150-125-315	WS_55	6	31	22,6	162	334	270	2300	800	1900	800
150-125-400	WS_55	6	26	20,9	162	419	330	1800	800	1800	800
200-150-200	WS_35	5	60	25,2	179	224	215	1800	800	2100	800
200-150-250	WS_35	6	49	23,0	191	269	220	1800	800	1800	800
200-150-315	WS_55	6	40	26,9	192	334	264	1800	800	1800	800
200-150-400	WS_55	6	33	23,8	191	419	330	1800	800	1800	800

Selection charts

Etanorm V (fixed speed version), n = 2900 rpm



Etanorm V (fixed speed version), n = 1450 rpm



Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Related documents

Information/documents

Document	Reference number
Characteristic curves booklet (50 Hz) Fixed speed version	1311.45

Dimensions

Pump dimensions

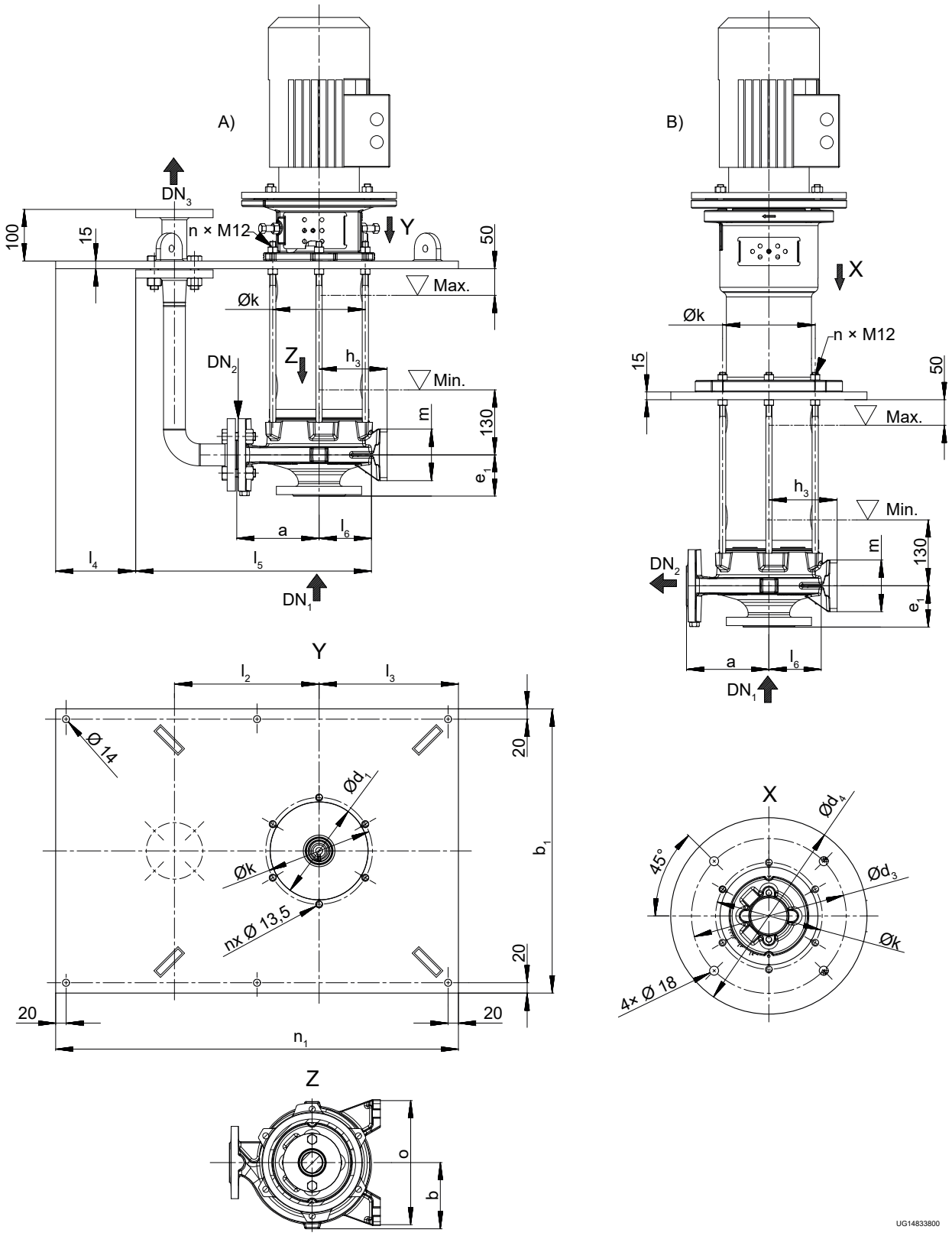


Fig. 289: Dimensions [mm]
A) Design W
B) Design D

Flanges of DN 65 come with 4 bolt holes; all other sizes come with 8 bolt holes.

Dimensions [mm]

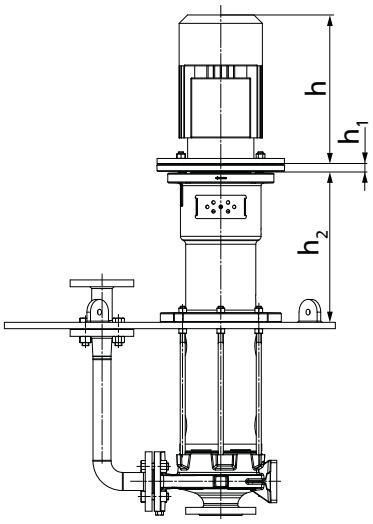
Etanorm V	Shaft unit	DN_1	DN_2	DN_3	a	b	b_1	d_1	d_3	d_4	e_1	h_3	k	l_2	l_3	l_4	l_5	l_6	m	n	n_1	o
050-032-125.1[346]	WS_25	50	32	40	140	116	550	190	300	380	80	112	207	280	270	155	455	100	100	6	780	190
050-032-160.1[346]	WS_25	50	32	40	160	116	550	190	300	380	80	132	207	280	270	155	466	111	100	6	780	240
050-032-200.1[346]	WS_25	50	32	40	180	142	550	190	300	380	80	160	207	280	270	155	491	136	100	6	780	240
050-032-250.1[346]	WS_25	50	32	40	225	168	550	190	300	380	100	180	207	280	270	155	521	166	125	6	780	320
050-032-125[346]	WS_25	50	32	40	140	115	550	190	300	380	80	112	207	280	270	155	455	100	100	6	780	190
050-032-160[346]	WS_25	50	32	40	160	118	550	190	300	380	80	132	207	280	270	155	470	115	100	6	780	240
050-032-200[346]	WS_25	50	32	40	180	142	550	190	300	380	80	160	207	280	270	155	492	137	100	6	780	240
050-032-250[346]	WS_25	50	32	40	225	169	550	190	300	380	100	180	207	280	270	155	521	166	125	6	780	320
065-040-125[346]	WS_25	65	40	50	140	117	550	190	300	380	80	112	207	270	270	157	460	107	100	6	780	210
065-040-160[346]	WS_25	65	40	50	160	119	550	190	300	380	80	132	207	290	270	137	492	119	100	6	780	240
065-040-200[346]	WS_25	65	40	50	180	142	550	190	300	380	100	160	207	310	270	117	534	141	100	6	780	265
065-040-250[346]	WS_25	65	40	50	225	169	550	190	300	380	100	180	207	295	270	132	544	166	125	6	780	320
065-040-315[346]	WS_35	65	40	50	250	207	550	241	300	380	125	225	260	320	270	107	607	204	125	6	780	345
065-050-125[346]	WS_25	65	50	65	160	117	550	190	300	380	100	132	207	310	270	107	515	112	100	6	780	240
065-050-160[346]	WS_25	65	50	65	180	128	550	190	300	380	100	160	207	330	270	87	556	133	100	6	780	265
065-050-200[346]	WS_25	65	50	65	200	144	550	190	300	380	100	160	207	290	270	127	533	150	100	6	780	265
065-050-250[346]	WS_25	65	50	65	225	170	550	190	300	380	100	180	207	315	270	102	580	172	125	6	780	320
065-050-315[346]	WS_35	65	50	65	280	207	550	241	350	380	125	225	260	370	270	47	666	203	125	6	780	345
080-065-125[346]	WS_25	80	65	80	180	117	550	190	300	380	100	160	207	350	270	60	577	127	125	6	780	280
080-065-160[346]	WS_25	80	65	80	200	132	550	190	300	380	100	160	207	370	270	40	610	140	125	6	780	280
080-065-200[346]	WS_25	80	65	80	225	155	550	190	300	380	100	180	207	335	270	75	596	161	125	6	780	320
080-065-250[346]	WS_35	80	65	80	250	199	550	241	350	380	100	200	260	360	270	50	645	185	160	8	780	360
080-065-315[346]	WS_35	80	65	80	280	209	550	241	350	380	125	225	260	390	270	49	674	213	160	8	780	400
100-080-160[346]	WS_25	100	80	100	225	138	550	190	300	380	125	180	207	355	270	145	618	153	125	6	880	320
100-080-200[346]	WS_35	100	80	100	250	159	550	241	350	380	125	180	260	380	270	120	660	170	125	8	880	345
100-080-250[346]	WS_35	100	80	100	280	183	550	241	350	380	125	200	260	410	270	90	712	192	160	8	880	400
100-080-315[346]	WS_35	100	80	100	315	218	550	241	350	380	125	250	260	445	270	55	782	227	160	8	880	400
100-080-400[346][347]	WS_55	100	80	100	355	257	700	241	420	445	125	280	260	485	355	200	-	-	160	8	1150	435
125-100-160[346]	WS_35	125	100	100	280	178	550	241	350	380	125	200	260	450	270	68	741	199	160	8	880	360
125-100-200[346]	WS_35	125	100	125	280	173	550	241	350	380	125	200	260	450	270	68	731	189	160	8	880	360
125-100-250[346]	WS_35	125	100	125	280	188	550	241	350	380	140	225	260	450	270	68	742	200	160	8	880	400
125-100-315[346]	WS_35	125	100	125	315	225	550	241	350	380	140	250	260	485	260	43	814	237	160	8	880	400
125-100-400[346][347]	WS_55	125	100	125	355	255	700	241	420	445	140	280	260	525	355	145	-	-	200	8	1150	500
150-125-200[346]	WS_35	150	125	150	315	189	600	241	350	380	140	250	260	520	330	157	875	212	160	8	1150	400
150-125-250[346]	WS_35	150	125	150	355	226	600	241	350	380	140	250	260	560	330	117	951	248	160	8	1150	400
150-125-315[346][347]	WS_55	150	125	150	355	243	700	241	420	445	140	280	260	560	355	92	-	-	200	8	1150	500
150-125-400[346][347]	WS_55	150	125	150	400	277	700	241	420	445	140	315	260	605	355	47	-	-	200	8	1150	500
200-150-200[346]	WS_35	200	150	200	400	240	600	241	350	380	160	280	260	645	330	43	1054	277	200	8	1150	550
200-150-250[346]	WS_35	200	150	200	400	230	600	241	350	380	160	280	260	645	330	43	1039	262	200	8	1150	500
200-150-315[346][347]	WS_55	200	150	200	400	255	700	241	420	445	160	280	260	645	330	43	-	-	200	8	1150	550
200-150-400[346][347]	WS_55	200	150	200	450	289	700	241	420	445	160	315	260	690	345	43	-	-	200	8	1210	550

346 Pump casings made of stainless steel are equipped with pump feet.
347 Pump casings made of grey cast iron, shaft unit 55, are equipped with pump feet.

Motor dimensions

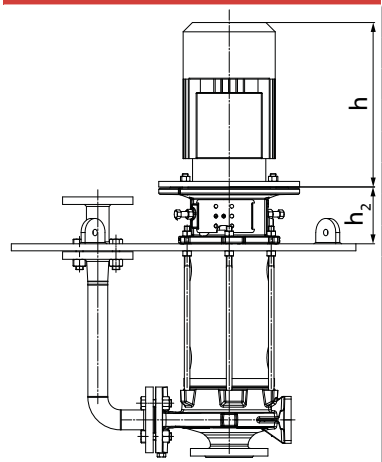
Design D

The dimensions used refer to a standard motor. For the exact motor-related dimensions refer to the general arrangement drawing.

Illustration	Motor	h	h_1			h_2		
		[mm]	[mm]			[mm]		
			WS_25	WS_35	WS_55	WS_25	WS_35	WS_55
	100	382	0	0	-	354	354	-
	112	371	0	0	-	354	354	-
	132	441	20	20	-	354	354	-
	160	552	50	50	0	354	354	631
	180	610	50	50	0	354	354	631
	200	669	50	50	0	354	354	631
	225	755	-	80	30	-	354	631
	250	817	-	0	30	-	434	631
	280	980	-	0	30	-	434	631

Design W

The dimensions used refer to a standard motor. For the exact motor-related dimensions refer to the general arrangement drawing.

Illustration	Motor	h	h_2		
		[mm]	[mm]		
			WS_25	WS_35	WS_55
	100	382	98	95	-
	112	371	98	95	-
	132	441	121	118	-
	160	552	154	151	151
	180	610	154	151	151
	200	669	154	151	151
	225	755	-	182	182
	250	817	-	194	194
	280	980	-	194	194

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Dimensions of immersion depths

Design D

Overview of immersion depths [mm] per shaft unit

Shaft unit	Immersion depth
WS_25	375, 425, 504
WS_35	398, 448, 529
WS_55	535

Design W

Overview of immersion depths [mm] per shaft unit

Shaft unit	Immersion depth
WS_25	375, 425, 504, 750, 1000, 1250, 1500, 1750, 2000
WS_35	398, 448, 529, 750, 1000, 1250, 1500, 1750, 2000
WS_55	535, 750, 1000, 1250, 1500, 1750, 2000

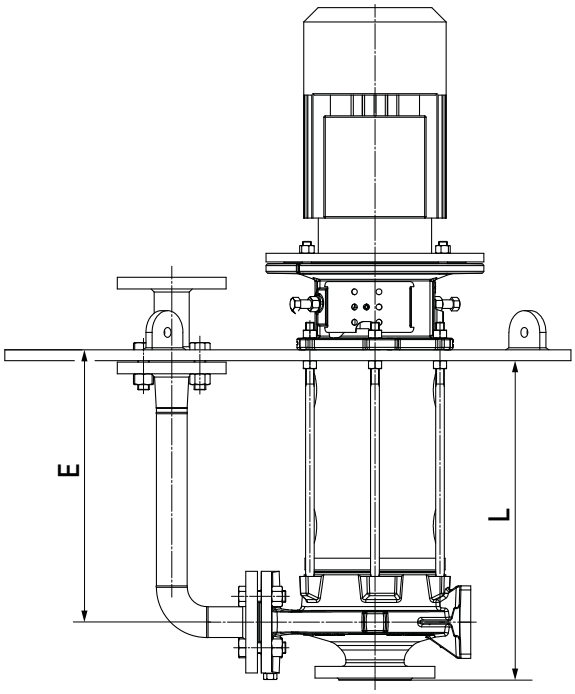


Fig. 290: Dimension of the immersion depth

Overview of dimension L [mm] depending on the immersion depth (E) [mm]

Etanorm V	Bearing bracket	E (immersion depth)												
		375	398	425	448	504	529	535	750	1000	1250	1500	1750	2000
		L												
050-032-125.1	WS_25	440	-	490	-	569	-	-	815	1065	1315	1565	1815	2065
050-032-160.1	WS_25	440	-	490	-	569	-	-	815	1065	1315	1565	1815	2065
050-032-200.1	WS_25	440	-	490	-	569	-	-	815	1065	1315	1565	1815	2065
050-032-250.1	WS_25	460	-	510	-	589	-	-	835	1085	1335	1585	1835	2085
050-032-125	WS_25	440	-	490	-	569	-	-	815	1065	1315	1565	1815	2065
050-032-160	WS_25	440	-	490	-	569	-	-	815	1065	1315	1565	1815	2065
050-032-200	WS_25	440	-	490	-	569	-	-	815	1065	1315	1565	1815	2065
050-032-250	WS_25	460	-	510	-	589	-	-	835	1085	1335	1585	1835	2085
065-040-125	WS_25	440	-	490	-	569	-	-	815	1065	1315	1565	1815	2065
065-040-160	WS_25	440	-	490	-	569	-	-	815	1065	1315	1565	1815	2065
065-040-200	WS_25	460	-	510	-	589	-	-	835	1085	1335	1585	1835	2085
065-040-250	WS_25	460	-	510	-	589	-	-	835	1085	1335	1585	1835	2085
065-040-315	WS_35	-	508	-	558	-	639	-	860	1110	1360	1610	1860	2110
065-050-125	WS_25	460	-	510	-	589	-	-	835	1085	1335	1585	1835	2085
065-050-160	WS_25	460	-	510	-	589	-	-	835	1085	1335	1585	1835	2085

Etanorm V	Bearing bracket	E (immersion depth)												
		375	398	425	448	504	529	535	750	1000	1250	1500	1750	2000
		L												
065-050-200	WS_25	460	-	510	-	589	-	-	835	1085	1335	1585	1835	2085
065-050-250	WS_25	460	-	510	-	589	-	-	835	1085	1335	1585	1835	2085
065-050-315	WS_35	-	508	-	558	-	639	-	860	1110	1360	1610	1860	2110
080-065-125	WS_25	460	-	510	-	589	-	-	835	1085	1335	1585	1835	2085
080-065-160	WS_25	460	-	510	-	589	-	-	835	1085	1335	1585	1835	2085
080-065-200	WS_25	460	-	510	-	589	-	-	835	1085	1335	1585	1835	2085
080-065-250	WS_35	-	483	-	533	-	614	-	835	1085	1335	1585	1835	2085
080-065-315	WS_35	-	508	-	558	-	639	-	860	1110	1360	1610	1860	2110
100-080-160	WS_25	485	-	535	-	614	-	-	860	1110	1360	1610	1860	2110
100-080-200	WS_35	-	508	-	558	-	639	-	860	1110	1360	1610	1860	2110
100-080-250	WS_35	-	508	-	558	-	639	-	860	1110	1360	1610	1860	2110
100-080-315	WS_35	-	508	-	558	-	639	-	860	1110	1360	1610	1860	2110
100-080-400	WS_55	-	-	-	-	-	-	645	860	1110	1360	1610	1860	2110
125-100-160	WS_35	-	508	-	558	-	639	-	860	1110	1360	1610	1860	2110
125-100-200	WS_35	-	508	-	558	-	639	-	860	1110	1360	1610	1860	2110
125-100-250	WS_35	-	523	-	573	-	654	-	875	1125	1375	1625	1875	2125
125-100-315	WS_35	-	523	-	573	-	654	-	875	1125	1375	1625	1875	2125
125-100-400	WS_55	-	-	-	-	-	-	660	875	1125	1375	1625	1875	2125
150-125-200	WS_35	-	523	-	573	-	654	-	875	1125	1375	1625	1875	2125
150-125-250	WS_35	-	523	-	573	-	654	-	875	1125	1375	1625	1875	2125
150-125-315	WS_55	-	-	-	-	-	-	660	875	1125	1375	1625	1875	2125
150-125-400	WS_55	-	-	-	-	-	-	660	875	1125	1375	1625	1875	2125
200-150-200	WS_35	-	543	-	593	-	674	-	895	1145	1395	1645	1895	2145
200-150-250	WS_35	-	543	-	593	-	674	-	895	1145	1395	1645	1895	2145
200-150-315	WS_55	-	-	-	-	-	-	680	895	1145	1395	1645	1895	2145
200-150-400	WS_55	-	-	-	-	-	-	680	895	1145	1395	1645	1895	2145

Dimensions: distance from the floor

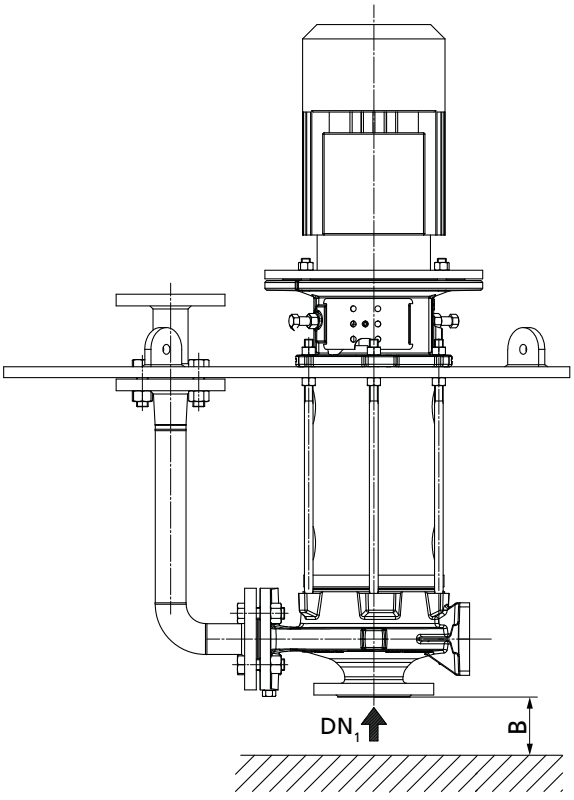


Fig. 291: Distance from the floor

Distance from the floor in [mm]

DN_1	B
50	≥80
65	≥80
80	≥100
100	≥100
125	≥100
150	≥150
200	≥150

Flange variant

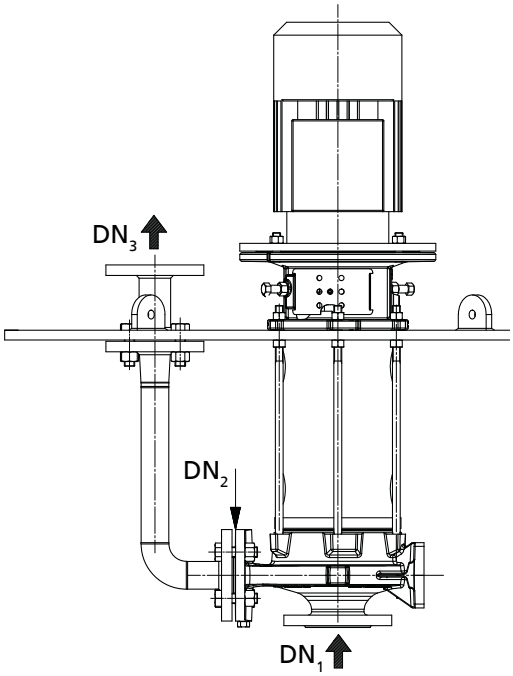


Fig. 292: Flange designation

Flange designs

	Suction side	Discharge side	
	DN_1	DN_2	DN_3
Standard	DIN EN 1092-2 (material variant G) DIN EN 1092-1 (material variant C)		
Flange position	Axial		
Pressure class	PN 16 PN 10 (from size DN 200)	PN 16	PN 10
Flange design	RF	RF	FF
Flange type	21-B	21-B	01-A

Flange sizes

Etanorm V	Suction side	Discharge side	
	DN_1	DN_2	DN_3
050-032-125.1	50	32	40
050-032-160.1	50	32	40
050-032-200.1	50	32	40
050-032-250.1	50	32	40
050-032-125	50	32	40
050-032-160	50	32	40
050-032-200	50	32	40
050-032-250	50	32	40
065-040-125	65[348)]	40	50
065-040-160	65[348)]	40	50
065-040-200	65[348)]	40	50
065-040-250	65[348)]	40	50
065-040-315	65[348)]	40	50
065-050-125	65[348)]	50	65[348)]
065-050-160	65[348)]	50	65[348)]
065-050-200	65[348)]	50	65[348)]
065-050-250	65[348)]	50	65[348)]
065-050-315	80	50	65[348)]

348 Flange with 4 bolt holes

Etanorm V	Suction side	Discharge side	
	DN_1	DN_2	DN_3
080-065-125	80	65[348)]	80
080-065-160	80	65[348)]	80
080-065-200	80	65[348)]	80
080-065-250	80	65[348)]	80
080-065-315	80	65[348)]	80
100-080-160	100	80	100
100-080-200	100	80	100
100-080-250	100	80	100
100-080-315	100	80	100
100-080-400	100	80	100
125-100-160	125	100	125
125-100-200	125	100	125
125-100-250	125	100	125
125-100-315	125	100	125
125-100-400	125	100	125
150-125-200	150	125	150
150-125-250	150	125	150
150-125-315	150	125	150
150-125-400	150	125	150
200-150-200	200	150	200
200-150-250	200	150	200
200-150-315	200	150	200
200-150-400	200	150	200

Flange design by materials

Material variant	Standard	Pressure class
GG, GB, GC	EN 1092-2	PN 16
CC	EN 1092-1	PN 16

Sets of spare parts

Etanorm V in design D

Overview of spare parts sets

Spare parts set	Part No.	Description
210 - shaft	210	Shaft
	550.95[349)]	Disc
	920.95	Nut
	930.95	Safety device
	940.01	Key
	940.02	Key
102 - volute casing	102	Volute casing
	502.01	Casing wear ring
	902.01[350)]	Stud
	903.01	Screw plug
	903.03	Screw plug
	920.01[350)]	Nut

Etanorm V in design W

Overview of spare parts sets

Spare parts set	Part No.	Description
210 - shaft	210	Shaft
	515	Locking ring

349 For shaft unit 25 only
350 For bolted casing cover only

Spare parts set	Part No.	Description
210 - shaft	550.95[351)]	Disc
	840	Coupling
	914.24	Hexagon socket head cap screw
	920.95	Nut
	930.95	Safety device
	940.01	Key
211 - pump shaft	211	Pump shaft
	515	Locking ring
	550.95[351)]	Disc
	561.29	Grooved pin
	914.24	Hexagon socket head cap screw
	920.95	Nut
	930.95	Safety device
	940.01	Key
102 - volute casing	102	Volute casing
	502.01	Casing wear ring
	902.01[352)]	Stud
	903.01	Screw plug
	903.03	Screw plug
	920.01[352)]	Nut
161 - casing cover	161	Casing cover
	502.02	Casing wear ring
515 - locking ring	515	Locking ring
	914.24	Hexagon socket head cap screw
381 - bearing cartridge	381.01	Bearing cartridge
	412.24	O-ring
	504[353)]	Spacer ring
	529.16	Bearing sleeve
	550.80[354)]	Disc
	561.29	Grooved pin
	932.41[354)]	Circlip
	932.42[355)]	Circlip
341 - drive lantern	68-3.02	Cover plate
	341	Drive lantern
	902.11	Stud
	920.11	Nut

Scope of supply

Depending on the model, the following items are included in the scope of supply:

- Pump
- Drive
- Cover plate
- Discharge line

351 For shaft unit 25 only
352 For bolted casing cover only
353 Only for Etanorm V, in stainless steel, design W, shaft unit 55
354 Only for Etanorm V, in cast iron, design W, shaft unit 55
355 Only for Etanorm V, in cast iron, design W, shaft units 25, 35 and 55

Volute Casing Pumps

Etanorm-R

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000058

Product benefits

- Operating costs reduced by trimming the nominal impeller diameter to match the specified duty point
- Little wear, low vibration levels and excellent smooth running characteristics thanks to good suction performance and virtually cavitation-free operation across a wide operating range
- Pioneering energy efficiency by variable speed operation in combination with PumpDrive. When used in combination with the KSB SuPremE motor, the pump achieves efficiency level IE4/IE5 to IEC TS 60034-30-2:2016 already today.
- Easy to dismantle due to back pull-out design; no need to remove the pump casing from the piping

Further information

Prices on request

Selection charts 713
Dimensions and connections 716

Further information

	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
ErP 2015	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for water pumps with a maximum nominal shaft power of 150 kW as per Regulation (EU) No. 547/2012.

Main applications

- Water supply systems
- Spray irrigation systems
- Drainage systems
- Air-conditioning systems
- Fire-fighting systems
- General irrigation systems
- Heating systems

Fluids handled

- Seawater
- Brackish water
- Drinking water
- High-temperature hot water
- Service water
- Fire-fighting water
- Brine
- Cleaning agents
- Condensate
- Oils

Further information on fluids handled

Overview of fluids handled (⇨ Page 711)

Operating data

Operating properties

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q m^3/h]	≤ 1900	≤ 2285
Head	H [m]	≤ 101	≤ 88
Fluid temperature	T [°C]	≥ -30	≥ -30
		≤ +140	≤ +140
Operating pressure	p [bar]	≤ 16	≤ 16

Design details

Design

- Volute casing pump
- Horizontal installation
- Back pull-out design
- Single-stage
- Two-stage (size 125-500/2)
- Axial thrust balanced by discharge-side casing wear ring and balancing holes
- Replaceable casing wear rings
- Fixed speed version (without PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R) / variable speed version (with PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R)

Pump casing

- Radially split volute casing
- Volute casing with integrally cast pump feet
- Baseframe made of welded channel sections
- Replaceable casing wear rings

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM B3
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM B3
- Enclosure IP55
- Duty type: continuous duty S1
- II 3G Ex ec IIC T3 Gc
- II 2G Ex eb IIC T3 Gb
- II 2G Ex db (eb) IIB T4 Gb
- II 2G Ex db (eb) IIC T4 Gb

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor (PumpDrive required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM B3
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 4 kW to 45 kW
- Rated speed 1500 min^{-1}
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2 / PumpDrive 2 Eco:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for motor mounting, wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

PumpMeter:

- Intelligent pressure transmitter for pumps, with on-site display of measured values and operating data
- For recording the load profile of the pump
- Supplied completely assembled and parameterised for the individual pump

KSB Guard

- System for monitoring the pump's condition by means of temperature and vibration sensors
- Measured values and operating data may be retrieved via the KSB Guard app and the web portal at any time.

Shaft seal

- Cartridge seal
- Standardised mechanical seal to EN 12756
- Gland packing

Impeller type

- Closed radial impeller with multiply curved vanes

Sizes 200-250, 250-300, 300-340:

- Mixed flow impeller

Bearings

- Grease-packed deep groove ball bearing
- Oil-lubricated deep groove ball bearing

Direction of rotation

- Clockwise, viewed from the drive end.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Designation

Example: Etanorm-R X G C1 300-400

Designation key

Code	Description	
Etanorm-R X	Type series (fire-fighting pump)	
G	Casing material	
	G	Cast iron
	S	Nodular cast iron
C1	Impeller material	
	C1	Stainless steel
	G	Cast iron
	M	Bronze
300	Nominal discharge nozzle diameter [mm]	
400	Nominal impeller diameter [mm]	
-	Additional code	
	-[356)]	Single-stage
	.1	Single-stage, modified version
	/2	Two-stage

356 Blank

Materials

Symbols key

Symbol	Description
✗	Standard
o	Optional
-	Version not available / not feasible

Overview of available materials

Part No.	Description	Material	Material variant					
			GG	GM	GC1	SG	SM	SC1
102	Volute casing	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	✗	✗	-	-	-
		Nodular cast iron EN-GJS-400 / A536 Gr. 60-40-18	-	-	-	✗	✗	✗
230	Impeller	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	-	-	✗	-	-
		Bronze CC480K-GS / B30 C90700	-	✗	-	-	✗	-
		Stainless steel 1.4408 / A743 Gr. CF8 M	-	-	✗	-	-	✗
161	Casing cover	Grey cast iron JL1040 / grey cast iron A 48 Cl. 35B	✗	✗	✗	-	-	-
		Nodular cast iron JS1030 / A536 Gr. 60-40-18	-	-	-	✗	✗	✗
171	Diffuser[357)]	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	-	-	-	-	-
		Grey cast iron JL1040 / grey cast iron A 48 Cl. 35B	-	-	-	✗	-	-
		Bronze CC480K-GS / B30 C90700	-	✗	-	-	✗	-
		Grey cast iron EN-GJL-250 / A 48 Cl. 35B	-	-	✗	-	-	✗
183	Support foot	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	✗	✗	✗	✗	✗
210	Shaft	Tempered steel C45+N	✗	✗	✗	✗	✗	✗
		Chrome steel 1.4057+QT800	o	o	o	o	o	o
502.01	Casing wear ring, suction side	Grey cast iron EN-GJL-250 / CI	✗	✗	✗	✗	✗	✗
		Bronze CC495K-GS	o	o	o	o	o	o
502.02	Casing wear ring, discharge side	Grey cast iron EN-GJL-250 / CI	✗	✗	✗	✗	✗	✗
		Bronze CC495K-GS	o	o	o	o	o	o
523	Shaft sleeve	Chrome nickel molybdenum steel 1.4571	✗	-	-	-	-	-
524	Shaft protecting sleeve	Chrome molybdenum steel 1.4122	-	✗	✗	✗	✗	✗
330	Bearing bracket	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	✗	✗	✗	✗	✗
360.1/.2	Bearing cover	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	✗	✗	✗	✗	✗	✗
400.1/.9	Gasket	DPAF	✗	✗	✗	✗	✗	✗
412	O-ring	EPDM80	✗	✗	✗	✗	✗	✗

357 For size 125-500/2 only

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Overview of product features / selection tables

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

Symbols key

Symbol	Description
✗	Standard
-	Version not available / not feasible

Excerpt from the overview of fluids handled with associated material variants

Fluid handled	T[358]		Materials						Shaft seal						
	Minimum	Maximum	GG	GM	GC1	SG	SM	SC1	Q1BVGG	Q1Q1VGG	Q1Q1EGG	Q1AEGG	Q1BEGG	RT/P NA	RT/P NB
	[°C]														
Fire-fighting water	0	60	✗	✗	✗	✗	✗	✗	-	-	-	✗	✗	-	-
Heating water ≤ 100 °C, to VDI 2035	0	100	✗	✗	✗	✗	✗	✗	-	-	-	✗	✗	-	-
High-temperature hot water, to VdTüV 1466	0	140	✗	✗	✗	✗	✗	✗	-	-	-	✗	✗[359]	-	-
Condensate, to VdTüV 1466	0	140	✗	✗	✗	✗	✗	✗	-	-	-	✗	✗[359]	-	-
Condensate, AF composition	0	140	✗	✗	✗	✗	✗	✗	-	-	-	✗	✗[359]	-	-
Vapour condensate	0	140	✗	✗	✗	✗	✗	✗	-	-	-	✗	✗[359]	-	-
Cooling water, closed cooling circuit	0	70	-	✗	✗	-	✗	✗	-	✗	-	-	-	-	-
Cooling water, open cooling circuit	0	70	-	✗	✗	-	✗	✗	-	✗	-	-	-	-	-
River water	0	60	✗	✗	✗	✗	✗	✗	-	✗	-	-	-	-	-
Surface water	0	60	✗	✗	✗	✗	✗	✗	-	✗	-	-	-	-	-
Lake water	0	60	✗	✗	✗	✗	✗	✗	-	✗	-	-	-	-	-
Dam water	0	60	✗	✗	✗	✗	✗	✗	-	✗	-	-	-	-	-
Raw water	0	60	✗	✗	✗	✗	✗	✗	-	✗	-	-	-	-	-
Grey water	0	60	✗	✗	✗	✗	✗	✗	-	✗	-	-	-	-	-
Swimming pool water	0	60	✗	✗	✗	✗	✗	✗	-	-	-	-	✗	-	-
Brewing water	0	60	✗	✗	✗	✗	✗	✗	-	-	-	-	✗	-	-
Ice water (brewery)	0	60	✗	✗	✗	✗	✗	✗	-	-	-	-	✗	-	-
Tap water	0	60	✗	✗	✗	✗	✗	✗	-	-	-	-	✗	-	-
Drinking water	0	60	✗	✗	✗	✗	✗	✗	-	-	-	-	✗	-	-
Hot water (brewery)	0	60	✗	✗	✗	✗	✗	✗	✗	✗	-	-	-	-	-
Clean water (brewery)	0	60	✗	✗	✗	✗	✗	✗	-	✗	-	-	✗	✗	✗
Ethylene glycol base anti-freeze (concentration: 50 %)	0	110	✗	✗	✗	✗	✗	✗	-	-	✗	-	-	✗	✗
Propylene glycol base anti-freeze (concentration: 50 %)	0	110	✗	✗	✗	✗	✗	✗	-	-	✗	-	-	✗	✗
Calcium chloride base cooling brine (concentration: ≤ 25.7 %)	0	25	✗	✗	-	✗	✗	-	-	-	✗	-	-	✗	✗
Ethylene glycol	0	80	✗	✗	✗	✗	✗	✗	-	-	-	-	✗	✗	✗
Condenser water (sugar production)	0	60	✗	-	✗	✗	-	✗	-	-	-	-	✗	✗	✗
Olive oil	10	90	✗	-	✗	✗	-	✗	✗	-	-	-	-	✗	✗
Petrol	0	30	✗	✗	✗	✗	✗	✗	✗	-	-	-	-	-	-
Fuel oil	0	60	✗	✗	✗	✗	✗	✗	✗	-	-	-	-	-	-
Methanol	0	60	✗	✗	✗	✗	✗	✗	-	-	-	-	✗	-	-

358 T = fluid temperature
359 Fluid temperature ≤ 110 °C

Overview of variants

Other designs on request

Symbols key

Symbol	Description
✗	Standard
-	Version not available / not feasible

Overview of Etanorm-R variants

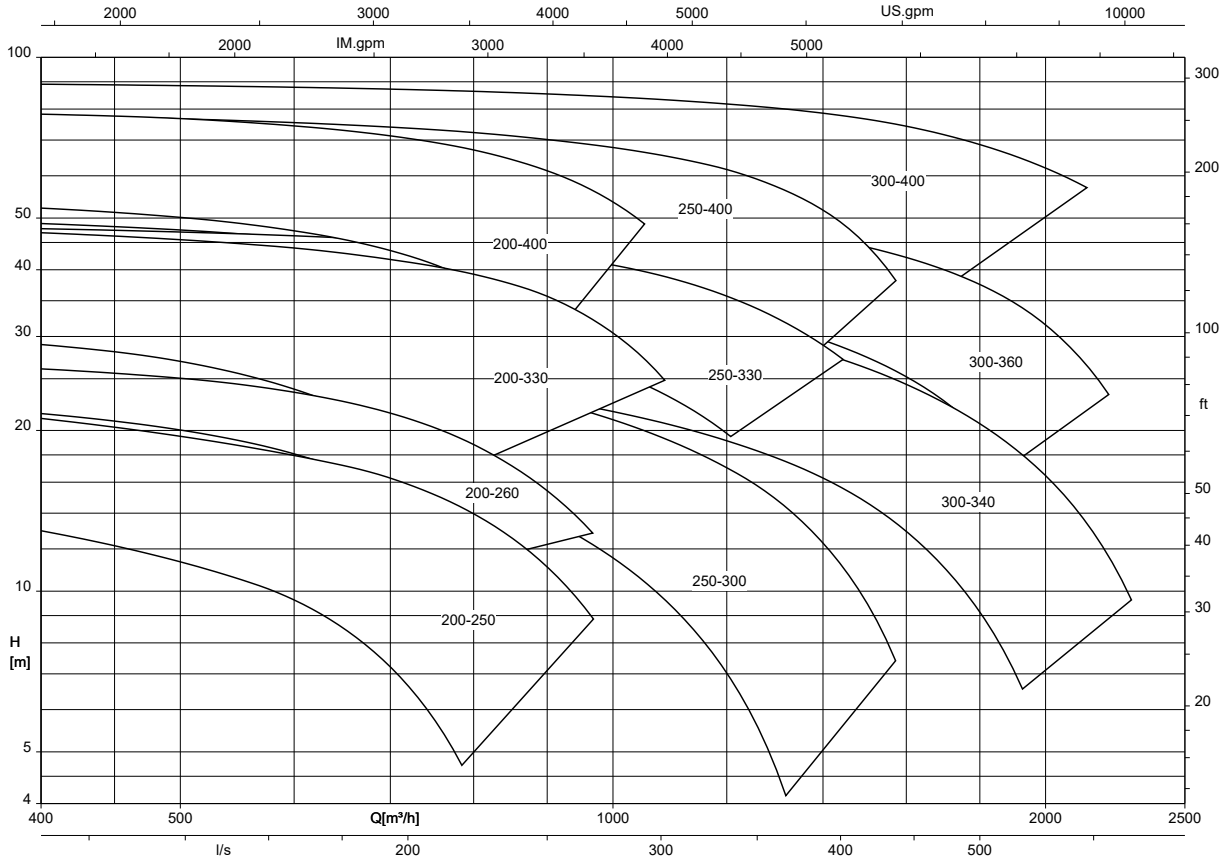
Design	102 / Volute casing	230 / Impeller	T [°C]	Main applications						
				Water supply systems	Fire-fighting systems	General irrigation systems	Drainage systems	Heating systems	Air-conditioning systems	Spray irrigation systems
GG	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	≥ -30 - ≤ +140	✗	✗	✗	✗	✗	✗	✗
GM	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	Bronze CC480K-GS / B30 C90700	≥ -30 - ≤ +140	✗	✗	✗	✗	✗	✗	✗
GC1	Grey cast iron EN-GJL-250 / A 48 Cl. 35B	Stainless steel 1.4408 / A743 Gr. CF8 M	≥ -30 - ≤ +140	✗	✗	✗	✗	✗	✗	✗

Prices on request

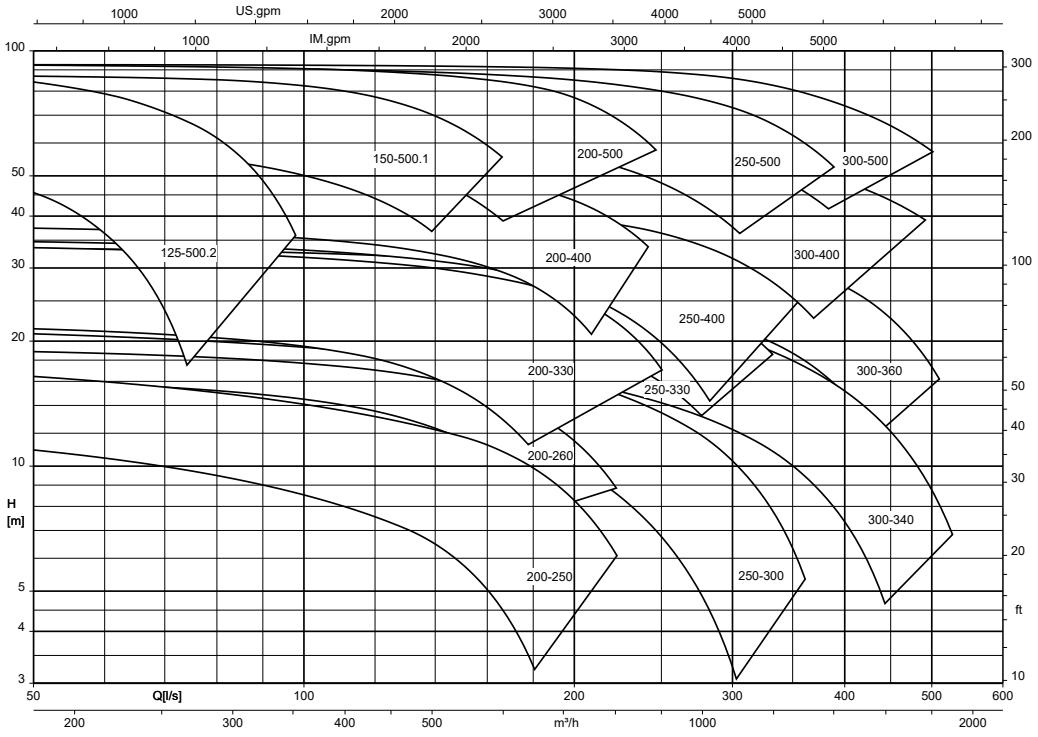
Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Selection charts

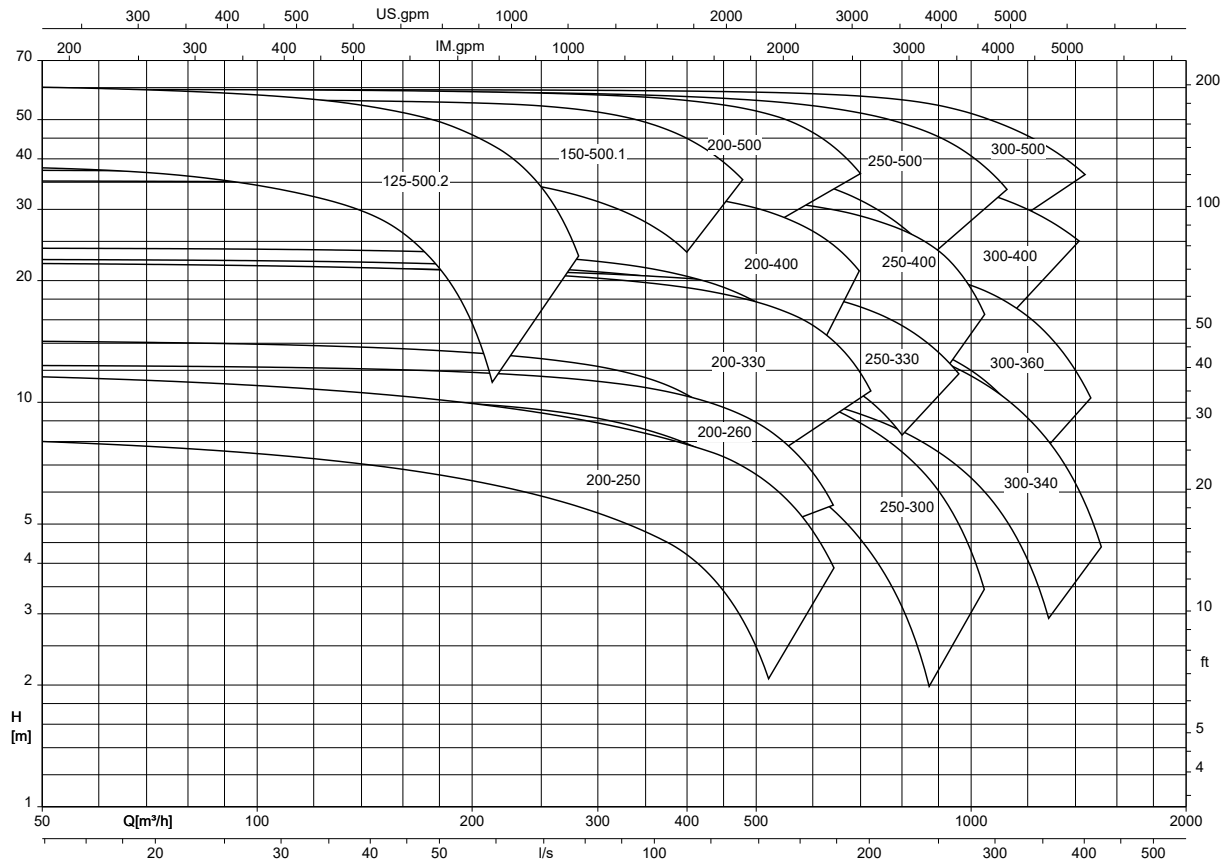
Etanorm-R (fixed speed version), n = 1750 rpm



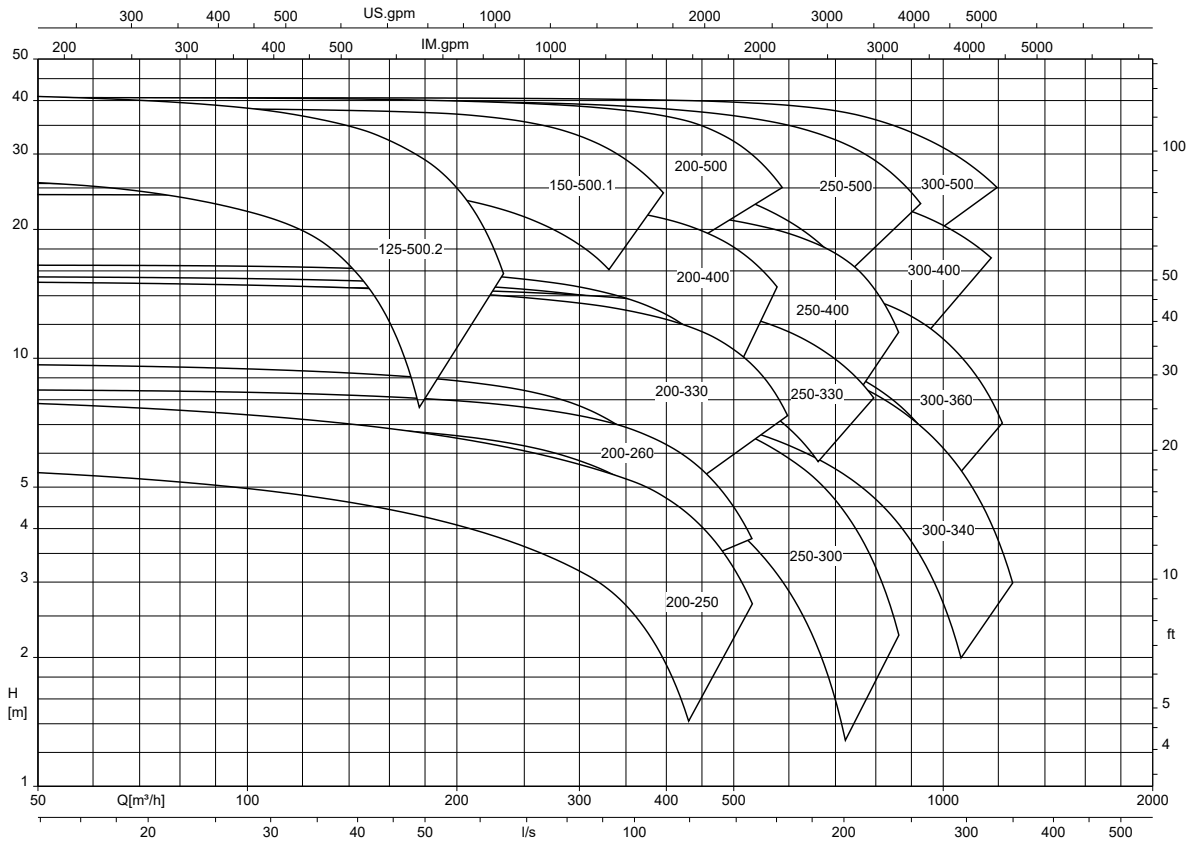
Etanorm-R (fixed speed version), n = 1450 rpm



Etanorm-R (fixed speed version), n = 1160 rpm



Etanorm-R (fixed speed version), n = 960 rpm



Related documents

Information/documents

Document	Reference number
Characteristic curves booklet (50 Hz) Fixed speed version	1311.45

Dimensions and connections

Dimensions of the pump set with foundation

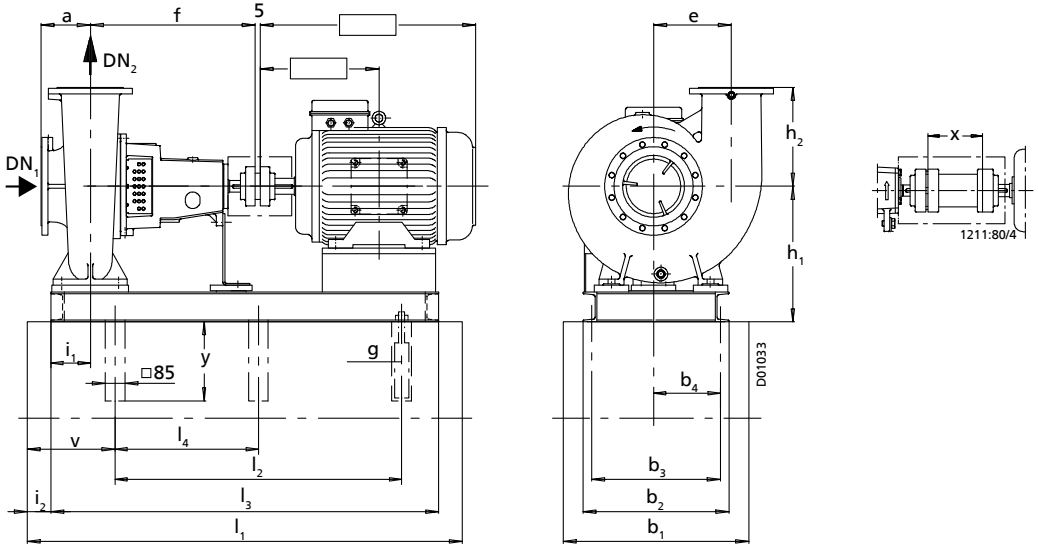


Fig. 293: Dimensions of the pump set with foundation

Dimensions

Etanorm-R	Motor	P_2		DN_1	DN_2	a	e	f	g	h_2	i	y	Coupling										Spacer-type coupling											
		960 rpm 1160 rpm	1450 rpm 1750 rpm										b_1	b_2	b_3	b_4	h_1	i_2	l_1	l_2	l_3	v	b_1	b_2	b_3	b_4	h_1	i_2	l_1	l_2	l_3	l_4	v	x
		[kW]		[mm]																													
125-500/2	160L	11,0	-	150	125	245	270	703	M20 × 400	300	145	450	1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	115	1920	1150	1695	-	310	200
125-500/2	180M	18,5	-	150	125	245	270	703	M20 × 400	300	145	450	1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	115	1920	1150	1695	-	310	200
125-500/2	180L	15,0	-	150	125	245	270	703	M20 × 400	300	145	450	1010	760	710	370	525	115	1920	1150	1695	310	900	650	805	318	505	110	2000	1250	1780	-	280	200
125-500/2	200L	18,5	-	150	125	245	270	703	M20 × 400	300	145	450	1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	110	2100	1300	1880	-	330	200
125-500/2	200L	22,0	-	150	125	245	270	703	M20 × 400	300	145	450	1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	110	2100	1300	1880	-	330	200
125-500/2	200L	-	30,0	150	125	245	270	703	M20 × 400	300	145	450	1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	110	2100	1300	1880	-	330	200
125-500/2	225S	-	37,0	150	125	245	270	703	M20 × 400	300	145	450	1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	110	2100	1300	1880	-	330	200
125-500/2	225M	30,0	45,0	150	125	245	270	703	M20 × 400	300	145	450	1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	110	2100	1300	1880	-	330	200
125-500/2	250M	37,0	55,0	150	125	245	270	703	M20 × 400	300	145	450	1010	760	710	370	525	115	1920	1150	1695	310	1010	760	710	370	525	110	2100	1300	1880	-	330	200
125-500/2	280S	45,0	75,0	150	125	245	270	703	M20 × 400	300	145	450	900	650	605	318	505	110	2000	1250	1780	280	1110	860	810	420	545	110	2260	1450	2040	-	330	200
125-500/2	280M	55,0	90,0	150	125	245	270	703	M20 × 400	300	145	450	900	650	605	318	505	110	2000	1250	1780	280	1110	860	810	420	545	110	2260	1450	2040	-	330	200
150-500.1	200L	18,5	-	200	150	150	315	715	M20 × 400	450	170	450	820	570	525	272	550	115	1920	1150	1695	285	1010	760	710	365	570	110	2100	1300	1880	-	330	200
150-500.1	200L	22,0	-	200	150	150	315	715	M20 × 400	450	170	450	820	570	525	272	550	115	1920	1150	1695	285	1010	760	710	365	570	110	2100	1300	1880	-	330	200
150-500.1	225S	37,0	-	200	150	150	315	715	M20 × 400	450	170	450	820	570	525	272	550	115	1920	1150	1695	285	1010	760	710	365	570	110	2100	1300	1880	-	330	200
150-500.1	225M	30,0	-	200	150	150	315	715	M20 × 400	450	170	450	820	570	525	272	550	115	1920	1150	1695	285	1010	760	710	365	570	110	2100	1300	1880	-	330	200

Etanorm-R	Motor	P_2		DN_1	DN_2	a	e	f	g	h_2	i	y	Coupling										Spacer-type coupling											
		960 rpm 1160 rpm	1450 rpm 1750 rpm										b_1	b_2	b_3	b_4	h_1	i_2	l_1	l_2	l_3	v	b_1	b_2	b_3	b_4	h_1	i_2	l_1	l_2	l_3	l_4	v	x
		[kW]				[mm]																													
150-500.1	250M	37,0	-	200	150	150	315	715	M20 × 400	450	170	450	900	650	605	313	550	110	2000	1250	1780	280	1110	860	810	415	590	110	2260	1450	2040	-	330	200
150-500.1	280S	45,0	-	200	150	150	315	715	M20 × 400	450	170	450	900	650	605	313	550	110	2000	1250	1780	280	1110	860	810	415	590	110	2260	1450	2040	-	330	200
150-500.1	280S	-	75,0	200	150	150	315	715	M20 × 400	450	170	450	900	650	605	313	550	110	2000	1250	1780	280	1110	860	810	415	590	110	2260	1450	2040	-	330	200
150-500.1	280M	55,0	90,0	200	150	150	315	715	M20 × 400	450	170	450	1010	760	710	365	570	110	2100	1300	1880	330	1110	860	810	415	590	110	2260	1450	2040	-	330	200
150-500.1	315S	75,0	110,0	200	150	150	315	715	M20 × 400	450	170	450	1010	760	710	365	570	110	2100	1300	1880	330	1110	860	800	410	610	110	2450	1650	2230	825	330	200
150-500.1	315M	-	132,0	200	150	150	315	715	M20 × 400	450	170	450	1110	860	810	415	590	110	2260	1450	2040	330	1110	860	800	410	610	110	2450	1650	2230	825	330	200
200-250	132M	4,0	-	200	200	220	250	815	M20 × 400	345	170	450	820	570	525	293	505	115	1920	1150	1695	285	900	650	605	333	505	110	2000	1250	1780	-	280	200
200-250	132M	5,5	-	200	200	220	250	815	M20 × 400	345	170	450	820	570	525	293	505	115	1920	1150	1695	285	900	650	605	333	505	110	2000	1250	1780	-	280	200
200-250	160M	7,5	-	200	200	220	250	815	M20 × 400	345	170	450	820	570	525	293	505	115	1920	1150	1695	285	1010	760	710	385	525	110	2100	1300	1880	-	330	200
200-250	160L	11,0	15,0	200	200	220	250	815	M20 × 400	345	170	450	820	570	525	293	505	115	1920	1150	1695	285	1010	760	710	385	525	110	2100	1300	1880	-	330	200
200-250	180M	-	18,5	200	200	220	250	815	M20 × 400	345	170	450	820	570	525	293	505	115	1920	1150	1695	285	1010	760	710	385	525	110	2100	1300	1880	-	330	200
200-250	180L	15,0	22,0	200	200	220	250	815	M20 × 400	345	170	450	820	570	525	293	505	115	1920	1150	1695	285	1010	760	710	385	525	110	2100	1300	1880	-	330	200
200-250	200L	-	30,0	200	200	220	250	815	M20 × 400	345	170	450	900	650	605	333	505	110	2000	1250	1780	280	1110	860	810	435	545	110	2260	1450	2040	-	330	200
200-250	225S	-	37,0	200	200	220	250	815	M20 × 400	345	170	450	900	650	605	333	505	110	2000	1250	1780	280	1110	860	810	435	545	110	2260	1450	2040	-	330	200
200-250	225M	-	45,0	200	200	220	250	815	M20 × 400	345	170	450	900	650	605	333	505	110	2000	1250	1780	280	1110	860	810	435	545	110	2260	1450	2040	-	330	200
200-260	160M	7,5	-	200	200	200	300	715	M20 × 400	350	170	450	820	570	525	293	550	115	1920	1150	1695	285	820	570	525	293	550	115	1920	1150	1695	-	285	200
200-260	160L	11,0	18,5	200	200	200	300	715	M20 × 400	350	170	450	820	570	525	293	550	115	1920	1150	1695	285	900	650	605	333	550	110	2000	1250	1780	-	280	200
200-260	180L	15,0	22,0	200	200	200	300	715	M20 × 400	350	170	450	820	570	525	293	550	115	1920	1150	1695	285	900	650	605	333	550	110	2000	1250	1780	-	280	200
200-260	180L	15,0	22,0	200	200	200	300	715	M20 × 400	350	170	450	820	570	525	293	550	115	1920	1150	1695	285	900	650	605	333	550	110	2000	1250	1780	-	280	200
200-260	200L	18,5	30,0	200	200	200	300	715	M20 × 400	350	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880	-	330	200
200-260	225S	-	37,0	200	200	200	300	715	M20 × 400	350	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880	-	330	200
200-260	225M	-	45,0	200	200	200	300	715	M20 × 400	350	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880	-	330	200
200-260	250M	-	55,0	200	200	200	300	715	M20 × 400	350	170	450	900	650	605	333	550	110	2000	1250	1780	280	1110	860	810	435	590	110	2260	1450	2040	-	330	200
200-330	160L	11,0	-	250	200	200	315	715	M20 × 400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	900	650	605	333	550	110	2000	1250	1780	-	280	200
200-330	180M	15,0	18,5	250	200	200	315	715	M20 × 400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	900	650	605	333	550	110	2000	1250	1780	-	280	200
200-330	180L	15,0	22,0	250	200	200	315	715	M20 × 400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	900	650	605	333	550	110	2000	1250	1780	-	280	200
200-330	200L	18,5	-	250	200	200	315	715	M20 × 400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880	-	330	200
200-330	200L	22,0	30,0	250	200	200	315	715	M20 × 400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880	-	330	200
200-330	225S	-	37,0	250	200	200	315	715	M20 × 400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880	-	330	200
200-330	225M	30,0	45,0	250	200	200	315	715	M20 × 400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880	-	330	200
200-330	250M	-	55,0	250	200	200	315	715	M20 × 400	400	170	450	900	650	605	333	550	110	2000	1250	1780	280	1110	860	810	435	590	110	2260	1450	2040	-	330	200
200-330	280S	-	75,0	250	200	200	315	715	M20 × 400	400	170	450	900	650	605	333	550	110	2000	1250	1780	280	1110	860	810	435	590	110	2260	1450	2040	-	330	200
200-330	280M	-	90,0	250	200	200	315	715	M20 × 400	400	170	450	1010	760	710	385	570	110	2100	1300	1880	330	1110	860	810	435	590	110	2260	1450	2040	-	330	200
200-330	315S	-	110,0	250	200	200	315	715	M20 × 400	400	170	450	1010	760	710	385	570	110	2100	1300	1880	330	1110	860	800	430	610	110	2450	1650	2230	825	330	200
200-400	200L	18,5	-	250	200	180	290	715	M20 × 400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880	-	330	200
200-400	200L	22,0	-	250	200	180	290	715	M20 × 400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880	-	330	200
200-400	225M	30,0	-	250	200	180	290	715	M20 × 400	400	170	450	820	570	525	293	550	115	1920	1150	1695	285	1010	760	710	385	570	110	2100	1300	1880	-	330	200
200-400	250M	37,0	-	250	200	180	290	715	M20 × 400	400	170	450	900	650	605	333	550	110	2000	1250	1780	280	1110	860	810	435	590	110	2260	1450	2040	-	330	200
200-400	280S	45,0	75,0	250	200	180	290	715	M20 × 400	400	170	450	900	650	605	333	550	110	2000	1250	1780	280	1110	860	810	435	590	110	2260	1450	2040	-	330	200
200-400	280M	55,0	90,0	250	200	180	290	715	M20 × 400	400	170	450	1010	760	710	385	570	110	2100	1300	1880	330	1110	860	810	435	590	110	2260	1450	2040	-	330	200
200-400	315S	75,0	110,0	250	200	180	290	715	M20 × 400	400	170	450	1010	760	710	385	570	110	2100	1300	1880	330	1110	860	800	430	610	110	2450	1650	2230	825	330	200
200-400	315M	-	132,0	250	200	180	290	715	M20 × 400	400	170	450	1110	860	810	435	590	110	2260	1450	2040	330	1110	860	800	430	610	110	2450	1650	2230	825	330	200
200-500	225M	30,0	-	250	200	200	387	715	M20 × 400	450	195	450	1010	760	710	385	670	110	2000	1200	1780	330	1010	760	710	385	670	110	2100	1300	1880	-	330	200
200-500	250M	37,0	-	250	200	200	387	715	M20 × 400	450	195	450	1010	760	710	385	670	110	2000	1200	1780	330	1110	860	810	435	690	110	2260	1450	2040	-	330	200
200-500	280S	45,0	-	250	200	200	387	715	M20 × 400	450	195	450	1010	760	710	385	670	110	2100	1300	1880	330	1110	860	810	435	690	110	2260	1450	2040	-	330	200

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Etanorm-R	Motor	P_2		DN_1	DN_2	a	e	f	g	h_2	i	y	Coupling										Spacer-type coupling											
		960 rpm 1160 rpm	1450 rpm 1750 rpm										b_1	b_2	b_3	b_4	h_1	i_2	l_1	l_2	l_3	v	b_1	b_2	b_3	b_4	h_1	i_2	l_1	l_2	l_3	l_4	v	x
		[kW]				[mm]																													
200-500	280M	55,0	-	250	200	200	387	715	M20 × 400	450	195	450	1010	760	710	385	670	110	2100	1300	1880	330	1110	860	810	435	690	110	2260	1450	2040	-	330	200
200-500	315S	75,0	-	250	200	200	387	715	M20 × 400	450	195	450	1110	860	810	435	690	110	2260	1450	2040	330	1110	860	800	430	710	110	2450	1650	2230	825	330	200
200-500	315S	-	110,0	250	200	200	387	715	M20 × 400	450	195	450	1110	860	810	435	690	110	2260	1450	2040	330	1110	860	800	430	710	110	2450	1650	2230	825	330	200
200-500	315M	90,0	132,0	250	200	200	387	715	M20 × 400	450	195	450	1110	860	810	435	690	110	2260	1450	2040	330	1110	860	800	430	710	110	2450	1650	2230	825	330	200
250-300	160L	11	-	250	250	225	300	830	M20 × 400	400	170	450	1010	760	710	385	570	115	1920	1150	1695	310	1010	760	710	385	570	110	2100	1300	1880	-	330	250
250-300	180M	-	18,5	250	250	225	300	830	M20 × 400	400	170	450	1010	760	710	385	570	115	1920	1150	1695	310	1010	760	710	385	570	110	2100	1300	1880	-	330	250
250-300	180L	15	-	250	250	225	300	830	M20 × 400	400	170	450	1010	760	710	385	570	115	1920	1150	1695	310	1110	860	810	445	590	110	2260	1450	2040	-	330	250
250-300	200L	18,5	30	250	250	225	300	830	M20 × 400	400	170	450	1010	760	710	385	570	110	2000	1200	1780	330	1110	860	810	445	590	110	2260	1450	2040	-	330	250
250-300	200L	22	-	250	250	225	300	830	M20 × 400	400	170	450	1010	760	710	385	570	110	2000	1200	1780	330	1110	860	810	445	590	110	2260	1450	2040	-	330	250
250-300	225S	-	37	250	250	225	300	830	M20 × 400	400	170	450	1010	760	710	385	570	110	2000	1200	1780	330	1110	860	810	445	590	110	2260	1450	2040	-	330	250
250-300	225M	30	45	250	250	225	300	830	M20 × 400	400	170	450	1010	760	710	385	570	110	2000	1200	1780	330	1110	860	810	445	590	110	2260	1450	2040	-	330	250
250-300	250M	-	55	250	250	225	300	830	M20 × 400	400	170	450	1010	760	710	385	570	110	2100	1300	1880	330	1110	860	800	430	610	110	2450	1650	2230	825	330	250
250-300	280S	-	75	250	250	225	300	830	M20 × 400	400	170	450	1010	760	710	385	570	110	2100	1300	1880	330	1110	860	800	430	610	110	2450	1650	2230	825	330	250
250-300	280M	-	90	250	250	225	300	830	M20 × 400	400	170	450	1110	860	810	435	590	110	2260	1450	2040	330	1110	860	800	430	610	110	2450	1650	2230	825	330	250
250-330	180L	15	-	250	250	250	345	715	M20 × 400	400	195	450	1010	760	710	395	620	115	1920	1150	1695	310	1010	760	710	395	620	110	2100	1300	1880	-	330	200
250-330	200L	18,5	-	250	250	250	345	715	M20 × 400	400	195	450	1010	760	710	395	620	115	1920	1150	1695	310	1010	760	710	395	620	110	2100	1300	1880	-	330	200
250-330	200L	22	-	250	250	250	345	715	M20 × 400	400	195	450	1010	760	710	395	620	115	1920	1150	1695	310	1010	760	710	395	620	110	2100	1300	1880	-	330	200
250-330	225S	37	-	250	250	250	345	715	M20 × 400	400	195	450	1010	760	710	395	620	115	1920	1150	1695	310	1010	760	710	395	620	110	2100	1300	1880	-	330	200
250-330	225M	30	-	250	250	250	345	715	M20 × 400	400	195	450	1010	760	710	395	620	110	2000	1200	1780	330	1010	760	710	395	620	110	2100	1300	1880	-	330	200
250-330	250M	37	55	250	250	250	345	715	M20 × 400	400	195	450	1010	760	710	395	620	110	2000	1200	1780	330	1110	860	810	445	640	110	2240	1450	2040	-	330	200
250-330	280S	45	75	250	250	250	345	715	M20 × 400	400	195	450	1010	760	710	395	620	110	2100	1300	1880	330	1110	860	810	445	640	110	2240	1450	2040	-	330	200
250-330	280M	-	90	250	250	250	345	715	M20 × 400	400	195	450	1010	760	710	395	620	110	2100	1300	1880	330	1110	860	810	445	640	110	2240	1450	2040	-	330	200
250-330	315S	-	110	250	250	250	345	715	M20 × 400	400	195	450	1110	860	810	445	640	110	2260	1450	2040	330	1110	860	800	440	660	110	2450	1650	2230	825	330	200
250-330	315M	-	132	250	250	250	345	715	M20 × 400	400	195	450	1110	860	810	445	640	110	2260	1450	2040	330	1110	860	800	440	660	110	2450	1650	2230	825	330	200
250-400	200L	18,5	-	300	250	180	335	715	M20 × 400	480	195	450	1010	760	710	385	620	115	1920	1150	1695	310	1010	760	710	385	620	110	2100	1300	1880	-	330	200
250-400	200L	22	-	300	250	180	335	715	M20 × 400	480	195	450	1010	760	710	385	620	115	1920	1150	1695	310	1010	760	710	385	620	110	2100	1300	1880	-	330	200
250-400	225S	37	-	300	250	180	335	715	M20 × 400	480	195	450	1010	760	710	385	620	115	1920	1150	1695	310	1010	760	710	385	620	110	2100	1300	1880	-	330	200
250-400	225M	30	-	300	250	180	335	715	M20 × 400	480	195	450	1010	760	710	385	620	110	2000	1200	1780	330	1010	760	710	385	620	110	2100	1300	1880	-	330	200
250-400	250M	37	-	300	250	180	335	715	M20 × 400	480	195	450	1010	760	710	385	620	110	2000	1200	1780	330	1110	860	810	435	640	110	2260	1450	2040	-	330	200
250-400	280S	45	-	300	250	180	335	715	M20 × 400	480	195	450	1010	760	710	385	620	110	2100	1300	1880	330	1110	860	810	435	640	110	2260	1450	2040	-	330	200
250-400	280S	-	75	300	250	180	335	715	M20 × 400	480	195	450	1010	760	710	385	620	110	2100	1300	1880	330	1110	860	810	435	640	110	2260	1450	2040	-	330	200
250-400	280M	55	90	300	250	180	335	715	M20 × 400	480	195	450	1010	760	710	385	620	110	2100	1300	1880	330	1110	860	810	435	640	110	2260	1450	2040	-	330	200
250-400	315S	75	110	300	250	180	335	715	M20 × 400	480	195	450	1110	860	810	435	640	110	2260	1450	2040	330	1110	860	800	430	660	110	2450	1650	2230	825	330	200
250-400	315M	-	132	300	250	180	335	715	M20 × 400	480	195	450	1110	860	810	435	640	110	2260	1450	2040	330	1110	860	800	430	660	110	2450	1650	2230	825	330	200
250-500	280S	45	-	300	250	225	425	715	M20 × 400	500	220	450	1110	860	810	445	690	110	2260	1450	2040	330	1110	860	810	445	690	110	2260	1450	2040	-	330	200
250-500	280M	55	-	300	250	225	425	715	M20 × 400	500	220	450	1110	860	810	445	690	110	2260	1450	2040	330	1110	860	800	440	710	110	2450	1650	2230	825	330	200
250-500	315S	75	-	300	250	225	425	715	M20 × 400	500	220	450	1110	860	810	445	690	110	2260	1450	2040	330	1110	860	800	440	710	110	2450	1650	2230	825	330	200
250-500	315M	90	-	300	250	225	425	715	M20 × 400	500	220	450	1110	860	810	445	690	110	2260	1450	2040	330	1110	860	800	440	710	110	2450	1650	2230	825	330	200
300-340	180L	15,0	-	300	300	255	315	850	M20 × 400	450	195	450	1010	760	710	395	620	110	2000	1200	1780	330	1110	860	810	445	640	110	2260	1450	2040	-	330	250
300-340	200L	18,5	-	300	300	255	315	850	M20 × 401	450	195	450	1010	760	710	395	620	110	2000	1200	1780	330	1110	860	810	445	640	110	2260	1450	2040	-	330	250
300-340	200L	22,0	-	300	300	255	315	850	M20 × 402	450	195	450	1010	760	710	395	620	110	2000	1200	1780	330	1110	860	810	445	640	110	2260	1450	2040	-	330	250
300-340	225S	-	37,0	300	300	255	315	850	M20 × 403	450	195	450	1010	760	710	385	620	110	2100	1300	1880	330	1110	860	810	445	640	110	2260	1450	2040	-	330	250
300-340	225M	30,0	45,0	300	300	255	315	850	M20 × 404	450	195	450	1010	760	710	385	620	110	2100	1300	1880	330	1110	860	800	440	660	110	2450	1650	2230	-	330	250
300-340	250M	30,0	55,0	300	300	255	315	850	M20 × 405	450	195	450	1010	760	710	385	620	110	2100	1300	1880	330	1110	860	800	440	660	110	2450	1650	2230	825	330	250
300-340	250M	37,0	-	300	300	255	315	850	M20 × 406	450	195	450	1010	760	710	395	620	110	2100	1300	1880	330	1110	860	800	440	660	110	2450	1650	2230	825	330	250

Etanorm-R	Motor	P_2		DN_1	DN_2	a	e	f	g	h_2	i	y	Coupling										Spacer-type coupling											
		960 rpm 1160 rpm	1450 rpm 1750 rpm										b_1	b_2	b_3	b_4	h_1	i_2	l_1	l_2	l_3	v	b_1	b_2	b_3	b_4	h_1	i_2	l_1	l_2	l_3	l_4	v	x
		[kW]				[mm]																													
300-340	280S	45,0	75,0	300	300	255	315	850	M20 × 407	450	195	450	1110	860	810	445	640	110	2260	1450	2040	330	1110	860	800	440	660	110	2450	1650	2230	825	330	250
300-340	280M	-	90,0	300	300	255	315	850	M20 × 408	450	195	450	1110	860	810	445	640	110	2260	1450	2040	330	1110	860	800	440	660	110	2450	1650	2230	825	330	250
300-340	315S	-	110,0	300	300	255	315	850	M20 × 409	450	195	450	1110	860	810	445	640	110	2260	1450	2040	330	1110	860	800	440	660	110	2590	1800	2370	900	330	250
300-340	315M	-	132,0	300	300	255	315	850	M20 × 410	450	195	450	1110	860	800	440	660	110	2450	1650	2230	330	1110	860	800	440	660	110	2590	1800	2370	900	330	250
300-360	225M	30,0	-	300	300	300	387	717	M20 × 411	450	220	450	1010	760	710	395	730	110	2000	1200	1780	330	1110	860	810	445	750	110	2260	1450	2040	-	330	250
300-360	250M	37,0	-	300	300	300	387	717	M20 × 412	450	220	450	1010	760	710	395	730	110	2100	1300	1880	330	1110	860	810	445	750	110	2250	1450	2040	-	330	250
300-360	280S	45,0	-	300	300	300	387	717	M20 × 413	450	220	450	1010	760	710	395	730	110	2100	1300	1880	330	1110	860	800	440	750	110	2450	1650	2230	825	330	250
300-360	280M	55,0	90,0	300	300	300	387	717	M20 × 414	450	220	450	1010	760	710	395	730	110	2100	1300	1880	330	1110	860	800	440	750	110	2450	1650	2230	825	330	250
300-360	315S	75,0	110,0	300	300	300	387	717	M20 × 415	450	220	450	1110	860	810	445	750	110	2260	1450	2040	330	1110	860	800	440	750	110	2450	1650	2230	825	330	250
300-360	315M	-	132,0	300	300	300	387	717	M20 × 416	450	220	450	1110	860	810	445	750	110	2260	1450	2040	330	1110	860	800	440	750	110	2450	1650	2230	825	330	250
300-400	250M	37,0	-	350	300	300	425	715	M20 × 417	500	220	450	1110	860	810	445	750	110	2260	1450	2040	330	1110	860	810	455	750	110	2260	1450	2040	-	330	250
300-400	280S	45,0	-	350	300	300	425	715	M20 × 418	500	220	450	1110	860	810	445	750	110	2260	1450	2040	330	1110	860	800	450	770	110	2450	1650	2230	825	330	250
300-400	280M	55,0	-	350	300	300	425	715	M20 × 419	500	220	450	1110	860	810	445	750	110	2260	1450	2040	330	1110	860	800	450	770	110	2450	1650	2230	825	330	250
300-400	315S	75,0	-	350	300	300	425	715	M20 × 420	500	220	450	1110	860	810	445	750	110	2260	1450	2040	330	1110	860	800	450	770	110	2450	1650	2230	825	330	250
300-400	315S	-	110,0	350	300	300	425	715	M20 × 421	500	220	450	1110	860	810	445	750	110	2260	1450	2040	330	1110	860	800	450	770	110	2450	1650	2230	825	330	250
300-400	315M	90,0	132,0	350	300	300	425	715	M20 × 422	500	220	450	1110	860	810	445	750	110	2260	1450	2040	330	1110	860	800	450	770	110	2450	1650	2230	825	330	250
300-500	315S	75,0	-	350	300	300	450	715	M20 × 423	500	220	450	1110	860	810	445	750	110	2260	1450	2040	330	1110	860	800	450	770	110	2450	1650	2230	825	330	250
300-500	315M	75,0	-	350	300	300	450	715	M20 × 424	500	220	450	1110	860	810	445	750	110	2260	1450	2040	330	1110	860	800	450	770	110	2450	1650	2230	825	330	250

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Pump dimensions

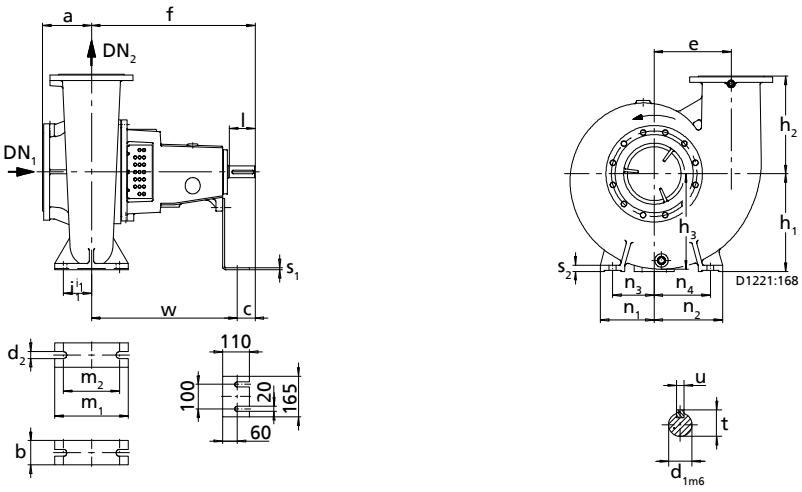


Fig. 294: Pump dimensions

Dimensions

Etanorm-R	DN_1	DN_2	a	b	c	d_{1m6}	d_2	e	f	h_1	h_2	h_3	i_1	l	m_1	m_2	n_1	n_2	n_3	n_4	s_1	s_2	t	u	w
			[mm]																						
125-500/2	150	125	245	120	121	60	24	270	703	355	300	297	95	140	250	190	270	300	220	250	6	22	64	18	582
150-500.1	200	150	150	100	115	60	28	315	715	400	450	359	115	140	300	230	240	260	190	210	6	25	64	18	600
200-250	200	200	220	100	119	60	28	250	815	355	345	329	109	140	300	230	220	280	170	230	6	25	64	18	690
200-260	200	200	200	100	120	60	28	300	715	400	350	369	115	140	300	230	220	280	170	230	8	25	64	18	595
200-330	250	200	200	100	120	60	28	315	715	400	400	390	115	140	300	230	220	280	170	230	8	25	64	18	595
200-400	250	200	180	130	120	60	28	290	715	400	400	358	115	140	300	230	220	280	155	215	8	25	64	18	595
200-500	250	200	200	130	115	60	28	387	715	500	450	497	140	140	350	280	320	380	255	315	20	25	64	18	600
250-300	250	250	225	130	115	60	28	300	830	400	400	384	95	140	300	230	270	330	205	265	8	25	64	18	695
250-330	250	250	250	130	120	60	34	345	715	450	400	445	140	140	350	280	310	390	245	325	10	25	64	18	595
250-400	300	250	180	130	120	60	34	335	715	450	480	400	140	140	350	280	320	380	255	315	10	25	64	18	595
250-500	300	250	225	130	115	60	34	425	715	500	500	514	162,5	140	400	325	360	440	295	375	20	32	64	18	600
300-340	300	300	255	160	115	60	34	315	850	450	450	427	120	140	350	280	310	390	230	310	10	25	64	18	715
300-360	300	300	300	160	122	60	34	387	717	560	450	505	162,5	140	400	325	310	390	230	310	20	32	64	18	595
300-400	350	300	300	160	120	60	34	425	715	560	500	540	162,5	140	400	325	350	450	270	370	20	32	64	18	595
300-500	350	300	300	160	115	60	34	450	715	560	500	581	162,5	140	400	325	350	450	270	370	20	32	64	18	600

Connections

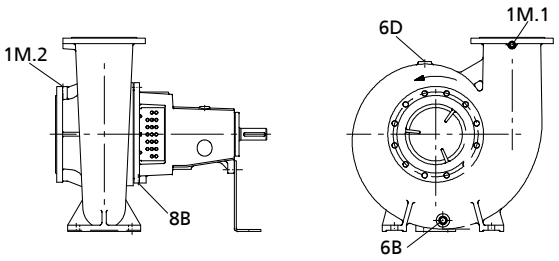


Fig. 295: Connections

1M	Connection for pressure gauge	6D	Fluid filling and venting
6B	Fluid drain	8B	Leakage drain

Connections

Etanorm-R	Connection			
	1M	6B	6D	8B
All	G 1/2	G 3/4[360)]	G 3/4[360)]	G 3/4

Flange design

Flange design by materials

Material variant	Standard	Nominal size	Pressure class	Material
G, M, GC1	EN 1092-2	DN 125, DN 150	PN 16	Grey cast iron EN-GJL-250/A48 Cl. 35B
		DN 200, DN 250, DN 300, DN 350	PN 10	Grey cast iron EN-GJL-250/A48 Cl. 35B
SG, SM, SC1	EN 1092-2	DN 125, DN 150, DN 200, DN 250, DN 300, DN 350	PN 16	Nodular cast iron, EN-GJS-400-15 / A536 Gr. 60-40-18

Optional: flange design to ASME Class 125, drilled

Etanorm-R	Suction nozzle	Discharge nozzle
125-500/2	✘	✘
150-500.1	✘	✘
200-250	✘	✘
200-260	✘	✘
200-330	✘	✘
200-400	✘	✘
200-500	✘	✘
250-300	✘	✘
250-330	✘	✘
250-400	-	✘
250-500	-	✘
300-340	-	-
300-360	-	-
300-400	✘	-
300-500	✘	-

360 Size 125-500/2: G 1/2

Interchangeability of pump components

Components featuring the same number in a column are interchangeable.

Interchangeability of pump components

Etanorm-R	Shaft unit	Description													
		Shaft	Radial ball bearing	Lip seal[361]	Mechanical seal	Casing cover[362]	Gland packing	Ring	Ring	Casing wear ring, suction side	Casing wear ring, discharge side	Thrower	Shaft sleeve	Shaft protecting sleeve	Spacer sleeve
		Part No.													
		210	321	421	433	161	461	500.1	500.3	502.1	502.2	507	523	524	525
125-500/2	65	-	1	1	1	-	1	1	1	-	-	1	-	-	-
150-500.1	65	1	1	1	1	1	1	1	1	1	1	1	1	1	-
200-250	65	2	1	1	1	-	1	1	1	-	3	1	2	2	-
200-260	65	1	1	1	1	-	1	1	1	1	3	1	1	1	-
200-330	65	1	1	1	1	4	1	1	1	-	4	1	1	1	-
200-400	65	1	1	1	1	-	1	1	1	2	2	1	1	1	-
200-500	65	1	1	1	1	1	1	1	1	-	1	1	1	1	-
250-300	65	2	1	1	1	4	1	1	1	-	4	1	2	2	-
250-330	65	1	1	1	1	-	1	1	1	2	4	1	1	1	-
250-400	65	1	1	1	1	-	1	1	1	-	1	1	1	1	-
250-500	65	1	1	1	1	2	1	1	1	-	1	1	1	1	-
300-340	65	2	1	1	1	-	1	1	1	-	2	1	2	2	-
300-360	65	1	1	1	1	3	1	1	1	-	1	1	1	1	-
300-400	65	1	1	1	1	3	1	1	1	3	1	1	1	1	-
300-500	65	1	1	1	1	2	1	1	1	3	1	1	1	1	-

361 For oil lubrication only
362 For gland packing or mechanical seal

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Recommended spare parts stock for 2 years' operation to DIN 24296

Quantity of spare parts for recommended spare parts stock

Part No.	Description	Number of pumps (including stand-by pumps)						
		2	3	4	5	6 and 7	8 and 9	10 and more
171	Diffuser[363)]	1	1	1	2	2	2	20 %
210	Shaft	1	1	1	2	2	2	20 %
230	Impeller	1	1	1	2	2	2	20 %
230.01/.02	Impeller[363)]	1	1	1	2	2	2	20 %
321	Radial ball bearing	2	2	4	4	4	6	50 %
330	Bearing bracket	-	-	-	-	-	1	2
400./...	Gasket (set)	4	6	8	8	9	12	150 %
412	O-ring[363)]	4	6	8	8	9	12	150 %
-	Torque-transmitting coupling elements (set)	1	1	2	2	3	4	30 %
502.01/02.	Casing wear ring	2	2	2	3	3	4	50 %
502.03/.04	Casing wear ring[363)]	2	2	2	3	3	4	50 %
525.01	Spacer sleeve[363)]	1	1	1	2	2	2	20 %
For variants with mechanical seal:								
433	Mechanical seal	1	1	2	2	2	3	25 %
500.03	Ring	1	1	2	2	2	3	25 %
523	Shaft sleeve	2	2	2	3	3	4	50 %
For variants with gland packing:								
456.01	Neck bush	1	1	2	2	2	3	30 %
461	Gland packing (set)	4	4	6	6	6	8	100 %
524	Shaft protecting sleeve	2	2	2	3	3	4	50 %

Scope of supply

Depending on the model, the following items are included in the scope of supply:

- Pump
- Drive
- Baseplate
- Coupling
- Coupling guard

363 For Etanorm-R 125-500/2 only

Volute Casing Pumps

Etaprime B

http://shop.ksb.com/catalog/k0/en/product/ES000119

Product benefits

- Maintenance-free mechanical seal ensures operating reliability
- Easy to dismantle due to back pull-out design; no need to remove the pump casing from the piping
- Good suction performance, self-priming up to 9 m suction lift, also suitable for applications with relatively poor inlet conditions (i.e. low or negative inlet pressure) and for handling fluids with entrained gas.
- Optimised hydraulic components for high efficiency help reduce energy consumption

Further information

Prices on request

Selection charts 727
Characteristic curves 728
Dimensions and connections 734

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certifications

Overview

Label	Effective in:	Comment
ISO 9001	All countries	Certified quality management to ISO 9001

Main applications

- Spray irrigation systems
- Service water supply systems
- Drainage
- Drainage systems
- Fire-fighting systems
- Lowering groundwater levels
- Domestic water supply
- Air-conditioning systems
- Cooling circuits
- Swimming pools
- Water supply systems

Fluids handled

- Drinking water
- Swimming pool water[364)]
- Fire-fighting water
- Seawater
- River water
- Lake water
- Groundwater
- Brackish water

364 Swimming pool water (0.4 to 1.4 mg/l free chlorine, max. 0.6 mg/l combined chlorine, pH 6.9 to 7.7, water hardness 10 to 30 °dH, max. salt content 7 g/l)

- Condensate
- Brine
- Oil
- Service water
- Cleaning agents
- Cooling water

Operating data

Operating properties

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q [m³/h]	≤ 130	≤ 150
	Q [l/s]	≤ 36	≤ 42
Head	H [m]	≤ 70	≤ 100
Fluid temperature	T [°C]	≥ -30	≥ -30
		≤ +90	≤ +90
Operating pressure	p [bar]	≤ 10	≤ 10
Geodetic head	H_{geo} [m]	≤ 9	≤ 9

Design details

Design

- Volute casing pump
- Back pull-out design (from size 40-40-140)
- Horizontal installation
- Self-priming
- Single-stage
- Single-entry
- Pump and motor connected by a stub shaft

Pump casing

- Radially split volute casing
- Volute casing with integrally cast pump feet (from pump size 40-40-140)

Drive

- KSB IEC frame standardised IE3 motor (from 0.75 kW)
- Type of construction B34 ≤ 1.1 kW
- Type of construction V1 1.1 to 4 kW
- Type of construction V15 > 4 kW
- 230/400 V up to 2.2 kW and 400/690 V from 3 kW
- Enclosure IP55
- Thermal class F
- 3 PTC thermistors

Shaft seal

- Shaft equipped with replaceable shaft protecting sleeve in the shaft seal area
- Single mechanical seals and double mechanical seals to EN 12756

Impeller type

- Open multi-vane impeller

Designation

Designation example

Position																													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
E	T	P	B	0	8	0	-	0	8	0	-	2	0	0		G	C	X	I	1	0	D	3	0	1	8	5	2			B
See name plate and data sheet																								See data sheet							

Designation key

Position	Code	Description	
1-4	Pump type		
	ETPB	Etaprime bloc	
5-16	Pump size, e.g.		
	080	Nominal suction nozzle diameter [mm]	
	080	Nominal discharge nozzle diameter [mm]	
	200	Nominal impeller diameter [mm]	
17	Pump casing material		
	G	Cast iron	EN-GJL-250 / A48CL35
	C	Stainless steel	1.4408 / A743CF8M
18	Impeller material		
	G	Cast iron	EN-GJL-250
	C	Stainless steel	1.4408
19	Design		
	-[365)]	Standard	
	X	Non-standard (BT3D, BT3)	
20	Shaft seal type		
	I	Single mechanical seal, internal circulation (conical seal chamber only)	
	D	Double mechanical seal in back-to-back arrangement	
	T	Double mechanical seal in tandem arrangement with internal circulation	
21-22	Seal code, single mechanical seal		

365 Blank

Position	Code	Description
21-22	01	Q1Q1VGG
	08	AQ1VGG[366)]
	09	U3U3VGG
	10	Q1Q1X4GG
	11	BQ1EGG
	70	Q12Q1M1GG
23	Scope of supply	
	D	Pump with motor
24	Shaft unit	
	1	Shaft unit 17
	2	Shaft unit 25
	3	Shaft unit 35
25-28	Motor size	
29	Number of motor poles	
30-31	Explosion protection	
	ex	With explosion-proof motor
	-[365)]	Without explosion-proof motor
32	Product generation	
	B	Etaprime Global Pump

Materials

A1 = default material variant
A2 = optional material variant

Part No.	Description	Material	Material variant		
			G	GC	C
102	Volute casing	Grey cast iron EN-GJL-250	A1	A1	-
		Stainless steel 1.4408	-	-	A1
161	Casing cover	Grey cast iron EN-GJL-250	A1	A1	-
		Stainless steel 1.4408	-	-	A1
210	Shaft for shaft units 25 and 35	Tempered steel C45+N	A1	A1	-
		Stainless steel 1.4571	A2	A2	A1
	Shaft for shaft unit 17	Stainless steel 1.4571	A1	A1	A1
230	Impeller	Grey cast iron EN-GJL-250	A1	-	-
		Stainless steel 1.4408	-	A1	A1
341	Drive lantern for shaft units 25 and 35	Grey cast iron EN-GJL-250	A1	A1	A1
	Drive lantern for shaft unit 17	Grey cast iron EN-GJL-250	A1	A1	-
		Stainless steel 1.4408	-	-	A1
412	O-ring	EPDM 80 peroxide[367)]	A1	A1	A1
523	Shaft sleeve (not for shaft unit 17)	Stainless steel 1.4571	A1	A1	A1

Prices on request

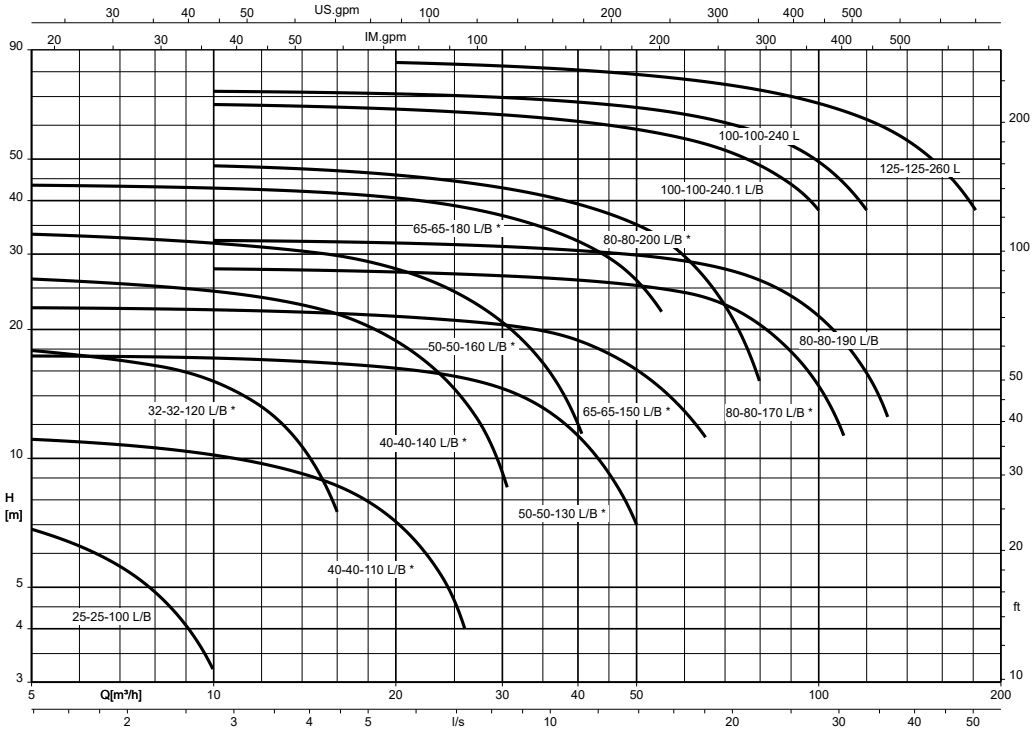
Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

366 For shaft unit 17: BQVGG
367 FKM 80 on request

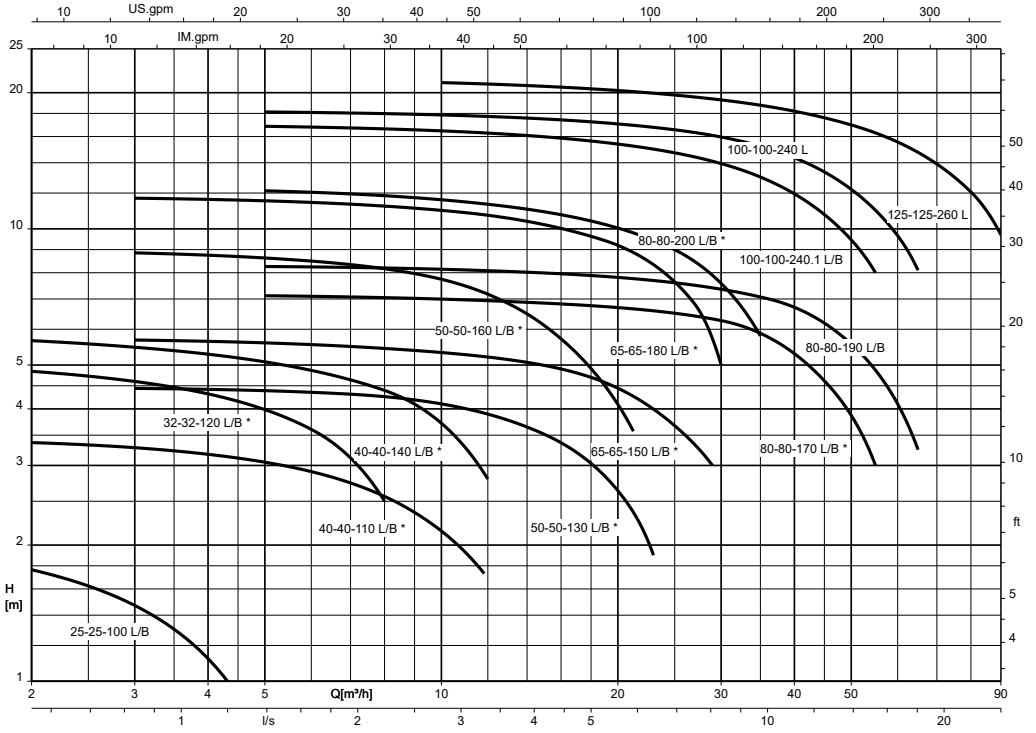
Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Selection charts

Etaprime L / Etaprime B, n = 2900 rpm (* also available in stainless steel material variant)

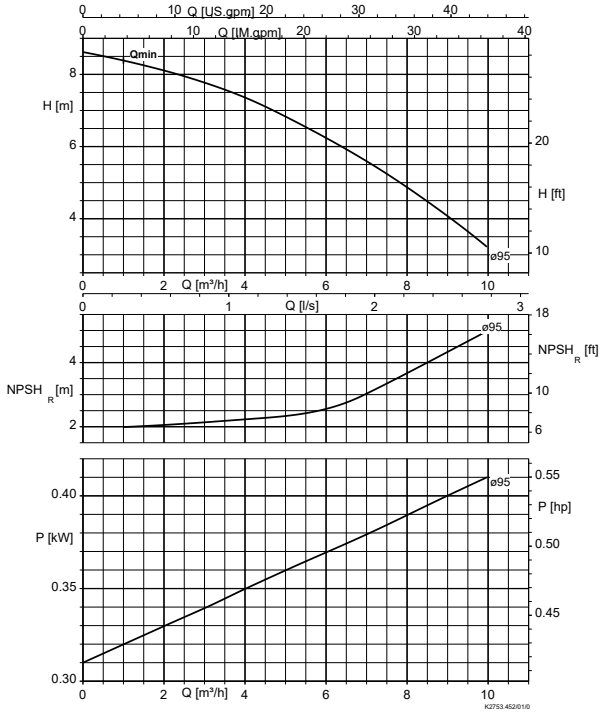


Etaprime L / Etaprime B, n = 1450 rpm (* also available in stainless steel material variant)



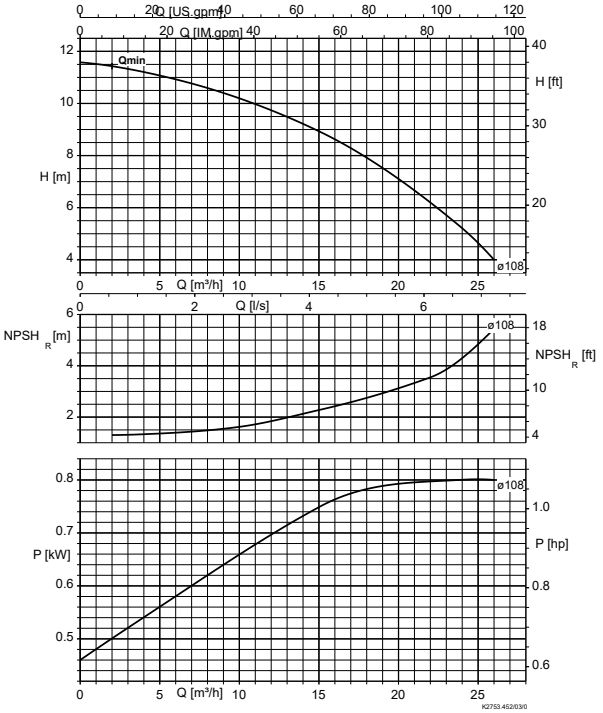
Characteristic curves

Etaprime 025-025-100, n = 2900 rpm



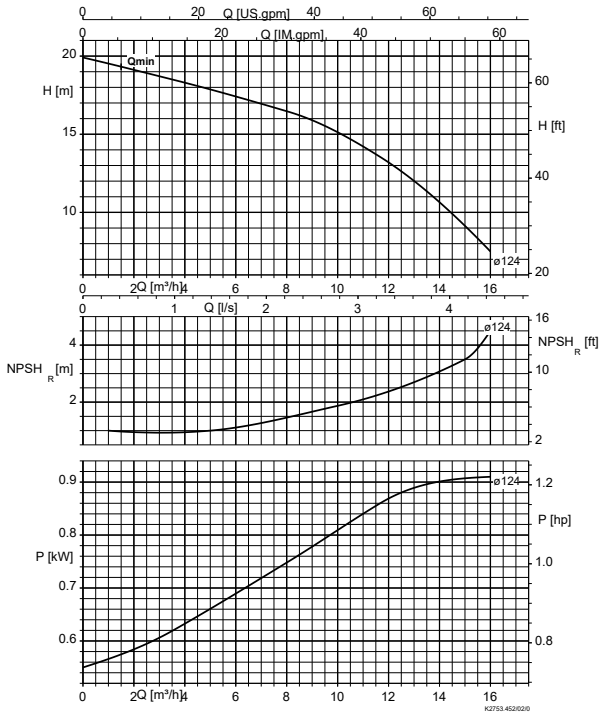
Impeller outlet width = 15 mm

Etaprime 040-040-110, n = 2900 rpm



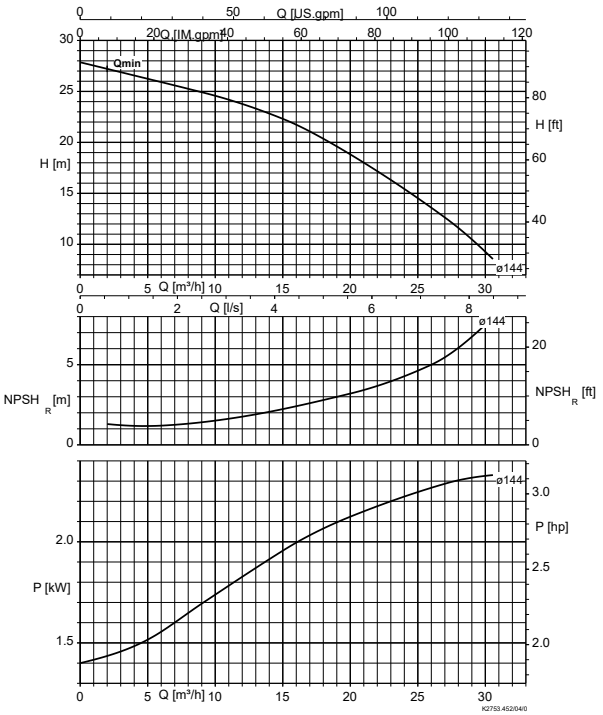
Impeller outlet width = 17.4 mm

Etaprime 032-032-120, n = 2900 rpm



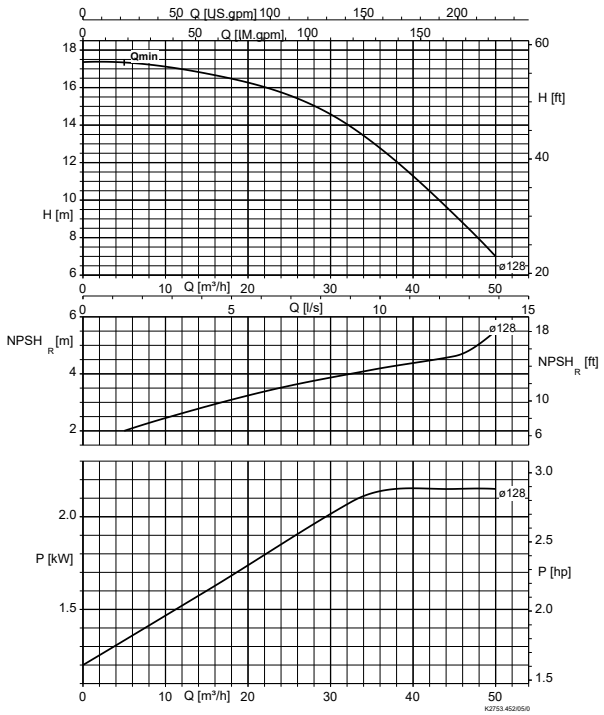
Impeller outlet width = 9.4 mm

Etaprime 040-040-140, n = 2900 rpm



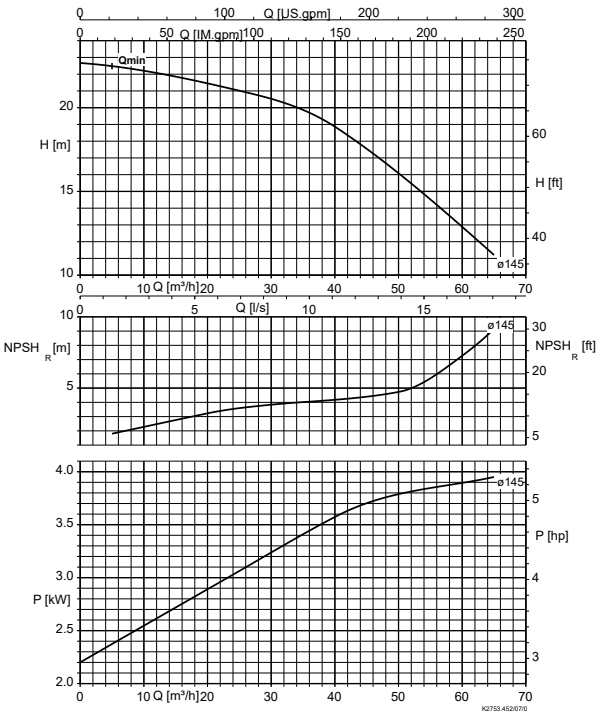
Impeller outlet width = 11 mm

Etaprime 050-050-130, n = 2900 rpm



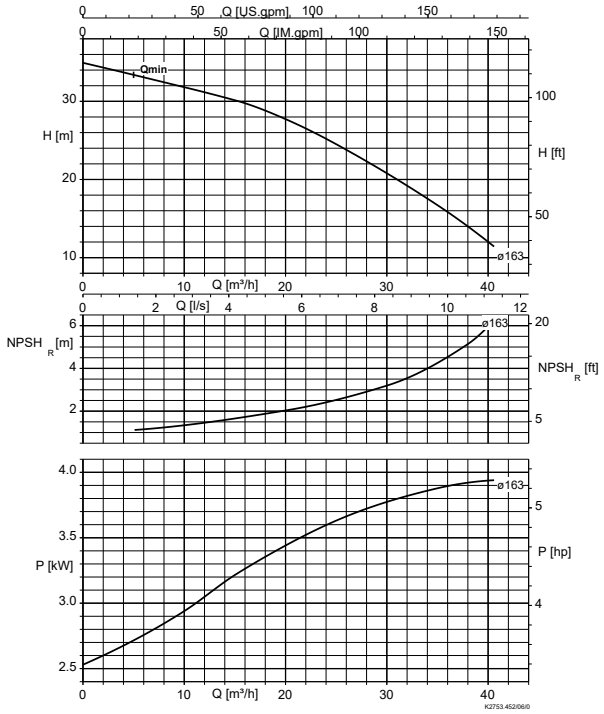
Impeller outlet width = 21 mm

Etaprime 065-065-150, n = 2900 rpm



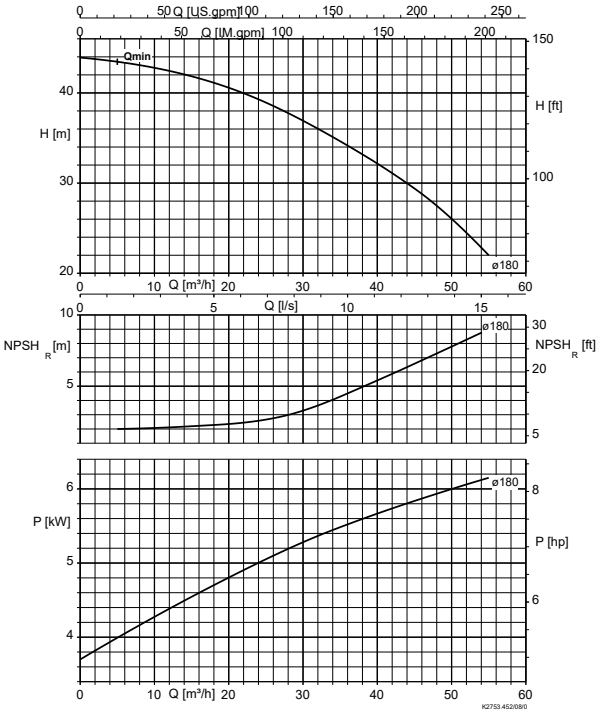
Impeller outlet width = 24 mm

Etaprime 050-050-160, n = 2900 rpm



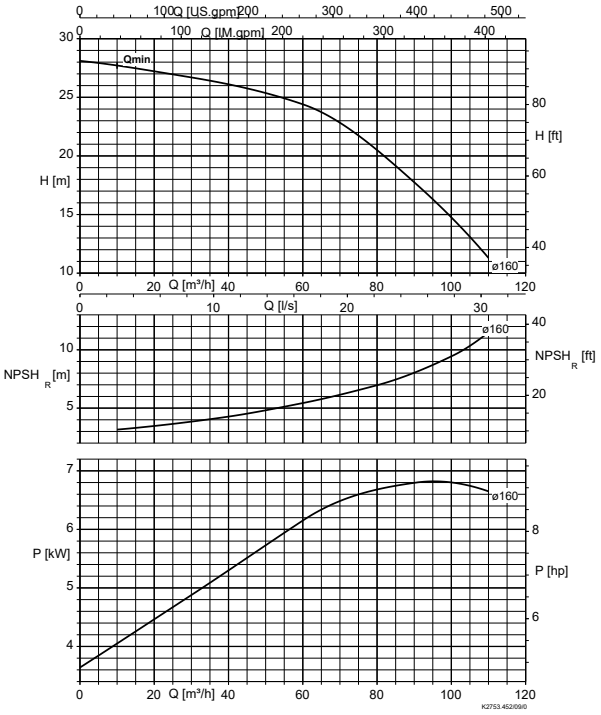
Impeller outlet width = 12.5 mm

Etaprime 065-065-180, n = 2900 rpm



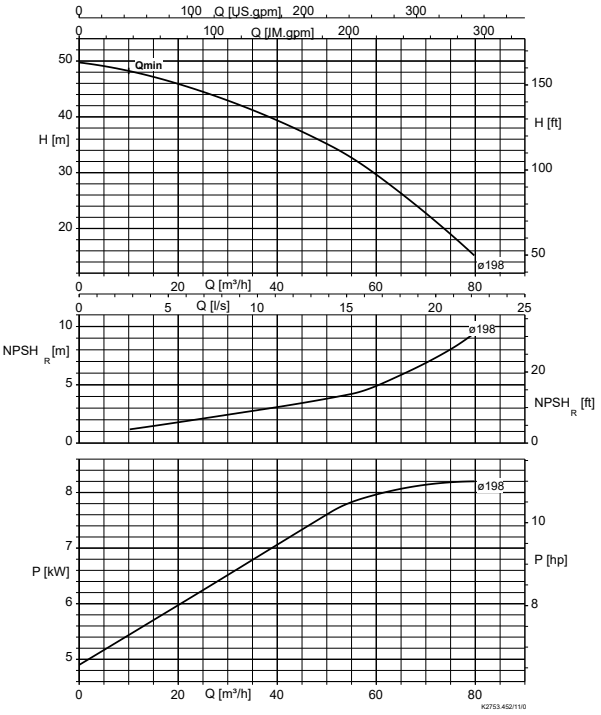
Impeller outlet width = 14.5 mm

Etaprime 080-080-170, n = 2900 rpm



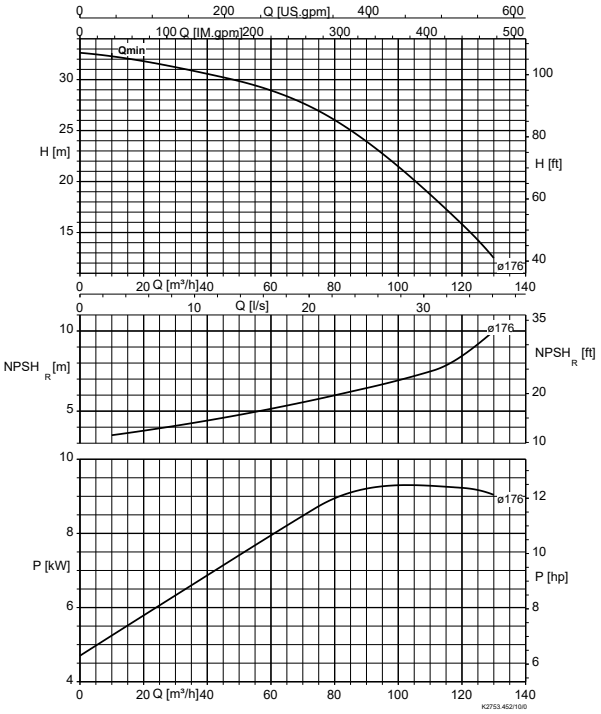
Impeller outlet width = 27 mm

Etaprime 080-080-200, n = 2900 rpm



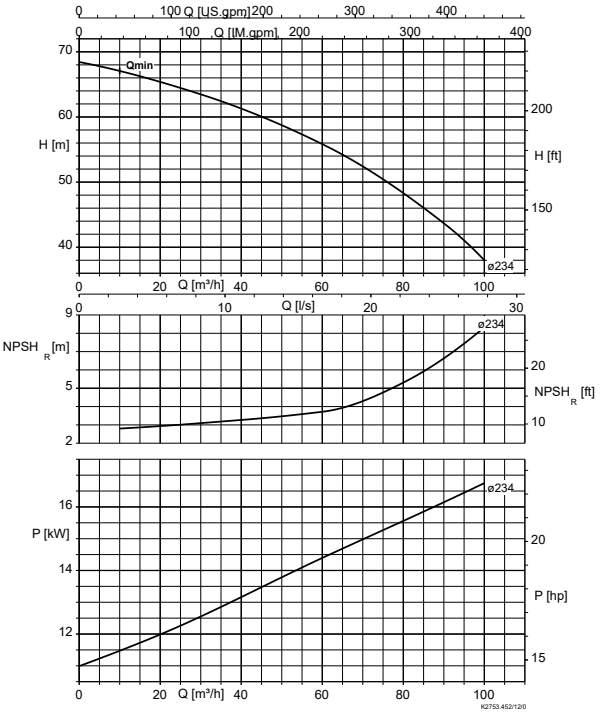
Impeller outlet width = 15 mm

Etaprime 080-080-190, n = 2900 rpm



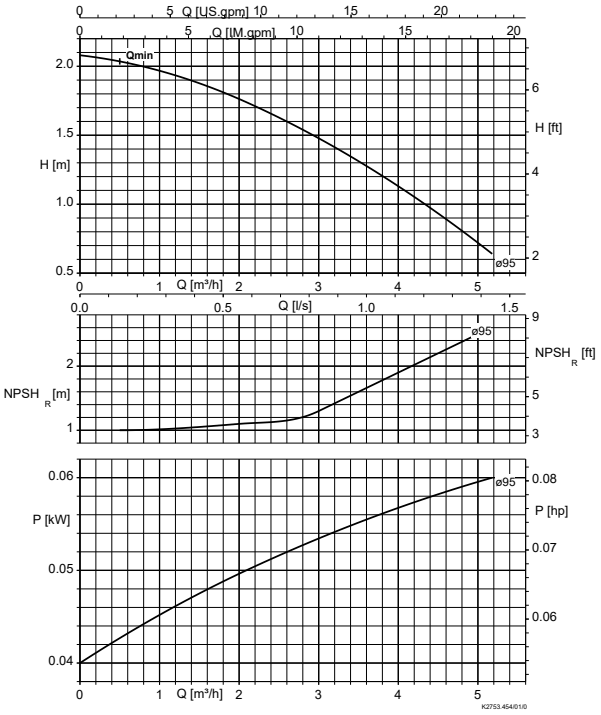
Impeller outlet width = 29 mm

Etaprime 100-100-240.1, n = 2900 rpm



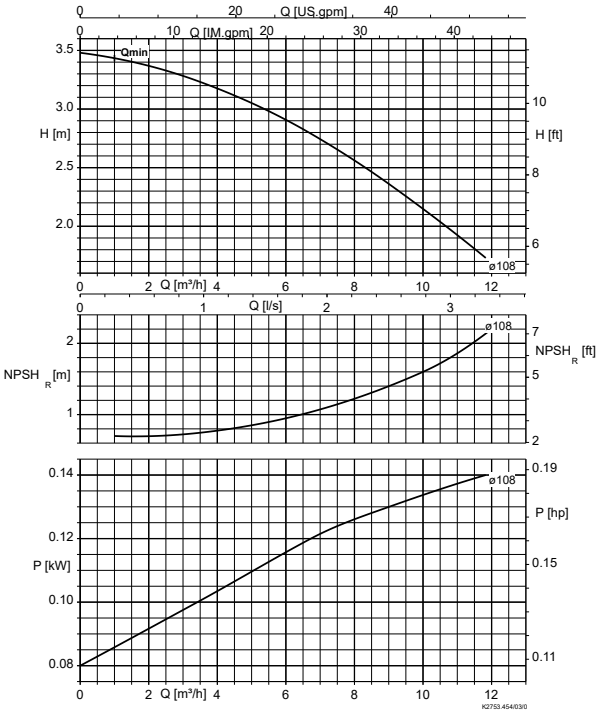
Impeller outlet width = 18 mm

Etaprime 025-025-100, n = 1450 rpm



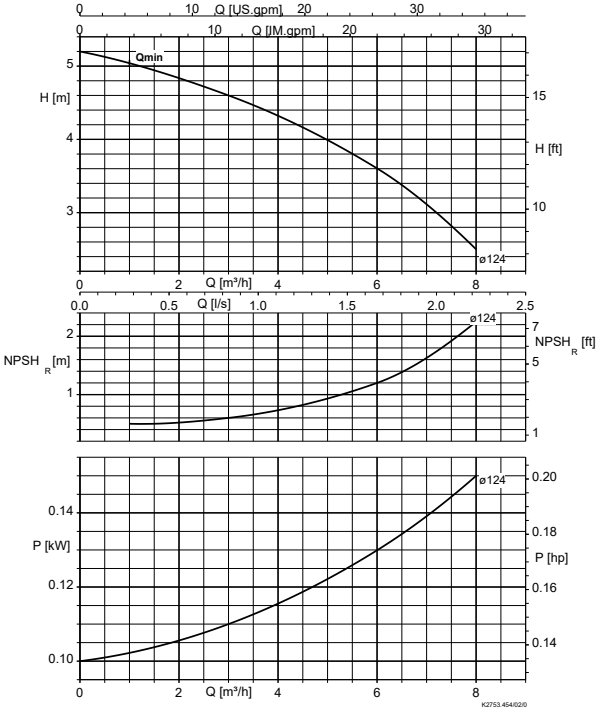
Impeller outlet width = 15 mm

Etaprime 040-040-110, n = 1450 rpm



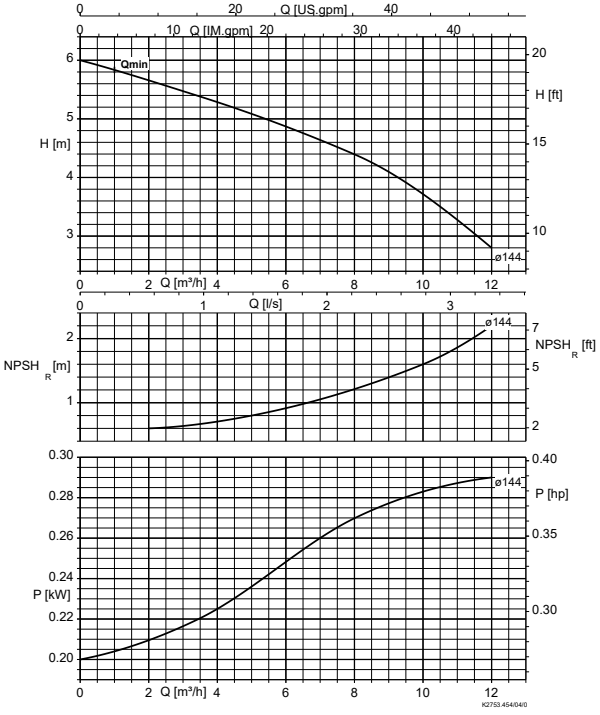
Impeller outlet width = 17.4 mm

Etaprime 032-032-120, n = 1450 rpm



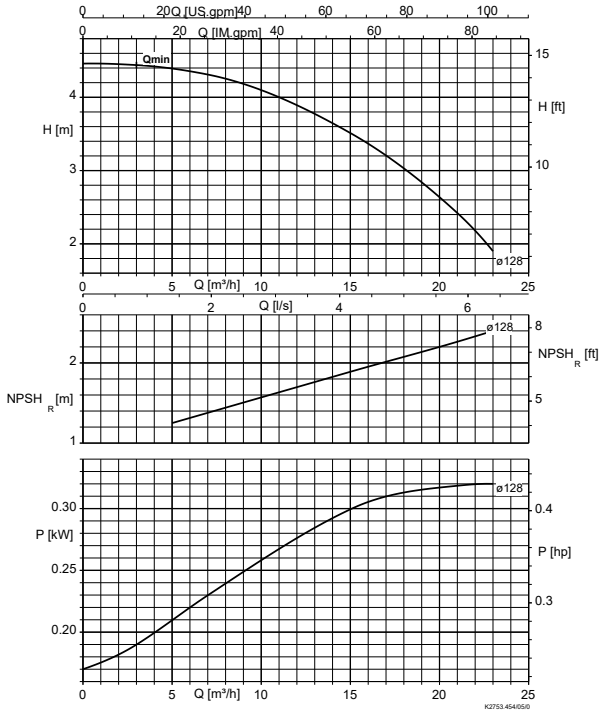
Impeller outlet width = 9.4 mm

Etaprime 040-040-140, n = 1450 rpm



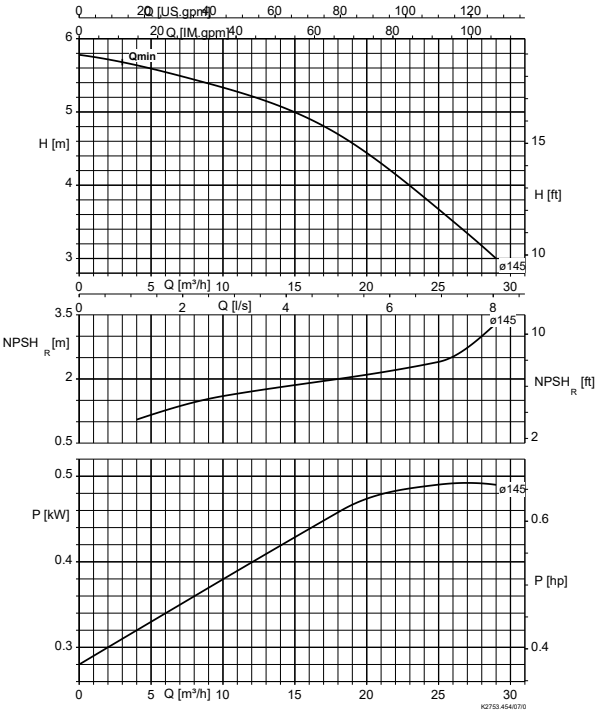
Impeller outlet width = 11 mm

Etaprime 050-050-130, n = 1450 rpm



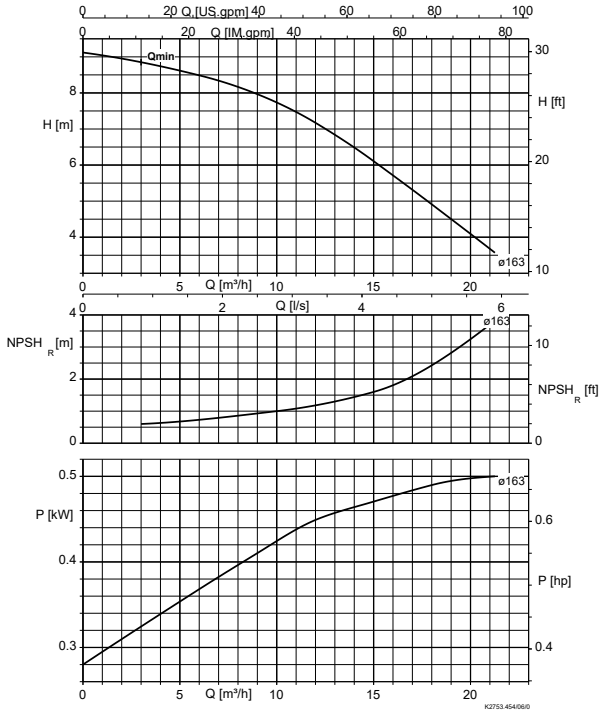
Impeller outlet width = 21 mm

Etaprime 065-065-150, n = 1450 rpm



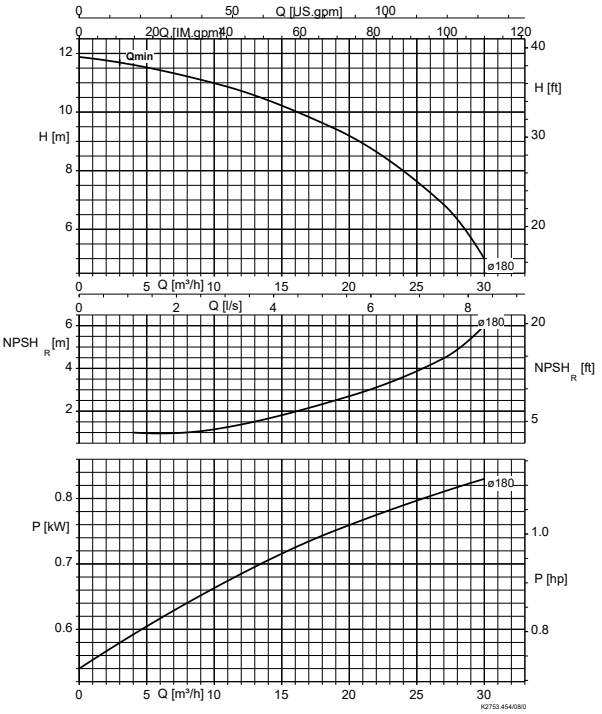
Impeller outlet width = 24 mm

Etaprime 050-050-160, n = 1450 rpm



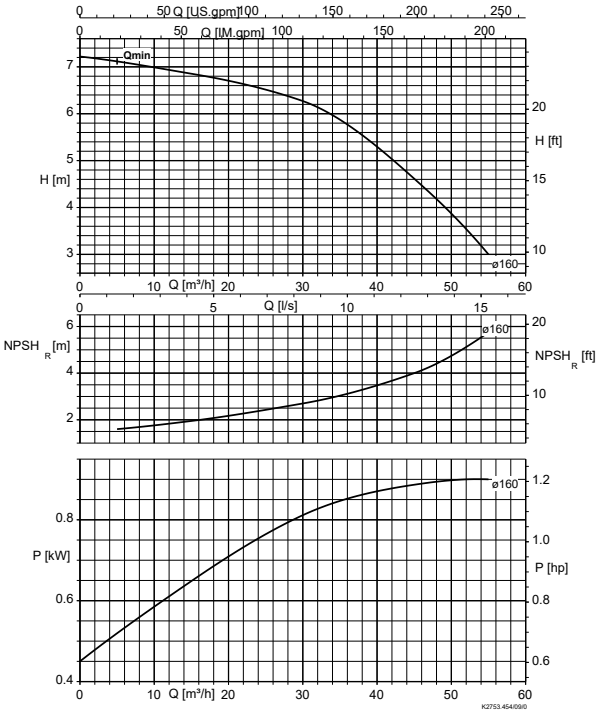
Impeller outlet width = 12.5 mm

Etaprime 065-065-180, n = 1450 rpm



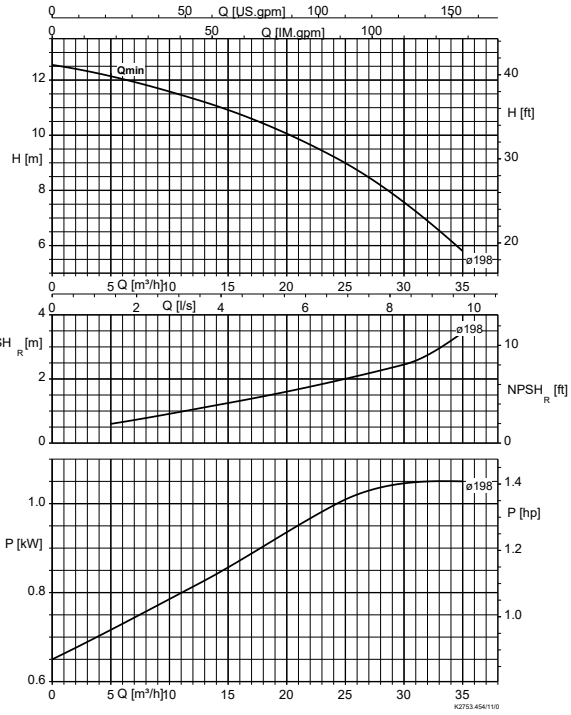
Impeller outlet width = 14.5 mm

Etaprime 080-080-170, n = 1450 rpm



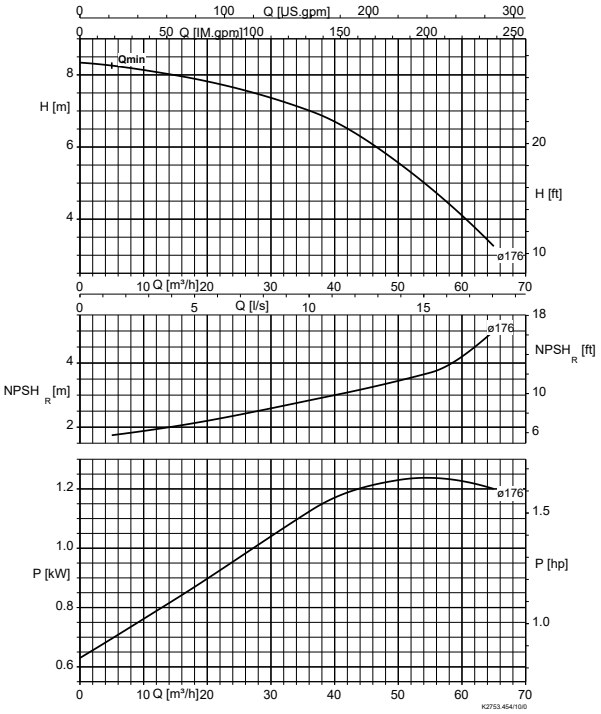
Impeller outlet width = 27 mm

Etaprime 080-080-200, n = 1450 rpm



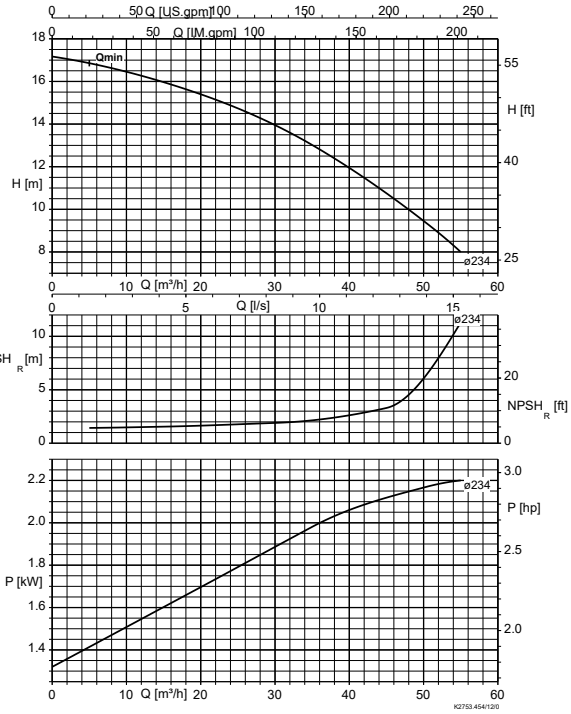
Impeller outlet width = 15 mm

Etaprime 080-080-190, n = 1450 rpm



Impeller outlet width = 29 mm

Etaprime 100-100-240.1, n = 1450 rpm



Impeller outlet width = 18 mm

Dimensions and connections

Etaprime B 025-025-100 to 100-100-240.1

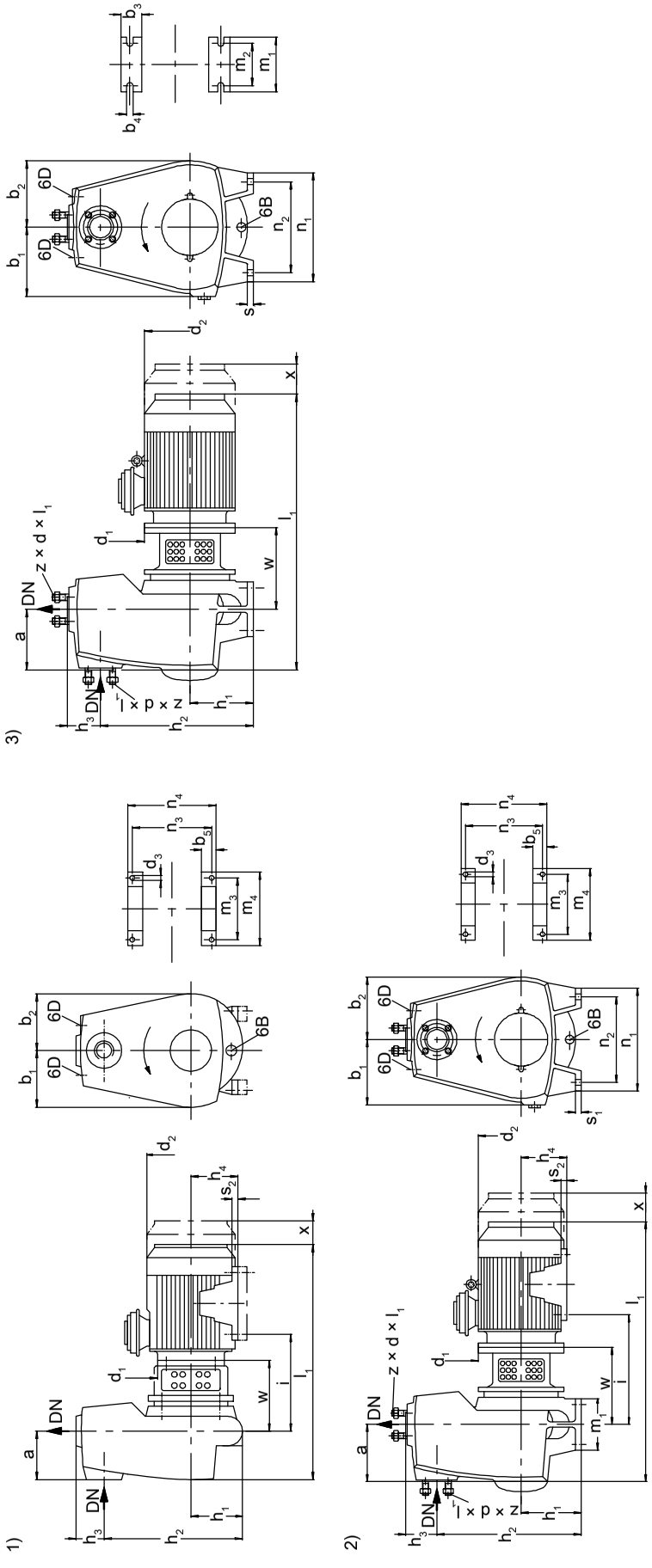


Fig. 296: Dimensions of Etaprime B

1)	Pump set with motor foot and motor ≤ 4.0 kW	3)	Pump set with pump foot and motor ≤ 4.0 kW
2)	Pump set with motor foot and motor ≥ 5.5 kW		
6B	Fluid drain	6D	Fluid priming and venting

Connections

Etaprime B	6B[368)]	6D[368)]
025-025-100	G 1/8	G 3/8
032-032-120	G 1/8	G 3/8
040-040-110	G 1/8	G 3/8
040-040-140	G 3/8	G 3/8
050-050-130	G 3/8	G 3/8
050-050-160	G 3/8	G 3/8
065-065-150	G 3/8	G 3/8
065-065-180	G 3/8	G 3/8
080-080-170	G 1/2	G 1/2
080-080-190	G 1/2	G 1/2
080-080-200	G 1/2	G 1/2
100-100-240.1	G 1/2	G 1/2

Flange dimensions, shaft unit 17

Etaprime B	Connection for	
	Standard	Optional
	DN[369)]	DN[370)]
025-025-100	Rp 1	NPT 1
032-032-120	Rp 1 1/4	NPT 1 1/4
040-040-110	Rp 1 1/2	NPT 1 1/2

Flange dimensions, shaft units 25, 35

Flanged connection	DN	Bolt circle diameter	z	d	l_1
Standard:	40	110	4	M16	40
▪ Drilled to EN 1092-1 (material variant C)	50	125	4	M16	40
▪ Drilled to EN 1092-2 (material variant G / GC)	65	145	4	M16	40
	80	160	8	M16	45
	100	180	8	M16	45
Optional:	NPS 1 1/2	98,6	4	UNC 1/2-13	40
▪ Drilled to ASME B16.1 (material variant G / GC)	NPS 2	120,7	4	UNC 5/8-11	40
▪ Drilled to ASME B16.5 (material variant C)	NPS 2 1/2	139,7	4	UNC 5/8-11	40
	NPS 3	152,4	4	UNC 5/8-11	40
	NPS 4	190,5	8	UNC 5/8-11	45

368 Threaded connection to ISO 228/1
369 Standard connection to ISO 7/1
370 Optional connection to ASME B1.20.1

Dimensions [mm]

Etaprime B	n				P_N	DN	Pump																													
	1450	1750	2900	3500	[kW]		a	b_1	b_2	b_3	b_4	b_5	d_1	d_2 (approx.)	d_3	h_1	h_2	h_3	h_4	i 371)	l_1 371) (approx.)	m_1	m_2	m_3	m_4	n_1	n_2	n_3	n_4	s_1	s_2	w 371)	x
	[rpm]																																			
025-025-100[372]	✘	✘	-	-	0,55	25	70	104	95	-	-	33	120	160	9	87	227	38	80	152	441	-	-	100	125	-	-	125	153	-	10	102	60
025-025-100[372]	-	-	✘	✘	1,10	25	70	104	95	-	-	33	120	160	9	87	227	38	80	152	473	-	-	100	125	-	-	125	153	-	10	102	60
032-032-120[372]	✘	✘	-	-	0,55	32	95	118	95	-	-	33	120	160	9	90	239	46	80	149	463	-	-	100	125	-	-	125	153	-	10	99	60
032-032-120[372]	-	-	✘	-	1,10	32	95	118	95	-	-	33	120	160	9	90	239	46	80	149	495	-	-	100	125	-	-	125	153	-	10	99	60
040-040-110[372]	✘	✘	-	-	0,55	40	105	118	110	-	-	33	120	160	9	101	256	55	80	154	478	-	-	100	125	-	-	125	153	-	10	104	60
040-040-110[372]	-	-	✘	✘	1,10	40	105	118	110	-	-	33	120	160	9	101	256	55	80	154	510	-	-	100	125	-	-	125	153	-	10	104	60
040-040-140	✘	-	-	-	0,55	40	115	128	115	57	16	-	200	162	-	112	284	73	-	-	550	100	70	-	-	220	160	-	-	13	-	166	100
040-040-140	-	✘	-	-	1,50	40	115	128	115	57	16	-	200	190	-	112	284	73	-	-	635	100	70	-	-	220	160	-	-	13	-	166	100
040-040-140	-	-	✘	-	2,20	40	115	128	115	57	16	-	200	190	-	112	284	73	-	-	635	100	70	-	-	220	160	-	-	13	-	166	100
040-040-140	-	-	✘	-	3,00	40	115	128	115	57	16	-	250	213	-	112	284	73	-	-	685	100	70	-	-	220	160	-	-	13	-	180	100
040-040-140	-	-	-	✘	4,00	40	115	128	115	57	16	-	250	235	-	112	284	73	-	-	667	100	70	-	-	220	160	-	-	13	-	180	100
040-040-140[373][374]	-	-	-	✘	5,50	40	115	128	115	57	16	55	300	274	12	112	284	73	132	292	731	100	70	140	220	220	160	216	270	13	12	203	100
050-050-130	✘	-	-	-	0,55	50	130	138	128	55	16	-	200	162	-	132	317	78	-	-	565	100	70	-	-	250	190	-	-	17	-	166	100
050-050-130	-	✘	-	-	1,50	50	130	138	128	55	16	-	200	190	-	132	317	78	-	-	650	100	70	-	-	250	190	-	-	17	-	166	100
050-050-130	-	-	✘	-	2,20	50	130	138	128	55	16	-	200	190	-	132	317	78	-	-	650	100	70	-	-	250	190	-	-	17	-	166	100
050-050-130	-	-	✘	-	3,00	50	130	138	128	55	16	-	250	213	-	132	317	78	-	-	700	100	70	-	-	250	190	-	-	17	-	180	100
050-050-130	-	-	-	✘	4,00	50	130	138	128	55	16	-	250	235	-	132	317	78	-	-	682	100	70	-	-	250	190	-	-	17	-	180	100
050-050-130	-	-	-	✘	5,50	50	130	138	128	55	16	55	300	274	12	132	317	78	132	292	746	100	70	140	220	250	190	216	270	17	12	203	100
050-050-160	✘	-	-	-	0,55	50	130	145	126	55	16	-	200	162	-	132	327	75	-	-	565	100	70	-	-	250	190	-	-	17	-	166	100
050-050-160	-	✘	-	-	1,50	50	130	145	126	55	16	-	200	190	-	132	327	75	-	-	650	100	70	-	-	250	190	-	-	17	-	166	100
050-050-160	-	-	✘	-	4,00	50	130	145	126	55	16	-	250	235	-	132	327	75	-	-	682	100	70	-	-	250	190	-	-	17	-	180	100
050-050-160	-	-	✘	✘	5,50	50	130	145	126	55	16	55	300	274	12	132	327	75	132	292	746	100	70	140	220	250	190	216	270	17	12	203	100
050-050-160	-	-	-	✘	7,50	50	130	145	126	55	16	55	300	274	12	132	327	75	132	292	790	100	70	140	220	250	190	216	270	17	12	203	100
065-065-150	✘	-	-	-	0,55	65	140	155	149	55	16	-	200	162	-	160	370	85	-	-	575	125	95	-	-	270	212	-	-	20	-	166	100
065-065-150	-	✘	-	-	1,50	65	140	155	149	55	16	-	200	190	-	160	370	85	-	-	660	125	95	-	-	270	212	-	-	20	-	166	100
065-065-150	-	-	✘	-	4,00	65	140	155	149	55	16	-	250	235	-	160	370	85	-	-	692	125	95	-	-	270	212	-	-	20	-	180	100
065-065-150[373][374]	-	-	✘	✘	5,50	65	140	155	149	55	16	55	300	274	12	160	370	85	132	292	756	125	95	140	220	270	212	216	270	20	12	203	100
065-065-150[373][374]	-	-	-	✘	7,50	65	140	155	149	55	16	55	300	274	12	160	370	85	132	292	800	125	95	140	220	270	212	216	270	20	12	203	100
065-065-180	✘	✘	-	-	2,20	65	140	158	138	55	16	-	250	213	-	160	376	89	-	-	740	125	95	-	-	270	212	-	-	18	-	210	140

371 Dimensions for variants with a single mechanical seal
372 Shim the motor feet by 30 mm.
373 If h1 > h4: shim the motor feet.
374 If h1 < h4: shim the pump feet.

Etaprime B	n [rpm]				P_N [kW]	DN	Pump																												
	1450	1750	2900	3500			a	b_1	b_2	b_3	b_4	b_5	d_1	d_2 (approx.)	d_3	h_1	h_2	h_3	h_4	i 371)	l_1 371) (approx.)	m_1	m_2	m_3	m_4	n_1	n_2	n_3	n_4	s_1	s_2	w 371)	x
065-065-180 373)374)	-	-	✘	-	5,50	65	140	158	138	55	16	55	300	274	12	160	376	89	132	322	786	125	95	140	220	270	212	216	270	18	12	233	140
065-065-180 373)374)	-	-	✘	-	7,50	65	140	158	138	55	16	55	300	274	12	160	376	89	132	322	830	125	95	140	220	270	212	216	270	18	12	233	140
065-065-180	-	-	-	✘	11,00	65	140	158	138	55	16	70	350	325	15	160	376	89	160	374	952	125	95	210	310	270	212	254	323	18	15	266	140
080-080-170	✘	✘	-	-	2,20	80	156	173	168	65	18	-	250	213	-	160	380	104	-	-	756	140	106	-	-	310	240	-	-	18	-	210	140
080-080-170 373)374)	-	-	✘	-	7,50	80	156	173	168	65	18	55	300	274	12	160	380	104	132	322	846	140	106	140	220	310	240	216	270	18	12	233	140
080-080-170	-	-	-	✘	15,00	80	156	173	168	65	18	70	350	325	15	160	380	104	160	374	968	140	106	210	310	310	240	254	323	18	15	266	140
080-080-190	✘	✘	-	-	2,20	80	170	188	181	65	20	-	250	213	-	180	420	107	-	-	770	160	120	-	-	345	280	-	-	22	-	210	140
080-080-190 373)374)	-	-	-	✘	11,00	80	170	188	181	65	20	70	350	325	15	180	420	107	160	374	982	160	120	210	310	345	280	254	323	22	15	266	140
080-080-190 373)374)	-	-	-	✘	18,50	80	170	188	181	65	20	70	350	325	15	180	420	107	160	374	1018	160	120	254	314	345	280	254	323	22	15	266	140
080-080-200	✘	✘	-	-	2,20	80	154	172	152	65	20	-	250	213	-	160	378	107	-	-	754	140	100	-	-	285	220	-	-	22	-	210	140
080-080-200	-	-	✘	-	11,00	80	154	172	152	65	20	70	350	325	15	160	378	107	160	374	966	140	100	210	310	285	220	254	323	22	15	266	140
080-080-200	-	-	-	✘	15,00	80	154	172	152	65	20	70	350	325	15	160	378	107	160	374	966	140	100	210	310	285	220	254	323	22	15	266	140
100-100-240.1	✘	-	-	-	2,20	100	182	203	178	68	20	-	250	213	-	200	457	127	-	-	771	140	100	-	-	330	260	-	-	18	-	199	140
100-100-240.1	✘	✘	-	-	3,00	100	182	203	178	68	20	-	250	213	-	200	457	127	-	-	771	140	100	-	-	330	260	-	-	18	-	199	140
100-100-240.1	-	✘	-	-	4,00	100	182	203	178	68	20	-	250	235	-	200	457	127	-	-	753	140	100	-	-	330	260	-	-	18	-	199	140
100-100-240.1 373)374)	-	-	✘	-	18,50	100	182	203	178	68	20	70	350	325	15	200	457	127	160	363	1019	140	100	254	314	330	260	254	323	18	15	255	140
100-100-240.1	-	-	-	✘	30,00	100	182	203	178	68	20	85	400	422	19	200	457	127	200	388	1106	140	100	305	388	330	260	318	404	18	19	255	140

Recommended spare parts stock

Spare parts list on request!

Volute Casing Pumps

Etaprime L

http://shop.ksb.com/catalog/k0/en/product/ES000120

Product benefits

- Maintenance-free mechanical seal ensures operating reliability
- Easy to dismantle due to back pull-out design; no need to remove the pump casing from the piping
- Good suction performance, self-priming up to 9 m suction lift, also suitable for applications with relatively poor inlet conditions (i.e. low or negative inlet pressure) and for handling fluids with entrained gas.
- Optimised hydraulic components for high efficiency help reduce energy consumption

Further information

Prices on request

Selection charts 741
Dimensions and connections 742

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certifications

Overview

Label	Effective in:	Comment
ISO 9001	All countries	Certified quality management to ISO 9001

Main applications

- Spray irrigation systems
- Service water supply systems
- Drainage
- Drainage systems
- Fire-fighting systems
- Lowering groundwater levels
- Domestic water supply
- Air-conditioning systems
- Cooling circuits
- Swimming pools
- Water supply systems

Fluids handled

- Drinking water
- Swimming pool water[375)]
- Fire-fighting water
- Seawater
- River water
- Lake water
- Groundwater
- Brackish water

375 Swimming pool water (0.4 to 1.4 mg/l free chlorine, max. 0.6 mg/l combined chlorine, pH 6.9 to 7.7, water hardness 10 to 30 °dH, max. salt content 7 g/l)

- Condensate
- Brine
- Oil
- Service water
- Cleaning agents
- Cooling water

Operating data

Operating properties

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q [m³/h]	≤ 180	≤ 150
	Q [l/s]	≤ 50	≤ 41
Head	H [m]	≤ 85	≤ 105
Fluid temperature	T [°C]	≥ -30	≥ -30
		≤ +90	≤ +90
Operating pressure	p [bar]	≤ 10	≤ 10
Geodetic suction lift	H_{geo} [m]	≤ 9	≤ 9

Design details

Design

- Volute casing pump
- Back pull-out design (from size 40-40-140)
- Horizontal installation
- Self-priming
- Single-stage
- Single-entry

Pump casing

- Radially split volute casing
- Volute casing with integrally cast pump feet (from pump size 40-40-140)

Drive

- KSB IEC frame standardised IE3 motor (from 0.75 kW)
- 230/400 V up to 2.2 kW and 400/690 V from 3 kW
- Rated voltage (60 Hz) 3~ 440 - 480 V ≥ 2.41 hp (1.80 kW)
- Type of construction IM B3
- Enclosure IP55
- Thermal class F with temperature sensor, 3 PTC thermistors
- Duty type: continuous duty S1

Shaft seal

- Shaft equipped with replaceable shaft protecting sleeve in the shaft seal area
- Single mechanical seals and double mechanical seals to EN 12756

Impeller type

- Open multi-vane impeller

Bearings

- Various application-oriented bearings

Designation

Designation example

Position																													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
E	T	P	L	0	8	0	-	0	8	0	-	2	0	0		G	C	X	I	1	0	D	3	0	1	8	5	2			B
See name plate and data sheet																								See data sheet							

Designation key

Position	Code	Description	
1-4	Pump type		
	ETPL	Etaprime with bearing bracket	
5-16	Size, e.g.		
	080	Nominal suction nozzle diameter [mm]	
	080	Nominal discharge nozzle diameter [mm]	
	200	Nominal impeller diameter [mm]	
17	Pump casing material		
	G	Cast iron	EN-GJL-250 / A48CL35
	C	Stainless steel	1.4408 / A743CF8M
18	Impeller material		
	G	Cast iron	EN-GJL-250
	C	Stainless steel	1.4408
19	Design		
	-[376]	Standard	
	X	Non-standard (BT3D, BT3)	
20	Shaft seal type		
	I	Single mechanical seal, internal circulation (conical seal chamber only)	
	D	Double mechanical seal in back-to-back arrangement	
	T	Double mechanical seal in tandem arrangement with internal circulation	

376 Blank

Position	Code	Description
21-22	Seal code, single mechanical seal	
	01	Q1Q1VGG
	08	AQ1VGG[377)]
	09	U3U3VGG
	10	Q1Q1X4GG
	11	BQ1EGG
23	Scope of supply	
	A	Pump only (Fig. 0 bare-shaft pump)
	B	Pump, baseplate
	C	Pump, baseplate, coupling, coupling guard
	D	Pump, baseplate, coupling, coupling guard, motor
24	Shaft unit	
	1	Shaft unit 17
	2	Shaft unit 25
	3	Shaft unit 35
25-28	Motor rating P_N [kW]	
	0011	1,10
	0075	7,50
	0185	18,50
29	Number of motor poles	
30-31	Explosion protection	
	ex	With explosion-proof motor
	--[376)]	Without explosion-proof motor
32	Product generation	
	B	Etaprime Global Pump

Materials

A1 = default material variant
A2 = optional material variant

Part No.	Description	Material	Material variant		
			G	GC	C
102	Volute casing	Grey cast iron EN-GJL-250	A1	A1	-
		Stainless steel 1.4408	-	-	A1
161	Casing cover	Grey cast iron EN-GJL-250	A1	A1	-
		Stainless steel 1.4408	-	-	A1
210	Shaft for shaft units 25 and 35	Tempered steel C45+N	A1	A1	-
		Duplex stainless steel 1.4462	A2	A2	A1
	Shaft for shaft unit 17	Stainless steel 1.4571	A1	A1	A1
230	Impeller	Grey cast iron EN-GJL-250	A1	-	-
		Stainless steel 1.4408	-	A1	A1
330	Bearing bracket for shaft units 25 and 35	Grey cast iron EN-GJL-250	A1	A1	A1
350	Bearing housing for shaft unit 17	Grey cast iron EN-GJL-250	A1	A1	-
		Stainless steel 1.4408	-	-	A1
412	O-ring	EPDM 80 peroxide[378)]	A1	A1	A1
523	Shaft sleeve (not for shaft unit 17)	Stainless steel 1.4571	A1	A1	A1

Prices on request

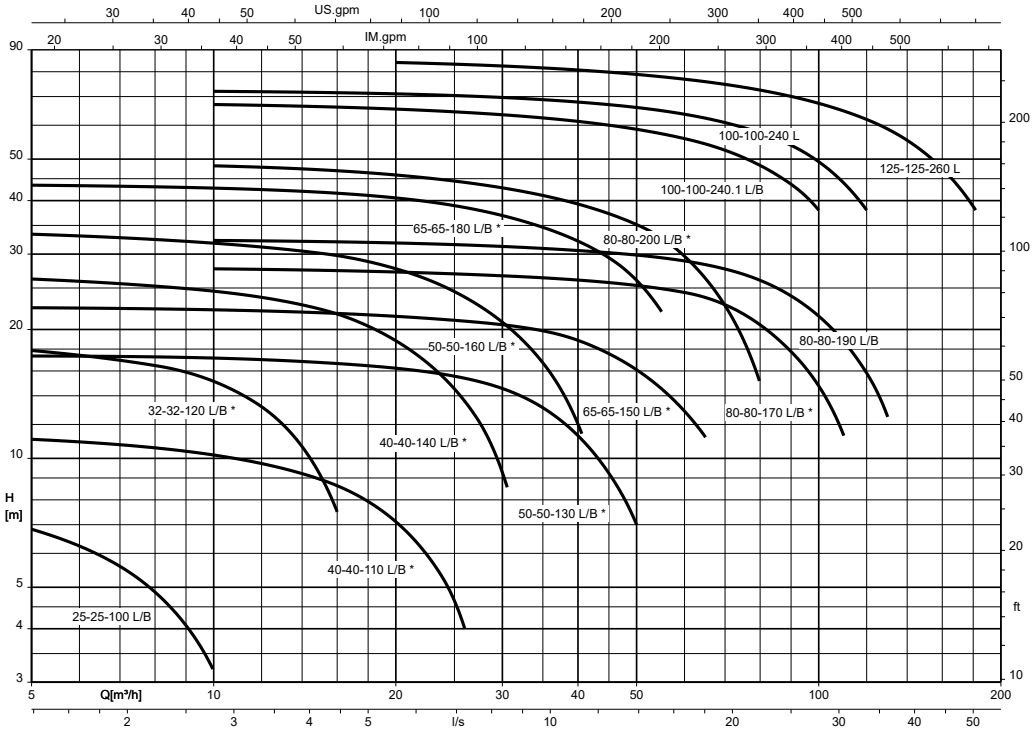
Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

377 BQVGG for shaft unit 17
378 FKM 80 on request

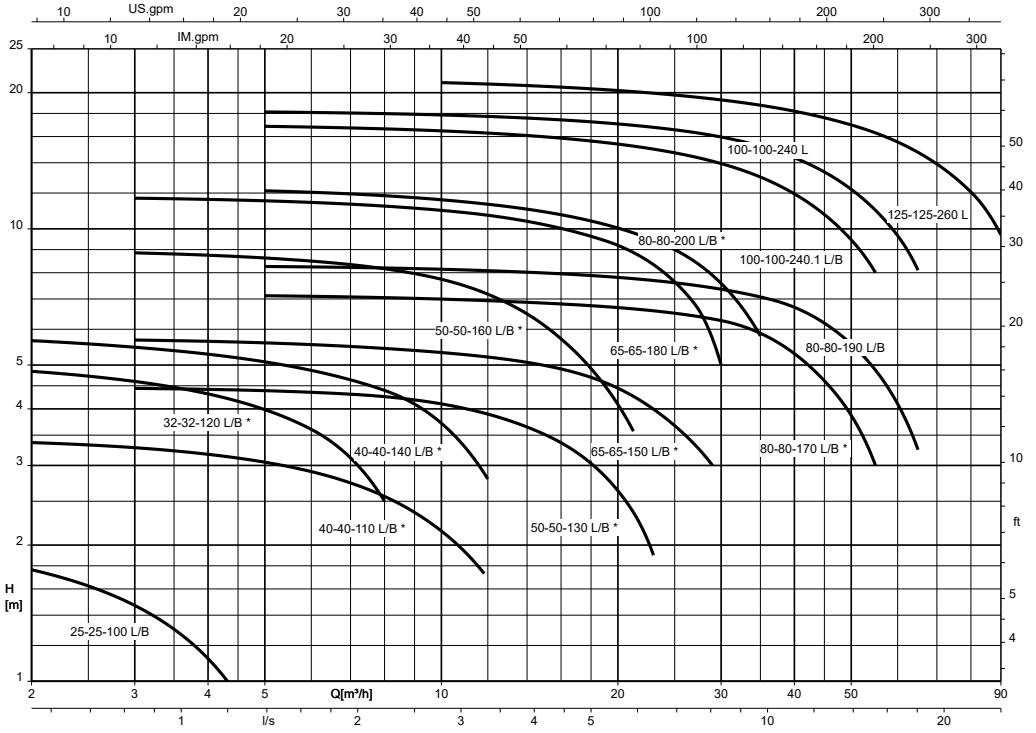
Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Selection charts

Etaprime L / Etaprime B, n = 2900 rpm (* also available in stainless steel material variant)



Etaprime L / Etaprime B, n = 1450 rpm (* also available in stainless steel material variant)



Dimensions and connections

Etaprime L 025-025-100 to 040-040-110 (shaft unit 17) – pump

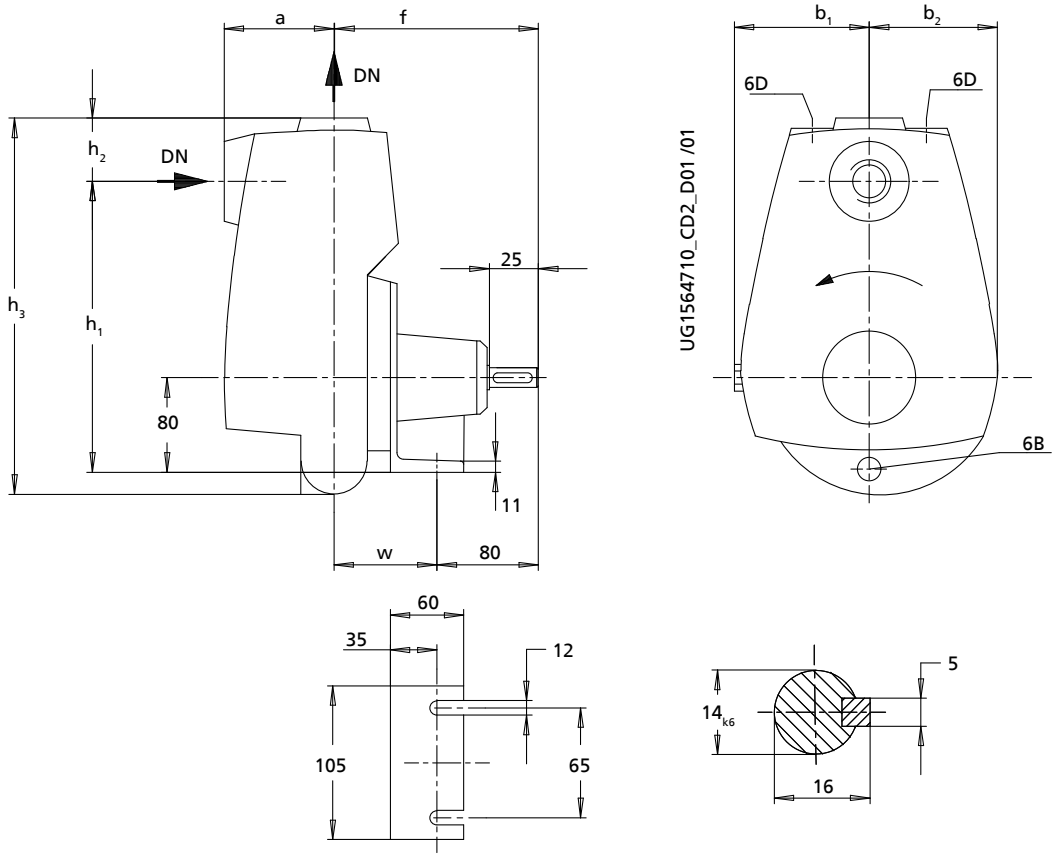


Fig. 297: Dimensions of sizes 025-025-100 to 040-040-110 (shaft unit 17) – pump

6B	Fluid drain	6D	Fluid priming and venting

Connections

Etaprime L	6 B[379)]	6D[379)]
025-025-100	G 1/8	G 3/8
032-032-120	G 1/8	G 3/8
040-040-110	G 1/8	G 3/8

Pump dimensions [mm]

Etaprime L	Connection		Pump							
	Standard	Optional	a	b_1	b_2	f	h_1	h_2	h_3	w
	DN[380)]	DN[381)]								
020-025-100	Rp 1	NPT 1	70	104	95	169	220	38	265	89
032-032-120	Rp 1 1/4	NPT 1 1/4	95	118	95	165	229	46	286	85
040-040-110	Rp 1 1/2	NPT 1 1/2	105	118	110	171	235	55	312	91

379 G = ISO 228/1
380 Standard connection to ISO 7/1
381 Optional connection to ASME B1.20.1

Etaprime L 025-025-100 to 040-040-110 (shaft unit 17) – pump set

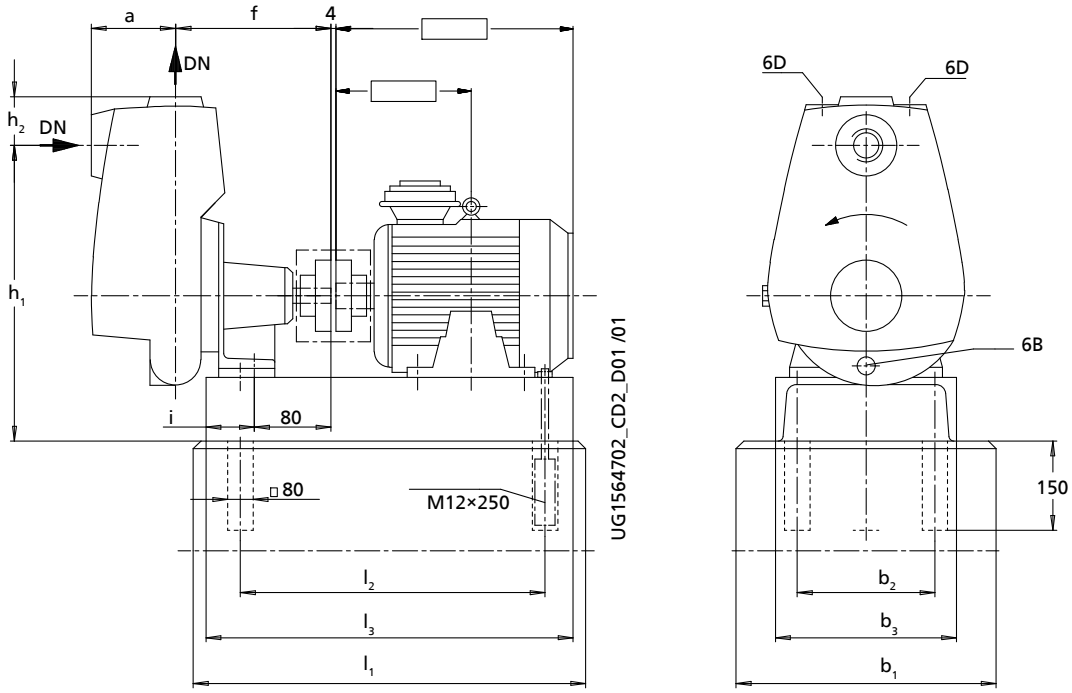


Fig. 298: Dimensions of sizes 025-025-100 to 040-040-110 (shaft unit 17) – pump set

6B	Fluid drain	6D	Fluid priming and venting

Pump set dimensions [mm]

Etaprime L	n				P_N	IEC motor	Connection		Pump set										
	1450	1750	2900	3500			Standard	Optional	a	f	h_1	h_2	b_1	b_2	b_3	i	l_1	l_2	l_3
	[rpm]				[kW]		DN[382]	DN[383]											
025-025-100	✗	✗	-	-	0,37	71	Rp 1	NPT 1	70	169	295	38	350	160	200	41,5	570	360	420
025-025-100	✗	✗	-	-	0,55	80M	Rp 1	NPT 1	70	169	295	38	350	160	200	41,5	570	360	420
025-025-100	-	-	✗	-	0,55	71	Rp 1	NPT 1	70	169	295	38	350	160	200	41,5	570	360	420
025-025-100	-	-	-	✗	0,75	80M	Rp 1	NPT 1	70	169	295	38	350	160	200	41,5	570	360	420
025-025-100	-	-	-	✗	1,10	80M	Rp 1	NPT 1	70	169	295	38	350	160	200	41,5	570	360	420
032-032-120	✗	✗	-	-	0,37	71	R 1 1/4	NPT 1 1/4	95	165	304	46	350	160	200	41,5	570	360	420
032-032-120	✗	✗	-	-	0,55	80M	R 1 1/4	NPT 1 1/4	95	165	304	46	350	160	200	41,5	570	360	420
032-032-120	-	-	✗	-	1,10	80M	R 1 1/4	NPT 1 1/4	95	165	304	46	350	160	200	41,5	570	360	420
032-032-120	-	-	-	✗	2,20	90L	R 1 1/4	NPT 1 1/4	95	165	314	46	350	160	200	41,5	570	360	420
040-040-110	✗	✗	-	-	0,37	71	Rp 1 1/2	NPT 1 1/2	105	171	310	55	350	160	200	41,5	570	360	420
040-040-110	✗	✗	-	-	0,55	80M	Rp 1 1/2	NPT 1 1/2	105	171	310	55	350	160	200	41,5	570	360	420
040-040-110	-	-	✗	-	1,10	80M	Rp 1 1/2	NPT 1 1/2	105	171	310	55	350	160	200	41,5	570	360	420
040-040-110	-	-	-	✗	1,50	90S	Rp 1 1/2	NPT 1 1/2	105	171	320	55	350	160	200	41,5	570	360	420

382 Standard connection to ISO 7/1
383 Optional connection to ASME B1.20.1

Etaprime L 040-040-140 to 125-125-260 (shaft units 25/35) – pump

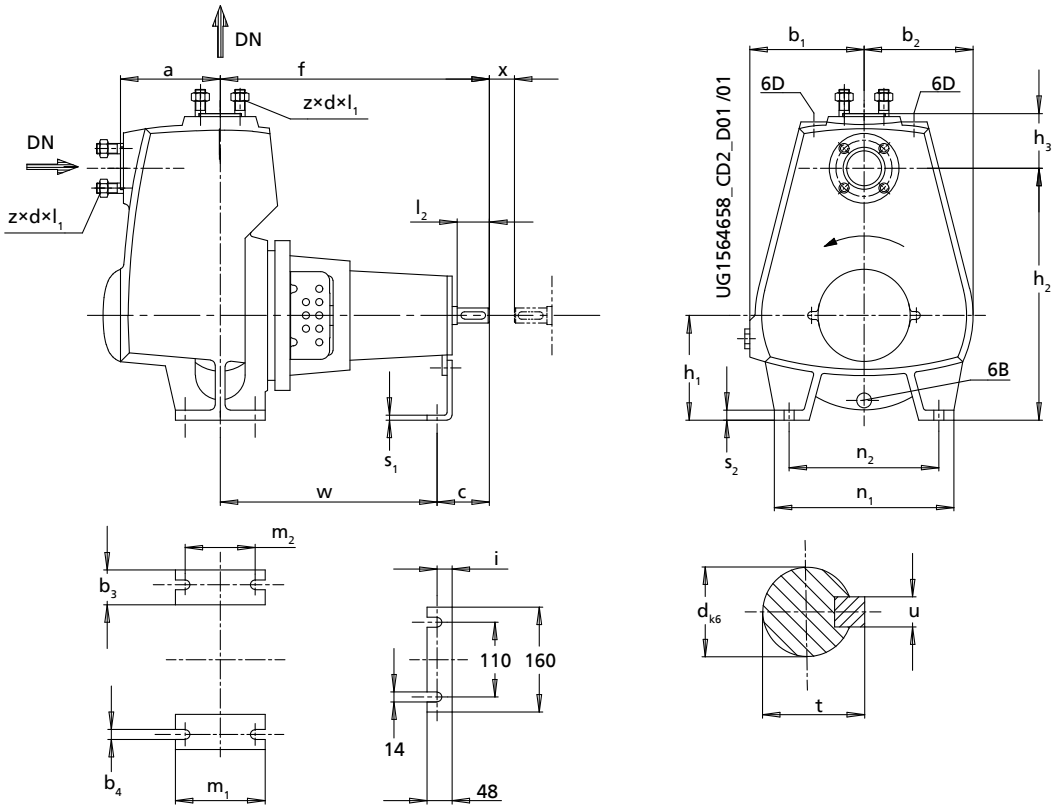


Fig. 299: Dimensions of sizes 040-040-140 to 125-125-260 (shaft units 25/35) – pump

6B	Fluid drain	6D	Fluid priming and venting

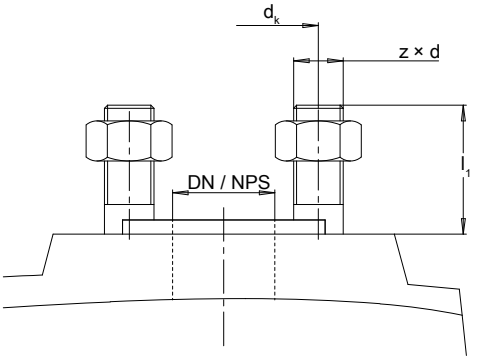


Fig. 300: Flange dimensions

Connections

Etaprime L	6B[384)]	6D[384)]
040-040-140	G 3/8	G 3/8
050-050-130	G 3/8	G 3/8
050-050-160	G 3/8	G 3/8
065-065-150	G 3/8	G 3/8
065-065-180	G 3/8	G 3/8
080-080-170	G 1/2	G 1/2
080-080-190	G 1/2	G 1/2
080-080-200	G 1/2	G 1/2
100-100-240.1	G 1/2	G 1/2
100-100-240	G 1/2	G 1/2
125-125-260	G 1/2	G 1/2

Flange dimensions [mm]

Flanged connection	DN	d_k	z	d	l_1
Standard:	40	110	4	M16	40
▪ Drilled to EN 1092-1 (material variant C)	50	125	4	M16	40
▪ Drilled to EN 1092-2 (material variant G / GC)	65	145	4	M16	40
	80	160	8	M16	45
	100	180	8	M16	45
	125	210	8	M16	45
Optional:	NPS 1 1/2	98,6	4	UNC 1/2-13	40
▪ Drilled to ASME B16.1 (material variant G / GC)	NPS 2	120,7	4	UNC 5/8-11	40
▪ Drilled to ASME B16.5 (material variant C)	NPS 2 1/2	139,7	4	UNC 5/8-11	40
	NPS 3	152,4	4	UNC 5/8-11	40
	NPS 4	190,5	8	UNC 5/8-11	45
	NPS 5	215,9	8	UNC 3/4-10	45

Pump dimensions [mm]

Etaprime L	Pump																					
	DN	a	b_1	b_2	b_3	b_4	c	d_{K6}	f	h_1	h_2	h_3	i	l_2	m_1	m_2	n_1	n_2	s_1	s_2	t	u	w
040-040-140	40	115	115	128	57	16	100	24	370	112	284	73	23	50	100	70	220	160	4	13	27	8	270
050-050-130	50	130	138	128	55	16	100	24	370	132	317	78	23	50	100	70	250	190	4	17	27	8	270
050-050-160	50	130	145	126	55	16	100	24	370	132	327	75	23	50	100	70	250	190	4	17	27	8	270
065-065-150	65	140	155	149	55	16	100	24	370	160	370	85	25	50	125	95	270	212	6	20	27	8	270
065-065-180	65	140	158	138	55	16	130	32	490	160	376	89	23	80	125	95	270	212	4	18	35	10	360
080-080-170	80	156	173	168	65	18	130	32	490	160	380	104	23	80	140	106	310	240	4	18	35	10	360
080-080-190	80	170	188	181	65	20	130	32	490	180	420	107	24	80	160	120	345	280	6	22	35	10	360
080-080-200	80	154	172	152	65	20	130	32	490	160	378	107	24	80	140	100	285	220	4	22	35	10	360
100-100-240.1	100	182	203	178	68	20	130	32	478	200	457	127	24	80	140	100	330	260	6	18	35	10	348
100-100-240	100	182	203	178	68	20	130	32	478	200	457	127	24	80	140	100	330	260	6	18	35	10	348
125-125-260	125	204	227	197	70	20	130	32	478	200	486	142	24	80	140	100	340	270	6	18	35	10	348

384 G = ISO 228/1

Etaprime L 040-040-140 to 125-125-260 (shaft units 25/35) – pump set with coupling

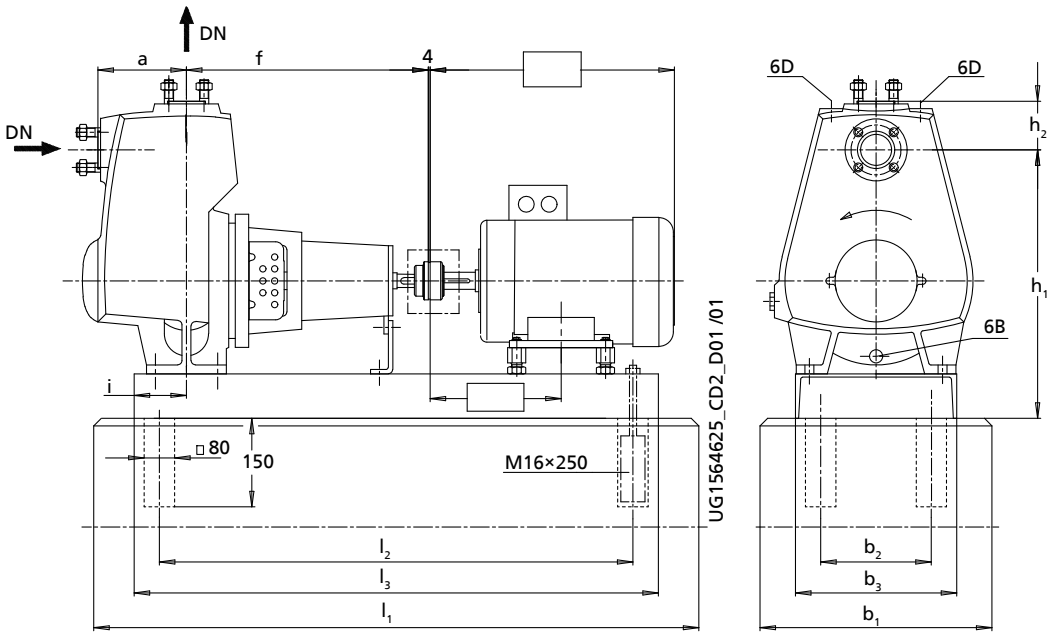


Fig. 301: Dimensions of sizes 040-040-140 to 125-125-260 (shaft units 25/35) – pump set with coupling

6B	Fluid drain	6D	Fluid priming and venting

Pump set dimensions [mm]

Etaprime L	n				P_N	Motor	Pump set											
	1450	1750	2900	3500			DN	a	f	h_1	h_2	b_1	b_2	b_3	i	l_1	l_2	l_3
	[rpm]				[kW]													
040-040-140	✘	✘	-	-	1,50	90L	40	115	370	384	73	450	240	300	100	950	740	800
040-040-140	-	-	✘	-	2,20	90L	40	115	370	384	73	450	240	300	100	950	740	800
040-040-140	-	-	✘	-	3,00	100L	40	115	370	384	73	450	240	300	100	950	740	800
040-040-140	-	-	-	✘	4,00	112M	40	115	370	384	73	450	240	300	100	1050	840	900
040-040-140	-	-	-	✘	5,50	132S	40	115	370	404	73	450	240	300	100	1050	840	900
050-050-130	✘	✘	-	-	1,50	90L	50	130	370	417	78	450	240	300	100	950	740	800
050-050-130	-	-	✘	-	2,20	90L	50	130	370	417	78	450	240	300	100	950	740	800
050-050-130	-	-	✘	-	3,00	100L	50	130	370	417	78	450	240	300	100	950	740	800
050-050-130	-	-	-	✘	4,00	112M	50	130	370	417	78	450	240	300	100	1050	840	900
050-050-160	✘	✘	-	-	1,50	90L	50	130	370	427	75	450	240	300	112	950	740	800
050-050-160	-	-	✘	-	4,00	112M	50	130	370	427	75	450	240	300	112	1050	840	900
050-050-160	-	-	✘	✘	5,50	132S	50	130	370	427	75	450	240	300	112	1150	940	1000
050-050-160	-	-	-	✘	7,50	132S	50	130	370	427	75	450	240	300	112	1150	940	1000
065-065-150	✘	✘	-	-	1,50	90L	65	140	370	470	85	450	240	300	112	950	740	800
065-065-150	-	-	✘	-	4,00	112M	65	140	370	470	85	450	240	300	112	1050	840	900
065-065-150	-	-	✘	✘	5,50	132S	65	140	370	470	85	450	240	300	112	1150	940	1000
065-065-150	-	-	-	✘	7,50	132S	65	140	370	470	85	450	240	300	112	1150	940	1000
065-065-180	✘	✘	-	-	2,20	100L	65	140	490	476	89	500	280	350	112	1270	1060	1120
065-065-180	-	-	✘	-	5,50	132S	65	140	490	476	89	500	280	350	112	1270	1060	1120
065-065-180	-	-	✘	-	7,50	132S	65	140	490	476	89	500	280	350	112	1270	1060	1120
065-065-180	-	-	-	✘	11,00	160M	65	140	490	476	89	500	280	350	112	1270	1060	1120
080-080-170	✘	✘	-	-	2,20	100L	80	156	490	480	104	500	280	350	120	1270	1060	1120
080-080-170	-	-	✘	-	7,50	132S	80	156	490	480	104	500	280	350	120	1270	1060	1120
080-080-170	-	-	-	✘	11,00	160M	80	156	490	480	104	500	280	350	120	1270	1060	1120
080-080-170	-	-	-	✘	15,00	160M	80	156	490	480	104	500	280	350	120	1270	1060	1120
080-080-190	✘	✘	-	-	2,20	100L	80	170	490	520	107	500	280	350	130	1270	1060	1120
080-080-190	✘	✘	-	-	3,00	100L	80	170	490	520	107	500	280	350	130	1270	1060	1120
080-080-190	-	-	✘	-	11,00	160M	80	170	490	520	107	500	280	350	130	1400	1190	1250
080-080-190	-	-	-	✘	15,00	160M	80	170	490	520	107	500	280	350	130	1400	1190	1250
080-080-190	-	-	-	✘	18,50	160L	80	170	490	520	107	500	280	350	130	1400	1190	1250

Etaprime L	n				P_N	Motor	Pump set											
	1450	1750	2900	3500			DN	a	f	h_1	h_2	b_1	b_2	b_3	i	l_1	l_2	l_3
	[rpm]				[kW]													
080-080-200	✗	✗	-	-	2,20	100L	80	154	490	478	107	500	280	350	120	1270	1060	1120
080-080-200	-	-	✗	-	11,00	160M	80	154	490	478	107	500	280	350	120	1400	1190	1250
080-080-200	-	-	-	✗	15,00	160M	80	154	490	478	107	500	280	350	120	1400	1190	1250
080-080-200	-	-	-	✗	18,50	160L	80	154	490	478	107	500	280	350	120	1400	1190	1250
100-100-240.1	✗	✗	-	-	2,20	100L	100	182	478	557	127	500	280	350	120	1270	1060	1120
100-100-240.1	✗	✗	-	-	3,00	100L	100	182	478	557	127	500	280	350	120	1270	1060	1120
100-100-240.1	✗	✗	-	-	4,00	112M	100	182	478	557	127	500	280	350	120	1270	1060	1120
100-100-240.1	-	-	✗	-	15,00	160M	100	182	478	557	127	500	280	350	120	1270	1060	1120
100-100-240.1	-	-	✗	-	18,50	160L	100	182	478	557	127	500	280	350	120	1400	1190	1250
100-100-240.1	-	-	-	✗	22,00	180M	100	182	478	567	127	550	320	400	120	1400	1190	1250
100-100-240.1	-	-	-	✗	30,00	200L	100	182	478	567	127	550	320	400	120	1400	1190	1250
100-100-240	✗	✗	-	-	3,00	100L	100	182	478	557	127	500	280	350	120	1270	1060	1120
100-100-240	✗	✗	-	-	4,00	112M	100	182	478	557	127	500	280	350	120	1270	1060	1120
100-100-240	✗	✗	-	-	5,50	132S	100	182	478	557	127	500	280	350	120	1270	1060	1120
100-100-240	-	-	✗	-	22,00	180M	100	182	478	567	127	550	320	400	120	1400	1190	1250
100-100-240	-	-	✗	-	30,00	200L	100	182	478	567	127	550	320	400	120	1400	1190	1250
100-100-240	-	-	-	✗	37,00	200L	100	182	478	567	127	550	320	400	120	1400	1190	1250
125-125-260	✗	✗	-	-	5,50	132S	125	204	478	586	142	500	280	350	120	1270	1060	1120
125-125-260	✗	✗	-	-	7,50	132M	125	204	478	586	142	500	280	350	120	1270	1060	1120
125-125-260	✗	✗	-	-	11,00	160M	125	204	478	596	142	550	320	400	120	1400	1190	1250
125-125-260	-	-	✗	-	30,00	200L	125	204	478	596	142	550	320	400	120	1400	1190	1250
125-125-260	-	-	✗	-	37,00	200L	125	204	478	596	142	550	320	400	120	1400	1190	1250

Etaprime L 040-040-140 to 125-125-260 (shaft units 25/35) – pump set with spacer-type coupling

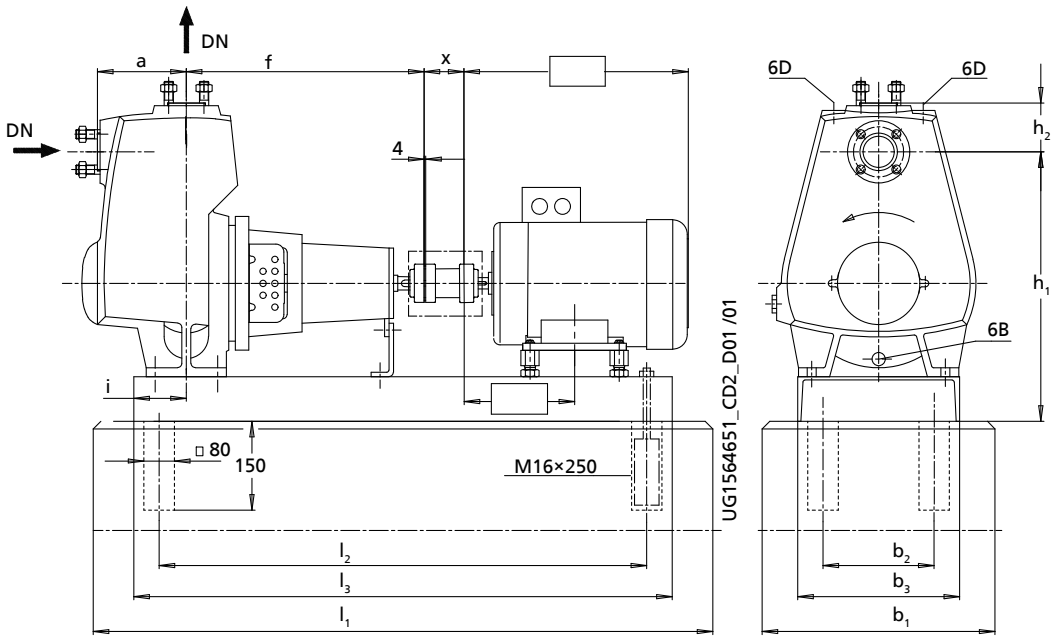


Fig. 302: Dimensions of sizes 040-040-140 to 125-125-260 (shaft units 25/35) – pump set with spacer-type coupling

6B	Fluid drain	6D	Fluid priming and venting

Pump set dimensions [mm]

Etaprime L	n				P_N	Motor	Pump set												
	1450	1750	2900	3500			DN	a	f	h_1	h_2	b_1	b_2	b_3	i	l_1	l_2	l_3	x
	[rpm]				[kW]														
040-040-140	✗	✗	-	-	1,50	90L	40	115	370	384	73	450	240	300	100	1050	840	900	100
040-040-140	-	-	✗	-	2,20	90L	40	115	370	384	73	450	240	300	100	1050	840	900	100
040-040-140	-	-	✗	-	3,00	100L	40	115	370	384	73	450	240	300	100	1050	840	900	100
040-040-140	-	-	-	✗	4,00	112M	40	115	370	384	73	450	240	300	100	1150	940	1000	100
040-040-140	-	-	-	✗	5,50	132S	40	115	370	404	73	450	240	300	100	1150	940	1000	100
050-050-130	✗	✗	-	-	1,50	90L	50	130	370	417	78	450	240	300	100	1050	840	900	100
050-050-130	-	-	✗	-	2,20	90L	50	130	370	417	78	450	240	300	100	1050	840	900	100
050-050-130	-	-	✗	-	3,00	100L	50	130	370	417	78	450	240	300	100	1050	840	900	100
050-050-130	-	-	-	✗	4,00	112M	50	130	370	417	78	450	240	300	100	1150	940	1000	100
050-050-160	✗	✗	-	-	1,50	90L	50	130	370	427	75	450	240	300	112	1050	840	900	100
050-050-160	-	-	✗	-	4,00	112M	50	130	370	427	75	450	240	300	112	1150	940	1000	100
050-050-160	-	-	✗	✗	5,50	132S	50	130	370	427	75	500	280	350	112	1270	1060	1120	100
050-050-160	-	-	-	✗	7,50	132S	50	130	370	427	75	500	280	350	112	1270	1060	1120	100
065-065-150	✗	✗	-	-	1,50	90L	65	140	370	470	85	450	240	300	112	1050	840	900	100
065-065-150	-	-	✗	-	4,00	112M	65	140	370	470	85	450	240	300	112	1150	940	1000	100
065-065-150	-	-	✗	✗	5,50	132S	65	140	370	470	85	500	280	350	112	1270	1060	1120	100
065-065-150	-	-	-	✗	7,50	132S	65	140	370	470	85	500	280	350	112	1270	1060	1120	100
065-065-180	✗	✗	-	-	2,20	100L	65	140	490	476	89	500	280	350	112	1400	1190	1250	140
065-065-180	-	-	✗	-	5,50	132S	65	140	490	476	89	500	280	350	112	1400	1190	1250	140
065-065-180	-	-	✗	-	7,50	132S	65	140	490	476	89	500	280	350	112	1400	1190	1250	140
065-065-180	-	-	-	✗	11,00	160M	65	140	490	476	89	500	280	350	112	1400	1190	1250	140
080-080-170	✗	✗	-	-	2,20	100L	80	156	490	480	104	500	280	350	120	1400	1190	1250	140
080-080-170	-	-	✗	-	7,50	132S	80	156	490	480	104	500	280	350	120	1400	1190	1250	140
080-080-170	-	-	-	✗	11,00	160M	80	156	490	480	104	500	280	350	120	1400	1190	1250	140
080-080-170	-	-	-	✗	15,00	160M	80	156	490	480	104	500	280	350	120	1400	1190	1250	140
080-080-190	✗	✗	-	-	2,20	100L	80	170	490	520	107	550	280	350	120	1400	1190	1250	140
080-080-190	✗	✗	-	-	3,00	100L	80	170	490	520	107	550	280	350	120	1400	1190	1250	140
080-080-190	-	-	✗	-	11,00	160M	80	170	490	530	107	550	320	400	130	1570	1360	1420	140
080-080-190	-	-	-	✗	15,00	160M	80	170	490	530	107	550	320	400	130	1570	1360	1420	140
080-080-190	-	-	-	✗	18,50	160L	80	170	490	530	107	550	320	400	130	1570	1360	1420	140

Etaprime L	n				P_N	Motor	Pump set												
	1450	1750	2900	3500			DN	a	f	h_1	h_2	b_1	b_2	b_3	i	l_1	l_2	l_3	x
	[rpm]				[kW]														
080-080-200	✘	✘	-	-	2,20	100L	80	154	490	478	107	500	280	350	120	1400	1190	1250	140
080-080-200	-	-	✘	-	11,00	160M	80	154	490	488	107	550	320	400	120	1570	1360	1420	140
080-080-200	-	-	-	✘	15,00	160M	80	154	490	488	107	550	320	400	120	1570	1360	1420	140
080-080-200	-	-	-	✘	18,50	160L	80	154	490	488	107	550	320	400	120	1570	1360	1420	140
100-100-240.1	✘	✘	-	-	2,20	100L	100	182	478	557	127	500	280	350	120	1400	1190	1250	140
100-100-240.1	✘	✘	-	-	3,00	100L	100	182	478	557	127	500	280	350	120	1400	1190	1250	140
100-100-240.1	✘	✘	-	-	4,00	112M	100	182	478	557	127	500	280	350	120	1400	1190	1250	140
100-100-240.1	-	-	✘	-	15,00	160M	100	182	478	557	127	500	280	350	120	1400	1190	1250	140
100-100-240.1	-	-	✘	-	18,50	160L	100	182	478	567	127	550	320	400	120	1570	1360	1420	140
100-100-240.1	-	-	-	✘	22,00	180M	100	182	478	567	127	550	320	400	120	1570	1360	1420	140
100-100-240.1	-	-	-	✘	30,00	200L	100	182	478	567	127	550	320	400	120	1570	1360	1420	140
100-100-240	✘	✘	-	-	3,00	100L	100	182	478	557	127	500	280	350	120	1400	1190	1250	140
100-100-240	✘	✘	-	-	4,00	112M	100	182	478	557	127	500	280	350	120	1400	1190	1250	140
100-100-240	✘	✘	-	-	5,50	132S	100	182	478	557	127	500	280	350	120	1400	1190	1250	140
100-100-240	-	-	✘	-	22,00	180M	100	182	478	567	127	550	320	400	120	1570	1360	1420	140
100-100-240	-	-	✘	-	30,00	200L	100	182	478	567	127	550	320	400	120	1570	1360	1420	140
100-100-240	-	-	-	✘	37,00	200L	100	182	478	567	127	550	320	400	120	1570	1360	1420	140
125-125-260	✘	✘	-	-	5,50	132S	125	204	478	596	142	550	320	400	120	1570	1360	1420	140
125-125-260	✘	✘	-	-	7,50	132M	125	204	478	596	142	550	320	400	120	1570	1360	1420	140
125-125-260	✘	✘	-	-	11,00	160M	125	204	478	596	142	550	320	400	120	1570	1360	1420	140
125-125-260	-	-	✘	-	30,00	200L	125	204	478	596	142	550	320	400	120	1570	1360	1420	140
125-125-260	-	-	✘	-	37,00	200L	125	204	478	596	142	550	320	400	120	1570	1360	1420	140

Close-coupled Pumps

Etabloc

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000107

Product benefits

- Improved efficiency and NPSHreq by experimentally verified hydraulic design of impellers (vanes)
- Operating costs reduced by trimming the nominal impeller diameter to match the specified duty point
- Little wear, low vibration levels and excellent smooth running characteristics thanks to good suction performance and virtually cavitation-free operation across a wide operating range
- Casing sealed reliably – even in varying operating conditions – by confined casing gasket
- Large variety of materials as standard for perfectly matching the pump to the fluid handled
- Extended selection chart with additional pump sizes for small flow rates
- Easy to dismantle using forcing screws at the interface of casing cover and drive lantern

Further information

Prices on request

Selection charts 761
Characteristic curves 763
Dimensions 782

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[385)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

385 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for water pumps with a maximum nominal shaft power of 150 kW as per Regulation (EU) No. 547/2012.

Main applications

- Handling clean or aggressive fluids not chemically and mechanically aggressive to the pump materials.
- Water supply systems
- Cooling circuits
- Swimming pools
- Fire-fighting systems
- General irrigation systems
- Drainage systems
- Heating systems
- Air-conditioning systems
- Spray irrigation systems

Fluids handled

- Seawater
- Brackish water
- Drinking water
- High-temperature hot water
- Service water
- Fire-fighting water
- Brine
- Cleaning agents
- Condensate
- Oils

Further information on fluids handled

Overview of fluids handled (⇨ Page 757)

Operating data

Operating properties

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q [m³/h]	≤ 660	≤ 740
Head	H [m]	≤ 140	≤ 144
Fluid temperature	T [°C]	≥ -30	≥ -30
		≤ +140	≤ +140
Operating pressure	p [bar]	≤ 16	≤ 16
Motor rating[386)]	P_N [kW]	≤ 110	≤ 110

386 Refer to the overview of pump size / motor combinations

Design details

Design

- Volute casing pump
- Single-stage
- Ratings to EN 733
- Requirements to 2009/125/EC Directive
- Fixed speed version (without PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R) / variable speed version (with PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R)

Pump casing

- Radially split volute casing
- Volute casing with integrally cast pump feet (not for pump casing material G, motor size ≤ 180)
- Replaceable casing wear rings (optional for pump casing material C)

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM V1 ≤ 4.00 kW
- Type of construction IM V15 ≥ 5.50 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM V1 ≤ 4.00 kW
- Type of construction IM V15 ≥ 5.50 kW
- Enclosure IP55
- Duty type: continuous duty S1
- II 3G Ex ec IIC T3 Gc
- II 2G Ex eb IIC T3 Gb
- II 2G Ex db (eb) IIB T4 Gb
- II 2G Ex db (eb) IIC T4 Gb

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[387)] (PumpDrive required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM V1 ≤ 4.00 kW
- Type of construction IM V15 ≥ 5.50 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 0.55 kW to 45 kW
- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2 / PumpDrive 2 Eco:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for motor mounting, wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

PumpMeter:

- Intelligent pressure transmitter for pumps, with on-site display of measured values and operating data
- For recording the load profile of the pump
- Supplied completely assembled and parameterised for the individual pump

KSB Guard

- System for monitoring the pump's condition by means of temperature and vibration sensors
- Measured values and operating data may be retrieved via the KSB Guard app and the web portal at any time.

Shaft seal

- Single mechanical seals and double mechanical seals to EN 12756
- Shaft equipped with replaceable shaft sleeve in the shaft seal area

Impeller type

- Closed radial impeller with multiply curved vanes

387 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Designation

Designation example

Position																																						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
E	T	B	-	0	4	0	-	0	2	5	-	1	6	0	-	G	G	S	A	V	6	7	D	2	1	1	0	0	2	-	-	B	P	D	2	E	M
See name plate and data sheet																									See data sheet								-				

Designation key

Position	Code	Description		
1-4	Pump type			
	ETB	Etabloc		
	ETBF	Etabloc bottle rinser variant		
5-16	Size [mm], e.g.			
	040	Nominal suction nozzle diameter		
	025	Nominal discharge nozzle diameter		
	160	Nominal impeller diameter		
17	Pump casing material			
	B	Bronze	CC480K-GS / B30 C90700	
	C	Stainless steel	1.4408 / A743CF8M	
	G	Cast iron	EN-GJL-250 / A48 Cl. 35B	
	S	Nodular cast iron	Nodular cast iron EN-GJS-400-15/ A536 Gr. 60-40-18	
18	Impeller material			
	B	Bronze	CC480K-DW	
	C	Stainless steel	1.4408 / A743CF8M	
	G	Cast iron	EN-GJL-250 / A48 Cl. 35B	
19	Description			
	E	EGV 1935/2004		
	F	Bottle rinser variant		
	H	Approved for drinking water to ACS		
	K	Approved for drinking water to KSB standard		
	P	Swimming pool variant		
	R	Gohl (special design)		
	S	Standard		
	U	Approved for drinking water to UBA		
	W	Approved for drinking water to WRAS		
	X	Non-standard (BT3D, BT3)		
20	Casing cover			
	A	Conical seal chamber		
	C	Cylindrical seal chamber		
21	Shaft seal type			
	D	Double mechanical seal in back-to-back arrangement		
	E	Single mechanical seal, external circulation		
	F	Single mechanical seal, external flushing		
	I	Single mechanical seal, internal circulation, conical cover (A-type cover) only		
	S	Single mechanical seal with vented chamber (A-type cover), discharge cover with anti-swirl baffles		
	T	Double mechanical seal in tandem arrangement with internal circulation		
	V	Single mechanical seal with vented chamber (A-type cover)		
22-23	Seal code, single mechanical seal			
	01	Q1Q1VGG	1 (ZN1181)	≥ -20 - ≤ +110 [°C]
	06	U3BEGG (shaft units 25, 35)	RMG13G606	≥ -30 - ≤ +140 [°C]
	07	Q1Q1EGG	1 A (ZN1181)	≥ -30 - ≤ +110 [°C]
	08	AQ1VGG	M32N69	≥ -30 - ≤ +110 [°C]
	09	U3U3VGG	MG13G60	≥ -20 - ≤ +110 [°C]
	10	Q1Q1X4GG	1 (ZN1181)	≥ -20 - ≤ +110 [°C]
	11	BQ1EGG-WA (WA = drinking water)	1 (ZN1181)	≥ -30 - ≤ +110 [°C]
	12	Q12Q1M1GG1	M37GN83	≥ -20 - ≤ +100 [°C]
	13	BQ1VGG	1 (ZN1181)	≥ -20 - ≤ +110 [°C]

Position	Code	Description		
22-23	14	Q1Q1KY7G	KMB13S2G9	≥ -20 - ≤ +120 [°C]
	15	Q1Q1KGG	M7G49	≥ -20 - ≤ +110 [°C]
	16	BVPGG	MG1S20	≥ -20 - ≤ +110 [°C]
	17	Q1BVGG	M7N	≥ -20 - ≤ +110 [°C]
	22	AQ1EGG (shaft unit 55)	M32N69	≥ -30 - ≤ +140 [°C]
	66	Q7Q7EGG	MG13G6	≥ -30 - ≤ +120 [°C]
	67	Q6Q6X4GG	MG13G60 / MG1G61S6	≥ -20 - ≤ +110 [°C]
	Seal code, double mechanical seal in tandem arrangement			
	18	Q1Q1EGG/G	MG12G6-E1	≥ -30 - ≤ +110 [°C]
		Q1Q1EGG-G	MG12G6-E1	≥ -30 - ≤ +110 [°C]
	19	Q1Q1M1GG	HN400N	≥ -30 - ≤ +110 [°C]
		Q1Q1EGG-G	MG12G6-E1	≥ -30 - ≤ +110 [°C]
	20	Q12Q1M1GG1	M37GN85	≥ -20 - ≤ +110 [°C]
		Q1Q1EGG-G	MG12G6-E1	≥ -20 - ≤ +110 [°C]
	23	Q12Q1M1GG1	M37GN92	≥ -20 - ≤ +110 [°C]
		Q1Q1EGG-G	MG12G6-E1	≥ -20 - ≤ +110 [°C]
	Seal code, double mechanical seal in back-to-back arrangement			
	21	Q1Q1KGG	M7G49	≥ -20 - ≤ +110 [°C]
		Q1Q1KGG	M7G49	≥ -20 - ≤ +110 [°C]
	24	Q1Q1KGG	M7G49	≥ -20 - ≤ +110 [°C]
		Q1BVGG	M7N	≥ -20 - ≤ +110 [°C]
	Seal code without mechanical seal			
	99	Shaft seal ring, variant Gohl		
24	Scope of supply			
	A	Pump only (Fig. 0)		
	D	Pump, motor		
	G	Pump, baseplate		
	E	Pump, back pull-out unit		
25	Shaft unit			
	2	Shaft unit 25		
	3	Shaft unit 35		
	5	Shaft unit 55		
26-29	Motor rating P_N [kW]			
	0075	7,5		
	0300	30		
	1100	110		
30	Number of motor poles			
	2	2 poles		
	4	4 poles		
	6	6 poles		
31-32	Explosion protection			
	ex	With explosion-proof motor		
	--	Without explosion-proof motor		
33	Product generation			
	B	Etabloc		
34-37	Description			
	-	Fixed speed version		
	PD2	Variable speed version, with PumpDrive 2		
	PD2E	Variable speed version, with PumpDrive 2 Eco		
	IFS	MyFlow Drive		
38	PumpMeter			
	M	PumpMeter		

Materials

Symbols key

Symbol	Description
✗	Standard
o	Optional
-	Version not available / not feasible

Overview of available materials

Part No.	Description	Material	Material variant							
			GG	GB	GC	BB	SG	SB	SC	CC
102	Volute casing	Grey cast iron EN-GJL-250 / A 48 CL 35 B	✗	✗	✗	-	-	-	-	-
		Grey cast iron EN-GJL-250 / CATAPHORESIS	o	o	o	-	-	-	-	-
		Bronze CC480K-GS / B30 C90700	-	-	-	✗	-	-	-	-
		Nodular cast iron EN-GJS-400-15 / A536 GR 60-40-18	-	-	-	-	✗	✗	✗	-
		Stainless steel 1.4408 / A743 GR CF8 M	-	-	-	-	-	-	-	✗
161	Casing cover, conical	Grey cast iron EN-GJL-250 / A 48 CL 35 B	✗	✗	✗	-	-	-	-	-
		Grey cast iron EN-GJL-250 / CATAPHORESIS	o	o	o	-	-	-	-	-
		Bronze CC480K-GS / B30 C90700	-	-	-	✗	-	-	-	-
		Nodular cast iron EN-GJS-400-15 / A536 Gr 60-40-18	-	-	-	-	✗	✗	✗	-
		Stainless steel 1.4408 / A743 Gr CF8 M	-	-	-	-	-	-	-	✗
161	Casing cover, cylindrical	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	o	o	o	-	-	-	-	-
		Grey cast iron EN-GJL-250 / CATAPHORESIS	o	o	o	-	-	-	-	-
		Stainless steel 1.4408 / A743 Gr CF8 M	-	-	-	o	-	-	-	-
		Bronze CC480K-GS / B30 C90700	-	-	-	-	-	-	-	o
210	Shaft	Tempered steel C45+N	✗	✗	✗	-	✗	✗	✗	-
		Stainless steel 1.4571	o	o	o	✗	o	o	o	✗
230	Impeller	Grey cast iron EN-GJL-250 / A 48 CL 35 B	✗	-	-	-	✗	-	-	-
		Bronze CC480K-DW	-	✗	-	✗	-	✗	-	-
		Stainless steel 1.4408 / A743 Gr CF8 M	-	-	✗	-	-	-	✗	✗
341	Drive lantern	Grey cast iron EN-GJL-250 / A 48 CL 35 B	✗	✗	✗	✗	✗	✗	✗	✗
400	Gaskets	DPAF, asbestos-free	✗	✗	✗	✗	✗	✗	✗	✗
502.01	Casing wear ring, suction side	JL / lamellar graphite cast iron	✗	✗	✗	-	✗	✗	✗	-
		Stainless steel (CrNiMo steel)[388]	o	o	o	-	-	-	-	o
		Bronze CC495K-GS	-	o	-	✗	-	o	-	-
502.02	Casing wear ring, discharge side	JL / lamellar graphite cast iron	✗	✗	✗	-	✗	✗	✗	-
		Stainless steel (CrNiMo steel)[388]	o	o	o	-	-	-	-	o
		Bronze CC495K-GS	-	o	-	✗	-	o	-	-
523	Shaft sleeve[389]	Stainless steel (CrNiMo steel)[388]	✗	✗	✗	✗	✗	✗	✗	✗
902	Studs	Steel 8.8	✗	✗	✗	-	✗	✗	✗	-
		A4-70/ A193 Gr. B8M CL2	o	o	o	✗	o	o	o	✗
903	Screw plug	Steel	✗	✗	✗	-	✗	✗	✗	-
		A4/ AISI 316	o	o	o	✗	o	o	o	✗
920	Nut	8+A2A/ 8+B633 SC1 TP3	✗	✗	✗	-	✗	✗	✗	-
		A4/ AISI 316	o	o	o	✗	o	o	o	✗
920.95	Impeller nut	A4/ AISI 316	o	o	✗	✗	o	✗	✗	✗

388 Possible materials for material group CrNiMo steel INT (material identification code 7605): 1.4401, 1.4404, 1.4408, 1.4571, AISI 316, AISI 316TI, A743 Gr. CF8 M, A479 type 316L.

389 For versions with mechanical seal

Part No.	Description	Material	Material variant							
			GG	GB	GC	BB	SG	SB	SC	CC
920.95	Impeller nut	Steel 8	✗	✗	-	-	✗	-	-	-

Overview of product features / selection tables

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

Symbols key

Symbol	Description
✗	Standard
-	Version not available / not feasible

Excerpt from the overview of fluids handled with associated material variants

Fluid handled	T[390]		Materials					Shaft seal						Comments
			Casing/impeller					Mechanical seal						
	Minimum	Maximum	Grey cast iron/ grey cast iron	Grey cast iron/ tin bronze	Nodular cast iron/ grey cast iron	Tin bronze/ tin bronze	CrNiMo cast steel/ CrNiMo cast steel	U3BEGG	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG	Q12Q1M1GG	
	[°C]		GG	GB	SG	BB	CC	6	7	9	10	11	12	
Water														
Brackish water[391]	-	≤ +25	-	-	-	✗	-	-	-	-	✗	-	-	CrNiMo cast steel can be used.
Fire-fighting water[392]	-	≤ +60	-	✗	-	-	-	-	-	-	✗	-	-	Contact KSB for supply to VdS guideline.
Heating water[393]	-	≤ +120	✗	-	-	-	-	-	-	-	-	✗	-	If used as a circulating pump to DIN 4752: p maximum ≤ 10 bar. If ductile material has been specified: SG
Heating water	-	≤ +140	✗	-	-	-	-	✗	-	-	-	-	-	
Heating water	≥ +110	-	✗	-	-	-	-	-	-		✗	-	-	
Condensate	-	≤ +120	✗	-	-	-	-	-	-	-	-	✗	-	-
Condensate, not conditioned	-	≤ +120		-	-	-	✗	-	-	-	-	✗	-	-
Cooling water without antifreeze	-	≤ +60	✗	-	-	-	-	-	-	-	✗	-	-	Open circuit: GB 10 required
Cooling water with antifreeze[394], pH ≥ 7.5	≥ -30	≤ +60	✗	-	-	-	-	-	-	-	-	✗	-	Open circuit: GB required
Cooling water with antifreeze[394], pH ≥ 7.5	≥ +60	≤ +110	✗	-	-	-	-		✗	-	-	-	-	Open circuit: GB required
Slightly contaminated water	-	≤ +60	✗	-	-	-	-	-	-	-	✗	-	-	-
Seawater	-	≤ +25	-	-	-	✗	-	-	-	-	✗	-	-	CrNiMo cast steel can be used.
Pure water[395]	-	≤ +60	✗	-	-	-	-	-	-	-	-	✗	-	-
Raw water	-	≤ +60	✗	-	-	-	-	-	-	-	✗	-	-	-
Swimming pool water (fresh water)	-	≤ +60	✗	-	-	-	-	-	-	-	✗	-	-	Also applies to requirements as per DIN 19643
Swimming pool water[396]: filtration	-	≤ +40	-	✗	-	-	-	-	-	-	✗	-	-	Variant GB Shaft C45+N, shaft sleeve CrNiMo steel, nut A4/AISI 316, key A2, casing wear ring (suction and discharge side) grey cast iron JL 1040/ CI
Swimming pool water[396]: water features; without turbulences and/ or air content	-	≤ +40	-	✗	-	-	-	-	-	-	✗	-	-	Variant GB Shaft C45+N, shaft sleeve CrNiMo steel, nut A4/ AISI 316, key A2, casing wear ring (suction and discharge side) CC495K-GS

390 T = fluid temperature

391 For components made of bronze: ammonia (NH3) ≤ 5 mg/kg, free from hydrogen sulphide (H2S); no limitation of CI content required in this case. Please contact KSB if limits are exceeded.

392 General evaluation criteria for results of water analysis: pH ≥ 7; chlorides content (Cl) ≤ 250 mg/kg. Chlorine (Cl2) ≤ 0.6 mg/kg.

393 Treatment to VdTÜV 1466, additional requirement: O2 t ≤ 0.02 mg/l

394 Antifreeze on ethylene glycol basis with inhibitors, content > 20 % to 50 % (e.g. Antifrogen N)

395 No ultra-pure water. Conductivity at 25 °C: ≤ 800 µS/cm, neutral with regard to chemical corrosion

396 For France, observe the applicable rules as per ministerial order dated 18 January 2002.

Fluid handled	T[390]		Materials					Shaft seal						Comments
			Casing/impeller					Mechanical seal						
	Minimum	Maximum	Grey cast iron/ grey cast iron	Grey cast iron/ tin bronze	Nodular cast iron/ grey cast iron	Tin bronze/ tin bronze	CrNiMo cast steel/ CrNiMo cast steel	U3BEGG	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG	Q12Q1M1GG	
	[°C]		GG	GB	SG	BB	CC	6	7	9	10	11	12	
Swimming pool water[396]: water features; with turbulences and/or air content	-	≤ +40	-	-	-	✗	-	-	-	-	✗	-	-	Variant B Shaft 1.4571, shaft sleeve CrNiMo steel, nut A4/ AISI 316, key A2, casing wear ring (suction and discharge side) CC495K-GS
Swimming pool water (seawater)	-	≤ +40	-	-	-	✗	-	-	-	-	✗	-	-	CrNiMo cast steel for t ≤ 25 °C
Dam water	-	≤ +60	-	✗	-	-	-	-	-	-	✗	-	-	If solids are contained, contact KSB.
Drinking water[397]	-	≤ +60	-	✗	-	-	-	-	-	-	-	✗	-	-
Partly desalinated water	-	≤ +120	✗	-	-	-	-	-	-	-	-	✗	-	-
Fully desalinated water	-	≤ +120	-	-	-	-	✗	-	-	-	-	✗	-	Purity requirements cannot be met.
Fully desalinated water as boiler feed water	-	≤ +120	✗	-	-	-	-	-	-	-	-	✗	-	-
Refrigerants, cooling brines														
Cooling brine; inorganic, pH > 7.5, inhibited	≥ -30	≤ +25	✗	-	-	-	-	-	-	-	-	✗	-	-
Water with antifreeze, pH ≥ 7.5	≥ -30	≤ +60	✗	-	-	-	-	-	-	-	-	✗	-	-
Water with antifreeze, pH ≥ 7.5	≥ +60	≤ +110	✗	-	-	-	-	-	✗	-	-	-	-	-
Oils/emulsions														
Diesel oil, extra light fuel oil	-	≤ +60	-	-	✗	-	-	-	-	-	✗	-	-	GG possible, unless specific standards have to be observed
Lubricating oil, turbine oil (does not apply to SF-D oils, hardly flammable)	-	≤ +80	-	-	✗	-	-	-	-	-	✗	-	-	For versions without internal primer contact KSB. GG possible, unless specific standards have to be observed
Drilling emulsion, grinding emulsion	-	≤ +60	✗	-	-	-	-	-	-	✗	-	-	-	-
Oil-water emulsion	-	≤ +60	✗	-	-	-	-	-	-	✗	-	-	-	-
Brewery applications														
Beer mash	-	≤ +100	✗	-	-	-	-	-	-	-	-	-	✗	If there is a risk of the pump running dry due to excessive emptying of the tank, use an Etanorm with double mechanical seal in tandem arrangement.
Beer wort	-	≤ +100	✗	-	-	-	-	-	-	-	-	-	✗	

397 For France, ACS approval is required.

Overview of variants

Other designs on request

Symbols key

Symbol	Description
✗	Standard
-	Version not available / not feasible

Overview of Etabloc variants

Description	102 / Volute casing	230 / Impeller	Mechanical seal	T	Main applications									
				[°C]	Handling clean or aggressive fluids not chemically and mechanically aggressive to the pump materials	Water supply systems	Cooling circuits	Swimming pools	Fire-fighting systems	General irrigation systems	Drainage systems	Heating systems	Air-conditioning systems	Spray irrigation systems
GG06	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	SU 25, 35: mech. seal U3BEGG SU 55: mech. seal AQ1EGG	≥ -30 - ≤ +140	-	-	-	-	-	-	-	✗	-	-
GG10	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Mech. seal Q1Q1X4GG	≥ -20 - ≤ +110	-	✗	-	✗[398]	✗	✗	✗	-	-	✗
GG11	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Mech. seal BQ1EGG	≥ -30 - ≤ +110	✗	✗	✗[399]	-	✗	-	-	-	✗[399]	-
GB06	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Bronze CC480K-DW/ B30 C90700	SU 25, 35: mech. seal U3BEGG SU 55: mech. seal AQ1EGG	≥ -30 - ≤ +140	-	-	-	-	-	-	-	✗	-	-
GB10	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Bronze CC480K-DW/ B30 C90700	Mech. seal Q1Q1X4GG	≥ -20 - ≤ +110	-	✗	-	✗[398]	✗	✗	✗	-	-	✗
GB11	Grey cast iron EN-GJL-250 / A 48 Cl. 35 B	Bronze CC480K-DW/ B30 C90700	Mech. seal BQ1EGG	≥ -30 - ≤ +110	✗	✗	✗[399]	-	✗	-	-	-	✗[399]	-
CC06	Stainless steel 1.4408 / A743 Gr. CF8 M	Stainless steel 1.4408 / A743 Gr. CF8 M	SU 25, 35: mech. seal U3BEGG SU 55: mech. seal AQ1EGG	≥ -30 - ≤ +140	-	-	-	-	-	-	-	✗	-	-
CC10	Stainless steel 1.4408 / A743 Gr. CF8 M	Stainless steel 1.4408 / A743 Gr. CF8 M	Mech. seal Q1Q1X4GG	≥ -20 - ≤ +110	-	✗	-	✗[398]	✗	✗	✗	-	-	✗
CC11	Stainless steel 1.4408 / A743 Gr. CF8 M	Stainless steel 1.4408 / A743 Gr. CF8 M	Mech. seal BQ1EGG	≥ -30 - ≤ +110	✗	✗	✗[399]	-	✗	-	-	-	✗[399]	-

398 Q1Q1VGG

399 Q1Q1EGG / Q7Q7EGG, fluid handled: water, glycol with inhibitors

Technical data

Etabloc

Technical data

Etabloc	Shaft unit	Impeller					Speed limit	
		Impeller outlet width	Free passage	Impeller inlet diameter	Nominal impeller diameter		Maximum	Minimum
					Maximum	Minimum		
		[mm]					[rpm]	
040-025-160	WS_25	6,0	5,7	45,2	169	135	3600	500
040-025-200	WS_25	6,0	5,7	45,2	209	165	3600	500
050-032-125.1	WS_25	6,8	6,0	52,4	139	104	3600	500
050-032-160.1	WS_25	5,7	5,4	52,7	170	135	4400	500
050-032-200.1	WS_25	5,6	5,3	54,0	204	168	3800	500
050-032-250.1	WS_25	5,5	5,2	58,3	254	200	3600	500
050-032-125	WS_25	9,8	5,7	63,4	139	104	3600	500
050-032-160	WS_25	8,5	5,8	60,6	174	132	3600	500
050-032-200	WS_25	7,0	6,7	62,9	209	170	3700	500
050-032-250	WS_25	7,5	7,1	62,6	261	205	3600	500
065-040-125	WS_25	14,0	9,6	73,9	139	104	3600	500
065-040-160	WS_25	13,0	11,5	70,0	174	128	4400	500
065-040-200	WS_25	9,4	8,9	69,4	209	160	3700	500
065-040-250	WS_25	8,4	8,0	74,1	260	195	3600	500
065-040-315	WS_35	7,5	7,1	75,3	326	260	3000	500
065-050-125	WS_25	19,9	11,6	87,9	142	112	4500	500
065-050-160	WS_25	16,9	11,6	86,9	174	128	4400	500
065-050-200	WS_25	13,8	11,9	83,6	219	170	3600	500
065-050-250	WS_25	10,5	10,0	84,0	260	215	3600	500
065-050-315	WS_35	10,0	9,5	87,0	323	265	3000	500
080-065-125	WS_25	25,8	12,9	99,0	141	109	3900	500
080-065-160	WS_25	21,0	12,2	91,9	174	132	3900	500
080-065-200	WS_25	17,0	13,3	99,7	219	165	3600	500
080-065-250	WS_35	15,1	14,3	101,0	260	215	3600	500
080-065-315	WS_35	13,7	14,0	108,2	320	245	3000	500
100-080-160	WS_25	31,6	15,1	124,0	174	138	3600	500
100-080-200	WS_35	24,5	15,2	115,3	219	165	3600	500
100-080-250	WS_35	19,0	15,8	115,1	269	215	3600	500
100-080-315	WS_35	18,7	17,8	115,6	334	265	3000	500
100-080-400	WS_55	15,0	14,3	129,9	398	315	1900	500
125-100-160	WS_35	37,6	16,4	135,4	185	162	3600	500
125-100-200	WS_35	32,5	17,9	142,0	219	170	3600	500
125-100-250	WS_35	27,0	18,8	145,0	269	210	3600	500
125-100-315	WS_35	23,0	19,9	142,1	334	250	3000	500
125-100-400	WS_55	18,0	17,1	142,8	401	317	1900	500
150-125-200	WS_35	40,7	21,1	159,2	224	182	3600	500
150-125-250	WS_35	37,0	22,4	162,4	269	218	2000	500
150-125-315	WS_55	30,9	22,6	162,3	334	270	1900	500
150-125-400	WS_55	25,9	20,9	162,4	419	330	1800	500
200-150-200	WS_35	59,5	25,2	179,4	224	188	2100	500
200-150-250	WS_35	48,8	23,0	191,0	269	220	1800	500
200-150-315	WS_55	39,7	26,9	191,5	334	264	1800	500
200-150-400	WS_55	33,0	23,8	191,4	419	330	1800	500

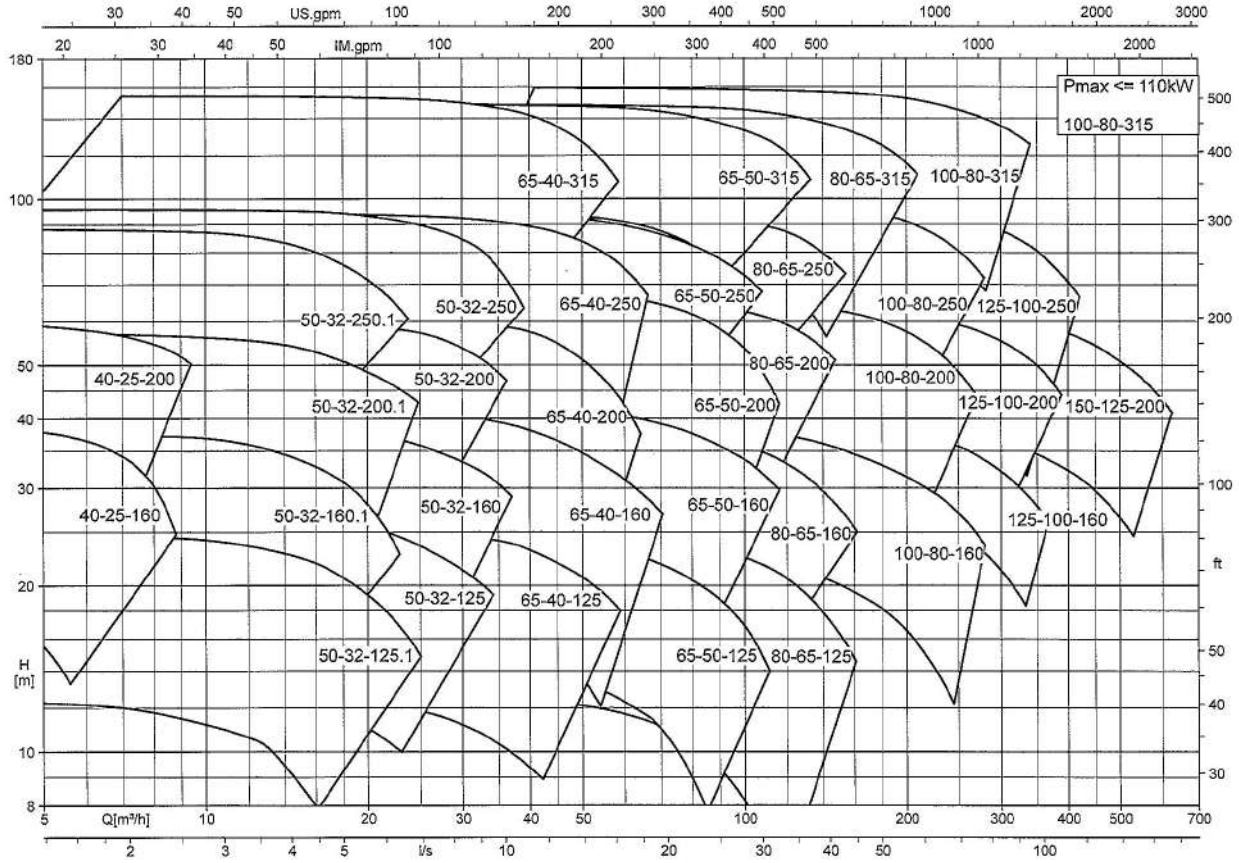
Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

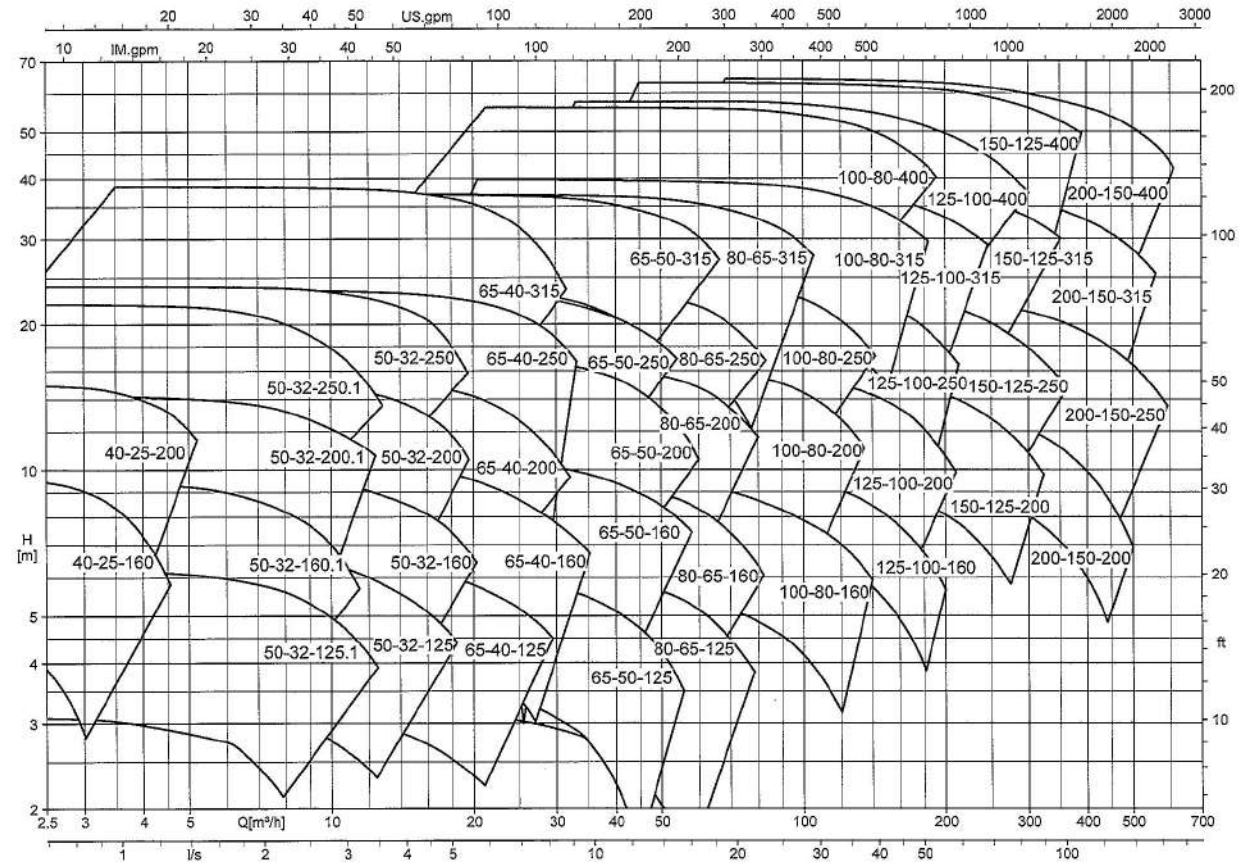
Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Selection charts

Etabloc, n = 2900 rpm (fixed speed version)



Etabloc, n = 1450 rpm (fixed speed version)



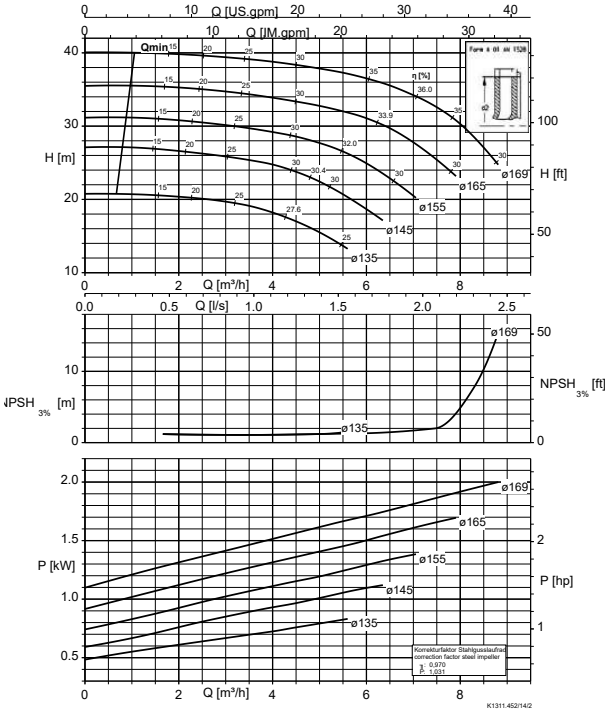
Related documents

Information/documents

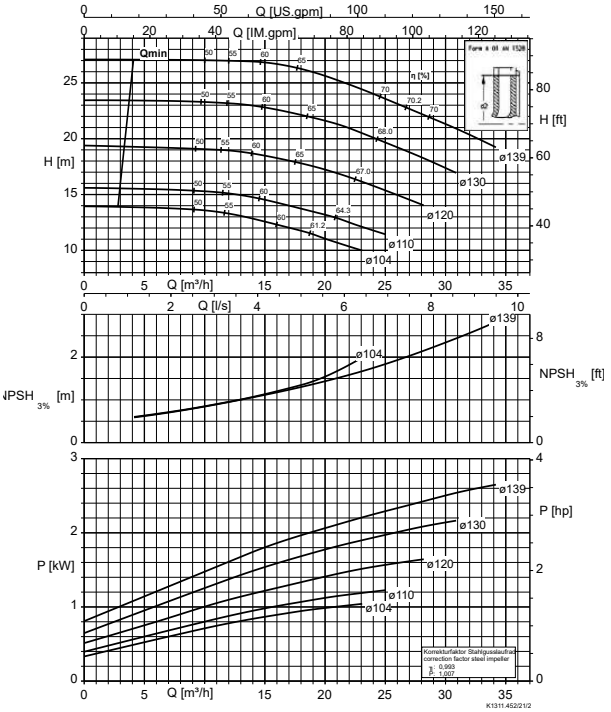
Document	Reference number
Characteristic curves booklet Variable speed version	1311.452

Characteristic curves

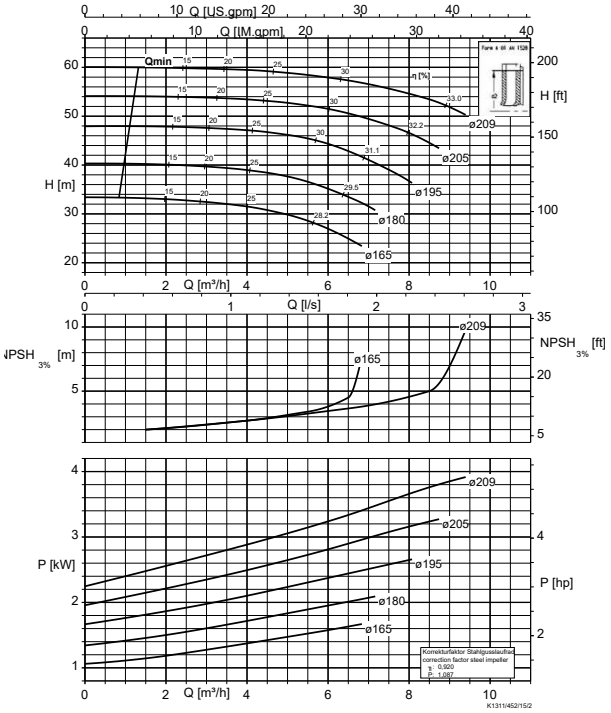
Etabloc 040-025-160, n = 2900 rpm



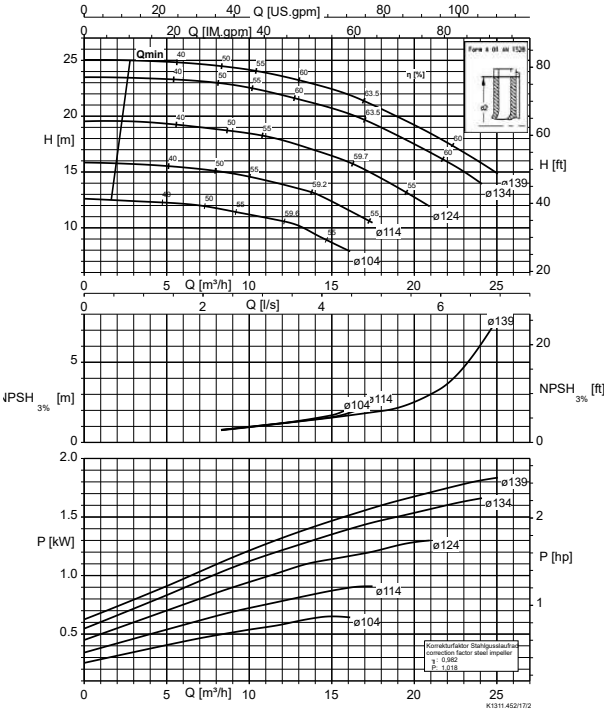
Etabloc 050-032-125, n = 2900 rpm



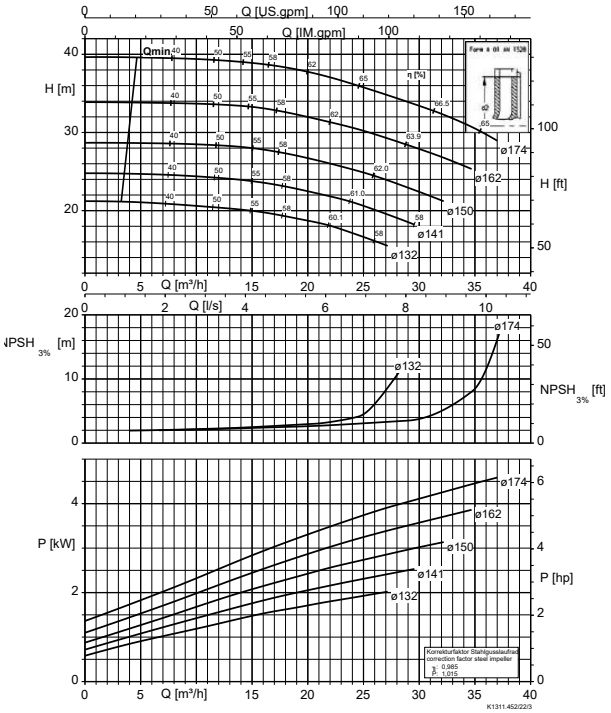
Etabloc 040-025-200, n = 2900 rpm



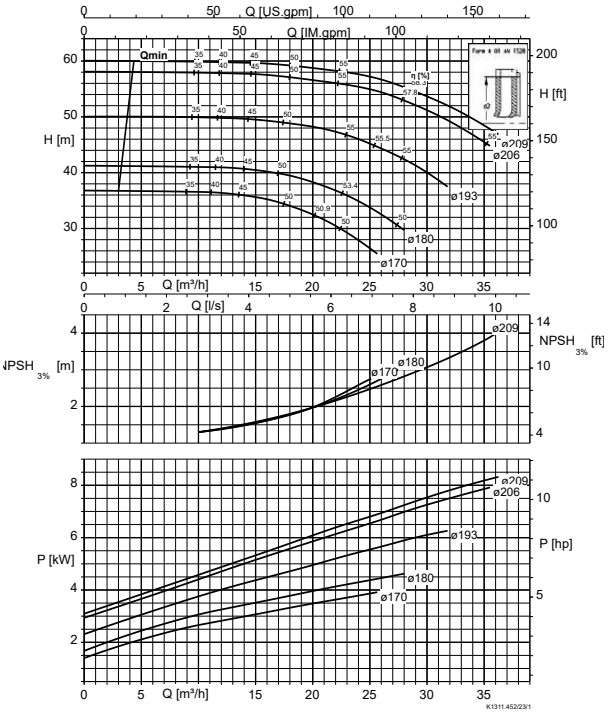
Etabloc 050-032-125.1, n = 2900 rpm



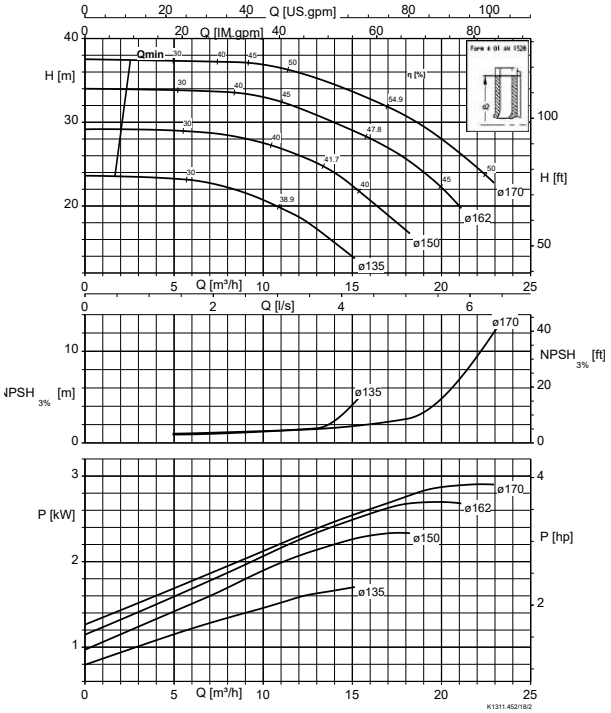
Etabloc 050-032-160, n = 2900 rpm



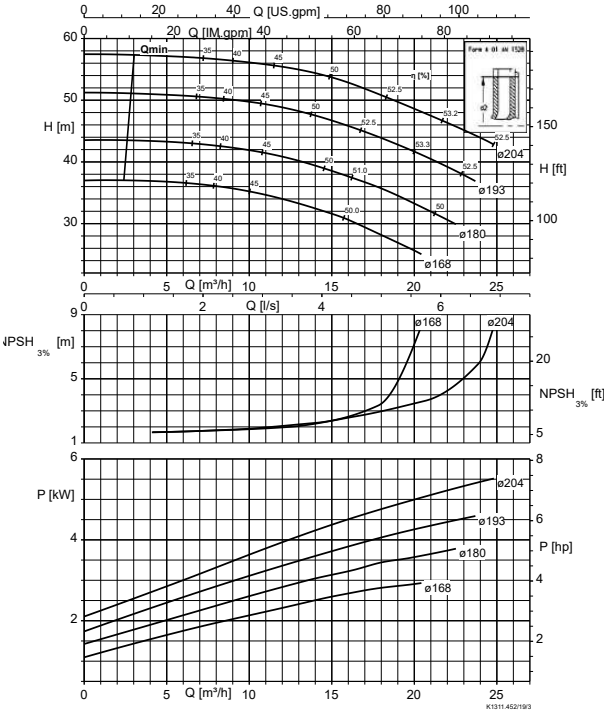
Etabloc 050-032-200, n = 2900 rpm



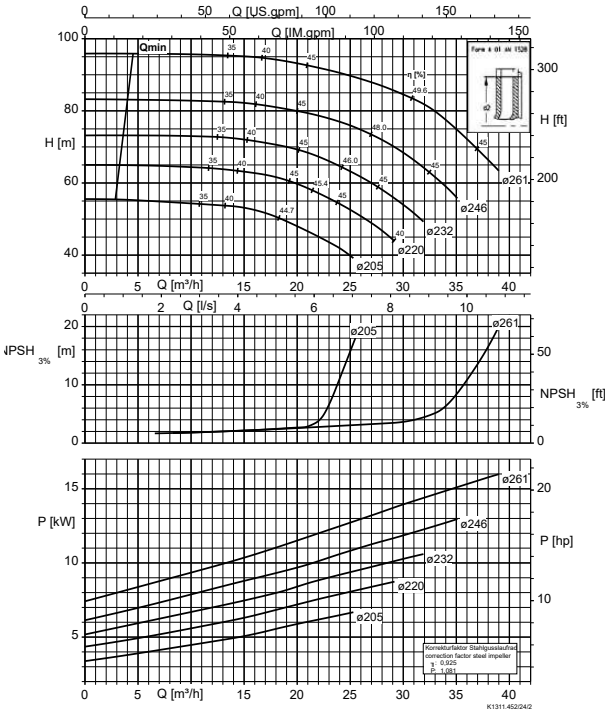
Etabloc 050-032-160.1, n = 2900 rpm



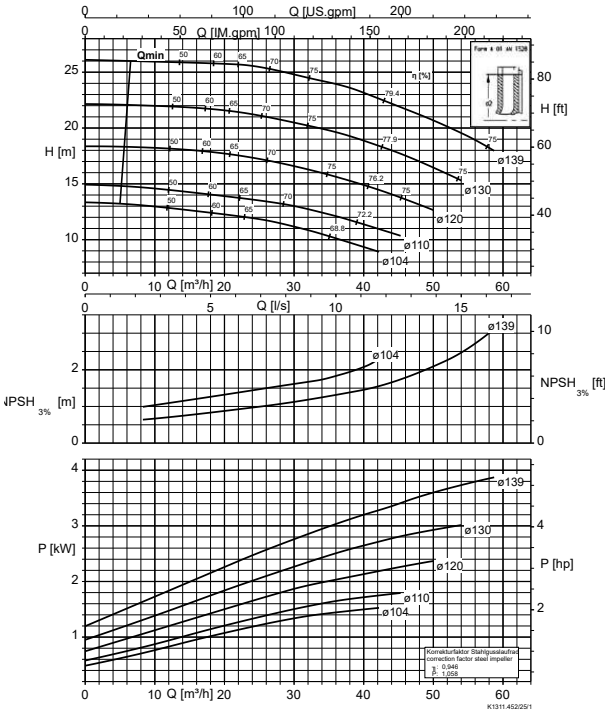
Etabloc 050-032-200.1, n = 2900 rpm



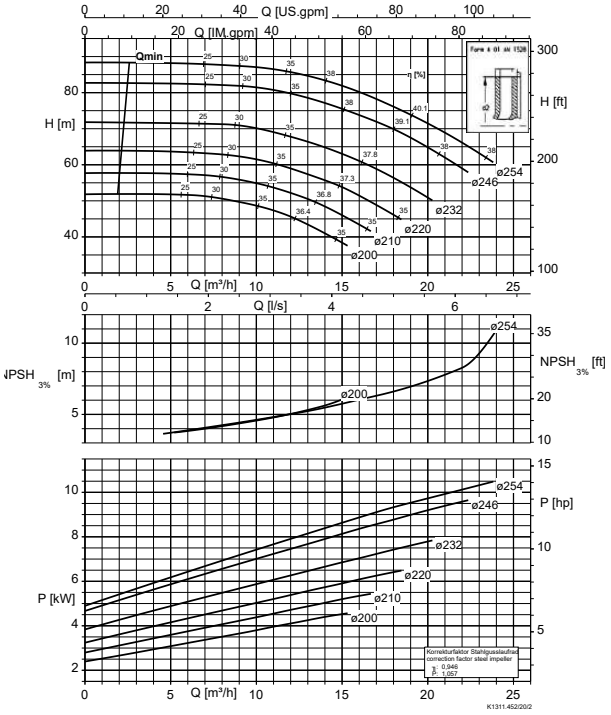
Etabloc 050-032-250, n = 2900 rpm



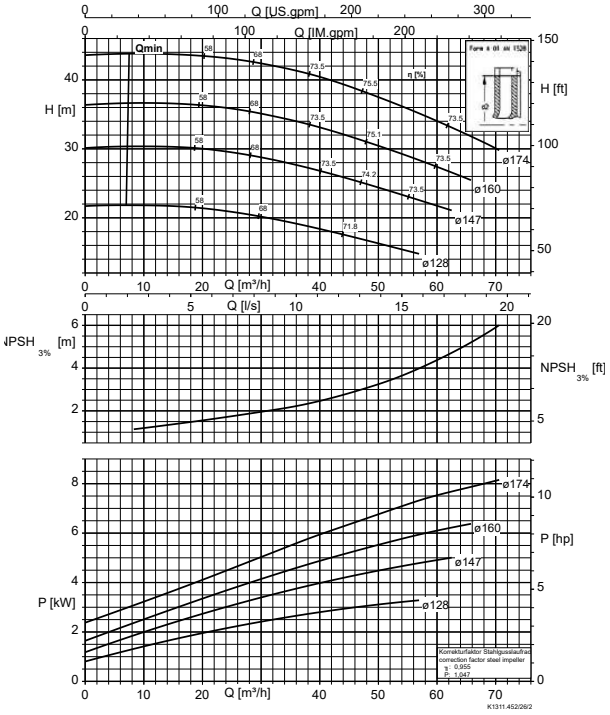
Etabloc 065-040-125, n = 2900 rpm



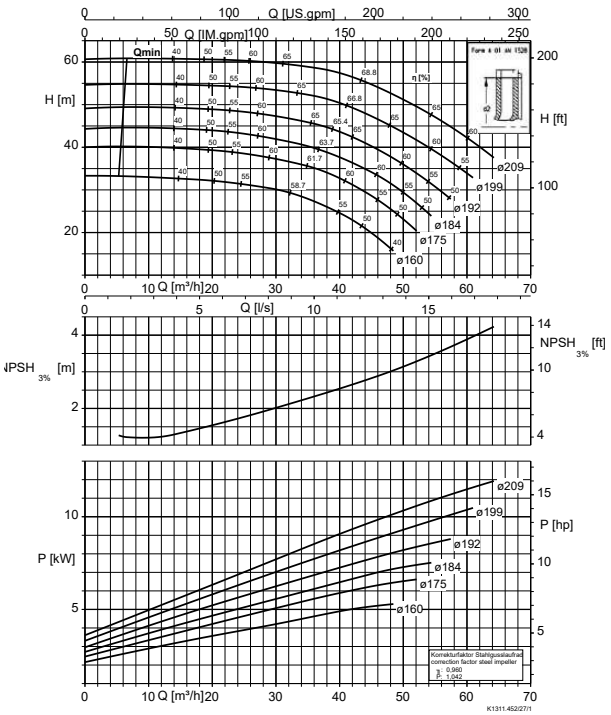
Etabloc 050-032-250.1, n = 2900 rpm



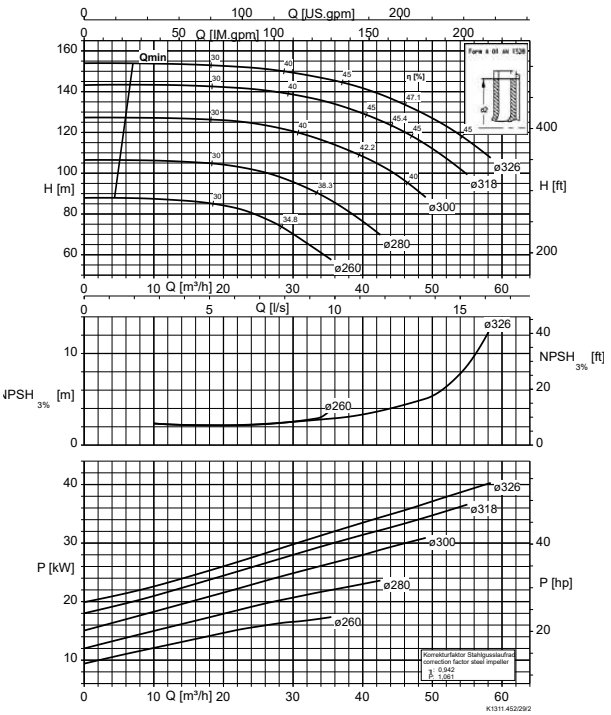
Etabloc 065-040-160, n = 2900 rpm



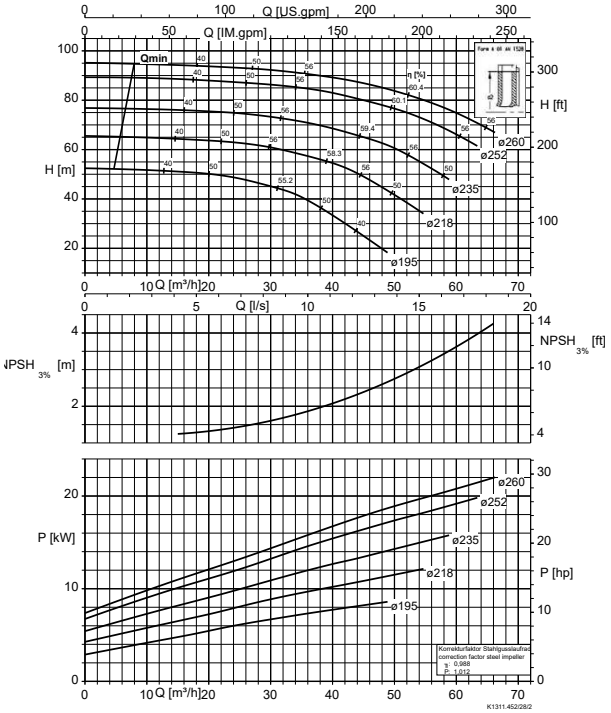
Etabloc 065-040-200, n = 2900 rpm



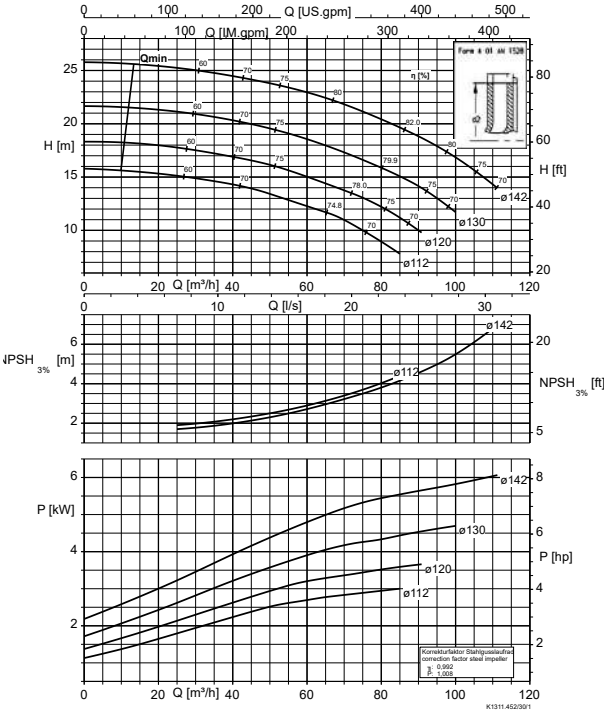
Etabloc 065-040-315, n = 2900 rpm



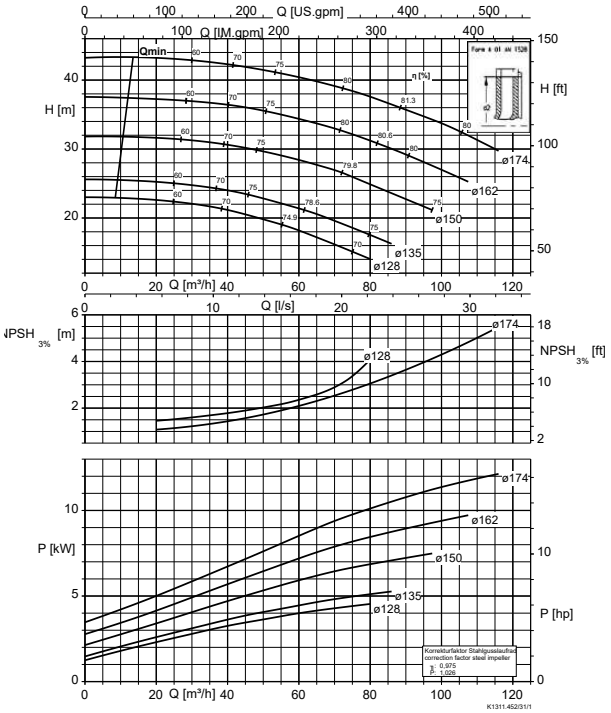
Etabloc 065-040-250, n = 2900 rpm



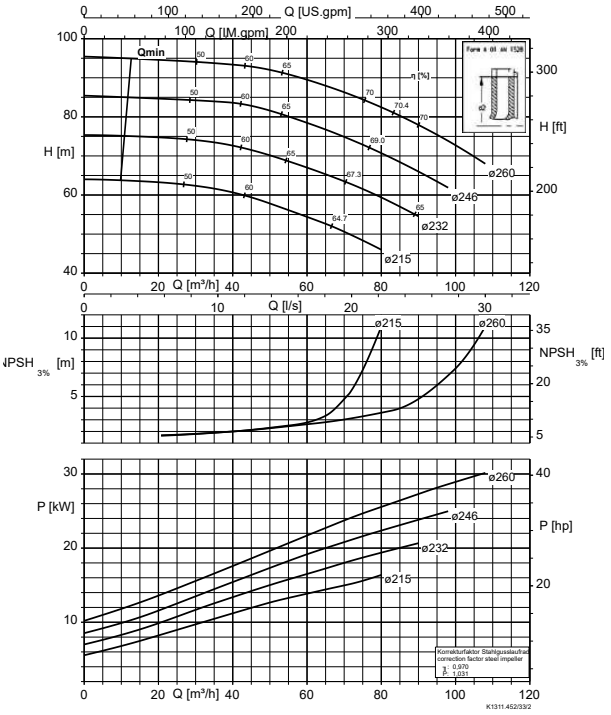
Etabloc 065-050-125, n = 2900 rpm



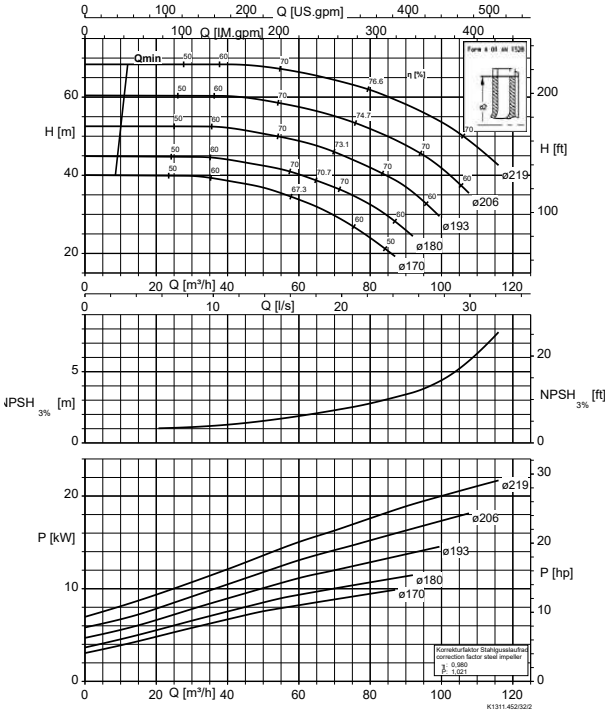
Etabloc 065-050-160, n = 2900 rpm



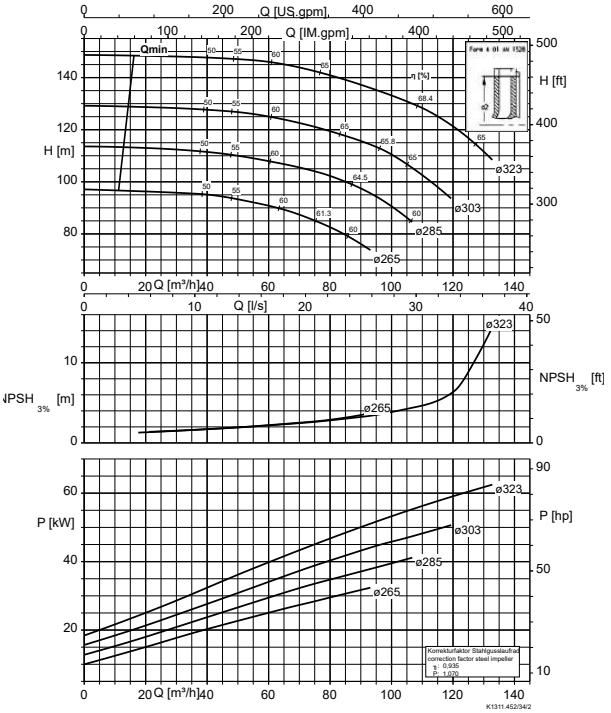
Etabloc 065-050-250, n = 2900 rpm



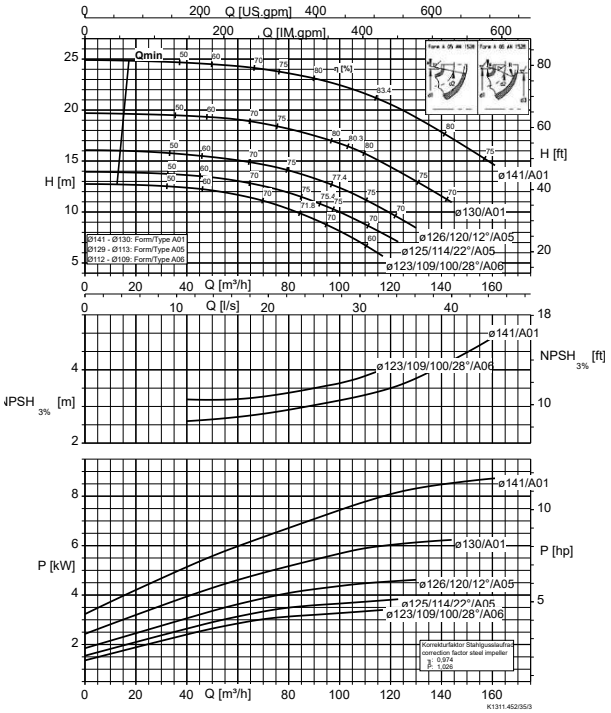
Etabloc 065-050-200, n = 2900 rpm



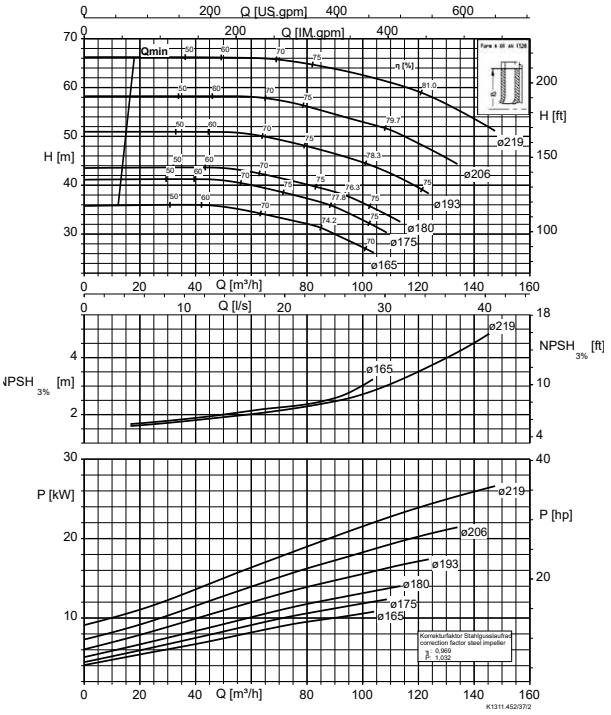
Etabloc 065-050-315, n = 2900 rpm



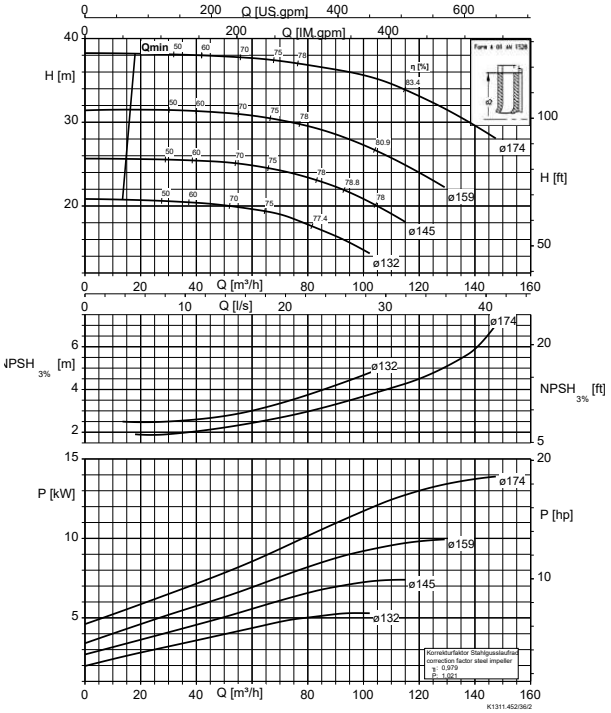
Etabloc 080-065-125, n = 2900 rpm



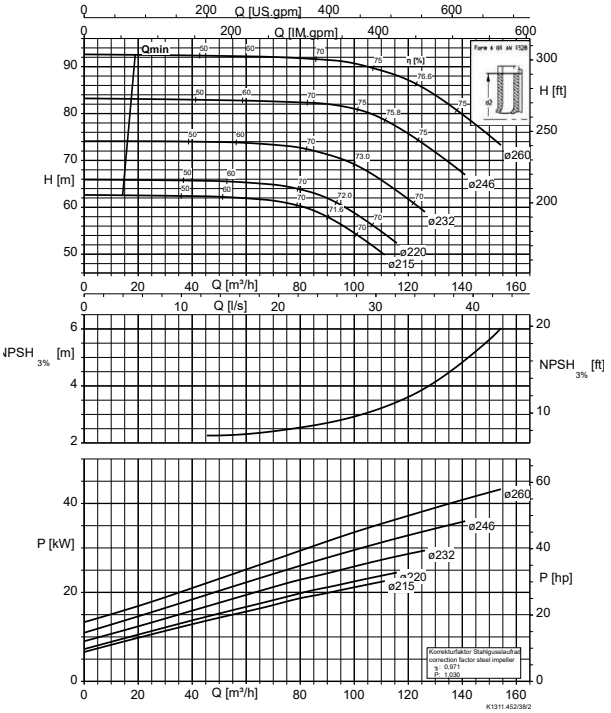
Etabloc 080-065-200, n = 2900 rpm



Etabloc 080-065-160, n = 2900 rpm

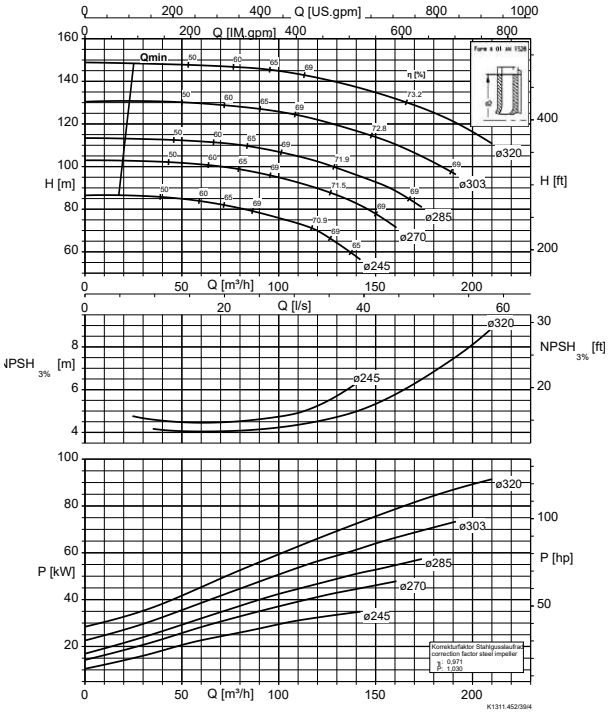


Etabloc 080-065-250, n = 2900 rpm

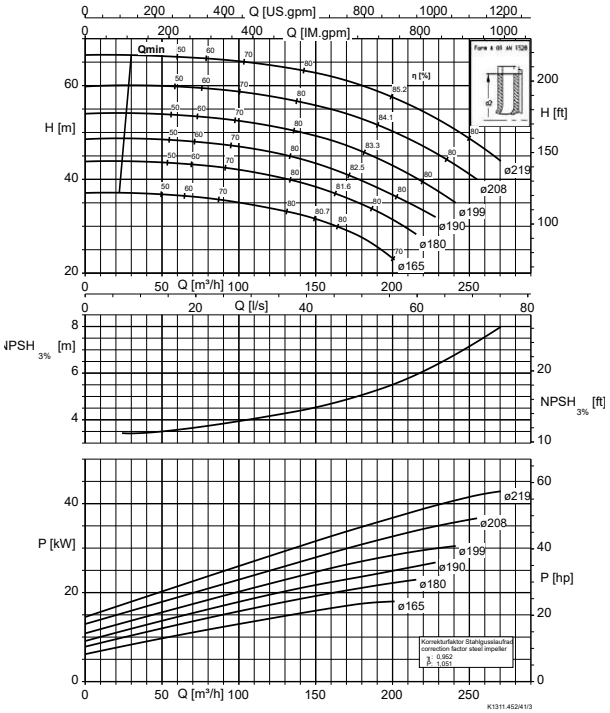


Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

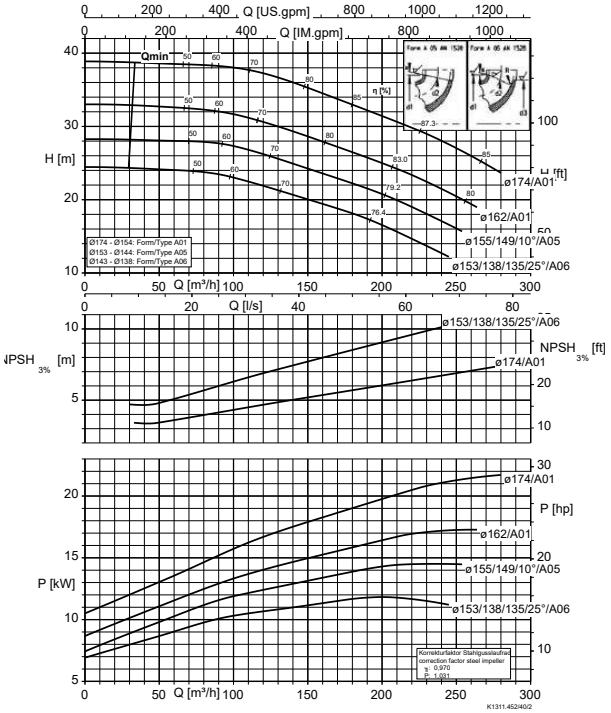
Etabloc 080-065-315, n = 2900 rpm



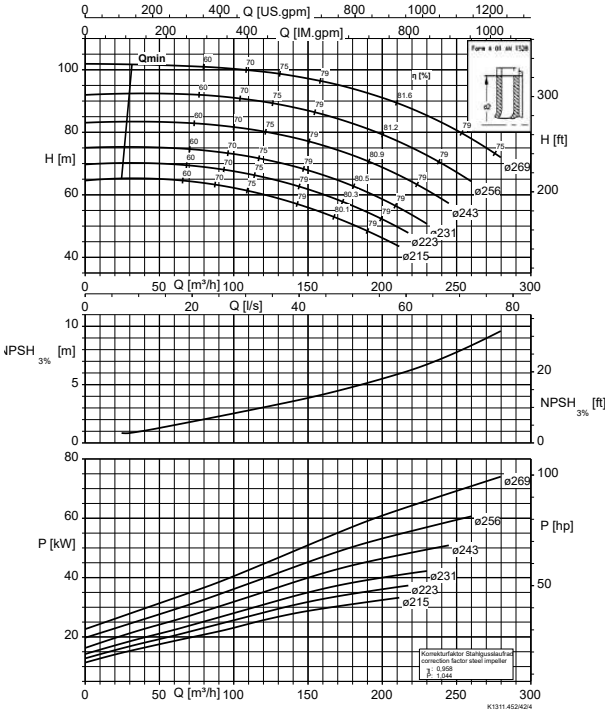
Etabloc 100-080-200, n = 2900 rpm



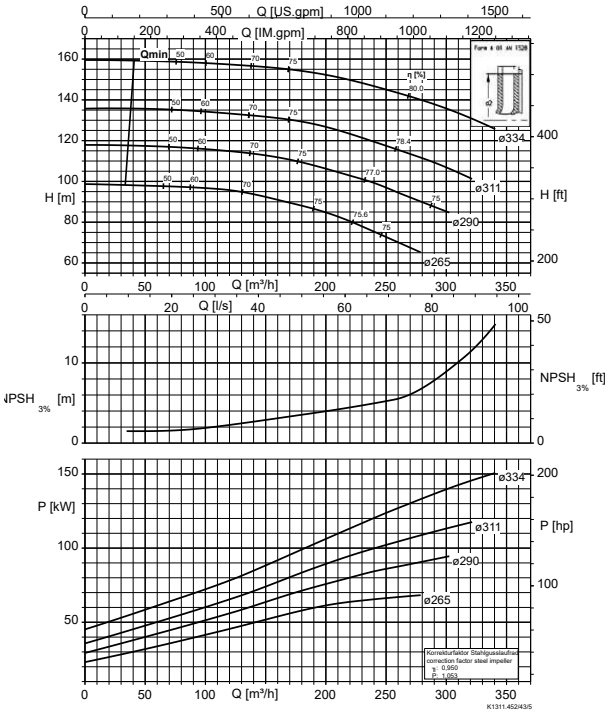
Etabloc 100-080-160, n = 2900 rpm



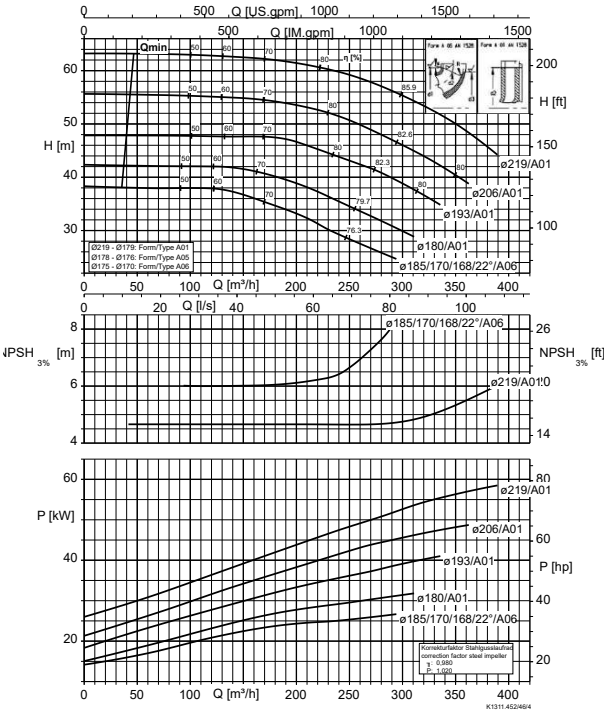
Etabloc 100-080-250, n = 2900 rpm



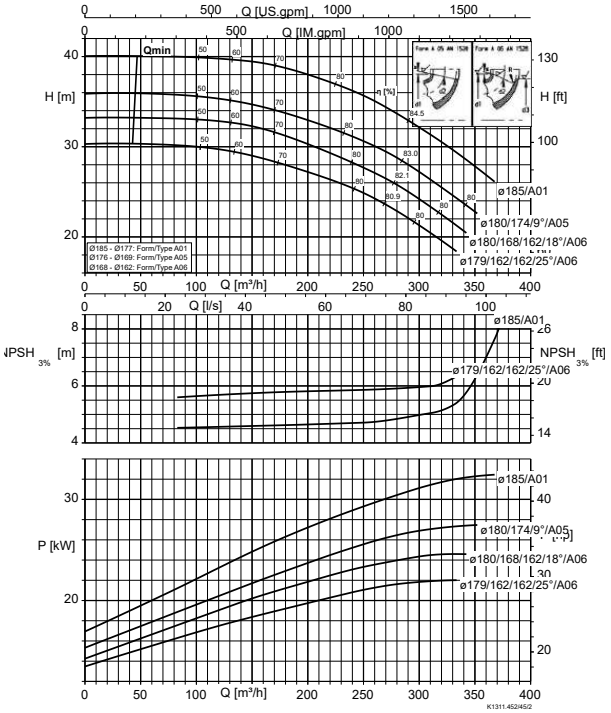
Etabloc 100-080-315, n = 2900 rpm



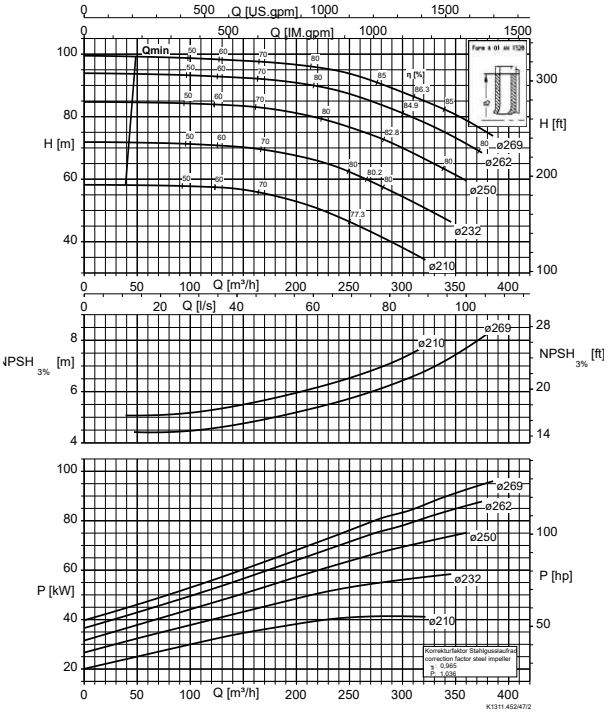
Etabloc 125-100-200, n = 2900 rpm



Etabloc 125-100-160, n = 2900 rpm

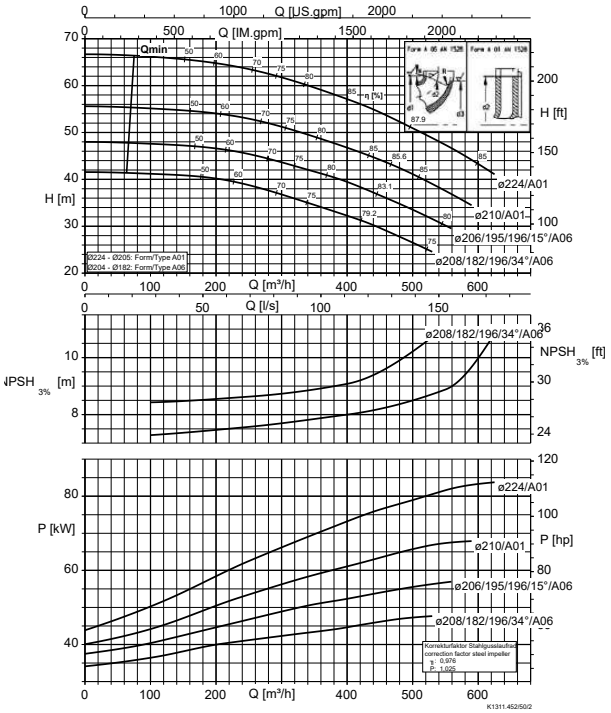


Etabloc 125-100-250, n = 2900 rpm

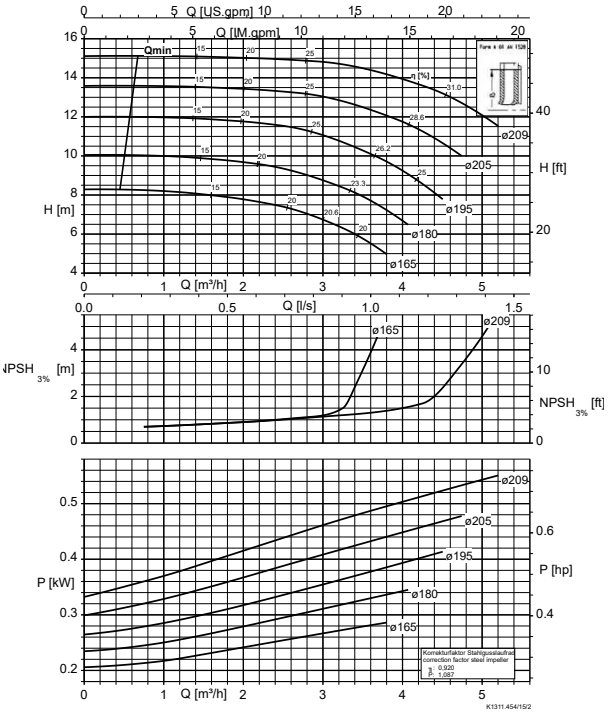


Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

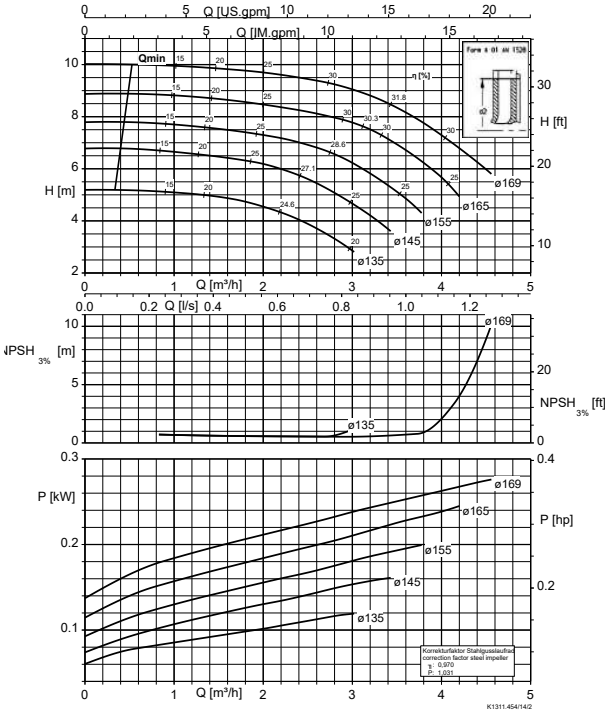
Etabloc 150-125-200, n = 2900 rpm



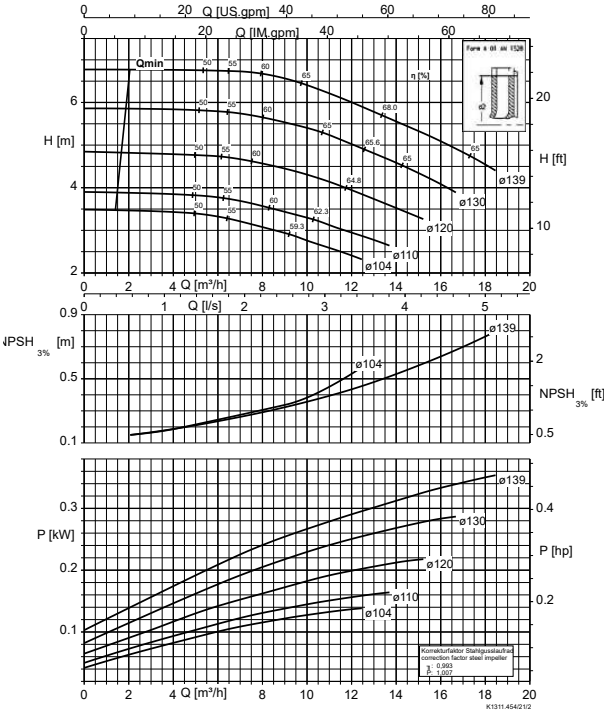
Etabloc 040-025-200, n = 1450 rpm



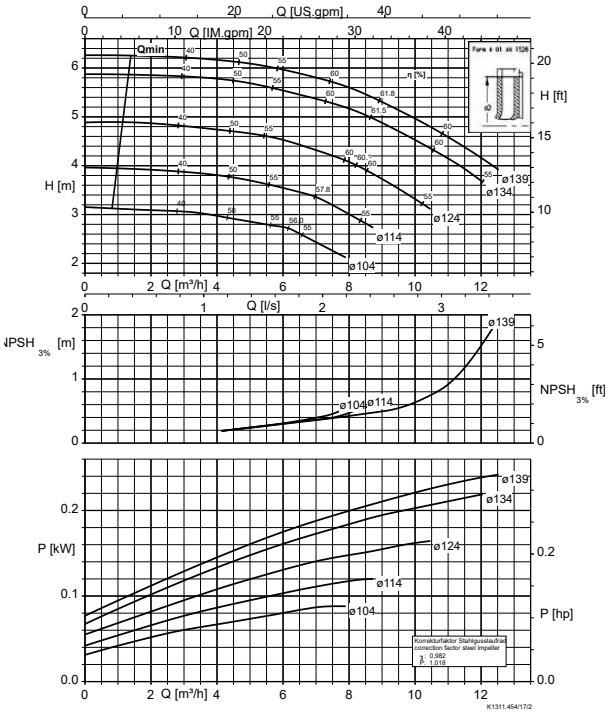
Etabloc 040-025-160, n = 1450 rpm



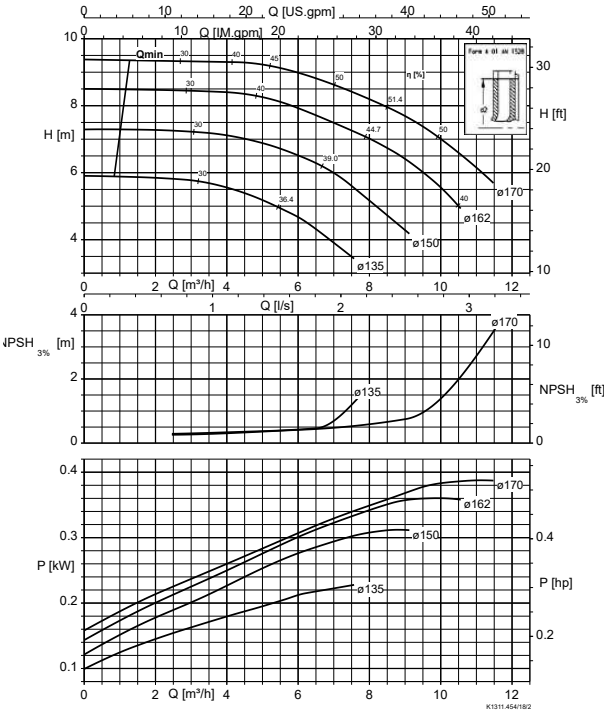
Etabloc 050-032-125, n = 1450 rpm



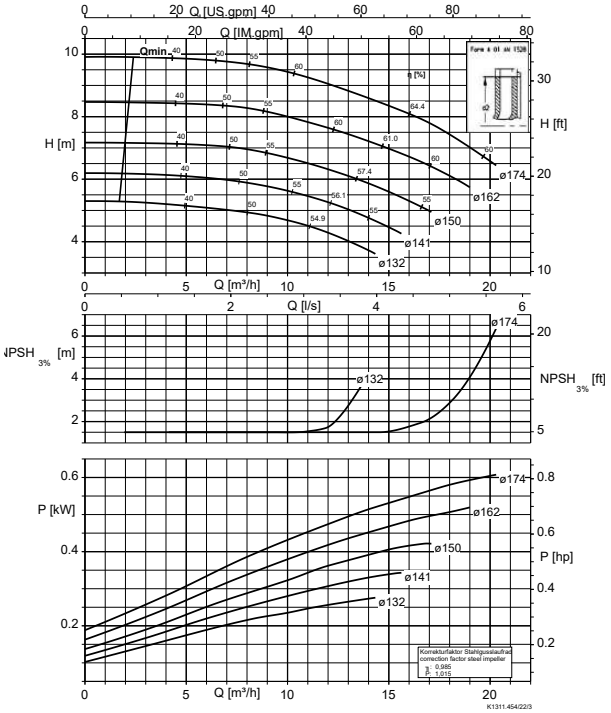
Etabloc 050-032-125.1, n = 1450 rpm



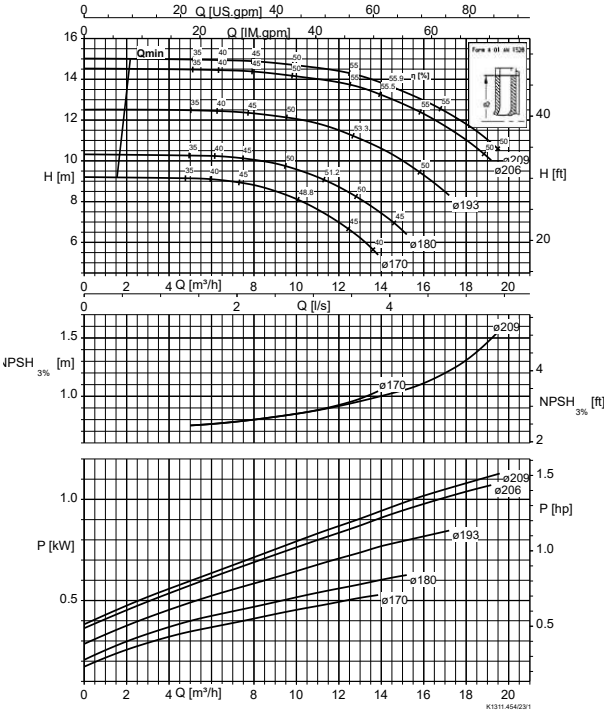
Etabloc 050-032-160.1, n = 1450 rpm



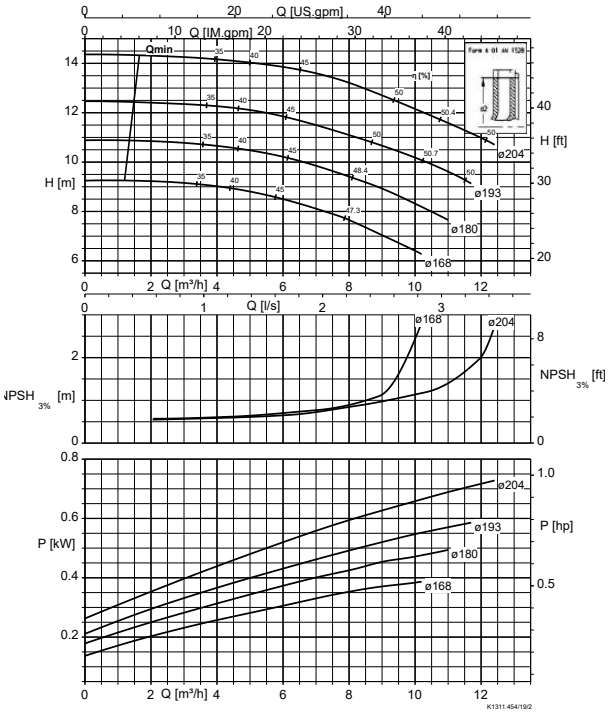
Etabloc 050-032-160, n = 1450 rpm



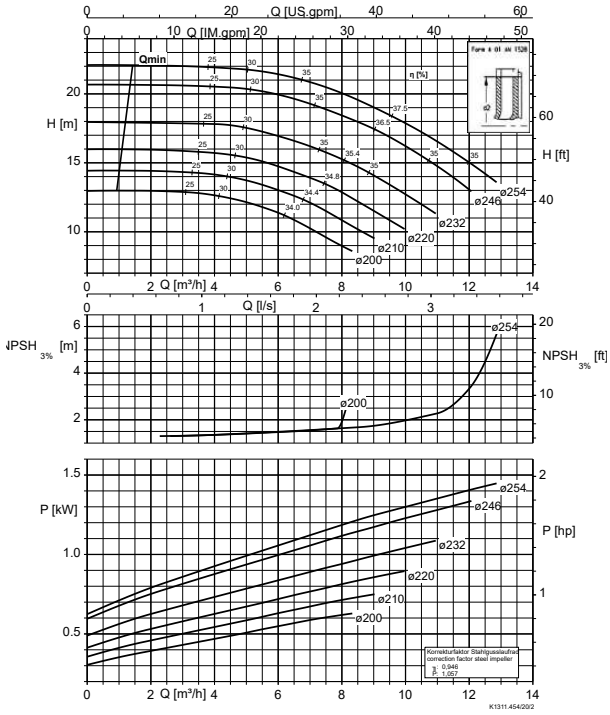
Etabloc 050-032-200, n = 1450 rpm



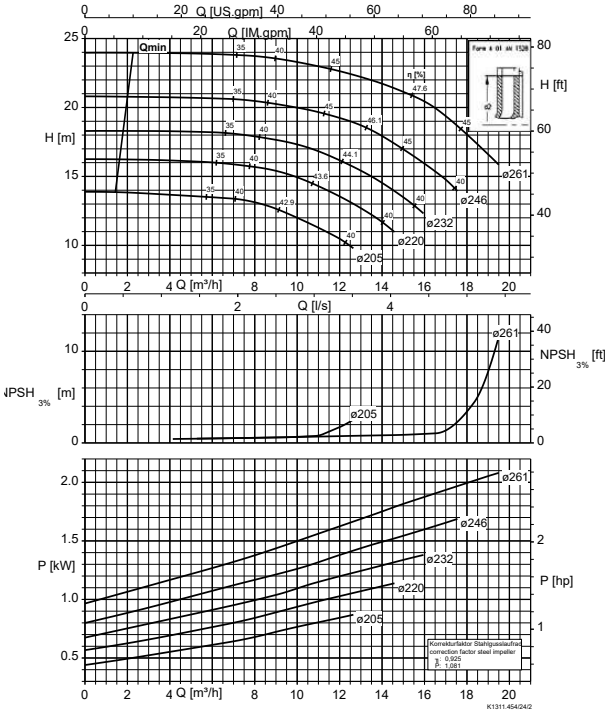
Etabloc 050-032-200.1, n = 1450 rpm



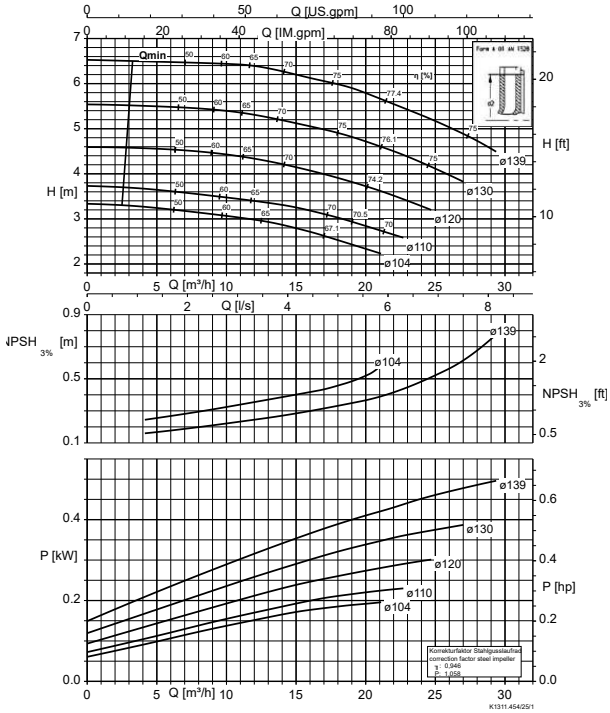
Etabloc 050-032-250.1, n = 1450 rpm



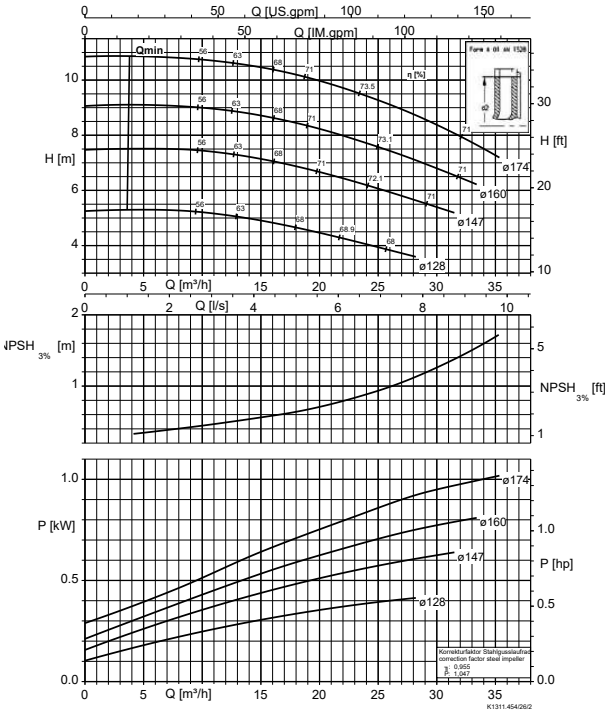
Etabloc 050-032-250, n = 1450 rpm



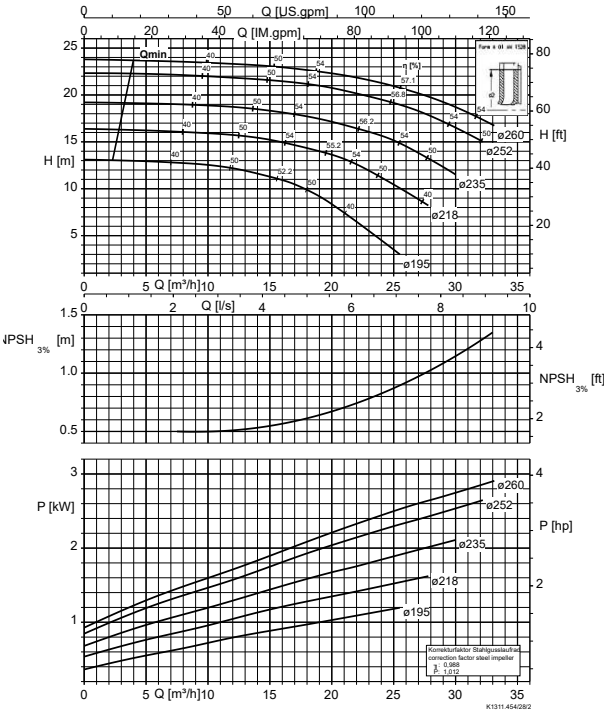
Etabloc 065-040-125, n = 1450 rpm



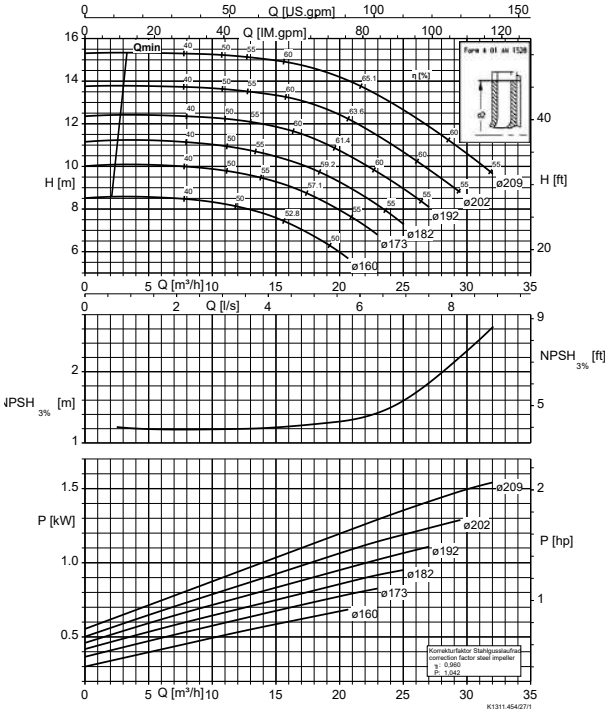
Etabloc 065-040-160, n = 1450 rpm



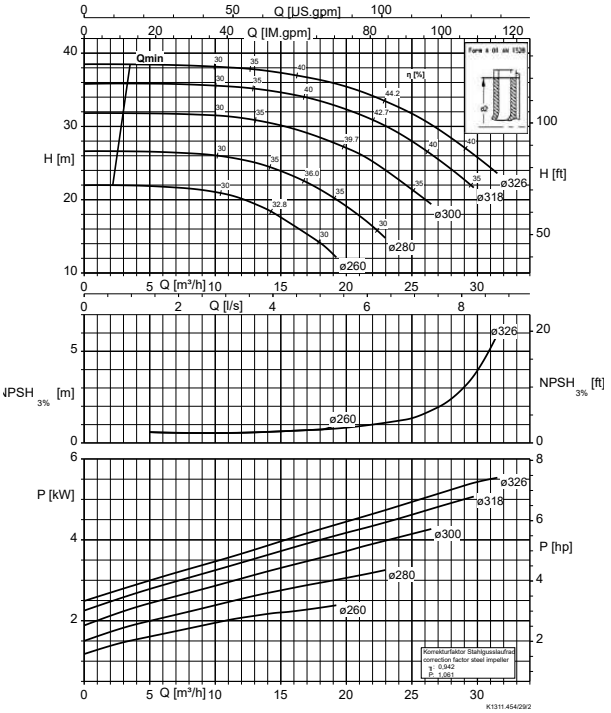
Etabloc 065-040-250, n = 1450 rpm



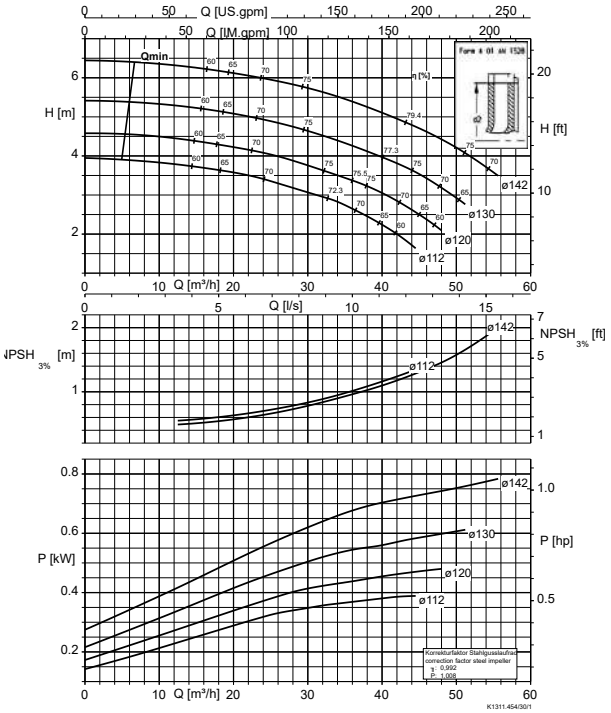
Etabloc 065-040-200, n = 1450 rpm



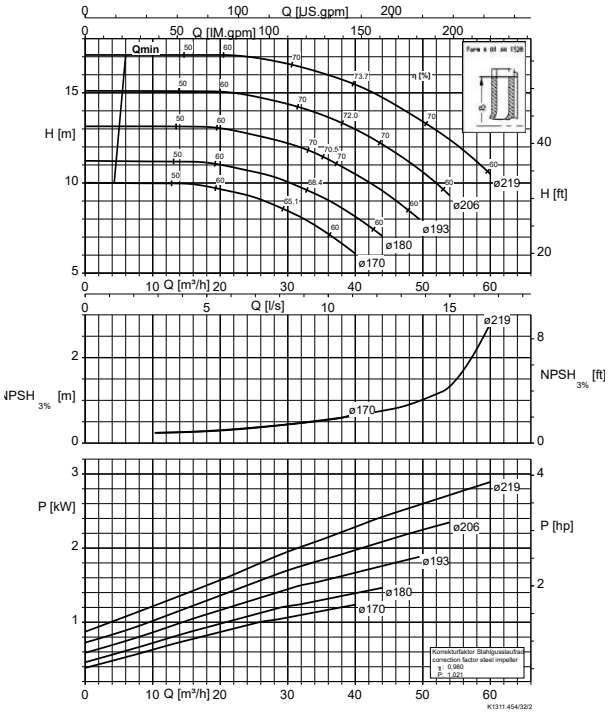
Etabloc 065-040-315, n = 1450 rpm



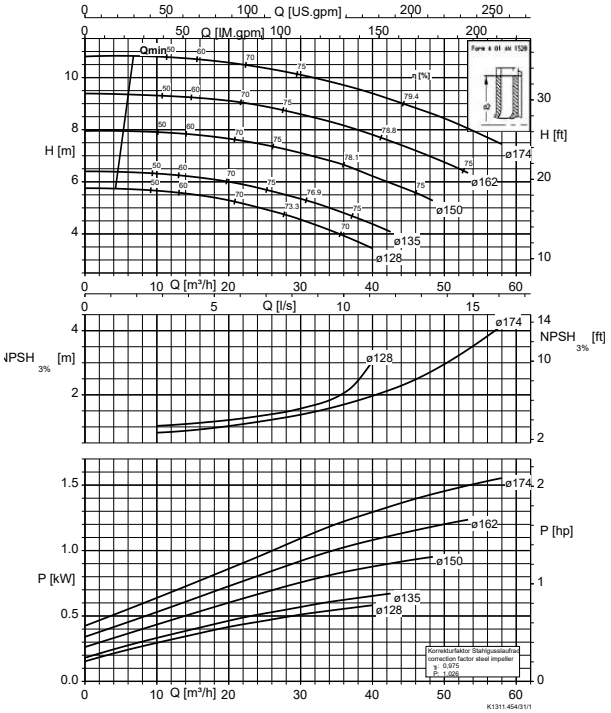
Etabloc 065-050-125, n = 1450 rpm



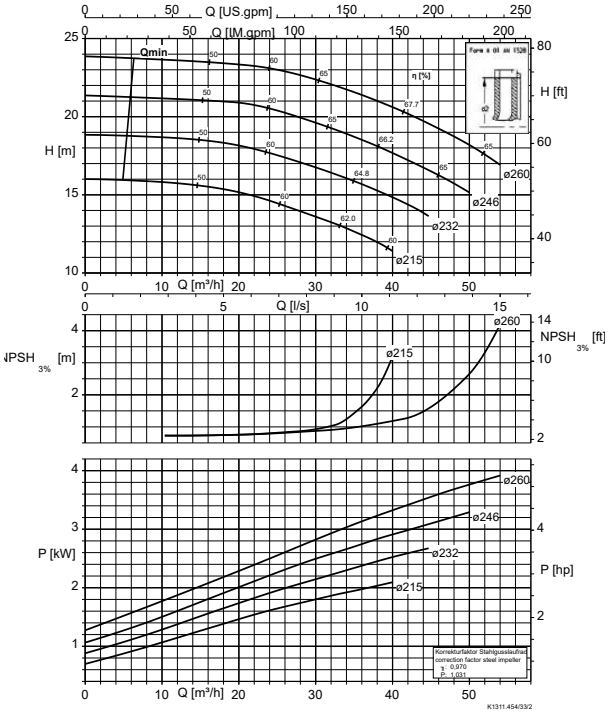
Etabloc 065-050-200, n = 1450 rpm



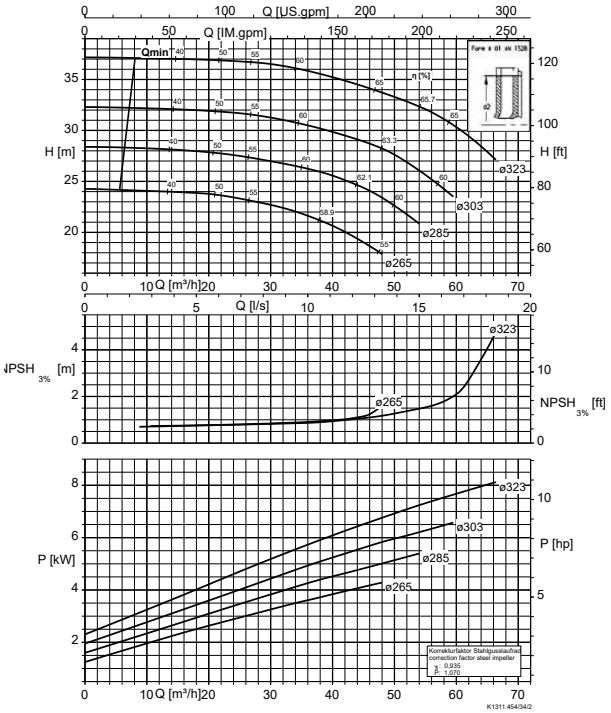
Etabloc 065-050-160, n = 1450 rpm



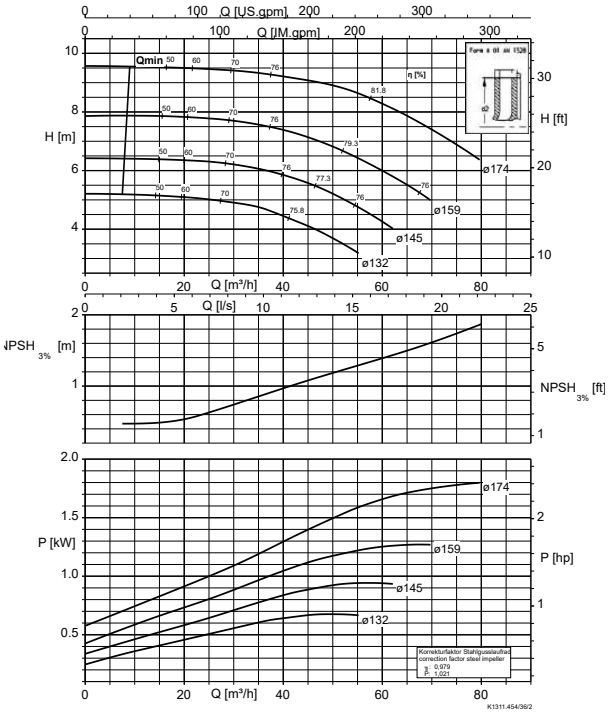
Etabloc 065-050-250, n = 1450 rpm



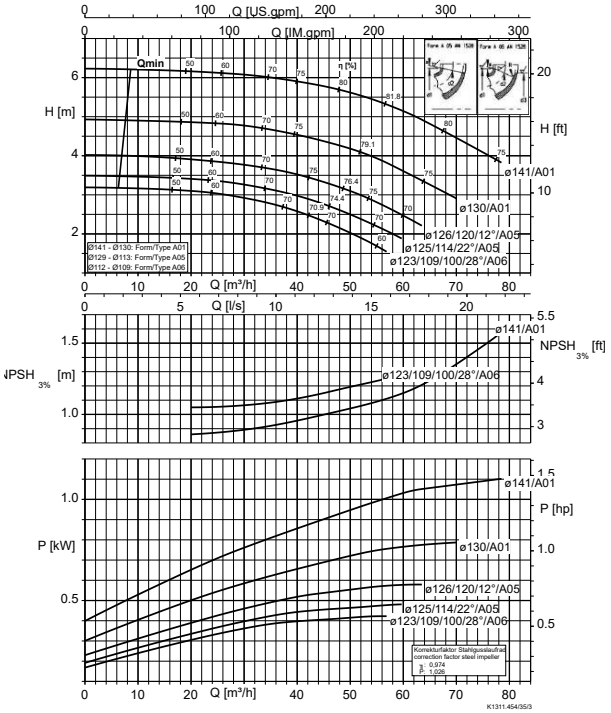
Etabloc 065-050-315, n = 1450 rpm



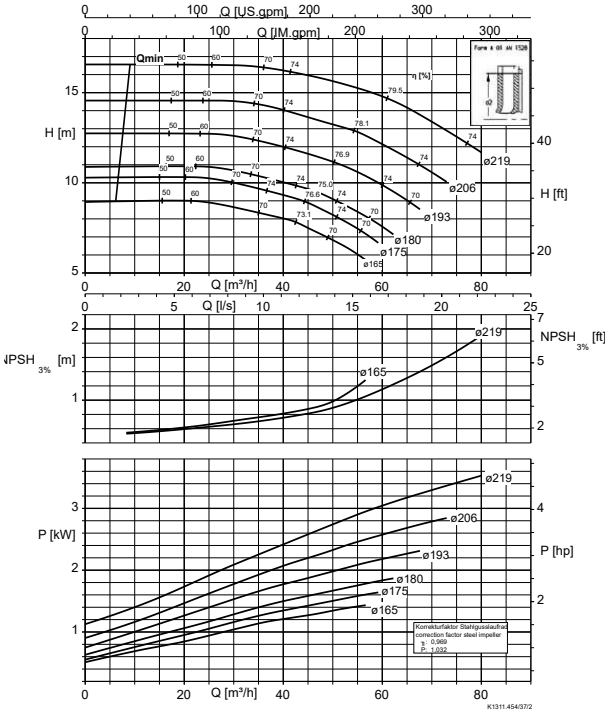
Etabloc 080-065-160, n = 1450 rpm



Etabloc 080-065-125, n = 1450 rpm

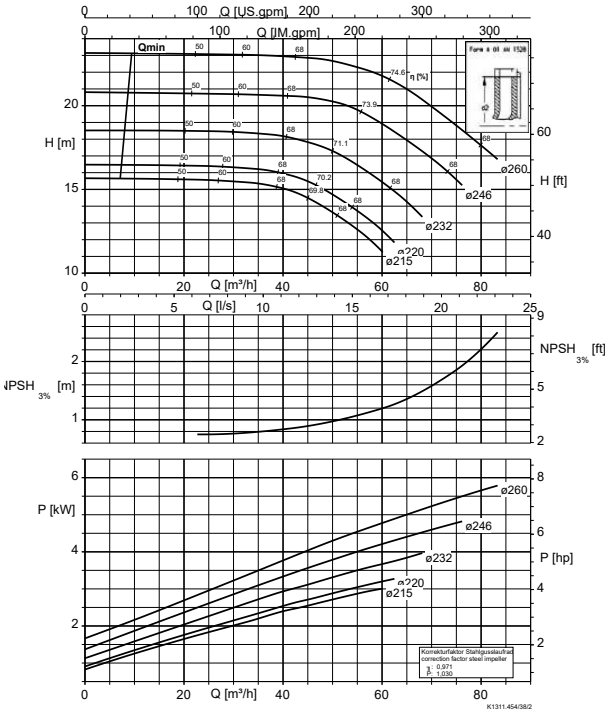


Etabloc 080-065-200, n = 1450 rpm

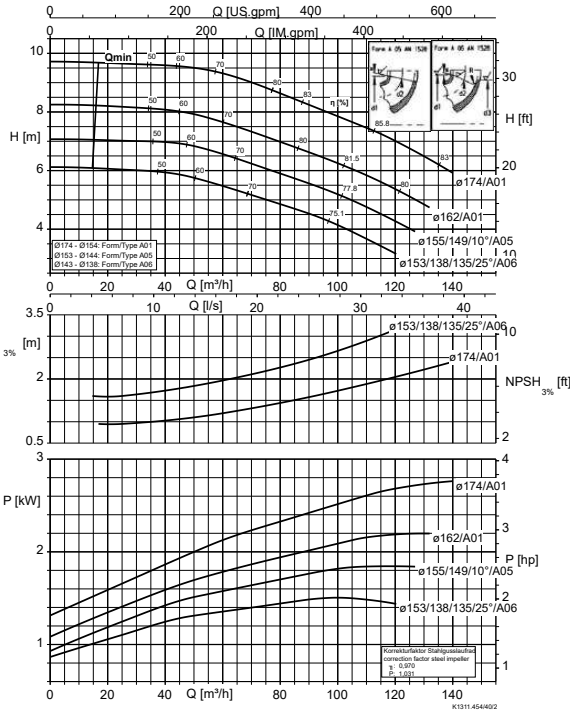


Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

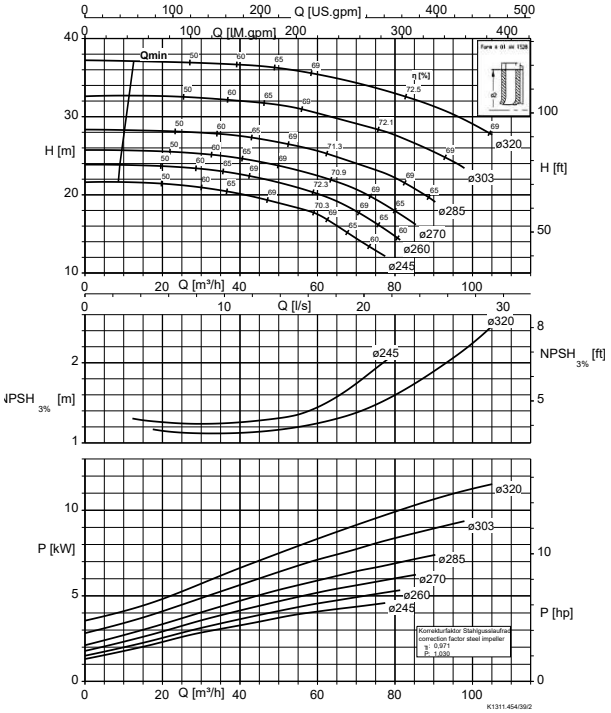
Etabloc 080-065-250, n = 1450 rpm



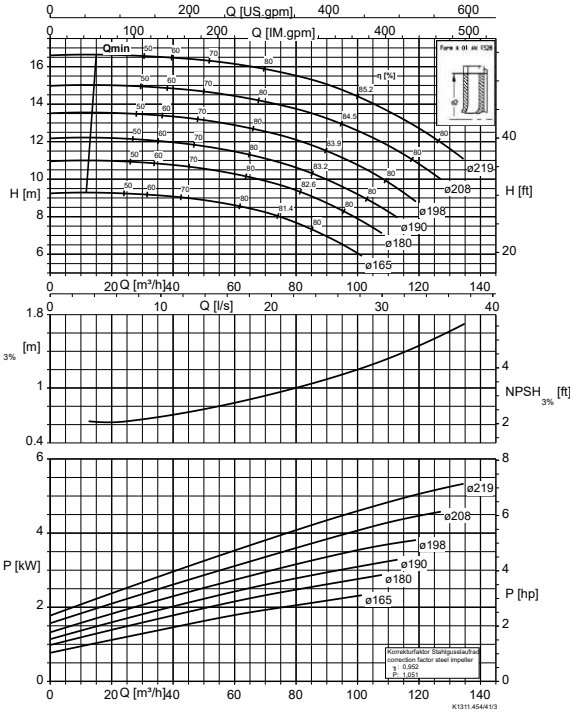
Etabloc 100-080-160, n = 1450 rpm



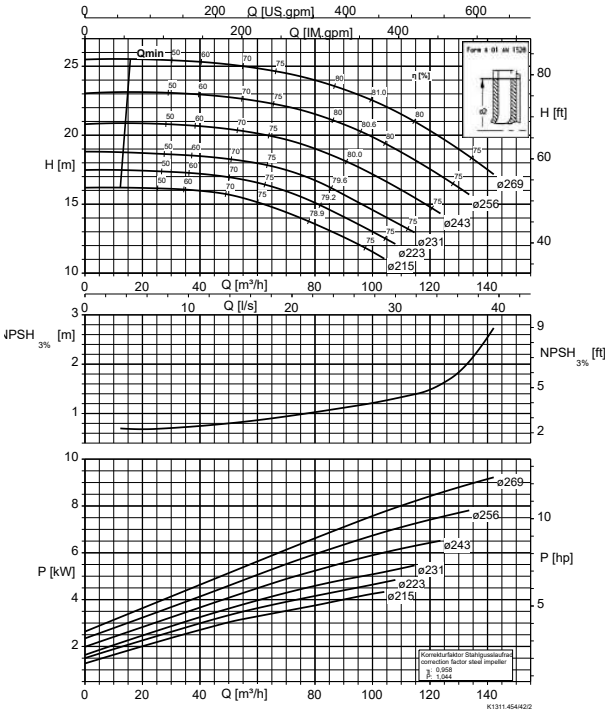
Etabloc 080-065-315, n = 1450 rpm



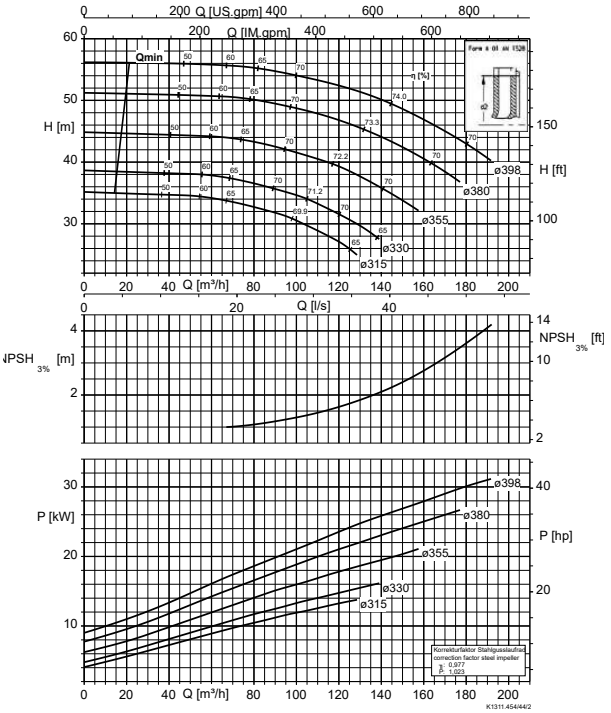
Etabloc 100-080-200, n = 1450 rpm



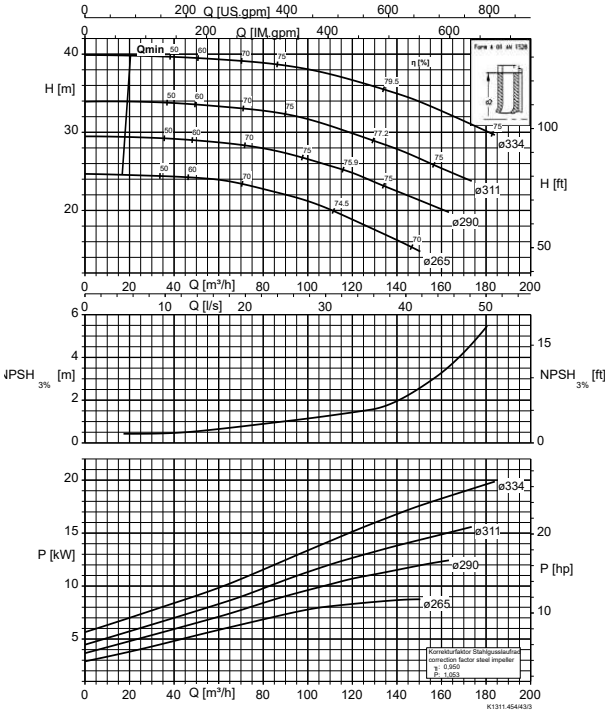
Etabloc 100-080-250, n = 1450 rpm



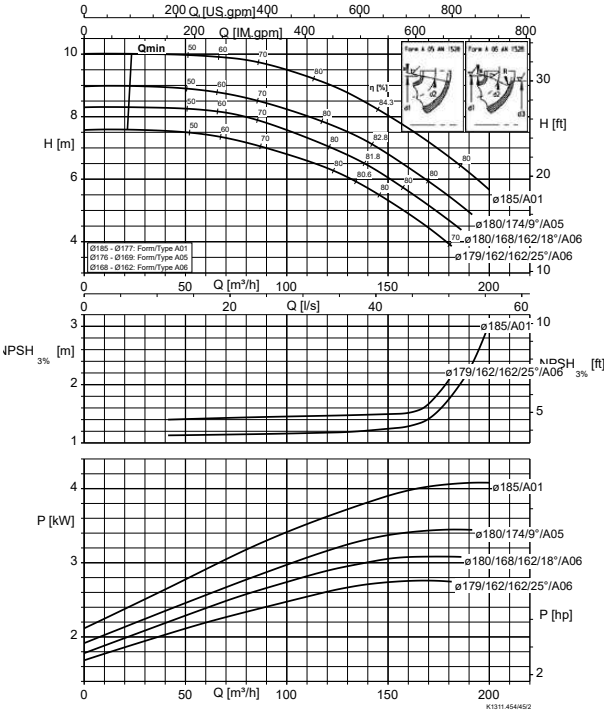
Etabloc 100-080-400, n = 1450 rpm



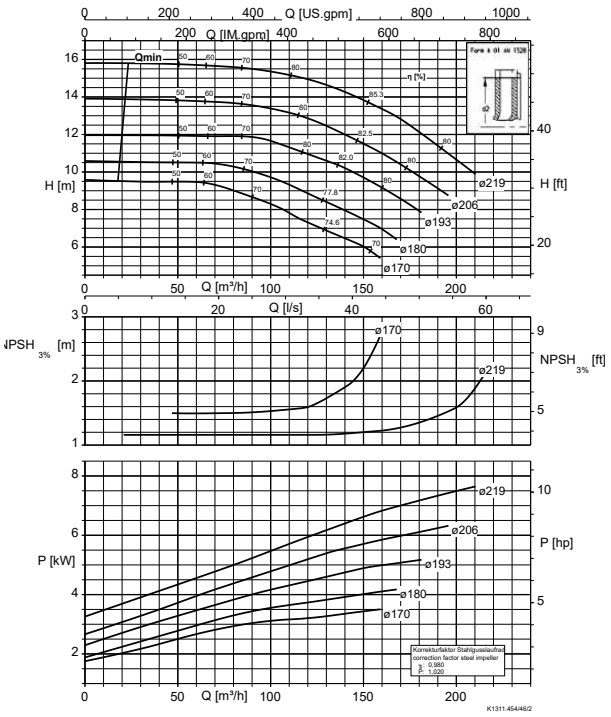
Etabloc 100-080-315, n = 1450 rpm



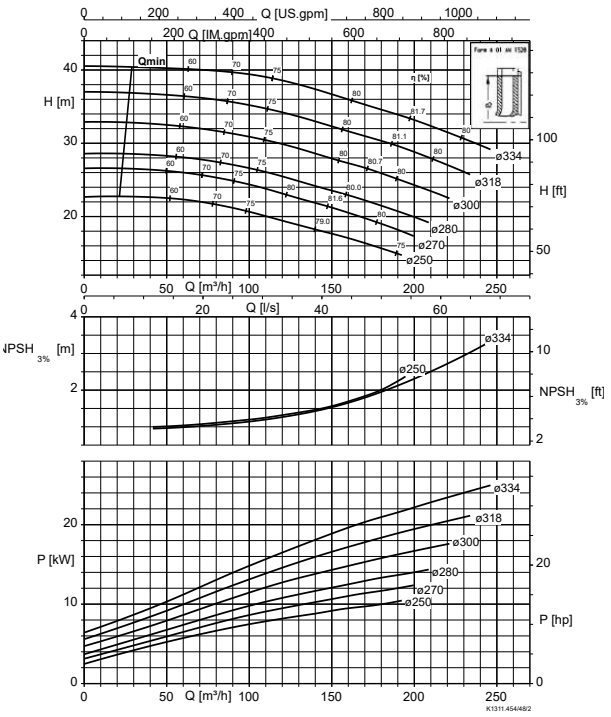
Etabloc 125-100-160, n = 1450 rpm



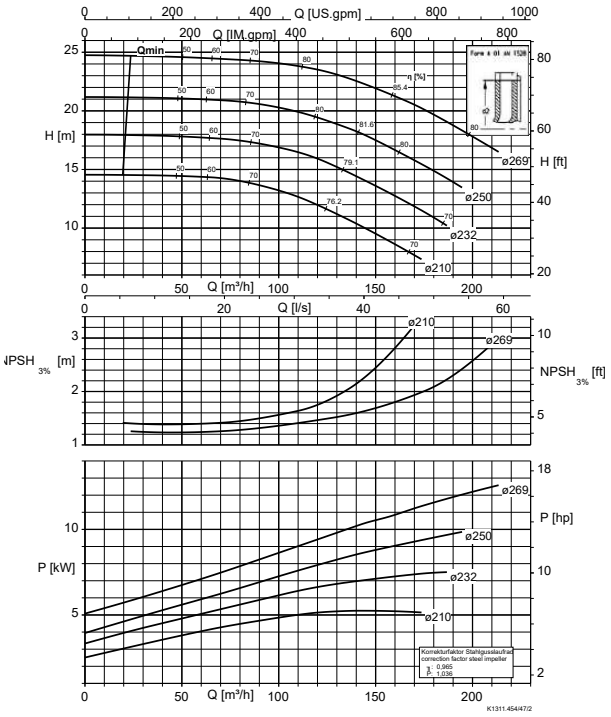
Etabloc 125-100-200, n = 1450 rpm



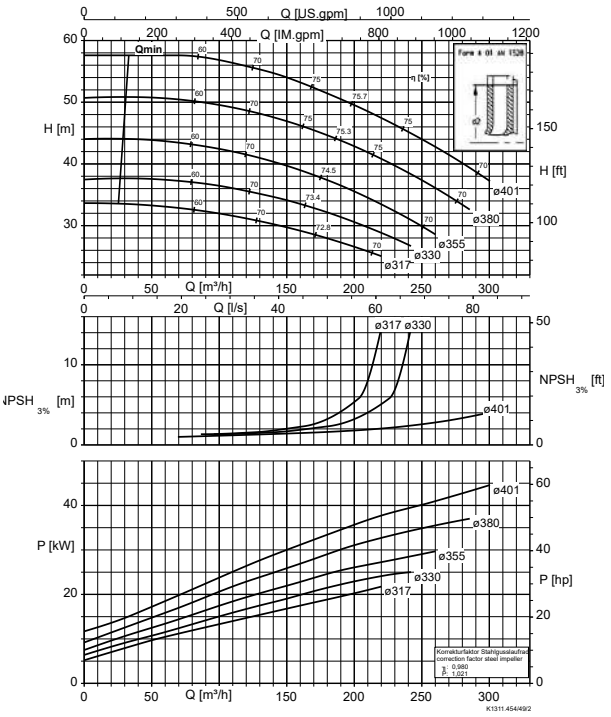
Etabloc 125-100-315, n = 1450 rpm



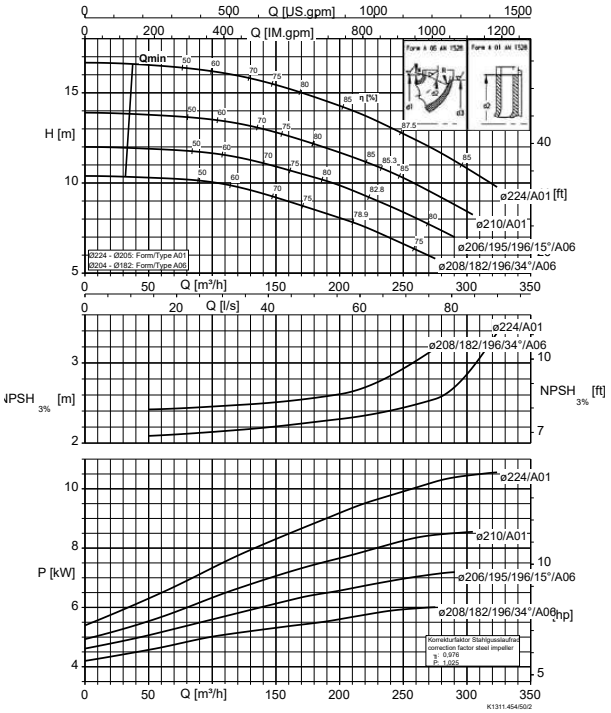
Etabloc 125-100-250, n = 1450 rpm



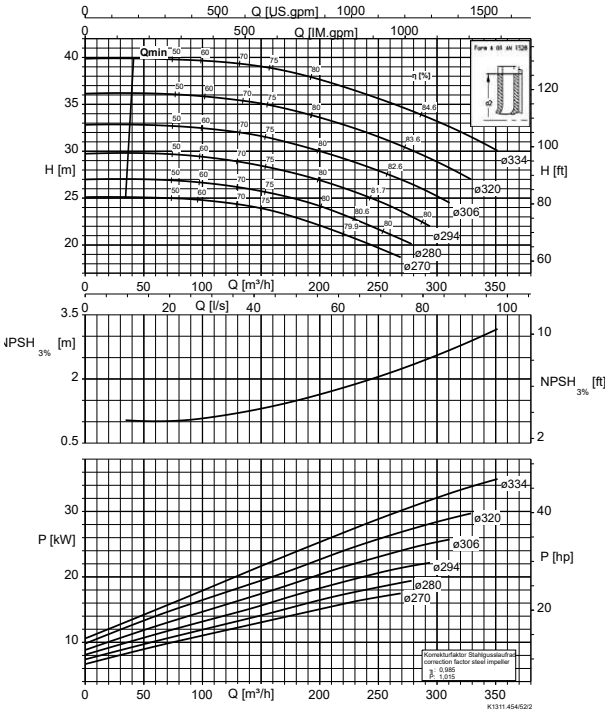
Etabloc 125-100-400, n = 1450 rpm



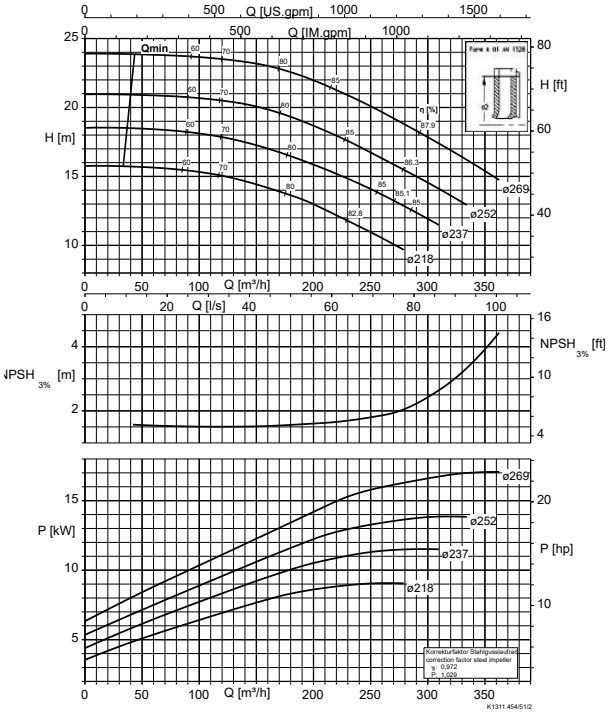
Etabloc 150-125-200, n = 1450 rpm



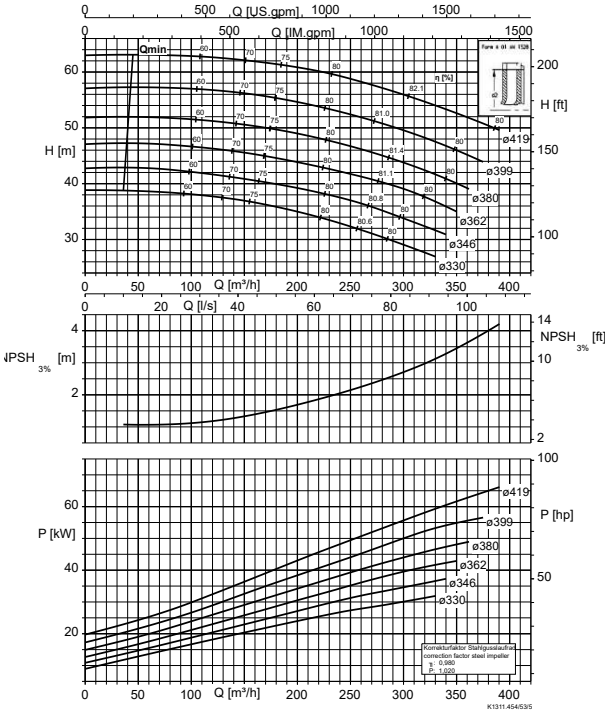
Etabloc 150-125-315, n = 1450 rpm



Etabloc 150-125-250, n = 1450 rpm



Etabloc 150-125-400, n = 1450 rpm



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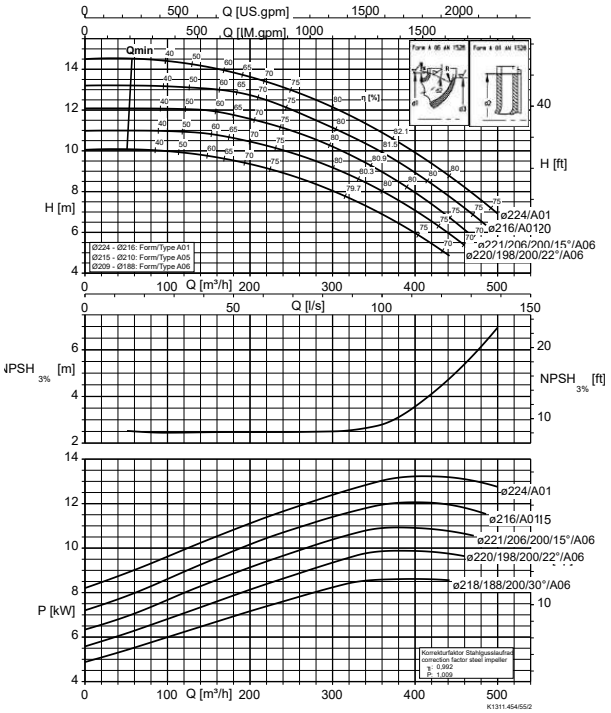
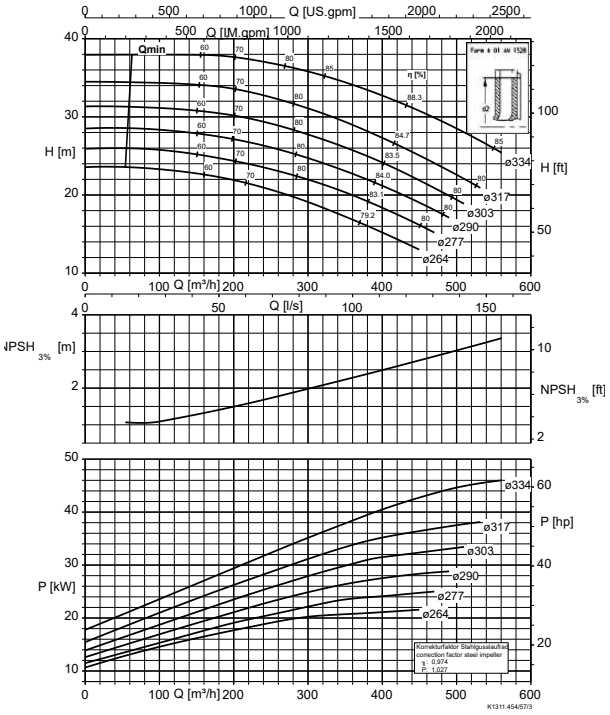
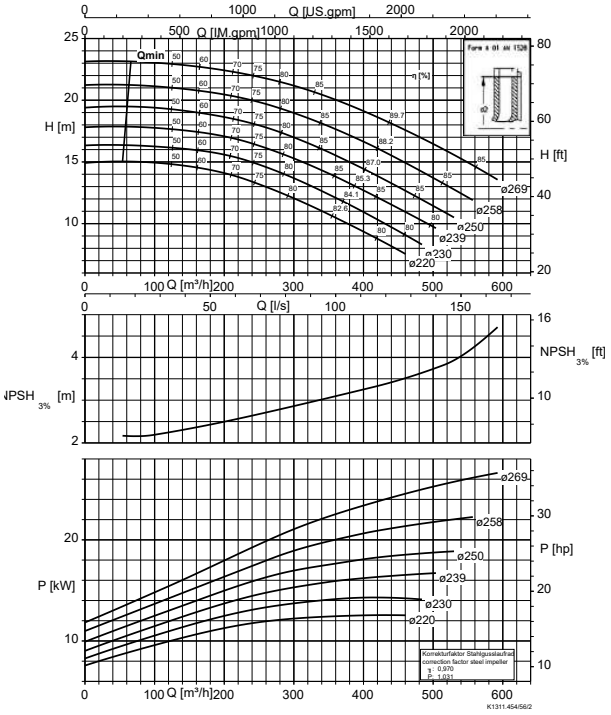
Etabloc 200-150-200, n = 1450 rpm



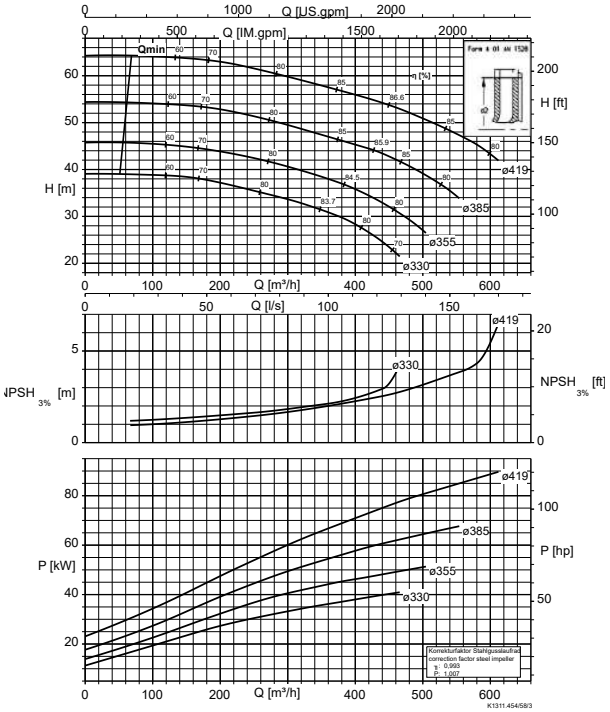
Etabloc 200-150-315, n = 1450 rpm



Etabloc 200-150-250, n = 1450 rpm

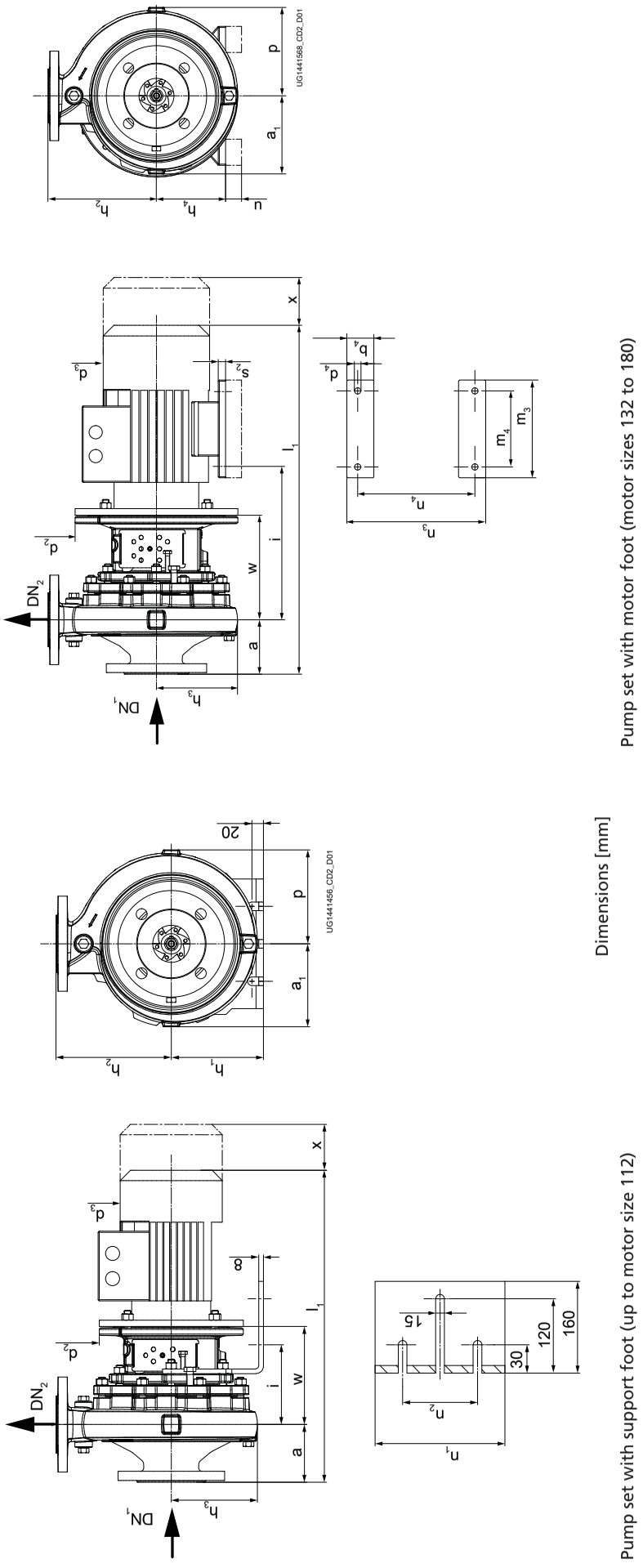


Etabloc 200-150-400, n = 1450 rpm



Dimensions

Pump set with support foot and motor foot (fixed speed version), ≤ 22 kW, n = 2900 rpm / 3500 rpm



n = 2900 rpm / n = 3500 rpm, material variant GG / GB / GC

Dimensions of Etabloc ≤ 22 kW[400)]
Values a_1, b_4, d_3, l_1, m_3, n_3 and p may vary slightly for production-related reasons.

Etabloc	Motor (IEC)	n		DN_1 401)	DN_2 401)	a 401)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 401)	h_3	h_4	i 402)	i 403)	l_1 402)	l_1 403)	m_3	m_4	n_1	n_2	n_3	n_4	p	s_2	u 404)	w 402)	w 403)	x 401)
		2900	3500	[mm]																										
		[rpm]																												
40-25-160/ 00072	80M	✘	-	40	25	80	118	-	200	162	-	160	160	107	-	118	-	501	-	-	-	225	130	-	-	118	-	-	156	-	100
40-25-160/ 00112	80M	✘	✘	40	25	80	118	-	200	162	-	160	160	107	-	118	-	537	-	-	-	225	130	-	-	118	-	-	156	-	100
40-25-160/ 00152	90S	✘	✘	40	25	80	118	-	200	190	-	160	160	107	-	118	118	590	634	-	-	225	130	-	-	118	-	-	156	200	100
40-25-160/ 00222	90L	✘	✘	40	25	80	118	-	200	190	-	160	160	107	-	118	118	590	634	-	-	225	130	-	-	118	-	-	156	200	100
40-25-160/ 00302	100L	-	✘	40	25	80	118	-	250	213	-	160	160	107	-	118	118	640	684	-	-	225	130	-	-	118	-	-	170	214	100
40-25-160/ 00402	112M	-	✘	40	25	80	118	-	250	235	-	160	160	107	-	118	118	622	666	-	-	225	130	-	-	118	-	-	170	214	100
40-25-200/ 00152	90S	✘	-	40	25	80	142	-	200	190	-	160	180	137	-	118	118	590	634	-	-	225	130	-	-	142	-	-	156	200	100
40-25-200/ 00222	90L	✘	-	40	25	80	142	-	200	190	-	160	180	137	-	118	118	590	634	-	-	225	130	-	-	142	-	-	156	200	100
40-25-200/ 00302	100L	✘	✘	40	25	80	142	-	250	213	-	160	180	137	-	118	118	640	684	-	-	225	130	-	-	142	-	-	170	214	100
40-25-200/ 00402	112M	✘	✘	40	25	80	142	-	250	235	-	160	180	137	-	118	118	622	666	-	-	225	130	-	-	142	-	-	170	214	100
40-25-200/ 00552	132S	✘	✘	40	25	80	142	55	300	274	12	-	180	137	132	282	326	686	730	220	140	-	-	270	216	142	15	20	193	237	100
40-25-200/ 00752	132S	-	✘	40	25	80	142	55	300	274	12	-	180	137	132	282	326	730	774	220	140	-	-	270	216	142	15	20	193	237	100
50-32-125/ 00112	80M	✘	-	50	32	80	115	-	200	162	-	160	140	100	-	118	-	537	-	-	-	225	130	-	-	115	-	-	156	-	100
50-32-125/ 00152	90S	✘	✘	50	32	80	115	-	200	190	-	160	140	100	-	118	118	590	634	-	-	225	130	-	-	115	-	-	156	200	100
50-32-125/ 00222	90L	✘	✘	50	32	80	115	-	200	190	-	160	140	100	-	118	118	590	634	-	-	225	130	-	-	115	-	-	156	200	100
50-32-125/ 00302	100L	✘	✘	50	32	80	115	-	250	213	-	160	140	100	-	118	118	640	684	-	-	225	130	-	-	115	-	-	170	214	100
50-32-125/ 00402	112M	-	✘	50	32	80	115	-	250	235	-	160	140	100	-	118	118	622	666	-	-	225	130	-	-	115	-	-	170	214	100
50-32-125/ 00552	132S	-	✘	50	32	80	115	55	300	274	12	-	140	100	132	282	326	686	730	220	140	-	-	270	216	115	15	20	193	237	100
50-32-125.1/ 00052	71M	✘	-	50	32	80	116	-	160	145	-	160	140	100	-	118	-	453	-	-	-	225	130	-	-	116	-	-	136	-	100
50-32-125.1/ 00072	80M	✘	-	50	32	80	116	-	200	162	-	160	140	100	-	118	-	501	-	-	-	225	130	-	-	116	-	-	156	-	100
50-32-125.1/ 00112	80M	✘	-	50	32	80	116	-	200	162	-	160	140	100	-	118	-	537	-	-	-	225	130	-	-	116	-	-	156	-	100
50-32-125.1/ 00152	90S	✘	-	50	32	80	116	-	200	190	-	160	140	100	-	118	118	590	634	-	-	225	130	-	-	116	-	-	156	200	100
50-32-125.1/ 00222	90L	✘	-	50	32	80	116	-	200	190	-	160	140	100	-	118	118	590	634	-	-	225	130	-	-	116	-	-	156	200	100
50-32-125.1/ 00302	100L	-	✘	50	32	80	116	-	250	213	-	160	140	100	-	118	118	640	684	-	-	225	130	-	-	116	-	-	170	214	100
50-32-125.1/ 00402	112M	-	✘	50	32	80	116	-	250	235	-	160	140	100	-	118	118	622	666	-	-	225	130	-	-	116	-	-	170	214	100
50-32-125.1/ 00552	132S	-	✘	50	32	80	116	55	300	274	12	-	140	100	132	282	326	686	730	220	140	-	-	270	216	116	15	20	193	237	100
50-32-160/ 00222	90L	✘	-	50	32	80	118	-	200	190	-	160	160	115	-	118	118	590	634	-	-	225	130	-	-	128	-	-	156	200	100
50-32-160/ 00302	100L	✘	✘	50	32	80	118	-	250	213	-	160	160	115	-	118	118	640	684	-	-	225	130	-	-	128	-	-	170	214	100
50-32-160/ 00402	112M	✘	✘	50	32	80	118	-	250	235	-	160	160	115	-	118	118	622	666	-	-	225	130	-	-	128	-	-	170	214	100
50-32-160/ 00552	132S	-	✘	50	32	80	118	55	300	274	12	-	160	115	132	282	326	686	730	220	140	-	-	270	216	128	15	20	193	237	100
50-32-160/ 00752	132S	-	✘	50	32	80	118	55	300	274	12	-	160	115	132	282	326	730	774	220	140	-	-	270	216	128	15	20	193	237	100

400 Tolerances of mating dimensions to EN 735
401 Dimensions to EN 733
402 Dimension with single mechanical seal (A, IA, EA, FA)
403 Dimension with double mechanical seal (DB, TI)
404 Motor feet must be shimmed.

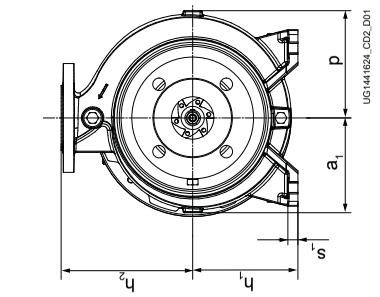
Etabloc	Motor (IEC)	n		DN_1 401)	DN_2 401)	a 401)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 401)	h_3	h_4	i 402)	i 403)	l_1 402)	l_1 403)	m_3	m_4	n_1	n_2	n_3	n_4	p	s_2	u 404)	w 402)	w 403)	x 401)
		2900	3500																											
		[rpm]		[mm]																											
50-32-160.1/ 00152	90S	✗	-	50	32	80	116	-	200	190	-	160	160	111	-	118	118	590	634	-	-	225	130	-	-	121	-	-	156	200	100
50-32-160.1/ 00222	90L	✗	✗	50	32	80	116	-	200	190	-	160	160	111	-	118	118	590	634	-	-	225	130	-	-	121	-	-	156	200	100
50-32-160.1/ 00302	100L	✗	✗	50	32	80	116	-	250	213	-	160	160	111	-	118	118	640	684	-	-	225	130	-	-	121	-	-	170	214	100
50-32-160.1/ 00402	112M	✗	✗	50	32	80	116	-	250	235	-	160	160	111	-	118	118	622	666	-	-	225	130	-	-	121	-	-	170	214	100
50-32-160.1/ 00552	132S	-	✗	50	32	80	116	55	300	274	12	-	160	111	132	282	326	686	730	220	140	-	-	270	216	121	15	20	193	237	100
50-32-160.1/ 00752	132S	-	✗	50	32	80	116	55	300	274	12	-	160	111	132	282	326	730	774	220	140	-	-	270	216	121	15	20	193	237	100
50-32-160.1/ 01102	160M	-	✗	50	32	80	116	70	350	325	15	-	160	111	160	334	378	852	896	310	210	-	-	323	254	121	21	20	226	270	100
50-32-200/ 00402	112M	✗	-	50	32	80	142	-	250	235	-	160	180	137	-	118	118	622	666	-	-	225	130	-	-	143	-	-	170	214	100
50-32-200/ 00552	132S	✗	-	50	32	80	142	55	300	274	12	-	180	137	132	282	326	686	730	220	140	-	-	270	216	143	15	20	193	237	100
50-32-200/ 00752	132S	✗	✗	50	32	80	142	55	300	274	12	-	180	137	132	282	326	730	774	220	140	-	-	270	216	143	15	20	193	237	100
50-32-200/ 01102	160M	✗	✗	50	32	80	142	70	350	325	15	-	180	137	160	334	378	852	896	310	210	-	-	323	254	143	21	20	226	270	100
50-32-200/ 01502	160M	-	✗	50	32	80	142	70	350	325	15	-	180	137	160	334	378	852	896	310	210	-	-	323	254	143	21	20	226	270	100
50-32-200.1/ 00302	100L	✗	-	50	32	80	142	-	250	213	-	160	180	136	-	118	118	640	684	-	-	225	130	-	-	142	-	-	170	214	100
50-32-200.1/ 00402	112M	✗	-	50	32	80	142	-	250	235	-	160	180	136	-	118	118	622	666	-	-	225	130	-	-	142	-	-	170	214	100
50-32-200.1/ 00552	132S	✗	✗	50	32	80	142	55	300	274	12	-	180	136	132	282	326	686	730	220	140	-	-	270	216	142	15	20	193	237	100
50-32-200.1/ 00752	132S	✗	✗	50	32	80	142	55	300	274	12	-	180	136	132	282	326	730	774	220	140	-	-	270	216	142	15	20	193	237	100
50-32-200.1/ 01102	160M	-	✗	50	32	80	142	70	350	325	15	-	180	136	160	334	378	852	896	310	210	-	-	323	254	142	21	20	226	270	100
50-32-200.1/ 01502	160M	-	✗	50	32	80	142	70	350	325	15	-	180	136	160	334	378	852	896	310	210	-	-	323	254	142	21	20	226	270	100
50-32-250/ 00752	132S	✗	-	50	32	100	169	55	300	274	12	-	225	166	132	282	326	750	794	220	140	-	-	270	216	178	15	20	193	237	100
50-32-250/ 01102	160M	✗	✗	50	32	100	169	70	350	325	15	-	225	166	160	334	378	872	916	310	210	-	-	323	254	178	21	20	226	270	100
50-32-250/ 01502	160M	✗	✗	50	32	100	169	70	350	325	15	-	225	166	160	334	378	872	916	310	210	-	-	323	254	178	21	20	226	270	100
50-32-250/ 01852	160L	-	✗	50	32	100	169	70	350	325	15	-	225	166	160	334	378	908	952	314	254	-	-	323	254	178	21	20	226	270	100
50-32-250/ 02202	180M	-	✗	50	32	100	169	80	350	370	15	-	225	166	180	347	391	943	987	343	241	-	-	368	279	178	23	-	226	270	100
50-32-250.1/ 00552	132S	✗	-	50	32	100	168	55	300	274	12	-	225	166	132	282	326	706	750	220	140	-	-	270	216	168	15	20	193	237	100
50-32-250.1/ 00752	132S	✗	✗	50	32	100	168	55	300	274	12	-	225	166	132	282	326	750	794	220	140	-	-	270	216	168	15	20	193	237	100
50-32-250.1/ 01102	160M	✗	✗	50	32	100	168	70	350	325	15	-	225	166	160	334	378	872	916	310	210	-	-	323	254	168	21	20	226	270	100
50-32-250.1/ 01502	160M	✗	✗	50	32	100	168	70	350	325	15	-	225	166	160	334	378	872	916	310	210	-	-	323	254	168	21	20	226	270	100
50-32-250.1/ 01852	160L	-	✗	50	32	100	168	70	350	325	15	-	225	166	160	334	378	908	952	314	254	-	-	323	254	168	21	20	226	270	100
65-40-125/ 00152	90S	✗	-	65	40	80	117	-	200	190	-	160	140	107	-	118	118	590	634	-	-	225	130	-	-	117	-	-	156	200	100
65-40-125/ 00222	90L	✗	-	65	40	80	117	-	200	190	-	160	140	107	-	118	118	590	634	-	-	225	130	-	-	117	-	-	156	200	100
65-40-125/ 00302	100L	✗	-	65	40	80	117	-	250	213	-	160	140	107	-	118	118	640	684	-	-	225	130	-	-	117	-	-	170	214	100
65-40-125/ 00402	112M	✗	✗	65	40	80	117	-	250	235	-	160	140	107	-	118	118	622	666	-	-	225	130	-	-	117	-	-	170	214	100
65-40-125/ 00552	132S	-	✗	65	40	80	117	55	300	274	12	-	140	107	132	282	326	686	730	220	140	-	-	270	216	117	15	20	193	237	100
65-40-125/ 00752	132S	-	✗	65	40	80	117	55	300	274	12	-	140	107	132	282	326	730	774	220	140	-	-	270	216	117	15	20	193	237	100
65-40-125/ 01102	160M	-	✗	65	40	80	117	70	350	325	15	-	140	107	160	334	378	852	896	310	210	-	-	323	254	117	21	20	226	270	100
65-40-160/ 00302	100L	✗	-	65	40	80	119	-	250	213	-	160	160	119	-	118	118	640	684	-	-	225	130	-	-	134	-	-	170	214	100
65-40-160/ 00402	112M	✗	-	65	40	80	119	-	250	235	-	160	160	119	-	118	118	622	666	-	-	225	130	-	-	134	-	-	170	214	100
65-40-160/ 00552	132S	✗	✗	65	40	80	119	55	300	274	12	-	160	119	132	282	326	686	730	220	140	-	-	270	216	134	15	20	193	237	100
65-40-160/ 00752	132S	✗	✗	65	40	80	119	55	300	274	12	-	160	119	132	282	326	730	774	220	140	-	-	270	216	134	15	20	193	237	100
65-40-160/ 01102	160M	-	✗	65	40	80	119	70	350	325	15	-	160	119	160	334	378	852	896	310	210	-	-	323	254	134	21	20	226	270	100
65-40-160/ 01502	160M	-	✗	65	40	80	119	70	350	325	15	-	160	119	160	334	378	852	896	310	210	-	-	323	254	134	21	20	226	270	100

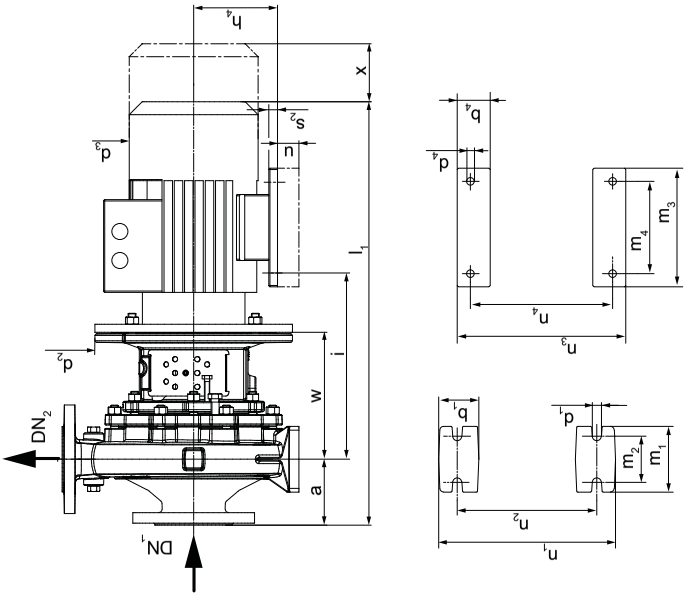
Etabloc	Motor (IEC)	n		DN_1 401)	DN_2 401)	a 401)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 401)	h_3	h_4	i 402)	i 403)	l_1 402)	l_1 403)	m_3	m_4	n_1	n_2	n_3	n_4	p	s_2	u 404)	w 402)	w 403)	x 401)
		2900	3500																											
		[rpm]		[mm]																											
65-40-200/ 00552	132S	✗	-	65	40	100	142	55	300	274	12	-	180	141	132	282	326	706	750	220	140	-	-	270	216	155	15	20	193	237	100
65-40-200/ 00752	132S	✗	-	65	40	100	142	55	300	274	12	-	180	141	132	282	326	750	794	220	140	-	-	270	216	155	15	20	193	237	100
65-40-200/ 01102	160M	✗	✗	65	40	100	142	70	350	325	15	-	180	141	160	334	378	872	916	310	210	-	-	323	254	155	21	20	226	270	100
65-40-200/ 01502	160M	✗	✗	65	40	100	142	70	350	325	15	-	180	141	160	334	378	872	916	310	210	-	-	323	254	155	21	20	226	270	100
65-40-200/ 01852	160L	✗	✗	65	40	100	142	70	350	325	15	-	180	141	160	334	378	908	952	314	254	-	-	323	254	155	21	20	226	270	100
65-40-200/ 02202	180M	✗	✗	65	40	100	142	80	350	370	15	-	180	141	180	347	391	943	987	343	241	-	-	368	279	155	23		226	270	100
65-40-250/ 01102	160M	✗	-	65	40	100	169	70	350	325	15	-	225	166	160	334	378	872	916	310	210	-	-	323	254	179	21	20	226	270	100
65-40-250/ 01502	160M	✗	✗	65	40	100	169	70	350	325	15	-	225	166	160	334	378	872	916	310	210	-	-	323	254	179	21	20	226	270	100
65-40-250/ 01852	160L	✗	✗	65	40	100	169	70	350	325	15	-	225	166	160	334	378	908	952	314	254	-	-	323	254	179	21	20	226	270	100
65-40-250/ 02202	180M	✗	✗	65	40	100	169	80	350	370	15	-	225	166	180	347	391	943	987	343	241	-	-	368	279	179	23	-	226	270	100
65-40-315/ 01852	160L	✗	-	65	40	125	207	70	350	325	15	-	250	204	160	354	408	953	1007	314	254	-	-	323	254	207	21	20	246	300	100
65-40-315/ 02202	180M	✗	-	65	40	125	207	80	350	370	15	-	250	204	180	367	421	988	1042	343	241	-	-	368	279	207	23	-	246	300	100
65-50-125/ 00302	100L	✗	-	65	50	100	117	-	250	213	-	160	160	112	-	118	118	660	704	-	-	225	130	-	-	130	-	-	170	214	100
65-50-125/ 00402	112M	✗	-	65	50	100	117	-	250	235	-	160	160	112	-	118	118	642	686	-	-	225	130	-	-	130	-	-	170	214	100
65-50-125/ 00552	132S	✗	✗	65	50	100	117	55	300	274	12	-	160	112	132	282	326	706	750	220	140	-	-	270	216	130	15	20	193	237	100
65-50-125/ 00752	132S	✗	✗	65	50	100	117	55	300	274	12	-	160	112	132	282	326	750	794	220	140	-	-	270	216	130	15	20	193	237	100
65-50-125/ 01102	160M	-	✗	65	50	100	117	70	350	325	15	-	160	112	160	334	378	872	916	310	210	-	-	323	254	130	21	20	226	270	100
65-50-125/ 01502	160M	-	✗	65	50	100	117	70	350	325	15	-	160	112	160	334	378	872	916	310	210	-	-	323	254	130	21	20	226	270	100
65-50-160/ 00552	132S	✗	-	65	50	100	128	55	300	274	12	-	180	133	132	282	326	706	750	220	140	-	-	270	216	149	15	20	193	237	100
65-50-160/ 00752	132S	✗	-	65	50	100	128	55	300	274	12	-	180	133	132	282	326	750	794	220	140	-	-	270	216	149	15	20	193	237	100
65-50-160/ 01102	160M	✗	✗	65	50	100	128	70	350	325	15	-	180	133	160	334	378	872	916	310	210	-	-	323	254	149	21	20	226	270	100
65-50-160/ 01502	160M	-	✗	65	50	100	128	70	350	325	15	-	180	133	160	334	378	872	916	310	210	-	-	323	254	149	21	20	226	270	100
65-50-160/ 01852	160L	-	✗	65	50	100	128	70	350	325	15	-	180	133	160	334	378	908	952	314	254	-	-	323	254	149	21	20	226	270	100
65-50-160/ 02202	180M	-	✗	65	50	100	128	80	350	370	15	-	180	133	180	347	391	943	987	343	241	-	-	368	279	149	23	-	226	270	100
65-50-200/ 01102	160M	✗	-	65	50	100	144	70	350	325	15	-	200	150	160	334	378	872	916	310	210	-	-	323	254	163	21	20	226	270	100
65-50-200/ 01502	160M	✗	-	65	50	100	144	70	350	325	15	-	200	150	160	334	378	872	916	310	210	-	-	323	254	163	21	20	226	270	100
65-50-200/ 01852	160L	✗	-	65	50	100	144	70	350	325	15	-	200	150	160	334	378	908	952	314	254	-	-	323	254	163	21	20	226	270	100
65-50-200/ 02202	180M	✗	✗	65	50	100	144	80	350	370	15	-	200	150	180	347	391	943	987	343	241	-	-	368	279	163	23	-	226	270	100
65-50-250/ 01502	160M	✗	-	65	50	100	170	70	350	325	15	-	225	172	160	334	378	872	916	310	210	-	-	323	254	186	21	20	226	270	100
65-50-250/ 01852	160L	✗	-	65	50	100	170	70	350	325	15	-	225	172	160	334	378	908	952	314	254	-	-	323	254	186	21	20	226	270	100
65-50-250/ 02202	180M	✗	✗	65	50	100	170	80	350	370	15	-	225	172	180	347	391	943	987	343	241	-	-	368	279	186	23	-	226	270	100
80-65-125/ 00402	112M	✗	-	80	65	100	117	-	250	235	-	160	180	127	-	118	118	642	686	-	-	225	130	-	-	150	-	-	170	214	100
80-65-125/ 00552	132S	✗	-	80	65	100	117	55	300	274	12	-	180	127	132	282	326	706	750	220	140	-	-	270	216	150	15	20	193	237	100
80-65-125/ 00752	132S	✗	✗	80	65	100	117	55	300	274	12	-	180	127	132	282	326	750	794	220	140	-	-	270	216	150	15	20	193	237	100
80-65-125/ 01102	160M	✗	✗	80	65	100	117	70	350	325	15	-	180	127	160	334	378	872	916	310	210	-	-	323	254	150	21	20	226	270	100
80-65-125/ 01502	160M	-	✗	80	65	100	117	70	350	325	15	-	180	127	160	334	378	872	916	310	210	-	-	323	254	150	21	20	226	270	100
80-65-125/ 01852	160L	-	✗	80	65	100	117	70	350	325	15	-	180	127	160	334	378	908	952	314	254	-	-	323	254	150	21	20	226	270	100
80-65-160/ 00752	132S	✗	-	80	65	100	132	55	300	274	12	-	200	140	132	282	326	750	794	220	140	-	-	270	216	160	15	20	193	237	100
80-65-160/ 01102	160M	✗	-	80	65	100	132	70	350	325	15	-	200	140	160	334	378	872	916	310	210	-	-	323	254	160	21	20	226	270	100
80-65-160/ 01502	160M	✗	✗	80	65	100	132	70	350	325	15	-	200	140	160	334	378	872	916	310	210	-	-	323	254	160	21	20	226	270	100
80-65-160/ 01852	160L	-	✗	80	65	100	132	70	350	325	15	-	200	140	160	334	378	908	952	314	254	-	-	323	254	160	21	20	226	270	100

Etabloc	Motor (IEC)	n		DN_1 401)	DN_2 401)	a 401)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 401)	h_3	h_4	i 402)	i 403)	l_1 402)	l_1 403)	m_3	m_4	n_1	n_2	n_3	n_4	p	s_2	u 404)	w 402)	w 403)	x 401)
		2900	3500																												
		[rpm]		[mm]																											
80-65-160/ 02202	180M	-	✗	80	65	100	132	80	350	370	15	-	200	140	180	347	391	943	987	343	241	-	-	368	279	160	23	-	226	270	100
80-65-200/ 01502	160M	✗	-	80	65	100	155	70	350	325	15	-	225	161	160	334	378	872	916	310	210	-	-	323	254	178	21	20	226	270	140
80-65-200/ 01852	160L	✗	-	80	65	100	155	70	350	325	15	-	225	161	160	334	378	908	952	314	254	-	-	323	254	178	21	20	226	270	140
80-65-200/ 02202	180M	✗	✗	80	65	100	155	80	350	370	15	-	225	161	180	347	391	943	987	343	241	-	-	368	279	178	23	-	226	270	140
80-65-250/ 02202	180M	✗	-	80	65	100	179	80	350	370	15	-	250	185	180	367	421	963	1017	343	241	-	-	368	279	199	23	-	246	300	140
100-80-160/ 01502	160M	✗	-	100	80	125	138	70	350	325	15	-	225	153	160	334	378	897	941	310	210	-	-	323	254	174	21	20	226	270	140
100-80-160/ 01852	160L	✗	-	100	80	125	138	70	350	325	15	-	225	153	160	334	378	933	977	314	254	-	-	323	254	174	21	20	226	270	140
100-80-160/ 02202	180M	✗	✗	100	80	125	138	80	350	370	15	-	225	153	180	347	391	968	1012	343	241	-	-	368	279	174	23	-	226	270	140
100-80-200/ 01852	160L	✗	-	100	80	125	159	70	350	325	15	-	250	170	160	354	408	953	1007	314	254	-	-	323	254	188	21	20	246	300	140
100-80-200/ 02202	180M	✗	-	100	80	125	159	80	350	370	15	-	250	170	180	367	421	988	1042	343	241	-	-	368	279	188	23	-	246	300	140
125-100-160/ 02202	180M	✗	-	125	100	125	178	80	350	370	15	-	280	199	180	367	421	988	1042	343	241	-	-	368	279	225	23	-	246	300	140

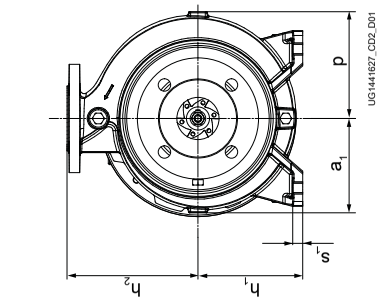
Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

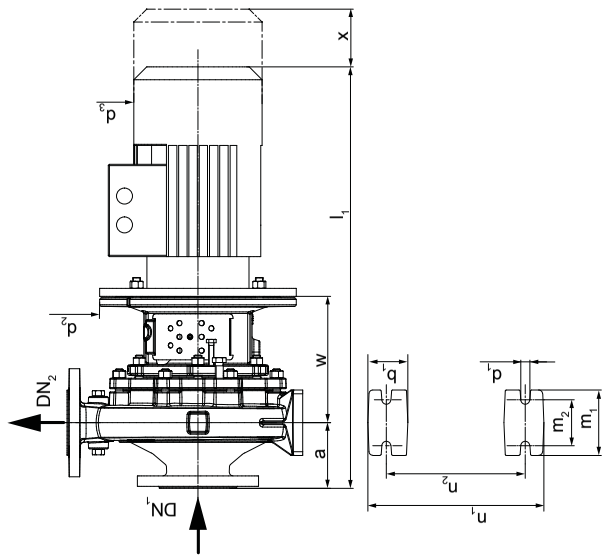
Pump set with volute casing foot and motor foot (fixed speed version), ≤ 22 kW, n = 2900 rpm / 3500 rpm





Pump set with volute casing foot and motor foot (motor sizes 132 to 180)





Pump set with volute casing foot (up to motor size 112)

n = 2900 rpm / n = 3500 rpm, material variants BB / CC / SG / SB / SC

Dimensions of Etabloc ≤ 22 kW[405)]
Values a_1, b_1, b_4, d_3, l_1, m_1, m_3, n_3 and p may vary slightly for production-related reasons.

Etabloc	Motor (IEC)	n		DN_1 406)	DN_2 406)	a 406)	a_1	b_1 406)	b_4	d_1 406)	d_2	d_3	d_4	h_1 406)	h_2 406)	h_4	i 407)	i 408)	l_1 407)	l_1 408)	m_1 406)	m_2 406)	m_3	m_4	n_1 406)	n_2 406)	n_3	n_4	p	s_1 406)	s_2	u 409)	w 407)	w 408)	x 406)
		2900	3500	[mm]																														
		[rpm]																																
40-25-160/ 00072	80M	✗	-	40	25	80	118	50	-	14	200	162	-	132	160	-	-	-	501	-	100	70	-	-	240	190	-	-	118	15	-	-	156	-	100
40-25-160/ 00112	80M	✗	✗	40	25	80	118	50	-	14	200	162	-	132	160	-	-	-	537	-	100	70	-	-	240	190	-	-	118	15	-	-	156	-	100
40-25-160/ 00152	90S	✗	✗	40	25	80	118	50	-	14	200	190	-	132	160	-	-	-	590	634	100	70	-	-	240	190	-	-	118	15	-	-	156	200	100
40-25-160/ 00222	90L	✗	✗	40	25	80	118	50	-	14	200	190	-	132	160	-	-	-	590	634	100	70	-	-	240	190	-	-	118	15	-	-	156	200	100
40-25-160/ 00302	100L	-	✗	40	25	80	118	50	-	14	250	213	-	132	160	-	-	-	640	684	100	70	-	-	240	190	-	-	118	15	-	-	170	214	100
40-25-160/ 00402	112M	-	✗	40	25	80	118	50	-	14	250	235	-	132	160	-	-	-	622	666	100	70	-	-	240	190	-	-	118	15	-	-	170	214	100
40-25-200/ 00152	90S	✗	-	40	25	80	142	50	-	14	200	190	-	160	180	-	-	-	590	634	100	70	-	-	240	190	-	-	142	15	-	-	156	200	100
40-25-200/ 00222	90L	✗	-	40	25	80	142	50	-	14	200	190	-	160	180	-	-	-	590	634	100	70	-	-	240	190	-	-	142	15	-	-	156	200	100
40-25-200/ 00302	100L	✗	✗	40	25	80	142	50	-	14	250	213	-	160	180	-	-	-	640	684	100	70	-	-	240	190	-	-	142	15	-	-	170	214	100
40-25-200/ 00402	112M	✗	✗	40	25	80	142	50	-	14	250	235	-	160	180	-	-	-	622	666	100	70	-	-	240	190	-	-	142	15	-	-	170	214	100
40-25-200/ 00552	132S	✗	✗	40	25	80	142	50	55	14	300	274	12	160	180	132	282	326	686	730	100	70	220	140	240	190	270	216	142	15	15	20	193	237	100
40-25-200/ 00752	132S	-	✗	40	25	80	142	50	55	14	300	274	12	160	180	132	282	326	730	774	100	70	220	140	240	190	270	216	142	15	15	20	193	237	100
50-32-125/ 00112	80M	✗	-	50	32	80	115	50	-	14	200	162	-	112	140	-	-	-	537	-	100	70	-	-	190	140	-	-	115	15	-	-	156	-	100
50-32-125/ 00152	90S	✗	✗	50	32	80	115	50	-	14	200	190	-	112	140	-	-	-	590	634	100	70	-	-	190	140	-	-	115	15	-	-	156	200	100
50-32-125/ 00222	90L	✗	✗	50	32	80	115	50	-	14	200	190	-	112	140	-	-	-	590	634	100	70	-	-	190	140	-	-	115	15	-	-	156	200	100
50-32-125/ 00302	100L	✗	✗	50	32	80	115	50	-	14	250	213	-	112	140	-	-	-	640	684	100	70	-	-	190	140	-	-	115	15	-	-	170	214	100
50-32-125/ 00402	112M	-	✗	50	32	80	115	50	-	14	250	235	-	112	140	-	-	-	622	666	100	70	-	-	190	140	-	-	115	15	-	-	170	214	100
50-32-125/ 00552	132S	-	✗	50	32	80	115	50	55	14	300	274	12	112	140	132	282	326	686	730	100	70	220	140	190	140	270	216	115	15	15	20	193	237	100
50-32-125.1/ 00052	71M	✗	-	50	32	80	116	50	-	14	160	145	-	112	140	-	-	-	453	-	100	70	-	-	190	140	-	-	116	15	-	-	136	-	100
50-32-125.1/ 00072	80M	✗	-	50	32	80	116	50	-	14	200	162	-	112	140	-	-	-	501	-	100	70	-	-	190	140	-	-	116	15	-	-	156	-	100
50-32-125.1/ 00112	80M	✗	-	50	32	80	116	50	-	14	200	162	-	112	140	-	-	-	537	-	100	70	-	-	190	140	-	-	116	15	-	-	156	-	100
50-32-125.1/ 00152	90S	✗	-	50	32	80	116	50	-	14	200	190	-	112	140	-	-	-	590	634	100	70	-	-	190	140	-	-	116	15	-	-	156	200	100
50-32-125.1/ 00222	90L	✗	-	50	32	80	116	50	-	14	200	190	-	112	140	-	-	-	590	634	100	70	-	-	190	140	-	-	116	15	-	-	156	200	100
50-32-125.1/ 00302	100L	-	✗	50	32	80	116	50	-	14	250	213	-	112	140	-	-	-	640	684	100	70	-	-	190	140	-	-	116	15	-	-	170	214	100
50-32-125.1/ 00402	112M	-	✗	50	32	80	116	50	-	14	250	235	-	112	140	-	-	-	622	666	100	70	-	-	190	140	-	-	116	15	-	-	170	214	100
50-32-125.1/ 00552	132S	-	✗	50	32	80	116	50	55	14	300	274	12	112	140	132	282	326	686	730	100	70	220	140	190	140	270	216	116	15	15	20	193	237	100
50-32-160/ 00222	90L	✗	-	50	32	80	118	50	-	14	200	190	-	132	160	-	-	-	590	634	100	70	-	-	240	190	-	-	128	15	-	-	156	200	100
50-32-160/ 00302	100L	✗	✗	50	32	80	118	50	-	14	250	213	-	132	160	-	-	-	640	684	100	70	-	-	240	190	-	-	128	15	-	-	170	214	100
50-32-160/ 00402	112M	✗	✗	50	32	80	118	50	-	14	250	235	-	132	160	-	-	-	622	666	100	70	-	-	240	190	-	-	128	15	-	-	170	214	100
50-32-160/ 00552	132S	-	✗	50	32	80	118	50	55	14	300	274	12	132	160	132	282	326	686	730	100	70	220	140	240	190	270	216	128	15	15	20	193	237	100
50-32-160/ 00752	132S	-	✗	50	32	80	118	50	55	14	300	274	12	132	160	132	282	326	730	774	100	70	220	140	240	190	270	216	128	15	15	20	193	237	100

405 Tolerances of mating dimensions to EN 735
406 Dimensions to EN 733
407 Dimension with single mechanical seal (A, IA, EA, FA)
408 Dimension with double mechanical seal (DB, TI)
409 Motor feet must be shimmed.

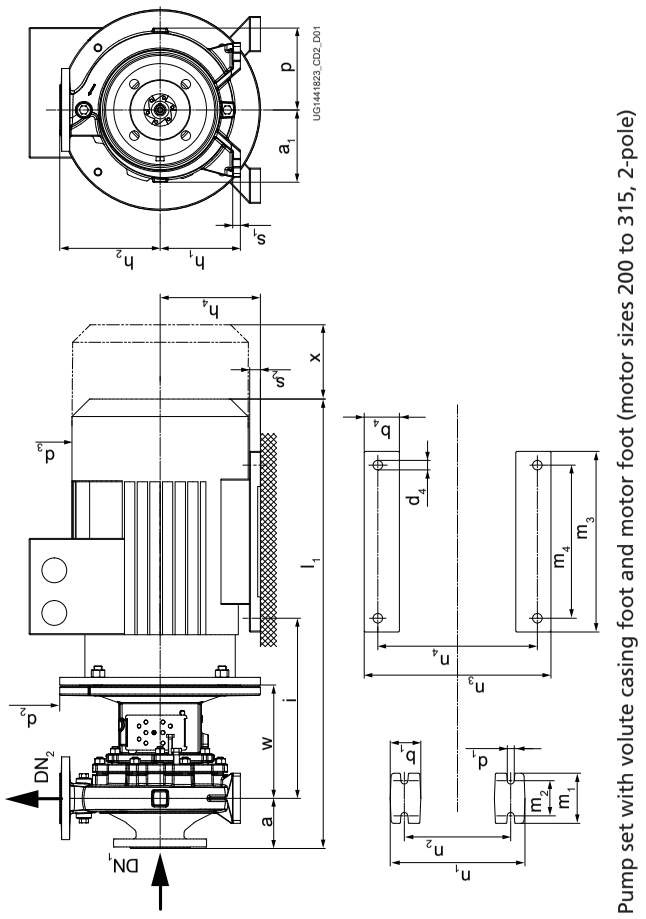
Etabloc	Motor (IEC)	n		DN_1 406)	DN_2 406)	a 406)	a_1	b_1 406)	b_4	d_1 406)	d_2	d_3	d_4	h_1 406)	h_2 406)	h_4	i 407)	i 408)	l_1 407)	l_1 408)	m_1 406)	m_2 406)	m_3	m_4	n_1 406)	n_2 406)	n_3	n_4	p	s_1 406)	s_2	u 409)	w 407)	w 408)	x 406)
		2900	3500																															
		[rpm]		[mm]																														
50-32-160.1/ 00152	90S	✗	-	50	32	80	116	50	-	14	200	190	-	132	160	-	-	-	590	634	100	70	-	-	240	190	-	-	121	15	-	-	156	200	100
50-32-160.1/ 00222	90L	✗	✗	50	32	80	116	50	-	14	200	190	-	132	160	-	-	-	590	634	100	70	-	-	240	190	-	-	121	15	-	-	156	200	100
50-32-160.1/ 00302	100L	✗	✗	50	32	80	116	50	-	14	250	213	-	132	160	-	-	-	640	684	100	70	-	-	240	190	-	-	121	15	-	-	170	214	100
50-32-160.1/ 00402	112M	✗	✗	50	32	80	116	50	-	14	250	236	-	132	160	-	-	-	622	666	100	70	-	-	240	190	-	-	121	15	-	-	170	214	100
50-32-160.1/ 00552	132S	-	✗	50	32	80	116	50	55	14	300	274	12	132	160	132	282	326	686	730	100	70	220	140	240	190	270	216	121	15	15	20	193	237	100
50-32-160.1/ 00752	132S	-	✗	50	32	80	116	50	55	14	300	274	12	132	160	132	282	326	730	774	100	70	220	140	240	190	270	216	121	15	15	20	193	237	100
50-32-160.1/ 01102	160M	-	✗	50	32	80	116	50	70	14	350	325	15	132	160	160	334	378	853	896	100	70	310	210	240	190	323	254	121	15	21	20	226	270	100
50-32-200/ 00402	112M	✗	-	50	32	80	142	50	-	14	250	235	-	160	180	-	-	-	622	666	100	70	-	-	240	190	-	-	143	18	-	-	170	214	100
50-32-200/ 00552	132S	✗	-	50	32	80	142	50	55	14	300	274	12	160	180	132	282	326	686	730	100	70	220	140	240	190	270	216	143	18	15	20	193	237	100
50-32-200/ 00752	132S	✗	✗	50	32	80	142	50	55	14	300	274	12	160	180	132	282	326	730	774	100	70	220	140	240	190	270	216	143	18	15	20	193	237	100
50-32-200/ 01102	160M	✗	✗	50	32	80	142	50	70	14	350	325	15	160	180	160	334	378	852	896	100	70	310	210	240	190	323	254	143	18	21	20	226	270	100
50-32-200/ 01502	160M	-	✗	50	32	80	142	50	70	14	350	325	15	160	180	160	334	378	852	896	100	70	310	210	240	190	323	254	143	18	21	20	226	270	100
50-32-200.1/ 00302	100L	✗	-	50	32	80	142	50	-	14	250	213	-	160	180	-	-	-	640	684	100	70	-	-	240	190	-	-	142	18	-	-	170	214	100
50-32-200.1/ 00402	112M	✗	-	50	32	80	142	50	-	14	250	235	-	160	180	-	-	-	622	666	100	70	-	-	240	190	-	-	142	18	-	-	170	214	100
50-32-200.1/ 00552	132S	✗	✗	50	32	80	142	50	55	14	300	274	12	160	180	132	282	326	686	730	100	70	220	140	240	190	270	216	142	18	15	20	193	237	100
50-32-200.1/ 00752	132S	✗	✗	50	32	80	142	50	55	14	300	274	12	160	180	132	282	326	730	774	100	70	220	140	240	190	270	216	142	18	15	20	193	237	100
50-32-200.1/ 01102	160M	-	✗	50	32	80	142	50	70	14	350	325	15	160	180	160	334	378	852	896	100	70	310	210	240	190	323	254	142	18	21	20	226	270	100
50-32-200.1/ 01502	160M	-	✗	50	32	80	142	50	70	14	350	325	15	160	180	160	334	378	852	896	100	70	310	210	240	190	323	254	142	18	21	20	226	270	100
50-32-250/ 00752	132S	✗	-	50	32	100	169	65	55	14	300	274	12	180	225	132	282	326	750	794	125	95	220	140	320	250	270	216	178	18	15	20	193	237	100
50-32-250/ 01102	160M	✗	✗	50	32	100	169	65	70	14	350	325	15	180	225	160	334	378	872	916	125	95	310	210	320	250	323	254	178	18	21	20	226	270	100
50-32-250/ 01502	160M	✗	✗	50	32	100	169	65	70	14	350	325	15	180	225	160	334	378	872	916	125	95	310	210	320	250	323	254	178	18	21	20	226	270	100
50-32-250/ 01852	160L	-	✗	50	32	100	169	65	70	14	350	325	15	180	225	160	334	378	908	952	125	95	314	254	320	250	323	254	178	18	21	20	226	270	100
50-32-250/ 02202	180M	-	✗	50	32	100	169	65	80	14	350	370	15	180	225	180	347	391	943	987	125	95	343	241	320	250	368	279	178	18	23	-	226	270	100
50-32-250.1/ 00552	132S	✗	-	50	32	100	168	65	55	14	300	274	12	180	225	132	282	326	706	750	125	95	220	140	320	250	270	216	168	18	15	20	193	237	100
50-32-250.1/ 00752	132S	✗	✗	50	32	100	168	65	55	14	300	274	12	180	225	132	282	326	750	794	125	95	220	140	320	250	270	216	168	18	15	20	193	237	100
50-32-250.1/ 01102	160M	✗	✗	50	32	100	168	65	70	14	350	325	15	180	225	160	334	378	872	916	125	95	310	210	320	250	323	254	168	18	21	20	226	270	100
50-32-250.1/ 01502	160M	✗	✗	50	32	100	168	65	70	14	350	325	15	180	225	160	334	378	872	916	125	95	310	210	320	250	323	254	168	18	21	20	226	270	100
50-32-250.1/ 01852	160L	-	✗	50	32	100	168	65	70	14	350	325	15	180	225	160	334	378	908	952	125	95	314	254	320	250	323	254	168	18	21	20	226	270	100
65-40-125/ 00152	90S	✗	-	65	40	80	117	50	-	14	200	190	-	112	140	-	-	-	590	634	100	70	-	-	210	160	-	-	117	15	-	-	156	200	100
65-40-125/ 00222	90L	✗	-	65	40	80	117	50	-	14	200	190	-	112	140	-	-	-	590	634	100	70	-	-	210	160	-	-	117	15	-	-	156	200	100
65-40-125/ 00302	100L	✗	-	65	40	80	117	50	-	14	250	213	-	112	140	-	-	-	640	684	100	70	-	-	210	160	-	-	117	15	-	-	170	214	100
65-40-125/ 00402	112M	✗	✗	65	40	80	117	50	-	14	250	235	-	112	140	-	-	-	622	666	100	70	-	-	210	160	-	-	117	15	-	-	170	214	100
65-40-125/ 00552	132S	-	✗	65	40	80	117	50	55	14	300	274	12	112	140	132	282	326	686	730	100	70	220	140	210	160	270	216	117	15	15	20	193	237	100
65-40-125/ 00752	132S	-	✗	65	40	80	117	50	55	14	300	274	12	112	140	132	282	326	730	774	100	70	220	140	210	160	270	216	117	15	15	20	193	237	100
65-40-125/ 01102	160M	-	✗	65	40	80	117	50	70	14	350	325	15	112	140	160	334	378	852	896	100	70	310	210	210	160	323	254	117	15	21	20	226	270	100
65-40-160/ 00302	100L	✗	-	65	40	80	119	50	-	14	250	213	-	132	160	-	-	-	640	684	100	70	-	-	240	190	-	-	134	15	-	-	170	214	100
65-40-160/ 00402	112M	✗	-	65	40	80	119	50	-	14	250	235	-	132	160	-	-	-	622	666	100	70	-	-	240	190	-	-	134	15	-	-	170	214	100
65-40-160/ 00552	132S	✗	✗	65	40	80	119	50	55	14	300	274	12	132	160	132	282	326	686	730	100	70	220	140	240	190	270	216	134	15	15	20	193	237	100
65-40-160/ 00752	132S	✗	✗	65	40	80	119	50	55	14	300	274	12	132	160	132	282	326	730	774	100	70	220	140	240	190	270	216	134	15	15	20	193	237	100
65-40-160/ 01102	160M	-	✗	65	40	80	119	50	70	14	350	325	15	132	160	160	334	378	852	896	100	70	310	210	240	190	323	254	134	15	21	20	226	270	100
65-40-160/ 01502	160M	-	✗	65	40	80	119	50	70	14	350	325	15	132	160	160	334	378	852	896	100	70	310	210	240	190	323	254	134	15	21	20	226	270	100

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Etabloc	Motor (IEC)	n		DN_1 406)	DN_2 406)	a 406)	a_1	b_1 406)	b_4	d_1 406)	d_2	d_3	d_4	h_1 406)	h_2 406)	h_4	i 407)	i 408)	l_1 407)	l_1 408)	m_1 406)	m_2 406)	m_3	m_4	n_1 406)	n_2 406)	n_3	n_4	p	s_1 406)	s_2	u 409)	w 407)	w 408)	x 406)
		2900	3500																														
		[rpm]		[mm]																														
65-40-200/ 00552	132S	✗	-	65	40	100	142	50	55	14	300	274	12	160	180	132	282	326	706	750	100	70	220	140	265	212	270	216	155	18	15	20	193	237	100
65-40-200/ 00752	132S	✗	-	65	40	100	142	50	55	14	300	274	12	160	180	132	282	326	750	794	100	70	220	140	265	212	270	216	155	18	15	20	193	237	100
65-40-200/ 01102	160M	✗	✗	65	40	100	142	50	70	14	350	325	15	160	180	160	334	378	872	916	100	70	310	210	265	212	323	254	155	18	21	20	226	270	100
65-40-200/ 01502	160M	✗	✗	65	40	100	142	50	70	14	350	325	15	160	180	160	334	378	872	916	100	70	310	210	265	212	323	254	155	18	21	20	226	270	100
65-40-200/ 01852	160L	✗	✗	65	40	100	142	50	70	14	350	325	15	160	180	160	334	378	908	952	100	70	314	254	265	212	323	254	155	18	21	20	226	270	100
65-40-200/ 02202	180M	✗	✗	65	40	100	142	50	80	14	350	370	15	160	180	180	347	391	943	987	100	70	343	241	265	212	368	279	155	18	23	-	226	270	100
65-40-250/ 01102	160M	✗	-	65	40	100	169	65	70	14	350	325	15	180	225	160	334	378	872	916	125	95	310	210	320	250	323	254	179	18	21	20	226	270	100
65-40-250/ 01502	160M	✗	✗	65	40	100	169	65	70	14	350	325	15	180	225	160	334	378	872	916	125	95	310	210	320	250	323	254	179	18	21	20	226	270	100
65-40-250/ 01852	160L	✗	✗	65	40	100	169	65	70	14	350	325	15	180	225	160	334	378	908	952	125	95	314	254	320	250	323	254	179	18	21	20	226	270	100
65-40-250/ 02202	180M	✗	✗	65	40	100	169	65	80	14	350	370	15	180	225	180	347	391	943	987	125	95	343	241	320	250	368	279	179	18	23	-	226	270	100
65-40-315/ 01852	160L	✗	-	65	40	125	207	65	70	14	350	325	15	225	250	160	354	408	953	1007	125	95	314	254	345	280	323	254	207	18	21	20	246	300	100
65-40-315/02202	180M	✗	-	65	40	125	207	65	80	14	350	370	15	225	250	180	367	421	988	1042	125	95	343	241	345	280	368	279	207	18	23	-	246	300	100
65-50-125/ 00302	100L	✗	-	65	50	100	117	50	-	14	250	213	-	132	160	-	-	-	660	704	100	70	-	-	240	190	-	-	130	18	-	-	170	214	100
65-50-125/ 00402	112M	✗	-	65	50	100	117	50	-	14	250	235	-	132	160	-	-	-	642	686	100	70	-	-	240	190	-	-	130	18	-	-	170	214	100
65-50-125/ 00552	132S	✗	✗	65	50	100	117	50	55	14	300	274	12	132	160	132	282	326	706	750	100	70	220	140	240	190	270	216	130	18	15	20	193	237	100
65-50-125/ 00752	132S	✗	✗	65	50	100	117	50	55	14	300	274	12	132	160	132	282	326	750	794	100	70	220	140	240	190	270	216	130	18	15	20	193	237	100
65-50-125/ 01102	160M	-	✗	65	50	100	117	50	70	14	350	325	15	132	160	160	334	378	872	916	100	70	310	210	240	190	323	254	130	18	21	20	226	270	100
65-50-125/ 01502	160M	-	✗	65	50	100	117	50	70	14	350	325	15	132	160	160	334	378	872	916	100	70	310	210	240	190	323	254	130	18	21	20	226	270	100
65-50-160/ 00552	132S	✗	-	65	50	100	128	50	55	14	300	274	12	160	180	132	282	326	706	750	100	70	220	140	265	212	270	216	149	18	15	20	193	237	100
65-50-160/ 00752	132S	✗	-	65	50	100	128	50	55	14	300	274	12	160	180	132	282	326	750	794	100	70	220	140	265	212	270	216	149	18	15	20	193	237	100
65-50-160/ 01102	160M	✗	✗	65	50	100	128	50	70	14	350	325	15	160	180	160	334	378	872	916	100	70	310	210	265	212	323	254	149	18	21	20	226	270	100
65-50-160/ 01502	160M	-	✗	65	50	100	128	50	70	14	350	325	15	160	180	160	334	378	872	916	100	70	310	210	265	212	323	254	149	18	21	20	226	270	100
65-50-160/ 01852	160L	-	✗	65	50	100	128	50	70	14	350	325	15	160	180	160	334	378	908	952	100	70	314	254	265	212	323	254	149	18	21	20	226	270	100
65-50-160/ 02202	180M	-	✗	65	50	100	128	50	80	14	350	370	15	160	180	180	347	391	943	987	100	70	343	241	265	212	368	279	149	18	23	-	226	270	100
65-50-200/ 01102	160M	✗	-	65	50	100	144	50	70	14	350	325	15	160	200	160	334	378	872	916	100	70	310	210	265	212	323	254	163	18	21	20	226	270	100
65-50-200/ 01502	160M	✗	-	65	50	100	144	50	70	14	350	325	15	160	200	160	334	378	872	916	100	70	310	210	265	212	323	254	163	18	21	20	226	270	100
65-50-200/ 01852	160L	✗	-	65	50	100	144	50	70	14	350	325	15	160	200	160	334	378	908	952	100	70	314	254	265	212	323	254	163	18	21	20	226	270	100
65-50-200/ 02202	180M	✗	✗	65	50	100	144	50	80	14	350	370	15	160	200	180	347	391	943	987	100	70	343	241	265	212	368	279	163	18	23	-	226	270	100
65-50-250/ 01502	160M	✗	-	65	50	100	170	65	70	14	350	325	15	180	225	160	334	378	872	916	125	95	310	210	320	250	323	254	186	18	21	20	226	270	100
65-50-250/ 01852	160L	✗	-	65	50	100	170	65	70	14	350	325	15	180	225	160	334	378	908	952	125	95	314	254	320	250	323	254	186	18	21	20	226	270	100
65-50-250/ 02202	180M	✗	✗	65	50	100	170	65	80	14	350	370	15	180	225	180	347	391	943	987	125	95	343	241	320	250	368	279	186	18	23	-	226	270	100
80-65-125/ 00402	112M	✗	-	80	65	100	117	65	-	14	250	235	-	160	180	-	-	-	642	686	125	95	-	-	280	212	-	-	150	18	-	-	170	214	100
80-65-125/ 00552	132S	✗	-	80	65	100	117	65	55	14	300	274	12	160	180	132	282	326	706	750	125	95	220	140	280	212	270	216	150	18	15	20	193	237	100
80-65-125/ 00752	132S	✗	✗	80	65	100	117	65	55	14	300	274	12	160	180	132	282	326	750	794	125	95	220	140	280	212	270	216	150	18	15	20	193	237	100
80-65-125/ 01102	160M	✗	✗	80	65	100	117	65	70	14	350	325	15	160	180	160	334	378	872	916	125	95	310	210	280	212	323	254	150	18	21	20	226	270	100
80-65-125/ 01502	160M	-	✗	80	65	100	117	65	70	14	350	325	15	160	180	160	334	378	872	916	125	95	310	210	280	212	323	254	150	18	21	20	226	270	100
80-65-125/ 01852	160L	-	✗	80	65	100	117	65	70	14	350	325	15	160	180	160	334	378	908	952	125	95	314	254	280	212	323	254	150	18	21	20	226	270	100
80-65-160/ 00752	132S	✗	-	80	65	100	132	65	55	14	300	274	12	160	200	132	282	326	750	794	125	95	220	140	280	212	270	216	160	18	15	20	193	237	100
80-65-160/ 01102	160M	✗	-	80	65	100	132	65	70	14	350	325	15	160	200	160	334	378	872	916	125	95	310	210	280	212	323	254	160	18	21	20	226	270	100
80-65-160/ 01502	160M	✗	✗	80	65	100	132	65	70	14	350	325	15	160	200	160	334	378	872	916	125	95	310	210	280	212	323	254	160	18	21	20	226	270	100
80-65-160/ 01852	160L	-	✗	80	65	100	132	65	70	14	350	325	15	160	200	160	334	378	908	952	125	95	314	254	280	212	323	254	160	18	21	20	226	270	100

Etabloc	Motor (IEC)	n		DN_1 406)	DN_2 406)	a 406)	a_1	b_1 406)	b_4	d_1 406)	d_2	d_3	d_4	h_1 406)	h_2 406)	h_4	i 407)	i 408)	l_1 407)	l_1 408)	m_1 406)	m_2 406)	m_3	m_4	n_1 406)	n_2 406)	n_3	n_4	p	s_1 406)	s_2	u 409)	w 407)	w 408)	x 406)
		2900	3500																															
		[rpm]		[mm]																														
80-65-160/ 02202	180M	-	✗	80	65	100	132	65	80	14	350	370	15	160	200	180	347	391	943	987	125	95	343	241	280	212	368	279	160	18	23	-	226	270	100
80-65-200/ 01502	160M	✗	-	80	65	100	155	65	70	14	350	325	15	180	225	160	334	378	872	916	125	95	310	210	320	250	323	254	178	18	21	20	226	270	140
80-65-200/ 01852	160L	✗	-	80	65	100	155	65	70	14	350	325	15	180	225	160	334	378	908	952	125	95	314	254	320	250	323	254	178	18	21	20	226	270	140
80-65-200/ 02202	180M	✗	✗	80	65	100	155	65	80	14	350	370	15	180	225	180	347	391	943	987	125	95	343	241	320	250	368	279	178	18	23	-	226	270	140
80-65-250/ 02202	180M	✗	-	80	65	100	179	80	80	19	350	370	15	200	250	180	367	421	963	1017	160	120	343	241	360	280	368	279	199	20	23	-	246	300	140
100-80-160/ 01502	160M	✗	-	100	80	125	138	65	70	14	350	325	15	180	225	160	334	378	897	941	125	95	310	210	320	250	323	254	174	18	21	20	226	270	140
100-80-160/ 01852	160L	✗	-	100	80	125	138	65	70	14	350	325	15	180	225	160	334	378	933	977	125	95	314	254	320	250	323	254	174	18	21	20	226	270	140
100-80-160/ 02202	180M	✗	✗	100	80	125	138	65	80	14	350	370	15	180	225	180	347	391	968	1012	125	95	343	241	320	250	368	279	174	18	23	-	226	270	140
100-80-200/ 01852	160L	✗	-	100	80	125	159	65	70	14	350	325	15	180	250	160	354	408	953	1007	125	95	314	254	345	280	323	254	188	18	21	20	246	300	140
100-80-200/ 02202	180M	✗	-	100	80	125	159	65	80	14	350	370	15	180	250	180	367	421	988	1042	125	95	343	241	345	280	368	279	188	18	23	-	246	300	140
125-100-160/ 02202	180M	✗	-	125	100	125	178	80	80	19	350	370	15	200	280	180	367	421	988	1042	160	120	343	241	360	280	368	279	225	18	23	-	246	300	140

Pump set with volute casing foot and motor foot (fixed speed version), 30 kW to 110 kW, n = 2900 rpm / 3500 rpm



Pump set with volute casing foot and motor foot (motor sizes 200 to 315, 2-pole)

n = 2900 rpm / n = 3500 rpm, material variants GG / GB / GC / BB / CC / SG / SB / SC

Dimensions of Etabloc 30 kW to 110 kW[410)]
Values a_1, b_1 , b_4, d_3, l_1, m_1, m_3, n_3 and p may vary slightly for production-related reasons.

Etabloc	Motor (IEC)	n		DN_1 411)	DN_2 411)	a 411)	a_1	b_1 411)	b_4	d_1 411)	d_2	d_3	d_4	h_1 411)	h_2 411)	h_4	i 412)	i 413)	l_1 412)	l_1 413)	m_1 411)	m_2 411)	m_3	m_4	n_1 411)	n_2 411)	n_3	n_4	p	s_1 411)	s_2	w 412)	w 413)	x 411)
		2900	3500	[mm]																													
		[rpm]																															
50-32-250/ 03002	200L	-	✘	50	32	100	169	65	85	14	400	422	19	180	225	200	359	397	995	1033	125	95	388	305	320	250	404	318	178	18	30	226	264	100
65-40-250/ 03002	200L	✘	✘	65	40	100	169	65	85	14	400	422	19	180	225	200	359	397	995	1033	125	95	388	305	320	250	404	318	179	18	30	226	264	100
65-40-250/ 03702	200L	-	✘	65	40	100	169	65	85	14	400	422	19	180	225	200	359	397	995	1033	125	95	388	305	320	250	404	318	179	18	30	226	264	100
65-40-315/ 03002	200L	✘	-	65	40	125	207	65	85	14	400	422	19	225	250	200	379	437	1040	1098	125	95	388	305	345	280	404	318	207	18	30	246	304	100
65-40-315/ 03702	200L	✘	-	65	40	125	207	65	85	14	400	422	19	225	250	200	379	437	1040	1098	125	95	388	305	345	280	404	318	207	18	30	246	304	100
65-40-315/ 04502	225M	✘	-	65	40	125	207	65	100	14	450	468	19	225	250	225	426	483	1157	1214	125	95	412	311	345	280	458	356	207	18	35	277	334	100
65-50-200/ 03002	200L	✘	✘	65	50	100	144	50	85	14	400	422	19	160	200	200	359	397	995	1033	100	70	388	305	265	212	404	318	163	18	30	226	264	100
65-50-200/ 03702	200L	-	✘	65	50	100	144	50	85	14	400	422	19	160	200	200	359	397	995	1033	100	70	388	305	265	212	404	318	163	18	30	226	264	100
65-50-250/ 03002	200L	✘	✘	65	50	100	170	65	85	14	400	422	19	180	225	200	359	397	995	1033	125	95	388	305	320	250	404	318	186	18	30	226	264	100
65-50-250/ 03702	200L	✘	✘	65	50	100	170	65	85	14	400	422	19	180	225	200	359	397	995	1033	125	95	388	305	320	250	404	318	186	18	30	226	264	100
65-50-315/ 03702	200L	✘	-	65	50	125	207	65	85	14	400	422	19	225	280	200	379	437	1040	1098	125	95	388	305	345	280	404	318	215	18	30	246	304	100
65-50-315/ 04502	225M	✘	-	65	50	125	207	65	100	14	450	468	19	225	280	225	426	483	1157	1214	125	95	412	311	345	280	458	356	215	18	35	277	334	100
65-50-315/ 05502	250M	✘	-	65	50	125	207	65	100	14	550	520	24	225	280	250	457	502	1231	1276	125	95	467	349	345	280	531	406	215	18	40	289	334	100
65-50-315/ 07502	280S	✘	-	65	50	125	207	65	100	14	550	580	24	225	280	280	479	524	1339	1384	125	95	517	368	345	280	585	457	215	18	40	289	334	100
80-65-160/ 03002	200L	-	✘	80	65	100	132	65	85	14	400	422	19	160	200	200	359	397	995	1033	125	95	388	305	280	212	404	318	160	18	30	226	264	100
80-65-200/ 03002	200L	✘	✘	80	65	100	155	65	85	14	400	422	19	180	225	200	359	397	995	1033	125	95	388	305	320	250	404	318	178	18	30	226	264	140
80-65-200/ 03702	200L	✘	✘	80	65	100	155	65	85	14	400	422	19	180	225	200	359	397	995	1033	125	95	388	305	320	250	404	318	178	18	30	226	264	140
80-65-250/ 03002	200L	✘	-	80	65	100	179	80	85	19	400	422	19	200	250	200	379	437	1015	1073	160	120	388	305	360	280	404	318	199	20	30	246	304	140
80-65-250/ 03702	200L	✘	✘	80	65	100	179	80	85	19	400	422	19	200	250	200	379	437	1015	1073	160	120	388	305	360	280	404	318	199	20	30	246	304	140
80-65-250/ 04502	225M	✘	✘	80	65	100	179	80	100	19	450	468	19	200	250	225	426	483	1132	1189	160	120	412	311	360	280	458	356	199	20	35	277	334	140
80-65-250/ 05502	250M	-	✘	80	65	100	179	80	100	19	550	520	24	200	250	250	457	502	1206	1251	160	120	467	349	360	280	531	406	199	20	40	289	334	140
80-65-250/ 07502	280S	-	✘	80	65	100	179	80	100	19	550	580	24	200	250	280	479	524	1314	1359	160	120	517	368	360	280	585	457	199	20	40	289	334	140
80-65-315/ 04502	225M	✘	-	80	65	100	179	80	100	19	450	468	19	200	250	225	426	483	1132	1189	160	120	412	311	360	280	458	356	199	20	35	277	334	140
80-65-315/ 05502	250M	✘	-	80	65	100	179	80	100	19	550	520	24	200	250	250	457	502	1206	1251	160	120	467	349	360	280	531	406	199	20	40	289	334	140
80-65-315/ 07502	280S	✘	-	80	65	100	179	80	100	19	550	580	24	200	250	280	479	524	1314	1359	160	120	517	368	360	280	585	457	199	20	40	289	334	140
80-65-315/ 09002	280M	✘	-	80	65	100	179	80	100	19	550	580	24	200	250	280	479	524	1369	1414	160	120	530	419	360	280	585	457	199	20	40	289	334	140
100-80-160/ 03002	200L	✘	✘	100	80	125	138	65	85	14	400	422	19	180	225	200	359	397	1020	1058	125	95	388	305	320	250	404	318	174	18	30	226	264	140
100-80-160/ 03702	200L	-	✘	100	80	125	138	65	85	14	400	422	19	180	225	200	359	397	1020	1058	125	95	388	305	320	250	404	318	174	18	30	226	264	140
100-80-200/ 03002	200L	✘	-	100	80	125	159	65	85	14	400	422	19	180	250	200	379	437	1040	1098	125	95	388	305	345	280	404	318	188	18	30	246	304	140
100-80-200/ 03702	200L	✘	-	100	80	125	159	65	85	14	400	422	19	180	250	200	379	437	1040	1098	125	95	388	305	345	280	404	318	188	18	30	246	304	140
100-80-200/ 04502	225M	✘	-	100	80	125	159	65	100	14	450	468	19	180	250	225	426	483	1157	1214	125	95	412	311	345	280	458	356	188	18	35	277	334	140

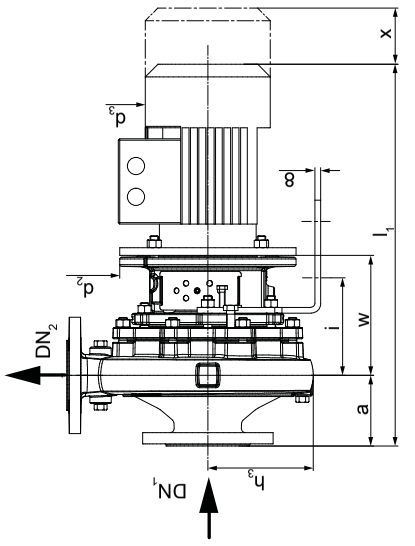
410 Tolerances of mating dimensions to EN 735
411 Dimensions to EN 733
412 Dimension with single mechanical seal (A, IA, EA, FA)
413 Dimension with double mechanical seal (DB, TI)

Etabloc	Motor (IEC)	n		DN_1 411)	DN_2 411)	a 411)	a_1	b_1 411)	b_4	d_1 411)	d_2	d_3	d_4	h_1 411)	h_2 411)	h_4	i 412)	i 413)	l_1 412)	l_1 413)	m_1 411)	m_2 411)	m_3	m_4	n_1 411)	n_2 411)	n_3	n_4	p	s_1 411)	s_2	w 412)	w 413)	x 411)
		2900	3500																														
		[rpm]		[mm]																														
100-80-200/ 05502	250M	-	✗	100	80	125	159	65	100	14	550	520	24	180	250	250	457	502	1231	1276	125	95	467	349	345	280	531	406	188	18	40	289	334	140
100-80-200/ 07502	280S	-	✗	100	80	125	159	65	100	14	550	580	24	180	250	280	479	524	1339	1384	125	95	517	368	345	280	585	457	188	18	40	289	334	140
100-80-250/ 03002	200L	✗	-	100	80	125	183	80	85	19	400	422	19	200	280	200	379	437	1040	1098	160	120	388	305	400	315	404	318	209	18	30	246	304	140
100-80-250/ 03702	200L	✗	-	100	80	125	183	80	85	19	400	422	19	200	280	200	379	437	1040	1098	160	120	388	305	400	315	404	318	209	18	30	246	304	140
100-80-250/ 04502	225M	✗	-	100	80	125	183	80	100	19	450	468	19	200	280	225	426	483	1157	1214	160	120	412	311	400	315	458	356	209	18	35	277	334	140
100-80-250 /05502	250M	✗	✗	100	80	125	183	80	100	19	550	520	24	200	280	250	457	502	1231	1276	160	120	467	349	400	315	531	406	209	18	40	289	334	140
100-80-250/ 07502	280S	✗	✗	100	80	125	183	80	100	19	550	580	24	200	280	280	479	524	1339	1384	160	120	517	368	400	315	585	457	209	18	40	289	334	140
100-80-250/ 09002	280M	-	✗	100	80	125	183	80	100	19	550	580	24	200	280	280	479	524	1394	1439	160	120	530	419	400	315	585	457	209	18	40	289	334	140
100-80-250/ 11002	315S	-	✗	100	80	125	183	80	132	19	650	664	28	200	280	315	595	595	1584	1584	160	120	621	406	400	315	662	508	209	18	50	379	379	140
100-80-315/ 07502	280S	✗	-	100	80	125	218	80	100	19	550	580	24	250	315	280	479	524	1339	1384	160	120	517	368	400	315	585	457	242	20	40	289	334	140
100-80-315/ 09002	280M	✗	-	100	80	125	218	80	100	19	550	580	24	250	315	280	479	524	1394	1439	160	120	530	419	400	315	585	457	242	20	40	289	334	140
100-80-315/ 11002	315S	✗	-	100	80	125	218	80	132	19	650	664	28	250	315	315	595	595	1584	1584	160	120	621	406	400	315	662	508	242	20	50	379	379	140
125-100-160/ 03002	200L	✗	-	125	100	125	178	80	85	19	400	422	19	200	280	200	379	437	1040	1098	160	120	388	305	360	280	404	318	225	18	30	246	304	140
125-100-160/ 03702	200L	✗	✗	125	100	125	178	80	85	19	400	422	19	200	280	200	379	437	1040	1098	160	120	388	305	360	280	404	318	225	18	30	246	304	140
125-100-160/ 04502	225M	-	✗	125	100	125	178	80	100	19	450	468	19	200	280	225	426	483	1157	1214	160	120	412	311	360	280	458	356	225	18	35	277	334	140
125-100-160/ 05502	250M	-	✗	125	100	125	178	80	100	19	550	520	24	200	280	250	457	502	1231	1276	160	120	467	349	360	280	531	406	225	18	40	289	334	140
125-100-200/ 03002	200L	✗	-	125	100	125	173	80	85	19	400	422	19	200	280	200	379	437	1040	1098	160	120	388	305	360	280	404	318	212	18	30	246	304	140
125-100-200/ 03702	200L	✗	-	125	100	125	173	80	85	19	400	422	19	200	280	200	379	437	1040	1098	160	120	388	305	360	280	404	318	212	18	30	246	304	140
125-100-200/ 04502	225M	✗	-	125	100	125	173	80	100	19	450	468	19	200	280	225	426	483	1157	1214	160	120	412	311	360	280	458	356	212	18	35	277	334	140
125-100-200/ 05502	250M	✗	-	125	100	125	173	80	100	19	550	520	24	200	280	250	457	502	1231	1276	160	120	467	349	360	280	531	406	212	18	40	289	334	140
125-100-200/ 07502	280S	✗	-	125	100	125	173	80	100	19	550	580	24	200	280	280	479	524	1339	1384	160	120	517	368	360	280	585	457	212	18	40	289	334	140
125-100-200/ 09002	280M	✗	-	125	100	125	173	80	100	19	550	580	24	200	280	280	479	524	1394	1439	160	120	530	419	360	280	585	457	212	18	40	289	334	140
125-100-250/ 04502	225M	✗	-	125	100	140	188	80	100	19	450	468	19	225	280	225	426	483	1172	1229	160	120	412	311	400	315	458	356	219	18	35	277	334	140
125-100-250/ 05502	250M	✗	-	125	100	140	188	80	100	19	550	520	24	225	280	250	457	502	1246	1291	160	120	467	349	400	315	531	406	219	18	40	289	334	140
125-100-250/ 07502	280S	✗	✗	125	100	140	188	80	100	19	550	580	24	225	280	280	479	524	1354	1399	160	120	517	368	400	315	585	457	242	18	40	289	334	140
125-100-250/ 09002	280M	✗	✗	125	100	140	188	80	100	19	550	580	24	225	280	280	479	524	1409	1454	160	120	530	419	400	315	585	457	242	18	40	289	334	140
125-100-250/ 11002	315S	✗	✗	125	100	140	188	80	132	19	650	664	28	225	280	315	595	595	1599	1599	160	120	621	406	400	315	662	508	242	18	50	379	379	140
150-125-200/ 05502	250M	✗	-	150	125	140	189	80	100	19	550	520	24	250	315	250	457	502	1246	1291	160	120	467	349	400	315	531	406	242	20	40	289	334	140
150-125-200/ 07502	280S	✗	✗	150	125	140	189	80	100	19	550	580	24	250	315	280	479	524	1354	1399	160	120	517	368	400	315	585	457	242	20	40	289	334	140
150-125-200/ 09002	280M	✗	✗	150	125	140	189	80	100	19	550	580	24	250	315	280	479	524	1409	1454	160	120	530	419	400	315	585	457	242	20	40	289	334	140
150-125-200/ 11002	315S	-	✗	150	125	140	189	80	132	19	650	664	28	250	315	315	595	595	1599	1599	160	120	621	406	400	315	662	508	242	20	50	379	379	140

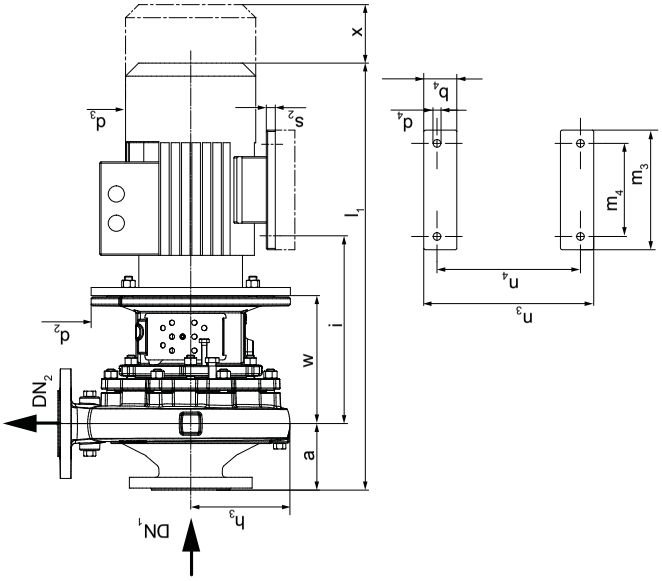
Pump set with support foot and motor foot (fixed speed version), ≤ 22 kW, n = 1450 rpm / 1750 rpm

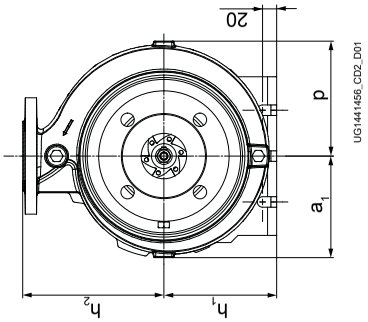
Dimensions [mm]

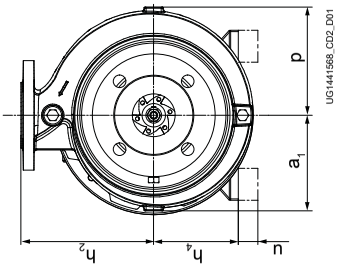
Pump set with support foot (up to motor size 112)



Pump set with motor foot (motor sizes 132 to 180)







n = 1450 rpm / n = 1750 rpm, material variants GG / GB / GC

Dimensions of Etabloc ≤ 22 kW[414)]
Values a_1, b_4, d_3, l_1, m_3, n_3 and p may vary slightly for production-related reasons.

Etabloc	Motor (IEC)	n		DN_1 415)	DN_2 415)	a 415)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 415)	h_3	h_4	i 416)	i 417)	l_1 416)	l_1 417)	m_3	m_4	n_1	n_2	n_3	n_4	p	s_2	u 418)	w 416)	w 417)	x 415)
		1450	1750																											
		[rpm]		[mm]																											
40-25-160/ 00024	71M	✘	✘	40	25	80	118	-	160	145	-	160	160	107	-	118	-	453	-	-	-	225	130	-	-	118	-	-	136	-	100
40-25-160/ 00034	71M	✘	✘	40	25	80	118	-	160	145	-	160	160	107	-	118	-	453	-	-	-	225	130	-	-	118	-	-	136	-	100
40-25-160/ 00054	80M	-	✘	40	25	80	118	-	200	162	-	160	160	107	-	118	-	491	-	-	-	225	130	-	-	118	-	-	156	-	100
40-25-160/ 00114	90S	✘	✘	40	25	80	118	-	200	190	-	160	160	107	-	118	118	590	634	-	-	225	130	-	-	118	-	-	156	200	100
40-25-200/ 00034	71M	✘	-	40	25	80	142	-	160	145	-	160	180	137	-	118	-	453	-	-	-	225	130	-	-	142	-	-	136	-	100
40-25-200/ 00054	80M	✘	✘	40	25	80	142	-	200	162	-	160	180	137	-	118	-	491	-	-	-	225	130	-	-	142	-	-	156	-	100
40-25-200/ 00074	80M	-	✘	40	25	80	142	-	200	162	-	160	180	137	-	118	-	537	-	-	-	225	130	-	-	142	-	-	156	-	100
40-25-200/ 00114	90S	-	✘	40	25	80	142	-	200	190	-	160	180	137	-	118	118	590	634	-	-	225	130	-	-	142	-	-	156	200	100
50-32-125/ 00024	71M	✘	-	50	32	80	115	-	160	145	-	160	140	100	-	118	-	453	-	-	-	225	130	-	-	115	-	-	136	-	100
50-32-125/ 00034	71M	✘	✘	50	32	80	115	-	160	145	-	160	140	100	-	118	-	453	-	-	-	225	130	-	-	115	-	-	136	-	100
50-32-125/ 00054	80M	✘	✘	50	32	80	115	-	200	162	-	160	140	100	-	118	-	491	-	-	-	225	130	-	-	115	-	-	156	-	100
50-32-125/ 00074	80M	-	✘	50	32	80	115	-	200	162	-	160	140	100	-	118	-	537	-	-	-	225	130	-	-	115	-	-	156	-	100
50-32-125/ 00114	90S	✘	✘	50	32	80	115	-	200	190	-	160	140	100	-	118	118	590	634	-	-	225	130	-	-	115	-	-	156	200	100
50-32-125.1/00024	71M	✘	✘	50	32	80	116	-	160	145	-	160	140	100	-	118	-	453	-	-	-	225	130	-	-	116	-	-	136	-	100
50-32-125.1/ 00034	71M	✘	✘	50	32	80	116	-	160	145	-	160	140	100	-	118	-	453	-	-	-	225	130	-	-	116	-	-	136	-	100
50-32-125.1/ 00054	80M	✘	✘	50	32	80	116	-	200	162	-	160	140	100	-	118	-	491	-	-	-	225	130	-	-	116	-	-	156	-	100
50-32-125.1/ 00114	90S	✘	✘	50	32	80	116	-	200	190	-	160	140	100	-	118	118	590	634	-	-	225	130	-	-	116	-	-	156	200	100
50-32-160/ 00034	71M	✘	-	50	32	80	118	-	160	145	-	160	160	115	-	118	-	453	-	-	-	225	130	-	-	128	-	-	136	-	100
50-32-160/ 00054	80M	✘	✘	50	32	80	118	-	200	162	-	160	160	115	-	118	-	491	-	-	-	225	130	-	-	128	-	-	156	-	100
50-32-160/ 00074	80M	✘	✘	50	32	80	118	-	200	162	-	160	160	115	-	118	-	537	-	-	-	225	130	-	-	128	-	-	156	-	100
50-32-160/ 00114	90S	-	✘	50	32	80	118	-	200	190	-	160	160	115	-	118	118	590	634	-	-	225	130	-	-	128	-	-	156	200	100
50-32-160.1/ 00024	71M	✘	-	50	32	80	116	-	160	145	-	160	160	111	-	118	-	453	-	-	-	225	130	-	-	121	-	-	136	-	100
50-32-160.1/ 00034	71M	✘	✘	50	32	80	116	-	160	145	-	160	160	111	-	118	-	453	-	-	-	225	130	-	-	121	-	-	136	-	100
50-32-160.1/ 00054	80M	✘	✘	50	32	80	116	-	200	162	-	160	160	111	-	118	-	491	-	-	-	225	130	-	-	121	-	-	156	-	100
50-32-160.1/ 00074	80M	-	✘	50	32	80	116	-	200	162	-	160	160	111	-	118	-	537	-	-	-	225	130	-	-	121	-	-	156	-	100
50-32-200/ 00054	80M	✘	-	50	32	80	142	-	200	162	-	160	180	137	-	118	-	491	-	-	-	225	130	-	-	143	-	-	156	-	100
50-32-200/ 00074	80M	✘	-	50	32	80	142	-	200	162	-	160	180	137	-	118	-	537	-	-	-	225	130	-	-	143	-	-	156	-	100
50-32-200/ 00114	90S	✘	✘	50	32	80	142	-	200	190	-	160	180	137	-	118	118	590	634	-	-	225	130	-	-	143	-	-	156	200	100
50-32-200/ 00154	90L	-	✘	50	32	80	142	-	200	190	-	160	180	137	-	118	118	590	634	-	-	225	130	-	-	143	-	-	156	200	100
50-32-200/ 00224	100L	-	✘	50	32	80	142	-	250	213	-	160	180	137	-	118	118	640	684	-	-	225	130	-	-	143	-	-	170	214	100

414 Tolerances of mating dimensions to EN 735
415 Dimensions to EN 733
416 Dimension with single mechanical seal (A, IA, EA, FA)
417 Dimension with double mechanical seal (DB, TI)
418 Motor feet must be shimmed.

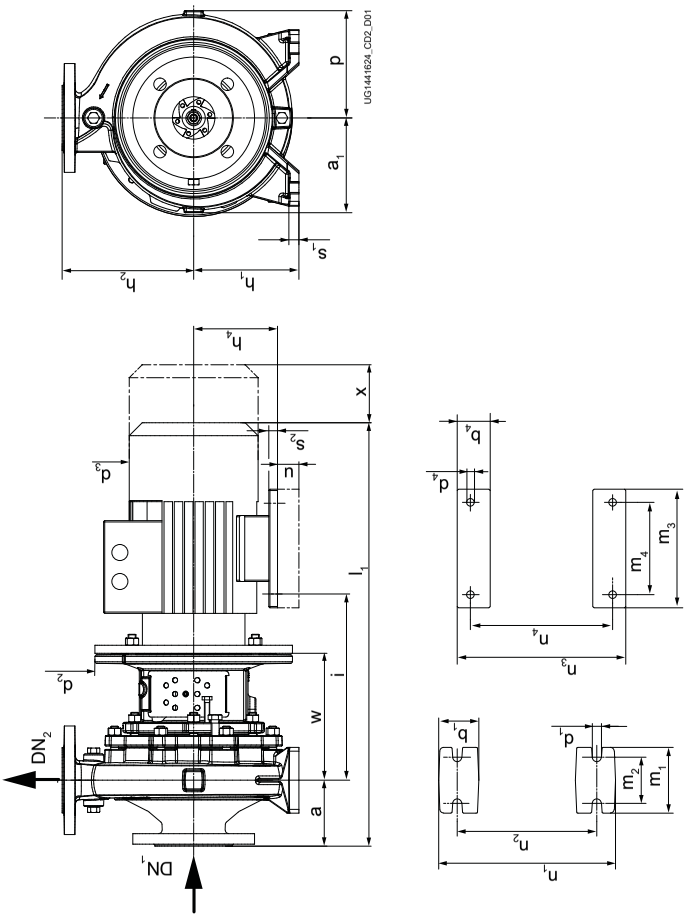
Etabloc	Motor (IEC)	n		DN_1 415)	DN_2 415)	a 415)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 415)	h_3	h_4	i 416)	i 417)	l_1 416)	l_1 417)	m_3	m_4	n_1	n_2	n_3	n_4	p	s_2	u 418)	w 416)	w 417)	x 415)
		1450	1750																											
		[rpm]		[mm]																											
50-32-200.1/ 00034	71M	✗	-	50	32	80	142	-	160	145	-	160	180	136	-	118	-	453	-	-	-	225	130	-	-	142	-	-	136	-	100
50-32-200.1/ 00054	80M	✗	✗	50	32	80	142	-	200	162	-	160	180	136	-	118	-	491	-	-	-	225	130	-	-	142	-	-	156	-	100
50-32-200.1/ 00074	80M	✗	✗	50	32	80	142	-	200	162	-	160	180	136	-	118	-	537	-	-	-	225	130	-	-	142	-	-	156	-	100
50-32-200.1/ 00114	90S	-	✗	50	32	80	142	-	200	190	-	160	180	136	-	118	118	590	634	-	-	225	130	-	-	142	-	-	156	200	100
50-32-200.1/ 00154	90L	-	✗	50	32	80	142	-	200	190	-	160	180	136	-	118	118	590	634	-	-	225	130	-	-	142	-	-	156	200	100
50-32-250/ 00114	90S	✗	-	50	32	100	169	-	200	190	-	160	225	166	-	118	118	610	654	-	-	225	130	-	-	178	-	-	156	200	100
50-32-250/ 00154	90L	✗	✗	50	32	100	169	-	200	190	-	160	225	166	-	118	118	610	654	-	-	225	130	-	-	178	-	-	156	200	100
50-32-250/ 00224	100L	✗	✗	50	32	100	169	-	250	213	-	160	225	166	-	118	118	660	704	-	-	225	130	-	-	178	-	-	170	214	100
50-32-250/ 00304	100L	-	✗	50	32	100	169	-	250	213	-	160	225	166	-	118	118	660	704	-	-	225	130	-	-	178	-	-	170	214	100
50-32-250/ 00404	112M	-	✗	50	32	100	169	-	250	235	-	160	225	166	-	118	118	642	686	-	-	225	130	-	-	178	-	-	170	214	100
50-32-250.1/ 00074	80M	✗	-	50	32	100	168	-	200	162	-	160	225	166	-	118	-	557	-	-	-	225	130	-	-	168	-	-	156	-	100
50-32-250.1/ 00114	90S	✗	✗	50	32	100	168	-	200	190	-	160	225	166	-	118	118	610	654	-	-	225	130	-	-	168	-	-	156	200	100
50-32-250.1/ 00154	90L	✗	✗	50	32	100	168	-	200	190	-	160	225	166	-	118	118	610	654	-	-	225	130	-	-	168	-	-	156	200	100
50-32-250.1/ 00224	100L	-	✗	50	32	100	168	-	250	213	-	160	225	166	-	118	118	660	704	-	-	225	130	-	-	168	-	-	170	214	100
50-32-250.1/ 00304	100L	-	✗	50	32	100	168	-	250	213	-	160	225	166	-	118	118	660	704	-	-	225	130	-	-	168	-	-	170	214	100
65-40-125/ 00024	71M	✗	-	65	40	80	117	-	160	145	-	160	140	107	-	118	-	453	-	-	-	225	130	-	-	117	-	-	136	-	100
65-40-125/ 00034	71M	✗	-	65	40	80	117	-	160	145	-	160	140	107	-	118	-	453	-	-	-	225	130	-	-	117	-	-	136	-	100
65-40-125/ 00054	80M	✗	✗	65	40	80	117	-	200	162	-	160	140	107	-	118	-	491	-	-	-	225	130	-	-	117	-	-	156	-	100
65-40-125/ 00074	80M	-	✗	65	40	80	117	-	200	162	-	160	140	107	-	118	-	537	-	-	-	225	130	-	-	117	-	-	156	-	100
65-40-125/ 00114	90S	-	✗	65	40	80	117	-	200	190	-	160	140	107	-	118	118	590	634	-	-	225	130	-	-	117	-	-	156	200	100
65-40-160/ 00054	80M	✗	-	65	40	80	119	-	200	162	-	160	160	119	-	118	-	491	-	-	-	225	130	-	-	134	-	-	156	-	100
65-40-160/ 00074	80M	✗	✗	65	40	80	119	-	200	162	-	160	160	119	-	118	-	537	-	-	-	225	130	-	-	134	-	-	156	-	100
65-40-160/ 00114	90S	✗	✗	65	40	80	119	-	200	190	-	160	160	119	-	118	118	590	634	-	-	225	130	-	-	134	-	-	156	200	100
65-40-160/ 00154	90L	-	✗	65	40	80	119	-	200	190	-	160	160	119	-	118	118	590	634	-	-	225	130	-	-	134	-	-	156	200	100
65-40-160/ 00224	100L	-	✗	65	40	80	119	-	250	213	-	160	160	119	-	118	118	640	684	-	-	225	130	-	-	134	-	-	170	214	100
65-40-200/ 00074	80M	✗	-	65	40	100	142	-	200	162	-	160	180	141	-	118	-	557	-	-	-	225	130	-	-	155	-	-	156	-	100
65-40-200/ 00114	90S	✗	-	65	40	100	142	-	200	190	-	160	180	141	-	118	118	610	654	-	-	225	130	-	-	155	-	-	156	200	100
65-40-200/ 00154	90L	✗	✗	65	40	100	142	-	200	190	-	160	180	141	-	118	118	610	654	-	-	225	130	-	-	155	-	-	156	200	100
65-40-200/ 00224	100L	-	✗	65	40	100	142	-	250	213	-	160	180	141	-	118	118	660	704	-	-	225	130	-	-	155	-	-	170	214	100
65-40-200/ 00304	100L	-	✗	65	40	100	142	-	250	213	-	160	180	141	-	118	118	660	704	-	-	225	130	-	-	155	-	-	170	214	100
65-40-250/ 00114	90S	✗	-	65	40	100	169	-	200	190	-	160	225	166	-	118	118	610	654	-	-	225	130	-	-	179	-	-	156	200	100
65-40-250/ 00154	90L	✗	-	65	40	100	169	-	200	190	-	160	225	166	-	118	118	610	654	-	-	225	130	-	-	179	-	-	156	200	100
65-40-250/ 00224	100L	✗	✗	65	40	100	169	-	250	213	-	160	225	166	-	118	118	660	704	-	-	225	130	-	-	179	-	20	170	214	100
65-40-250/ 00304	100L	✗	✗	65	40	100	169	-	250	213	-	160	225	166	-	118	118	660	704	-	-	225	130	-	-	179	-	-	170	214	100
65-40-250/ 00404	112M	-	✗	65	40	100	169	-	250	235	-	160	225	166	-	118	118	642	686	-	-	225	130	-	-	179	-	-	170	214	100
65-40-250/ 00554	132S	-	✗	65	40	100	169	55	300	274	12	-	225	166	132	282	326	750	794	220	140	-	-	270	216	179	15	-	193	237	100
65-40-315/ 00224	100L	✗	-	65	40	125	207	-	250	213	-	180	250	204	-	142	142	705	753	-	-	260	180	-	-	207	-	20	190	238	100
65-40-315/ 00304	100L	✗	-	65	40	125	207	-	250	213	-	180	250	204	-	142	142	705	753	-	-	260	180	-	-	207	-	20	190	238	100
65-40-315/ 00404	112M	✗	✗	65	40	125	207	-	250	235	-	180	250	204	-	142	142	687	735	-	-	260	180	-	-	207	-	20	190	238	100
65-40-315/ 00554	132S	✗	✗	65	40	125	207	55	300	274	12	-	250	204	132	302	350	795	843	220	140	-	-	270	216	207	15	-	213	261	100
65-40-315/ 00754	132M	-	✗	65	40	125	207	59	300	298	12	-	250	204	132	302	350	795	843	240	178	-	-	270	216	207	15	-	213	261	100

Etabloc	Motor (IEC)	n		DN_1 415)	DN_2 415)	a 415)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 415)	h_3	h_4	i 416)	i 417)	l_1 416)	l_1 417)	m_3	m_4	n_1	n_2	n_3	n_4	p	s_2	u 418)	w 416)	w 417)	x 415)
		1450	1750																											
		[rpm]		[mm]																											
65-40-315/ 01104	160M	-	✗	65	40	125	207	70	350	325	15	-	250	204	160	354	408	917	971	310	210	-	-	323	254	207	21	-	246	300	100
65-50-125/ 00054	80M	✗	-	65	50	100	117	-	200	162	-	160	160	112	-	118	-	511	-	-	-	225	130	-	-	130	-	-	156	-	100
65-50-125/ 00074	80M	✗	✗	65	50	100	117	-	200	162	-	160	160	112	-	118	-	557	-	-	-	225	130	-	-	130	-	-	156	-	100
65-50-125/ 00114	90S	✗	✗	65	50	100	117	-	200	190	-	160	160	112	-	118	118	610	654	-	-	225	130	-	-	130	-	-	156	200	100
65-50-125/ 00154	90L	-	✗	65	50	100	117	-	200	190	-	160	160	112	-	118	118	610	654	-	-	225	130	-	-	130	-	-	156	200	100
65-50-160/ 00074	80M	✗	-	65	50	100	128	-	200	162	-	160	180	133	-	118	-	557	-	-	-	225	130	-	-	149	-	-	156	-	100
65-50-160/ 00114	90S	✗	✗	65	50	100	128	-	200	190	-	160	180	133	-	118	118	610	654	-	-	225	130	-	-	149	-	-	156	200	100
65-50-160/ 00154	90L	✗	✗	65	50	100	128	-	200	190	-	160	180	133	-	118	118	610	654	-	-	225	130	-	-	149	-	-	156	200	100
65-50-160/ 00224	100L	-	✗	65	50	100	128	-	250	213	-	160	180	133	-	118	118	660	704	-	-	225	130	-	-	149	-	-	170	214	100
65-50-160/ 00304	100L	-	✗	65	50	100	128	-	250	213	-	160	180	133	-	118	118	660	704	-	-	225	130	-	-	149	-	-	170	214	100
65-50-200/ 00154	90L	✗	-	65	50	100	144	-	200	190	-	160	200	150	-	118	118	610	654	-	-	225	130	-	-	163	-	-	156	200	100
65-50-200/ 00224	100L	✗	✗	65	50	100	144	-	250	213	-	160	200	150	-	118	118	660	704	-	-	225	130	-	-	163	-	20	170	214	100
65-50-200/ 00304	100L	✗	✗	65	50	100	144	-	250	213	-	160	200	150	-	118	118	660	704	-	-	225	130	-	-	163	-	-	170	214	100
65-50-200/ 00404	112M	-	✗	65	50	100	144	-	250	235	-	160	200	150	-	118	118	642	686	-	-	225	130	-	-	163	-	-	170	214	100
65-50-200/ 00554	132S	-	✗	65	50	100	144	55	300	274	12	-	200	150	132	282	326	750	794	220	140	-	-	270	216	163	15	-	193	237	100
65-50-250/ 00224	100L	✗	-	65	50	100	170	-	250	213	-	160	225	172	-	118	118	660	704	-	-	225	130	-	-	186	-	20	170	214	100
65-50-250/ 00304	100L	✗	-	65	50	100	170	-	250	213	-	160	225	172	-	118	118	660	704	-	-	225	130	-	-	186	-	20	170	214	100
65-50-250/ 00404	112M	✗	✗	65	50	100	170	-	250	235	-	160	225	172	-	118	118	642	686	-	-	225	130	-	-	186	-	-	170	214	100
65-50-250/ 00554	132S	-	✗	65	50	100	170	55	300	274	12	-	225	172	132	282	326	750	794	220	140	-	-	270	216	186	15	-	193	237	100
65-50-250/ 00754	132M	-	✗	65	50	100	170	59	300	298	12	-	225	172	132	282	326	750	794	240	178	-	-	270	216	186	15	20	193	237	100
65-50-315/ 00304	100L	✗	-	65	50	125	207	-	250	213	-	180	280	203	-	142	142	705	753	-	-	260	180	-	-	215	-	20	190	238	100
65-50-315/ 00404	112M	✗	-	65	50	125	207	-	250	235	-	180	280	203	-	142	142	687	735	-	-	260	180	-	-	215	-	20	190	238	100
65-50-315/ 00554	132S	✗	-	65	50	125	207	55	300	274	12	-	280	203	132	302	350	795	843	220	140	-	-	270	216	215	15	20	213	261	100
65-50-315/ 00754	132M	✗	✗	65	50	125	207	59	300	298	12	-	280	203	132	302	350	795	843	240	178	-	-	270	216	215	15	-	213	261	100
65-50-315/ 01104	160M	-	✗	65	50	125	207	70	350	325	15	-	280	203	160	354	408	917	971	310	210	-	-	323	254	215	21	-	246	300	100
65-50-315/ 01504	160L	-	✗	65	50	125	207	70	350	325	15	-	280	203	160	354	408	953	1007	314	254	-	-	323	254	215	21	-	246	300	100
80-65-125/ 00054	80M	✗	-	80	65	100	117	-	200	162	-	160	180	127	-	118	-	511	-	-	-	225	130	-	-	150	-	-	156	-	100
80-65-125/ 00074	80M	✗	-	80	65	100	117	-	200	162	-	160	180	127	-	118	-	557	-	-	-	225	130	-	-	150	-	-	156	-	100
80-65-125/ 00114	90S	✗	✗	80	65	100	117	-	200	190	-	160	180	127	-	118	118	610	654	-	-	225	130	-	-	150	-	-	156	200	100
80-65-125/ 00154	90L	-	✗	80	65	100	117	-	200	190	-	160	180	127	-	118	118	610	654	-	-	225	130	-	-	150	-	-	156	200	100
80-65-125/ 00224	100L	-	✗	80	65	100	117	-	250	213	-	160	180	127	-	118	118	660	704	-	-	225	130	-	-	150	-	-	170	214	100
80-65-160/ 00114	90S	✗	-	80	65	100	132	-	200	190	-	160	200	140	-	118	118	610	654	-	-	225	130	-	-	160	-	-	156	200	100
80-65-160/ 00154	90L	✗	✗	80	65	100	132	-	200	190	-	160	200	140	-	118	118	610	654	-	-	225	130	-	-	160	-	-	156	200	100
80-65-160/ 00224	100L	✗	✗	80	65	100	132	-	250	213	-	160	200	140	-	118	118	660	704	-	-	225	130	-	-	160	-	-	170	214	100
80-65-160/ 00304	100L	-	✗	80	65	100	132	-	250	213	-	160	200	140	-	118	118	660	704	-	-	225	130	-	-	160	-	-	170	214	100
80-65-160/ 00404	112M	-	✗	80	65	100	132	-	250	235	-	160	200	140	-	118	118	642	686	-	-	225	130	-	-	160	-	-	170	214	100
80-65-200/ 00224	100L	✗	-	80	65	100	155	-	250	213	-	160	225	161	-	118	118	660	704	-	-	225	130	-	-	178	-	20	170	214	140
80-65-200/ 00304	100L	✗	✗	80	65	100	155	-	250	213	-	160	225	161	-	118	118	660	704	-	-	225	130	-	-	178	-	20	170	214	140
80-65-200/ 00404	112M	✗	✗	80	65	100	155	-	250	235	-	160	225	161	-	118	118	642	686	-	-	225	130	-	-	178	-	-	170	214	140
80-65-200/ 00554	132S	-	✗	80	65	100	155	55	300	274	12	-	225	161	132	282	326	750	794	220	140	-	-	270	216	178	15	-	193	237	140
80-65-200/ 00754	132M	-	✗	80	65	100	155	59	300	298	12	-	225	161	132	282	326	750	794	240	178	-	-	270	216	178	15	20	193	237	140

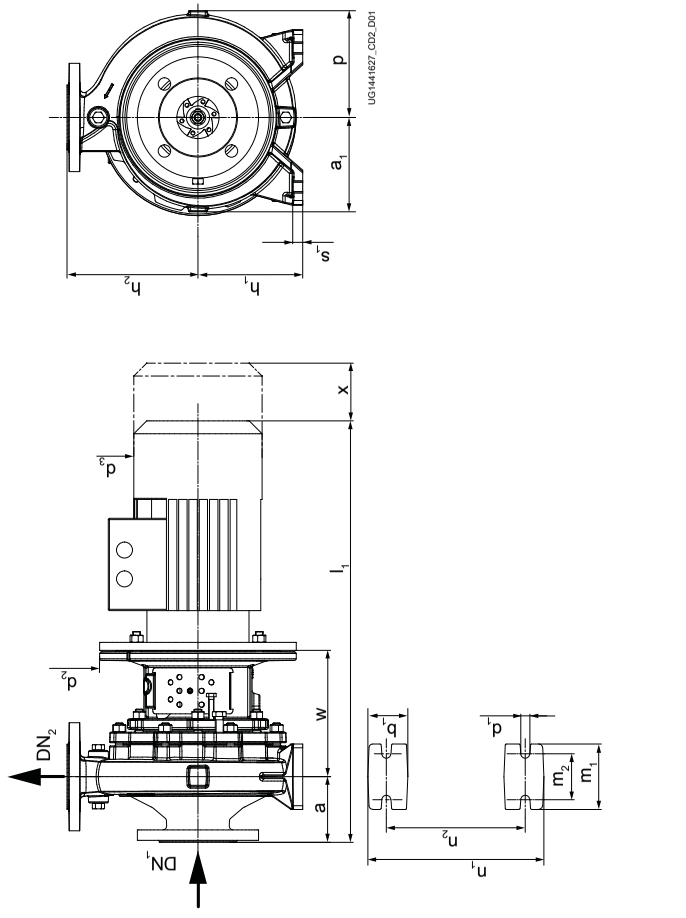
Etabloc	Motor (IEC)	n		DN_1 415)	DN_2 415)	a 415)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 415)	h_3	h_4	i 416)	i 417)	l_1 416)	l_1 417)	m_3	m_4	n_1	n_2	n_3	n_4	p	s_2	u 418)	w 416)	w 417)	x 415)
		1450	1750																											
		[rpm]		[mm]																											
80-65-250/ 00304	100L	✗	-	80	65	100	179	-	250	213	-	180	250	185	-	142	142	680	728	-	-	260	180	-	-	199	-	20	190	238	140
80-65-250/ 00404	112M	✗	-	80	65	100	179	-	250	235	-	180	250	185	-	142	142	662	710	-	-	260	180	-	-	199	-	20	190	238	140
80-65-250/ 00554	132S	✗	✗	80	65	100	179	55	300	274	12	-	250	185	132	302	350	770	818	220	140	-	-	270	216	199	15	20	213	261	140
80-65-250/ 00754	132M	-	✗	80	65	100	179	59	300	298	12	-	250	185	132	302	350	770	818	240	178	-	-	270	216	199	15	20	213	261	140
80-65-250/ 01104	160M	-	✗	80	65	100	179	70	350	325	15	-	250	185	160	354	408	892	946	310	210	-	-	323	254	199	21	20	246	300	140
80-65-315/ 00554	132S	✗	-	80	65	125	209	55	300	274	12	-	280	213	132	302	350	795	843	220	140	-	-	270	216	229	15	20	213	261	140
80-65-315/ 00754	132M	✗	-	80	65	125	209	59	300	298	12	-	280	213	132	302	350	795	843	240	178	-	-	270	216	229	15	-	213	261	140
80-65-315/ 01104	160M	✗	✗	80	65	125	209	70	350	325	15	-	280	213	160	354	408	917	971	310	210	-	-	323	254	229	21	-	246	300	140
80-65-315/ 01504	160L	✗	✗	80	65	125	209	70	350	325	15	-	280	213	160	354	408	953	1007	314	254	-	-	323	254	229	21	-	246	300	140
80-65-315/ 01854	180M	-	✗	80	65	125	209	80	350	370	15	-	280	213	180	367	421	988	1042	343	241	-	-	368	279	229	23	-	246	300	140
80-65-315/ 02204	180L	-	✗	80	65	125	209	80	350	370	15	-	280	213	180	367	421	988	1042	358	279	-	-	368	279	229	23	-	246	300	140
100-80-160 /00154	90L	✗	-	100	80	125	138	-	200	190	-	160	225	153	-	118	118	635	679	-	-	225	130	-	-	174	-	-	156	200	140
100-80-160/ 00224	100L	✗	-	100	80	125	138	-	250	213	-	160	225	153	-	118	118	685	729	-	-	225	130	-	-	174	-	20	170	214	140
100-80-160/ 00304	100L	✗	✗	100	80	125	138	-	250	213	-	160	225	153	-	118	118	685	729	-	-	225	130	-	-	174	-	-	170	214	140
100-80-160/ 00404	112M	-	✗	100	80	125	138	-	250	235	-	160	225	153	-	118	118	667	711	-	-	225	130	-	-	174	-	-	170	214	140
100-80-160/ 00554	132S	-	✗	100	80	125	138	55	300	274	12	-	225	153	132	282	326	775	819	220	140	-	-	270	216	174	15	-	193	237	140
100-80-200/ 00224	100L	✗	-	100	80	125	159	-	250	213	-	180	250	170	-	142	142	705	753	-	-	260	180	-	-	188	-	20	190	238	140
100-80-200/ 00304	100L	✗	-	100	80	125	159	-	250	213	-	180	250	170	-	142	142	705	753	-	-	260	180	-	-	188	-	20	190	238	140
100-80-200/ 00404	112M	✗	-	100	80	125	159	-	250	235	-	180	250	170	-	142	142	687	735	-	-	260	180	-	-	188	-	20	190	238	140
100-80-200/ 00554	132S	✗	✗	100	80	125	159	55	300	274	12	-	250	170	132	302	350	795	843	220	140	-	-	270	216	188	15	-	213	261	140
100-80-200/ 00754	132M	-	✗	100	80	125	159	59	300	298	12	-	250	170	132	302	350	795	843	240	178	-	-	270	216	188	15	20	213	261	140
100-80-200/ 01104	160M	-	✗	100	80	125	159	70	350	325	15	-	250	170	160	354	408	917	971	310	210	-	-	323	254	188	21	20	246	300	140
100-80-250/ 00404	112M	✗	-	100	80	125	183	-	250	235	-	180	280	192	-	142	142	687	735	-	-	260	180	-	-	209	-	20	190	238	140
100-80-250/ 00554	132S	✗	-	100	80	125	183	55	300	274	12	-	280	192	132	302	350	795	843	220	140	-	-	270	216	209	15	20	213	261	140
100-80-250/ 00754	132M	✗	✗	100	80	125	183	59	300	298	12	-	280	192	132	302	350	795	843	240	178	-	-	270	216	209	15	-	213	261	140
100-80-250/ 01104	160M	✗	✗	100	80	125	183	70	350	325	15	-	280	192	160	354	408	917	971	310	210	-	-	323	254	209	21	20	246	300	140
100-80-250/ 01504	160L	-	✗	100	80	125	183	70	350	325	15	-	280	192	160	354	408	953	1007	314	254	-	-	323	254	209	21	20	246	300	140
100-80-250/ 01854	180M	-	✗	100	80	125	183	80	350	370	15	-	280	192	180	367	421	988	1042	343	241	-	-	368	279	209	23	20	246	300	140
100-80-315/ 00754	132M	✗	-	100	80	125	218	59	300	298	12	-	315	227	132	302	350	795	843	240	178	-	-	270	216	242	15	-	213	261	140
100-80-315/ 01104	160M	✗	-	100	80	125	218	70	350	325	15	-	315	227	160	354	408	917	971	310	210	-	-	323	254	242	21	-	246	300	140
100-80-315/ 01504	160L	✗	✗	100	80	125	218	70	350	325	15	-	315	227	160	354	408	953	1007	314	254	-	-	323	254	242	21	-	246	300	140
100-80-315/ 01854	180M	✗	✗	100	80	125	218	80	350	370	15	-	315	227	180	367	421	988	1042	343	241	-	-	368	279	242	23	-	246	300	140
100-80-315/ 02204	180L	✗	✗	100	80	125	218	80	350	370	15	-	315	227	180	367	421	988	1042	358	279	-	-	368	279	242	23	20	246	300	140
125-100-160/ 00304	100L	✗	-	125	100	125	178	-	250	213	-	180	280	199	-	142	142	705	753	-	-	260	180	-	-	225	-	20	190	238	140
125-100-160/ 00404	112M	✗	-	125	100	125	178	-	250	235	-	180	280	199	-	142	142	687	735	-	-	260	180	-	-	225	-	-	190	238	140
125-100-160/ 00554	132S	✗	✗	125	100	125	178	55	300	274	12	-	280	199	132	302	350	795	843	220	140	-	-	270	216	225	15	20	213	261	140
125-100-160/ 00754	132M	-	✗	125	100	125	178	59	300	298	12	-	280	199	132	302	350	795	843	240	178	-	-	270	216	225	15	20	213	261	140
125-100-200/ 00404	112M	✗	-	125	100	125	173	-	250	235	-	180	280	189	-	142	142	687	735	-	-	260	180	-	-	212	-	20	190	238	140
125-100-200/ 00554	132S	✗	-	125	100	125	173	55	300	274	12	-	280	189	132	302	350	795	843	220	140	-	-	270	216	212	15	20	213	261	140
125-100-200/ 00754	132M	✗	✗	125	100	125	173	59	300	298	12	-	280	189	132	302	350	795	843	240	178	-	-	270	216	212	15	20	213	261	140
125-100-200/ 01104	160M	✗	✗	125	100	125	173	70	350	325	15	-	280	189	160	354	408	917	971	310	210	-	-	323	254	212	21	20	246	300	140

Etabloc	Motor (IEC)	n		DN_1 415)	DN_2 415)	a 415)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 415)	h_3	h_4	i 416)	i 417)	l_1 416)	l_1 417)	m_3	m_4	n_1	n_2	n_3	n_4	p	s_2	u 418)	w 416)	w 417)	x 415)
		1450	1750																											
		[rpm]		[mm]																											
125-100-200/ 01504	160L	-	✗	125	100	125	173	70	350	325	15	-	280	189	160	354	408	953	1007	314	254	-	-	323	254	212	21	20	246	300	140
125-100-250/ 00754	132M	✗	-	125	100	140	188	59	300	298	12	-	280	200	132	302	350	810	858	240	178	-	-	270	216	219	15	-	213	261	140
125-100-250/ 01104	160M	✗	✗	125	100	140	188	70	350	325	15	-	280	200	160	354	408	932	986	310	210	-	-	323	254	219	21	-	246	300	140
125-100-250/ 01504	160L	✗	✗	125	100	140	188	70	350	325	15	-	280	200	160	354	408	968	1022	314	254	-	-	323	254	219	21	20	246	300	140
125-100-250/ 01854	180M	-	✗	125	100	140	188	80	350	370	15	-	280	200	180	367	421	1003	1057	343	241	-	-	368	279	219	23	-	246	300	140
125-100-250/ 02204	180L	-	✗	125	100	140	188	80	350	370	15	-	280	200	180	367	421	1003	1057	358	279	-	-	368	279	219	23	-	246	300	140
125-100-315/ 01504	160L	✗	-	125	100	140	225	70	350	325	15	-	315	237	160	354	408	968	1022	314	254	-	-	323	254	255	21	20	246	300	140
125-100-315/ 01854	180M	✗	-	125	100	140	225	80	350	370	15	-	315	237	180	367	421	1003	1057	343	241	-	-	368	279	255	23	20	246	300	140
125-100-315/ 02204	180L	✗	-	125	100	140	225	80	350	370	15	-	315	237	180	367	421	1003	1057	358	279	-	-	368	279	255	23	20	246	300	140
150-125-200/ 00754	132M	✗	-	150	125	140	189	59	300	298	12	-	315	212	132	302	350	810	858	240	178	-	-	270	216	242	15	-	213	261	140
150-125-200/ 01104	160M	✗	✗	150	125	140	189	70	350	325	15	-	315	212	160	354	408	932	986	310	210	-	-	323	254	242	21	-	246	300	140
150-125-200/ 01504	160L	✗	✗	150	125	140	189	70	350	325	15	-	315	212	160	354	408	968	1022	314	254	-	-	323	254	242	21	20	246	300	140
150-125-200/ 01854	180M	-	✗	150	125	140	189	80	350	370	15	-	315	212	180	367	421	1003	1057	343	241	-	-	368	279	242	23	20	246	300	140
150-125-200/ 02204	180L	-	✗	150	125	140	189	80	350	370	15	-	315	212	180	367	421	1003	1057	358	279	-	-	368	279	242	23	-	246	300	140
150-125-250/ 01104	160M	✗	-	150	125	140	226	70	350	325	15	-	355	248	160	354	408	932	986	310	210	-	-	323	254	275	21	-	246	300	140
150-125-250/ 01504	160L	✗	✗	150	125	140	226	70	350	325	15	-	355	248	160	354	408	968	1022	314	254	-	-	323	254	275	21	20	246	300	140
150-125-250/ 01854	180M	✗	✗	150	125	140	226	80	350	370	15	-	355	248	180	367	421	1003	1057	343	241	-	-	368	279	275	23	20	246	300	140
150-125-250/ 02204	180L	-	✗	150	125	140	226	80	350	370	15	-	355	248	180	367	421	1003	1057	358	279	-	-	368	279	275	23	-	246	300	140
200-150-200/ 00754	132M	✗	-	200	150	160	240	59	300	298	12	-	400	277	132	302	350	830	878	240	178	-	-	270	216	316	15	20	213	261	140
200-150-200/ 01104	160M	✗	-	200	150	160	240	70	350	325	15	-	400	277	160	354	408	952	1006	310	210	-	-	323	254	316	21	-	246	300	140
200-150-200/ 01504	160L	✗	✗	200	150	160	240	70	350	325	15	-	400	277	160	354	408	988	1042	314	254	-	-	323	254	316	21	20	246	300	140
200-150-200/ 01854	180M	-	✗	200	150	160	240	80	350	370	15	-	400	277	180	367	421	1023	1077	343	241	-	-	368	279	316	23	-	246	300	140
200-150-200/ 02204	180L	-	✗	200	150	160	240	80	350	370	15	-	400	277	180	367	421	1023	1077	358	279	-	-	368	279	316	23	-	246	300	140
200-150-250/ 01504	160L	✗	-	200	150	160	230	70	350	325	15	-	400	262	160	354	408	988	1042	314	254	-	-	323	254	300	21	-	246	300	140
200-150-250/ 01854	180M	✗	-	200	150	160	230	80	350	370	15	-	400	262	180	367	421	1023	1077	343	241	-	-	368	279	300	23	-	246	300	140
200-150-250/ 02204	180L	✗	✗	200	150	160	230	80	350	370	15	-	400	262	180	367	421	1023	1077	358	279	-	-	368	279	300	23	-	246	300	140

Pump set with volute casing foot and motor foot (fixed speed version), ≤ 22 kW, n = 1450 rpm / 1750 rpm



Pump set with volute casing foot and motor foot (motor sizes 132 to 180)



Pump set with volute casing foot (up to motor size 112)

n = 1450 rpm / n = 1750 rpm, material variants BB / CC / SG / SB / SC

Dimensions of Etabloc ≤ 22 kW[419]
Values a_1, b_1, b_4, d_3, l_1, m_1, m_3, n_3 and p may vary slightly for production-related reasons.

Etabloc	Motor (IEC)	n		DN_1 [420]	DN_2 [420]	a [420]	a1	b_1 [420]	b_4	d_1 [420]	d_2	d_3	d_4	h_1 [420]	h_2 [420]	h_4	i [421]	i [422]	l_1 [421]	l_1 [422]	m_1 [420]	m_2 [420]	m_3	m_4	n_1 [420]	n_2 [420]	n_3	n_4	p	s_1 [420]	s_2	u [423]	w [421]	w [422]	x [420]
		1450	1750																															
		[rpm]		[mm]																														
40-25-160/ 00024	71M	✘	✘	40	25	80	118	50	-	14	160	145	-	132	160	-	-	-	453	-	100	70	-	-	240	190	-	-	118	15	-	-	136	-	100
40-25-160/ 00034	71M	✘	✘	40	25	80	118	50	-	14	160	145	-	132	160	-	-	-	453	-	100	70	-	-	240	190	-	-	118	15	-	-	136	-	100
40-25-160/ 00054	80M	-	✘	40	25	80	118	50	-	14	200	162	-	132	160	-	-	-	491	-	100	70	-	-	240	190	-	-	118	15	-	-	156	-	100
40-25-160/ 00114	90S	✘	✘	40	25	80	118	50	-	14	200	190	-	132	160	-	-	-	590	634	100	70	-	-	240	190	-	-	118	15	-	-	156	200	100
40-25-200/ 00034	71M	✘	-	40	25	80	142	50	-	14	160	145	-	160	180	-	-	-	453	-	100	70	-	-	240	190	-	-	142	15	-	-	136	-	100
40-25-200/ 00054	80M	✘	✘	40	25	80	142	50	-	14	200	162	-	160	180	-	-	-	491	-	100	70	-	-	240	190	-	-	142	15	-	-	156	-	100
40-25-200/ 00074	80M	-	✘	40	25	80	142	50	-	14	200	162	-	160	180	-	-	-	537	-	100	70	-	-	240	190	-	-	142	15	-	-	156	-	100
40-25-200/ 00114	90S	-	✘	40	25	80	142	50	-	14	200	190	-	160	180	-	-	-	590	634	100	70	-	-	240	190	-	-	142	15	-	-	156	200	100
50-32-125/ 00024	71M	✘	-	50	32	80	115	50	-	14	160	145	-	112	140	-	-	-	453	-	100	70	-	-	190	140	-	-	115	15	-	-	136	-	100
50-32-125/ 00034	71M	✘	✘	50	32	80	115	50	-	14	160	145	-	112	140	-	-	-	453	-	100	70	-	-	190	140	-	-	115	15	-	-	136	-	100
50-32-125/ 00054	80M	✘	✘	50	32	80	115	50	-	14	200	162	-	112	140	-	-	-	491	-	100	70	-	-	190	140	-	-	115	15	-	-	156	-	100
50-32-125/ 00074	80M	-	✘	50	32	80	115	50	-	14	200	162	-	112	140	-	-	-	537	-	100	70	-	-	190	140	-	-	115	15	-	-	156	-	100
50-32-125/ 00114	90S	✘	✘	50	32	80	115	50	-	14	200	190	-	112	140	-	-	-	590	634	100	70	-	-	190	140	-	-	115	15	-	-	156	200	100
50-32-125.1/ 00024	71M	✘	✘	50	32	80	116	50	-	14	160	145	-	112	140	-	-	-	453	-	100	70	-	-	190	140	-	-	116	15	-	-	136	-	100
50-32-125.1/ 00034	71M	✘	✘	50	32	80	116	50	-	14	160	145	-	112	140	-	-	-	453	-	100	70	-	-	190	140	-	-	116	15	-	-	136	-	100
50-32-125.1/ 00054	80M	✘	✘	50	32	80	116	50	-	14	200	162	-	112	140	-	-	-	491	-	100	70	-	-	190	140	-	-	116	15	-	-	156	-	100
50-32-125.1/ 00114	90S	✘	✘	50	32	80	116	50	-	14	200	190	-	112	140	-	-	-	590	634	100	70	-	-	190	140	-	-	116	15	-	-	156	200	100
50-32-160/ 00034	71M	✘	-	50	32	80	118	50	-	14	160	145	-	132	160	-	-	-	453	-	100	70	-	-	240	190	-	-	128	15	-	-	136	-	100
50-32-160/ 00054	80M	✘	✘	50	32	80	118	50	-	14	200	162	-	132	160	-	-	-	491	-	100	70	-	-	240	190	-	-	128	15	-	-	156	-	100
50-32-160/ 00074	80M	✘	✘	50	32	80	118	50	-	14	200	162	-	132	160	-	-	-	537	-	100	70	-	-	240	190	-	-	128	15	-	-	156	-	100
50-32-160/ 00114	90S	-	✘	50	32	80	118	50	-	14	200	190	-	132	160	-	-	-	590	634	100	70	-	-	240	190	-	-	128	15	-	-	156	200	100
50-32-160.1/ 00024	71M	✘	-	50	32	80	116	50	-	14	160	145	-	132	160	-	-	-	453	-	100	70	-	-	240	190	-	-	121	15	-	-	136	-	100
50-32-160.1/ 00034	71M	✘	✘	50	32	80	116	50	-	14	160	145	-	132	160	-	-	-	453	-	100	70	-	-	240	190	-	-	121	15	-	-	136	-	100
50-32-160.1/ 00054	80M	✘	✘	50	32	80	116	50	-	14	200	162	-	132	160	-	-	-	491	-	100	70	-	-	240	190	-	-	121	15	-	-	156	-	100
50-32-160.1/ 00074	80M	-	✘	50	32	80	116	50	-	14	200	162	-	132	160	-	-	-	537	-	100	70	-	-	240	190	-	-	121	15	-	-	156	-	100
50-32-200/ 00054	80M	✘	-	50	32	80	142	50	-	14	200	162	-	160	180	-	-	-	491	-	100	70	-	-	240	190	-	-	143	18	-	-	156	-	100
50-32-200/ 00074	80M	✘	-	50	32	80	142	50	-	14	200	162	-	160	180	-	-	-	537	-	100	70	-	-	240	190	-	-	143	18	-	-	156	-	100
50-32-200/ 00114	90S	✘	✘	50	32	80	142	50	-	14	200	190	-	160	180	-	-	-	590	634	100	70	-	-	240	190	-	-	143	18	-	-	156	200	100
50-32-200/ 00154	90L	-	✘	50	32	80	142	50	-	14	200	190	-	160	180	-	-	-	590	634	100	70	-	-	240	190	-	-	143	18	-	-	156	200	100
50-32-200/ 00224	100L	-	✘	50	32	80	142	50	-	14	250	213	-	160	180	-	-	-	640	684	100	70	-	-	240	190	-	-	143	18	-	-	170	214	100

419 Tolerances of mating dimensions to EN 735
420 Dimensions to EN 733
421 Dimension with single mechanical seal (A, IA, EA, FA)
422 Dimension with double mechanical seal (DB, TI)
423 Motor feet must be shimmed.

Etabloc	Motor (IEC)	n		DN_1 420)	DN_2 420)	a 420)	a1	b_1 420)	b_4	d_1 420)	d_2	d_3	d_4	h_1 420)	h_2 420)	h_4	i 421)	i 422)	l_1 421)	l_1 422)	m_1 420)	m_2 420)	m_3	m_4	n_1 420)	n_2 420)	n_3	n_4	p	s_1 420)	s_2	u 423)	w 421)	w 422)	x 420)
		1450	1750																															
		[rpm]		[mm]																														
50-32-200.1/ 00034	71M	✗	-	50	32	80	142	50	-	14	160	145	-	160	180	-	-	-	453	-	100	70	-	-	240	190	-	-	142	18	-	-	136	-	100
50-32-200.1/ 00054	80M	✗	✗	50	32	80	142	50	-	14	200	162	-	160	180	-	-	-	491	-	100	70	-	-	240	190	-	-	142	18	-	-	156	-	100
50-32-200.1/ 00074	80M	✗	✗	50	32	80	142	50	-	14	200	162	-	160	180	-	-	-	537	-	100	70	-	-	240	190	-	-	142	18	-	-	156	-	100
50-32-200.1/ 00114	90S	-	✗	50	32	80	142	50	-	14	200	190	-	160	180	-	-	-	590	634	100	70	-	-	240	190	-	-	142	18	-	-	156	200	100
50-32-200.1/ 00154	90L	-	✗	50	32	80	142	50	-	14	200	190	-	160	180	-	-	-	590	634	100	70	-	-	240	190	-	-	142	18	-	-	156	200	100
50-32-250/ 00114	90S	✗	-	50	32	100	169	65	-	14	200	190	-	180	225	-	-	-	610	654	125	95	-	-	320	250	-	-	178	18	-	-	156	200	100
50-32-250/ 00154	90L	✗	✗	50	32	100	169	65	-	14	200	190	-	180	225	-	-	-	610	654	125	95	-	-	320	250	-	-	178	18	-	-	156	200	100
50-32-250/ 00224	100L	✗	✗	50	32	100	169	65	-	14	250	213	-	180	225	-	-	-	660	704	125	95	-	-	320	250	-	-	178	18	-	-	170	214	100
50-32-250/ 00304	100L	-	✗	50	32	100	169	65	-	14	250	213	-	180	225	-	-	-	660	704	125	95	-	-	320	250	-	-	178	18	-	-	170	214	100
50-32-250/ 00404	112M	-	✗	50	32	100	169	65	-	14	250	235	-	180	225	-	-	-	642	686	125	95	-	-	320	250	-	-	178	18	-	-	170	214	100
50-32-250.1/ 00074	80M	✗	-	50	32	100	168	65	-	14	200	162	-	180	225	-	-	-	557	-	125	95	-	-	320	250	-	-	168	18	-	-	156	-	100
50-32-250.1/ 00114	90S	✗	✗	50	32	100	168	65	-	14	200	190	-	180	225	-	-	-	610	654	125	95	-	-	320	250	-	-	168	18	-	-	156	200	100
50-32-250.1/ 00154	90L	✗	✗	50	32	100	168	65	-	14	200	190	-	180	225	-	-	-	610	654	125	95	-	-	320	250	-	-	168	18	-	-	156	200	100
50-32-250.1/ 00224	100L	-	✗	50	32	100	168	65	-	14	250	213	-	180	225	-	-	-	660	704	125	95	-	-	320	250	-	-	168	18	-	-	170	214	100
50-32-250.1/ 00304	100L	-	✗	50	32	100	168	65	-	14	250	213	-	180	225	-	-	-	660	704	125	95	-	-	320	250	-	-	168	18	-	-	170	214	100
65-40-125/ 00024	71M	✗	-	65	40	80	117	50	-	14	160	145	-	112	140	-	-	-	453	-	100	70	-	-	210	160	-	-	117	15	-	-	136	-	100
65-40-125/ 00034	71M	✗	-	65	40	80	117	50	-	14	160	145	-	112	140	-	-	-	453	-	100	70	-	-	210	160	-	-	117	15	-	-	136	-	100
65-40-125/ 00054	80M	✗	✗	65	40	80	117	50	-	14	200	162	-	112	140	-	-	-	491	-	100	70	-	-	210	160	-	-	117	15	-	-	156	-	100
65-40-125/ 00074	80M	-	✗	65	40	80	117	50	-	14	200	162	-	112	140	-	-	-	537	-	100	70	-	-	210	160	-	-	117	15	-	-	156	-	100
65-40-125/ 00114	90S	-	✗	65	40	80	117	50	-	14	200	190	-	112	140	-	-	-	590	634	100	70	-	-	210	160	-	-	117	15	-	-	156	200	100
65-40-160/ 00054	80M	✗	-	65	40	80	119	50	-	14	200	162	-	132	160	-	-	-	491	-	100	70	-	-	240	190	-	-	134	15	-	-	156	-	100
65-40-160/ 00074	80M	✗	✗	65	40	80	119	50	-	14	200	162	-	132	160	-	-	-	537	-	100	70	-	-	240	190	-	-	134	15	-	-	156	-	100
65-40-160/ 00114	90S	✗	✗	65	40	80	119	50	-	14	200	190	-	132	160	-	-	-	590	634	100	70	-	-	240	190	-	-	134	15	-	-	156	200	100
65-40-160/ 00154	90L	-	✗	65	40	80	119	50	-	14	200	190	-	132	160	-	-	-	590	634	100	70	-	-	240	190	-	-	134	15	-	-	156	200	100
65-40-160/ 00224	100L	-	✗	65	40	80	119	50	-	14	250	213	-	132	160	-	-	-	640	684	100	70	-	-	240	190	-	-	134	15	-	-	170	214	100
65-40-200/ 00074	80M	✗	-	65	40	100	142	50	-	14	200	162	-	160	180	-	-	-	557	-	100	70	-	-	265	212	-	-	155	18	-	-	156	-	100
65-40-200/ 00114	90S	✗	-	65	40	100	142	50	-	14	200	190	-	160	180	-	-	-	610	654	100	70	-	-	265	212	-	-	155	18	-	-	156	200	100
65-40-200/ 00154	90L	✗	✗	65	40	100	142	50	-	14	200	190	-	160	180	-	-	-	610	654	100	70	-	-	265	212	-	-	155	18	-	-	156	200	100
65-40-200/ 00224	100L	-	✗	65	40	100	142	50	-	14	250	213	-	160	180	-	-	-	660	704	100	70	-	-	265	212	-	-	155	18	-	-	170	214	100
65-40-200/ 00304	100L	-	✗	65	40	100	142	50	-	14	250	213	-	160	180	-	-	-	660	704	100	70	-	-	265	212	-	-	155	18	-	-	170	214	100
65-40-250/ 00114	90S	✗	-	65	40	100	169	65	-	14	200	190	-	180	225	-	-	-	610	654	125	95	-	-	320	250	-	-	179	18	-	-	156	200	100
65-40-250/ 00154	90L	✗	-	65	40	100	169	65	-	14	200	190	-	180	225	-	-	-	610	654	125	95	-	-	320	250	-	-	179	18	-	-	156	200	100
65-40-250/ 00224	100L	✗	✗	65	40	100	169	65	-	14	250	213	-	180	225	-	-	-	660	704	125	95	-	-	320	250	-	-	179	18	-	-	170	214	100
65-40-250/ 00304	100L	✗	✗	65	40	100	169	65	-	14	250	213	-	180	225	-	-	-	660	704	125	95	-	-	320	250	-	-	179	18	-	-	170	214	100
65-40-250/ 00404	112M	-	✗	65	40	100	169	65	-	14	250	235	-	180	225	-	-	-	642	686	125	95	-	-	320	250	-	-	179	18	-	-	170	214	100
65-40-250/ 00554	132S	-	✗	65	40	100	169	65	55	14	300	274	12	180	225	132	282	326	750	794	125	95	220	140	320	250	270	216	179	18	15	20	193	237	100
65-40-315/ 00224	100L	✗	-	65	40	125	207	65	-	14	250	213	-	225	250	-	-	-	705	752,5	125	95	-	-	345	280	-	-	207	18	-	-	190	238	100
65-40-315/ 00304	100L	✗	-	65	40	125	207	65	-	14	250	213	-	225	250	-	-	-	705	752,5	125	95	-	-	345	280	-	-	207	18	-	-	190	238	100
65-40-315/ 00404	112M	✗	✗	65	40	125	207	65	-	14	250	235	-	225	250	-	-	-	687	734,5	125	95	-	-	345	280	-	-	207	18	-	-	190	238	100
65-40-315/ 00554	132S	✗	✗	65	40	125	207	65	55	14	300	274	12	225	250	132	302	350	795	842,5	125	95	220	140	345	280	270	216	207	18	15	20	213	261	100
65-40-315/ 00754	132M	-	✗	65	40	125	207	65	59	14	300	298	12	225	250	132	302	350	795	842,5	125	95	240	178	345	280	270	216	207	18	15	20	213	261	100

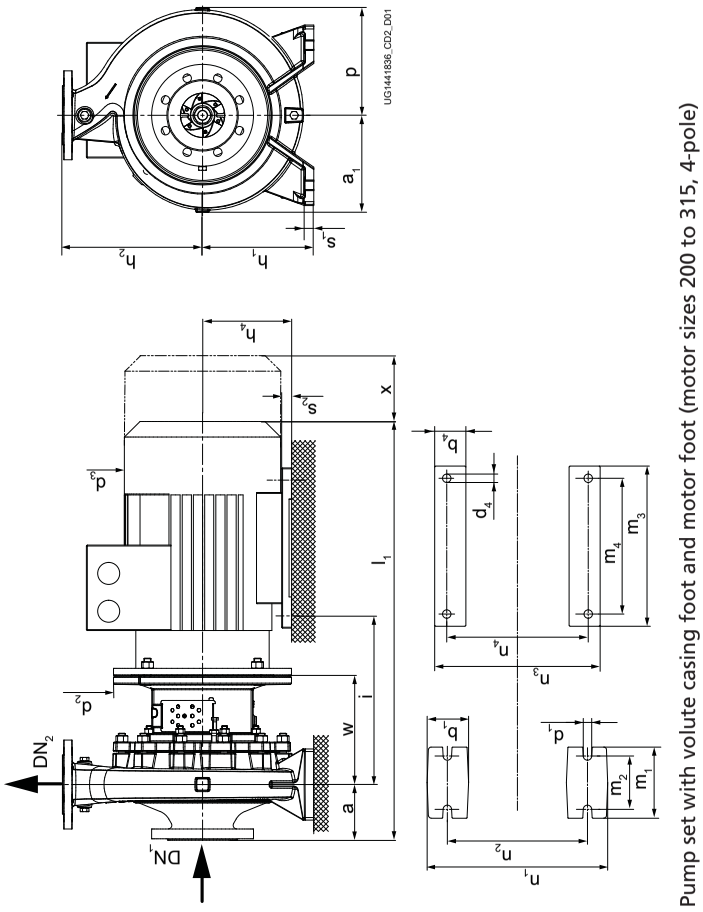
Etabloc	Motor (IEC)	n		DN_1 420)	DN_2 420)	a 420)	a1	b_1 420)	b_4	d_1 420)	d_2	d_3	d_4	h_1 420)	h_2 420)	h_4	i 421)	i 422)	l_1 421)	l_1 422)	m_1 420)	m_2 420)	m_3	m_4	n_1 420)	n_2 420)	n_3	n_4	p	s_1 420)	s_2	u 423)	w 421)	w 422)	x 420)
		1450	1750																															
		[rpm]		[mm]																																
65-40-315/ 01104	160M	-	✗	65	40	125	207	65	70	14	350	325	15	225	250	160	354	408	917	971	125	95	310	210	345	280	323	254	207	18	21	20	246	300	100
65-50-125/ 00054	80M	✗	-	65	50	100	117	50	-	14	200	162	-	132	160	-	-	-	511	-	100	70	-	-	240	190	-	-	130	18	-	-	156	-	100
65-50-125/ 00074	80M	✗	✗	65	50	100	117	50	-	14	200	162	-	132	160	-	-	-	557	-	100	70	-	-	240	190	-	-	130	18	-	-	156	-	100
65-50-125/ 00114	90S	✗	✗	65	50	100	117	50	-	14	200	190	-	132	160	-	-	-	610	654	100	70	-	-	240	190	-	-	130	18	-	-	156	200	100
65-50-125/ 00154	90L	-	✗	65	50	100	117	50	-	14	200	190	-	132	160	-	-	-	610	654	100	70	-	-	240	190	-	-	130	18	-	-	156	200	100
65-50-160/ 00074	80M	✗	-	65	50	100	128	50	-	14	200	162	-	160	180	-	-	-	557	-	100	70	-	-	265	212	-	-	149	18	-	-	156	-	100
65-50-160/ 00114	90S	✗	✗	65	50	100	128	50	-	14	200	190	-	160	180	-	-	-	610	654	100	70	-	-	265	212	-	-	149	18	-	-	156	200	100
65-50-160/ 00154	90L	✗	✗	65	50	100	128	50	-	14	200	190	-	160	180	-	-	-	610	654	100	70	-	-	265	212	-	-	149	18	-	-	156	200	100
65-50-160/ 00224	100L	-	✗	65	50	100	128	50	-	14	250	213	-	160	180	-	-	-	660	704	100	70	-	-	265	212	-	-	149	18	-	-	170	214	100
65-50-160/ 00304	100L	-	✗	65	50	100	128	50	-	14	250	213	-	160	180	-	-	-	660	704	100	70	-	-	265	212	-	-	149	18	-	-	170	214	100
65-50-200/ 00154	90L	✗	-	65	50	100	144	50	-	14	200	190	-	160	200	-	-	-	610	654	100	70	-	-	265	212	-	-	163	18	-	-	156	200	100
65-50-200/ 00224	100L	✗	✗	65	50	100	144	50	-	14	250	213	-	160	200	-	-	-	660	704	100	70	-	-	265	212	-	-	163	18	-	-	170	214	100
65-50-200/ 00304	100L	✗	✗	65	50	100	144	50	-	14	250	213	-	160	200	-	-	-	660	704	100	70	-	-	265	212	-	-	163	18	-	-	170	214	100
65-50-200/ 00404	112M	-	✗	65	50	100	144	50	-	14	250	235	-	160	200	-	-	-	642	686	100	70	-	-	265	212	-	-	163	18	-	-	170	214	100
65-50-200/ 00554	132S	-	✗	65	50	100	144	50	55	14	300	274	12	160	200	132	282	326	750	794	100	70	220	140	265	212	270	216	163	18	15	20	193	237	100
65-50-250/ 00224	100L	✗	-	65	50	100	170	65	-	14	250	213	-	180	225	-	-	-	660	704	125	95	-	-	320	250	-	-	186	18	-	-	170	214	100
65-50-250/ 00304	100L	✗	-	65	50	100	170	65	-	14	250	213	-	180	225	-	-	-	660	704	125	95	-	-	320	250	-	-	186	18	-	-	170	214	100
65-50-250/ 00404	112M	✗	✗	65	50	100	170	65	-	14	250	235	-	180	225	-	-	-	642	686	125	95	-	-	320	250	-	-	186	18	-	-	170	214	100
65-50-250/ 00554	132S	-	✗	65	50	100	170	65	55	14	300	274	12	180	225	132	282	326	750	794	125	95	220	140	320	250	270	216	186	18	15	20	193	237	100
65-50-250/ 00754	132M	-	✗	65	50	100	170	65	59	14	300	298	12	180	225	132	282	326	750	794	125	95	240	178	320	250	270	216	186	18	15	20	193	237	100
65-50-315/ 00304	100L	✗	-	65	50	125	207	65	-	14	250	213	-	225	280	-	-	-	705	752,5	125	95	-	-	345	280	-	-	215	18	-	-	190	238	100
65-50-315/ 00404	112M	✗	-	65	50	125	207	65	-	14	250	235	-	225	280	-	-	-	687	734,5	125	95	-	-	345	280	-	-	215	18	-	-	190	238	100
65-50-315/ 00554	132S	✗	-	65	50	125	207	65	55	14	300	274	12	225	280	132	302	350	795	842,5	125	95	220	140	345	280	270	216	215	18	15	20	213	261	100
65-50-315/ 00754	132M	✗	✗	65	50	125	207	65	59	14	300	298	12	225	280	132	302	350	795	842,5	125	95	240	178	345	280	270	216	215	18	15	20	213	261	100
65-50-315/ 01104	160M	-	✗	65	50	125	207	65	70	14	350	325	15	225	280	160	354	408	917	971	125	95	310	210	345	280	323	254	215	18	21	20	246	300	100
65-50-315/ 01504	160L	-	✗	65	50	125	207	65	70	14	350	325	15	225	280	160	354	408	953	1007	125	95	314	254	345	280	323	254	215	18	21	20	246	300	100
80-65-125/ 00054	80M	✗	-	80	65	100	117	65	-	14	200	162	-	160	180	-	-	-	511	-	125	95	-	-	280	212	-	-	150	18	-	-	156	-	100
80-65-125/ 00074	80M	✗	-	80	65	100	117	65	-	14	200	162	-	160	180	-	-	-	557	-	125	95	-	-	280	212	-	-	150	18	-	-	156	-	100
80-65-125/ 00114	90S	✗	✗	80	65	100	117	65	-	14	200	190	-	160	180	-	-	-	610	654	125	95	-	-	280	212	-	-	150	18	-	-	156	200	100
80-65-125/ 00154	90L	-	✗	80	65	100	117	65	-	14	200	190	-	160	180	-	-	-	610	654	125	95	-	-	280	212	-	-	150	18	-	-	156	200	100
80-65-125/ 00224	100L	-	✗	80	65	100	117	65	-	14	250	213	-	160	180	-	-	-	660	704	125	95	-	-	280	212	-	-	150	18	-	-	170	214	100
80-65-160/ 00114	90S	✗	-	80	65	100	132	65	-	14	200	190	-	160	200	-	-	-	610	654	125	95	-	-	280	212	-	-	160	18	-	-	156	200	100
80-65-160/ 00154	90L	✗	✗	80	65	100	132	65	-	14	200	190	-	160	200	-	-	-	610	654	125	95	-	-	280	212	-	-	160	18	-	-	156	200	100
80-65-160/ 00224	100L	✗	✗	80	65	100	132	65	-	14	250	213	-	160	200	-	-	-	660	704	125	95	-	-	280	212	-	-	160	18	-	-	170	214	100
80-65-160/ 00304	100L	-	✗	80	65	100	132	65	-	14	250	213	-	160	200	-	-	-	660	704	125	95	-	-	280	212	-	-	160	18	-	-	170	214	100
80-65-160/ 00404	112M	-	✗	80	65	100	132	65	-	14	250	235	-	160	200	-	-	-	642	686	125	95	-	-	280	212	-	-	160	18	-	-	170	214	100
80-65-200/ 00224	100L	✗	-	80	65	100	155	65	-	14	250	213	-	180	225	-	-	-	660	704	125	95	-	-	320	250	-	-	178	18	-	-	170	214	140
80-65-200/ 00304	100L	✗	✗	80	65	100	155	65	-	14	250	213	-	180	225	-	-	-	660	704	125	95	-	-	320	250	-	-	178	18	-	-	170	214	140
80-65-200/ 00404	112M	✗	✗	80	65	100	155	65	-	14	250	235	-	180	225	-	-	-	642	686	125	95	-	-	320	250	-	-	178	18	-	-	170	214	140
80-65-200/ 00554	132S	-	✗	80	65	100	155	65	55	14	300	274	12	180	225	132	282	326	750	794	125	95	220	140	320	250	270	216	178	18	15	20	193	237	140
80-65-200/ 00754	132M	-	✗	80	65	100	155	65	59	14	300	298	12	180	225	132	282	326	750	794	125	95	240	178	320	250	270	216	178	18	15	20	193	237	140

Etabloc	Motor (IEC)	n		DN_1 420)	DN_2 420)	a 420)	a1	b_1 420)	b_4	d_1 420)	d_2	d_3	d_4	h_1 420)	h_2 420)	h_4	i 421)	i 422)	l_1 421)	l_1 422)	m_1 420)	m_2 420)	m_3	m_4	n_1 420)	n_2 420)	n_3	n_4	p	s_1 420)	s_2	u 423)	w 421)	w 422)	x 420)
		1450	1750																															
		[rpm]		[mm]																														
80-65-250/ 00304	100L	✗	-	80	65	100	179	80	-	19	250	213	-	200	250	-	-	-	680	727,5	160	120	-	-	360	280	-	-	199	20	-	-	190	238	140
80-65-250/ 00404	112M	✗	-	80	65	100	179	80	-	19	250	235	-	200	250	-	-	-	662	709,5	160	120	-	-	360	280	-	-	199	20	-	-	190	238	140
80-65-250/ 00554	132S	✗	✗	80	65	100	179	80	55	19	300	274	12	200	250	132	302	350	770	817,5	160	120	220	140	360	280	270	216	199	20	15	20	213	261	140
80-65-250/ 00754	132M	-	✗	80	65	100	179	80	59	19	300	298	12	200	250	132	302	350	770	817,5	160	120	240	178	360	280	270	216	199	20	15	20	213	261	140
80-65-250/ 01104	160M	-	✗	80	65	100	179	80	70	19	350	325	15	200	250	160	354	408	892	946	160	120	310	210	360	280	323	254	199	20	21	20	246	300	140
80-65-315/ 00554	132S	✗	-	80	65	125	209	80	55	19	300	274	12	225	280	132	302	350	795	842,5	160	120	220	140	400	315	270	216	229	20	15	20	213	261	140
80-65-315/ 00754	132M	✗	-	80	65	125	209	80	59	19	300	298	12	225	280	132	302	350	795	842,5	160	120	240	178	400	315	270	216	229	20	15	20	213	261	140
80-65-315/ 01104	160M	✗	✗	80	65	125	209	80	70	19	350	325	15	225	280	160	354	408	917	971	160	120	310	210	400	315	323	254	229	20	21	20	246	300	140
80-65-315/ 01504	160L	✗	✗	80	65	125	209	80	70	19	350	325	15	225	280	160	354	408	953	1007	160	120	314	254	400	315	323	254	229	20	21	20	246	300	140
80-65-315/ 01854	180M	-	✗	80	65	125	209	80	80	19	350	370	15	225	280	180	367	421	988	1042	160	120	343	241	400	315	368	279	229	20	23	-	246	300	140
80-65-315/ 02204	180L	-	✗	80	65	125	209	80	80	19	350	370	15	225	280	180	367	421	988	1042	160	120	358	279	400	315	368	279	229	20	23	-	246	300	140
100-80-160/ 00154	90L	✗	-	100	80	125	138	65	-	14	200	190	-	180	225	-	-	-	635	679	125	95	-	-	320	250	-	-	174	18	-	-	156	200	140
100-80-160/ 00224	100L	✗	-	100	80	125	138	65	-	14	250	213	-	180	225	-	-	-	685	729	125	95	-	-	320	250	-	-	174	18	-	-	170	214	140
100-80-160/ 00304	100L	✗	✗	100	80	125	138	65	-	14	250	213	-	180	225	-	-	-	685	729	125	95	-	-	320	250	-	-	174	18	-	-	170	214	140
100-80-160/ 00404	112M	-	✗	100	80	125	138	65	-	14	250	235	-	180	225	-	-	-	667	711	125	95	-	-	320	250	-	-	174	18	-	-	170	214	140
100-80-160/ 00554	132S	-	✗	100	80	125	138	65	55	14	300	274	12	180	225	132	282	326	775	819	125	95	220	140	320	250	270	216	174	18	15	20	193	237	140
100-80-200/ 00224	100L	✗	-	100	80	125	159	65	-	14	250	213	-	180	250	-	-	-	705	752,5	125	95	-	-	345	280	-	-	188	18	-	-	190	238	140
100-80-200/ 00304	100L	✗	-	100	80	125	159	65	-	14	250	213	-	180	250	-	-	-	705	752,5	125	95	-	-	345	280	-	-	188	18	-	-	190	238	140
100-80-200/ 00404	112M	✗	-	100	80	125	159	65	-	14	250	235	-	180	250	-	-	-	687	734,5	125	95	-	-	345	280	-	-	188	18	-	-	190	238	140
100-80-200/ 00554	132S	✗	✗	100	80	125	159	65	55	14	300	274	12	180	250	132	302	350	795	842,5	125	95	220	140	345	280	270	216	188	18	15	20	213	261	140
100-80-200/ 00754	132M	-	✗	100	80	125	159	65	59	14	300	298	12	180	250	132	302	350	795	842,5	125	95	240	178	345	280	270	216	188	18	15	20	213	261	140
100-80-200/ 01104	160M	-	✗	100	80	125	159	65	70	14	350	325	15	180	250	160	354	408	917	971	125	95	310	210	345	280	323	254	188	18	21	20	246	300	140
100-80-250/ 00404	112M	✗	-	100	80	125	183	80	-	19	250	235	-	200	280	-	-	-	687	734,5	160	120	-	-	400	315	-	-	209	18	-	-	190	238	140
100-80-250/ 00554	132S	✗	-	100	80	125	183	80	55	19	300	274	12	200	280	132	302	350	795	842,5	160	120	220	140	400	315	270	216	209	18	15	20	213	261	140
100-80-250/ 00754	132M	✗	✗	100	80	125	183	80	59	19	300	298	12	200	280	132	302	350	795	842,5	160	120	240	178	400	315	270	216	209	18	15	20	213	261	140
100-80-250/ 01104	160M	✗	✗	100	80	125	183	80	70	19	350	325	15	200	280	160	354	408	917	971	160	120	310	210	400	315	323	254	209	18	21	20	246	300	140
100-80-250/ 01504	160L	-	✗	100	80	125	183	80	70	19	350	325	15	200	280	160	354	408	953	1007	160	120	314	254	400	315	323	254	209	18	21	20	246	300	140
100-80-250/ 01854	180M	-	✗	100	80	125	183	80	80	19	350	370	15	200	280	180	367	421	988	1042	160	120	343	241	400	315	368	279	209	18	23	-	246	300	140
100-80-315/ 00754	132M	✗	-	100	80	125	218	80	59	19	300	298	12	250	315	132	302	350	795	842,5	160	120	240	178	400	315	270	216	242	20	15	20	213	261	140
100-80-315/ 01104	160M	✗	-	100	80	125	218	80	70	19	350	325	15	250	315	160	354	408	917	971	160	120	310	210	400	315	323	254	242	20	21	20	246	300	140
100-80-315/ 01504	160L	✗	✗	100	80	125	218	80	70	19	350	325	15	250	315	160	354	408	953	1007	160	120	314	254	400	315	323	254	242	20	21	20	246	300	140
100-80-315/ 01854	180M	✗	✗	100	80	125	218	80	80	19	350	370	15	250	315	180	367	421	988	1042	160	120	343	241	400	315	368	279	242	20	23	-	246	300	140
100-80-315/ 02204	180L	✗	✗	100	80	125	218	80	80	19	350	370	15	250	315	180	367	421	988	1042	160	120	358	279	400	315	368	279	242	20	23	-	246	300	140
125-100-160/ 00304	100L	✗	-	125	100	125	178	80	-	19	250	213	-	200	280	-	-	-	705	752,5	160	120	-	-	360	280	-	-	225	18	-	-	190	238	140
125-100-160/ 00404	112M	✗	-	125	100	125	178	80	-	19	250	235	-	200	280	-	-	-	687	734,5	160	120	-	-	360	280	-	-	225	18	-	-	190	238	140
125-100-160/ 00554	132S	✗	✗	125	100	125	178	80	55	19	300	274	12	200	280	132	302	350	795	842,5	160	120	220	140	360	280	270	216	225	18	15	20	213	261	140
125-100-160/ 00754	132M	-	✗	125	100	125	178	80	59	19	300	298	12	200	280	132	302	350	795	842,5	160	120	240	178	360	280	270	216	225	18	15	20	213	261	140
125-100-200/ 00404	112M	✗	-	125	100	125	173	80	-	19	250	235	-	200	280	-	-	-	687	734,5	160	120	-	-	360	280	-	-	212	18	-	-	190	238	140
125-100-200/ 00554	132S	✗	-	125	100	125	173	80	55	19	300	274	12	200	280	132	302	350	795	842,5	160	120	220	140	360	280	270	216	212	18	15	20	213	261	140
125-100-200/ 00754	132M	✗	✗	125	100	125	173	80	59	19	300	298	12	200	280	132	302	350	795	842,5	160	120	240	178	360	280	270	216	212	18	15	20	213	261	140
125-100-200/ 01104	160M	✗	✗	125	100	125	173	80	70	19	350	325	15	200	280	160	354	408	917	971	160	120	310	210	360	280	323	254	212	18	21	20	246	300	140

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Etabloc	Motor (IEC)	n		DN_1 420)	DN_2 420)	a 420)	a1	b_1 420)	b_4	d_1 420)	d_2	d_3	d_4	h_1 420)	h_2 420)	h_4	i 421)	i 422)	l_1 421)	l_1 422)	m_1 420)	m_2 420)	m_3	m_4	n_1 420)	n_2 420)	n_3	n_4	p	s_1 420)	s_2	u 423)	w 421)	w 422)	x 420)
		1450	1750																															
		[rpm]		[mm]																																
125-100-200/ 01504	160L	-	✗	125	100	125	173	80	70	19	350	325	15	200	280	160	354	408	953	1007	160	120	314	254	360	280	323	254	212	18	21	20	246	300	140
125-100-250/ 00754	132M	✗	-	125	100	140	188	80	59	19	300	298	12	225	280	132	302	350	810	857,5	160	120	240	178	400	315	270	216	219	18	15	20	213	261	140
125-100-250/ 01104	160M	✗	✗	125	100	140	188	80	70	19	350	325	15	225	280	160	354	408	932	986	160	120	310	210	400	315	323	254	219	18	21	20	246	300	140
125-100-250/ 01504	160L	✗	✗	125	100	140	188	80	70	19	350	325	15	225	280	160	354	408	968	1022	160	120	314	254	400	315	323	254	219	18	21	20	246	300	140
125-100-250/ 01854	180M	-	✗	125	100	140	188	80	80	19	350	370	15	225	280	180	367	421	1003	1057	160	120	343	241	400	315	368	279	219	18	23	-	246	300	140
125-100-250/ 02204	180L	-	✗	125	100	140	188	80	80	19	350	370	15	225	280	180	367	421	1003	1057	160	120	358	279	400	315	368	279	219	18	23	-	246	300	140
125-100-315/ 01504	160L	✗	-	125	100	140	225	80	70	19	350	325	15	250	315	160	354	408	968	1022	160	120	314	254	400	315	323	254	255	18	21	20	246	300	140
125-100-315/ 01854	180M	✗	-	125	100	140	225	80	80	19	350	370	15	250	315	180	367	421	1003	1057	160	120	343	241	400	315	368	279	255	18	23	-	246	300	140
125-100-315/ 02204	180L	✗	-	125	100	140	225	80	80	19	350	370	15	250	315	180	367	421	1003	1057	160	120	358	279	400	315	368	279	255	18	23	-	246	300	140
150-125-200/ 00754	132M	✗	-	150	125	140	189	80	59	19	300	298	12	250	315	132	302	350	810	857,5	160	120	240	178	400	315	270	216	242	20	15	20	213	261	140
150-125-200/ 01104	160M	✗	✗	150	125	140	189	80	70	19	350	325	15	250	315	160	354	408	932	986	160	120	310	210	400	315	323	254	242	20	21	20	246	300	140
150-125-200/ 01504	160L	✗	✗	150	125	140	189	80	70	19	350	325	15	250	315	160	354	408	968	1022	160	120	314	254	400	315	323	254	242	20	21	20	246	300	140
150-125-200/ 01854	180M	-	✗	150	125	140	189	80	80	19	350	370	15	250	315	180	367	421	1003	1057	160	120	343	241	400	315	368	279	242	20	23	-	246	300	140
150-125-200/ 02204	180L	-	✗	150	125	140	189	80	80	19	350	370	15	250	315	180	367	421	1003	1057	160	120	358	279	400	315	368	279	242	20	23	-	246	300	140
150-125-250/ 01104	160M	✗	-	150	125	140	226	80	70	19	350	325	15	250	355	160	354	408	932	986	160	120	310	210	400	315	323	254	275	20	21	20	246	300	140
150-125-250/ 01504	160L	✗	✗	150	125	140	226	80	70	19	350	325	15	250	355	160	354	408	968	1022	160	120	314	254	400	315	323	254	275	20	21	20	246	300	140
150-125-250/ 01854	180M	✗	✗	150	125	140	226	80	80	19	350	370	15	250	355	180	367	421	1003	1057	160	120	343	241	400	315	368	279	275	20	23	-	246	300	140
150-125-250/ 02204	180L	-	✗	150	125	140	226	80	80	19	350	370	15	250	355	180	367	421	1003	1057	160	120	358	279	400	315	368	279	275	20	23	-	246	300	140
200-150-200/ 00754	132M	✗	-	200	150	160	240	100	59	24	300	298	12	280	400	132	302	350	830	877,5	200	150	240	178	550	450	270	216	316	20	15	20	213	261	140
200-150-200/ 01104	160M	✗	-	200	150	160	240	100	70	24	350	325	15	280	400	160	354	408	952	1006	200	150	310	210	550	450	323	254	316	20	21	20	246	300	140
200-150-200/ 01504	160L	✗	✗	200	150	160	240	100	70	24	350	325	15	280	400	160	354	408	988	1042	200	150	314	254	550	450	323	254	316	20	21	20	246	300	140
200-150-200/ 01854	180M	-	✗	200	150	160	240	100	80	24	350	370	15	280	400	180	367	421	1023	1077	200	150	343	241	550	450	368	279	316	20	23	-	246	300	140
200-150-200/ 02204	180L	-	✗	200	150	160	240	100	80	24	350	370	15	280	400	180	367	421	1023	1077	200	150	358	279	550	450	368	279	316	20	23	-	246	300	140
200-150-250/ 01504	160L	✗	-	200	150	160	230	100	70	24	350	325	15	280	400	160	354	408	988	1042	200	150	314	254	500	400	323	254	300	20	21	20	246	300	140
200-150-250/ 01854	180M	✗	-	200	150	160	230	100	80	24	350	370	15	280	400	180	367	421	1023	1077	200	150	343	241	500	400	368	279	300	20	23	-	246	300	140
200-150-250/ 02204	180L	✗	✗	200	150	160	230	100	80	24	350	370	15	280	400	180	367	421	1023	1077	200	150	358	279	500	400	368	279	300	20	23	-	246	300	140

Pump set with volute casing foot and motor foot (fixed speed version), 30 kW to 110 kW, n = 1450 rpm / 1750 rpm



Pump set with volute casing foot and motor foot (motor sizes 200 to 315, 4-pole)

n = 1450 rpm / n = 1750 rpm, material variants GG / GB / GC / BB / CC / SG / SB / SC

Dimensions of Etabloc 30 kW to 110 kW[424)]
Values a_1, b_1 , b_4, d_3, l_1, m_1, m_3, n_3 and p may vary slightly for production-related reasons.

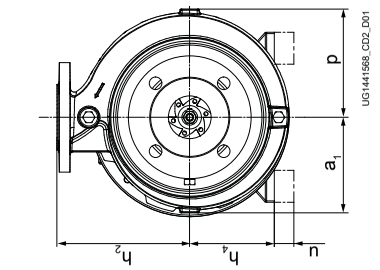
Etabloc	Motor (IEC)	n		DN_1 425)	DN_2 425)	a 425)	a_1	b_1 425)	b_4	d_1 425)	d_2	d_3	d_4	h_1 425)	h_2 425)	h_4	i 426)	i 427)	l_1 426)	l_1 427)	m_1 425)	m_2 425)	m_3	m_4	n_1 425)	n_2 425)	n_3	n_4	p	s_1 425)	s_2	w 426)	w 427)	x 425)
		1450	1750																														
		[rpm]		[mm]																														
100-80-315/ 03004	200L	-	✘	100	80	125	218	80	85	19	400	422	19	250	315	200	379	437	1040	1098	160	120	388	305	400	315	404	318	242	20	30	246	304	140
100-80-315/ 03704	225S	-	✘	100	80	125	218	80	100	19	450	460	19	250	315	225	426	483	1097	1154	160	120	412	286	400	315	458	356	242	20	35	277	334	140
100-80-400/ 03004	200L	✘	✘	100	80	125	257	80	85	19	400	422	19	280	355	200	379	437	1040	1098	160	120	388	305	435	355	404	318	280	20	30	246	304	140
100-80-400/ 03704	225S	✘	✘	100	80	125	257	80	100	19	450	460	19	280	355	225	426	483	1097	1154	160	120	412	286	435	355	458	356	280	20	35	277	334	140
100-80-400/ 04504	225M	-	✘	100	80	125	257	80	100	19	450	468	19	280	355	225	426	483	1145	1202	160	120	412	311	435	355	458	356	280	20	35	277	334	140
100-80-400/ 05504	250M	-	✘	100	80	125	257	80	100	19	550	520	24	280	355	250	457	502	1231	1276	160	120	467	349	435	355	531	406	280	20	40	289	334	140
125-100-315/ 03004	200L	✘	✘	125	100	140	225	80	85	19	400	422	19	250	315	200	379	437	1055	1113	160	120	388	305	400	315	404	318	255	18	30	246	304	140
125-100-315/ 03704	225S	-	✘	125	100	140	225	80	100	19	450	460	19	250	315	225	426	483	1112	1169	160	120	412	286	400	315	458	356	255	18	35	277	334	140
125-100-315/ 04504	225M	-	✘	125	100	140	225	80	100	19	450	468	19	250	315	225	426	483	1160	1217	160	120	412	311	400	315	458	356	255	18	35	277	334	140
125-100-400/ 03004	200L	✘	-	125	100	140	255	100	85	24	400	422	19	280	355	200	379	437	1055	1113	200	150	388	305	500	400	404	318	283	20	30	246	304	140
125-100-400/ 03704	225S	✘	✘	125	100	140	255	100	100	24	450	460	19	280	355	225	426	483	1112	1169	200	150	412	286	500	400	458	356	283	20	35	277	334	140
125-100-400/ 04504	225M	✘	✘	125	100	140	255	100	100	24	450	468	19	280	355	225	426	483	1160	1217	200	150	412	311	500	400	458	356	283	20	35	277	334	140
125-100-400/ 05504	250M	-	✘	125	100	140	255	100	100	24	550	520	24	280	355	250	457	502	1246	1291	200	150	467	349	500	400	531	406	283	20	40	289	334	140
125-100-400/ 07504	280S	-	✘	125	100	140	255	100	100	24	550	580	24	280	355	280	479	524	1354	1399	200	150	517	368	500	400	585	457	283	20	40	289	334	140
150-125-250/ 03004	200L	-	✘	150	125	140	226	80	85	19	400	422	19	250	355	200	379	437	1055	1113	160	120	388	305	400	315	404	318	275	20	30	246	304	140
150-125-315/ 03004	200L	✘	✘	150	125	140	243	100	85	24	400	422	19	280	355	200	379	437	1055	1113	200	150	388	305	500	400	404	318	280	20	30	246	304	140
150-125-315/ 03704	225S	✘	✘	150	125	140	243	100	100	24	450	460	19	280	355	225	426	483	1112	1169	200	150	412	286	500	400	458	356	280	20	35	277	334	140
150-125-315/ 04504	225M	-	✘	150	125	140	243	100	100	24	450	468	19	280	355	225	426	483	1160	1217	200	150	412	311	500	400	458	356	280	20	35	277	334	140
150-125-315/ 05504	250M	-	✘	150	125	140	243	100	100	24	550	520	24	280	355	250	457	502	1246	1291	200	150	467	349	500	400	531	406	280	20	40	289	334	140
150-125-400/ 03004	200L	✘	-	150	125	140	277	100	85	24	400	422	19	315	400	200	379	437	1055	1113	200	150	388	305	500	400	404	318	309	20	30	246	304	140
150-125-400/ 03704	225S	✘	-	150	125	140	277	100	100	24	450	460	19	315	400	225	426	483	1112	1169	200	150	412	286	500	400	458	356	309	20	35	277	334	140
150-125-400/ 04504	225M	✘	-	150	125	140	277	100	100	24	450	468	19	315	400	225	426	483	1160	1217	200	150	412	311	500	400	458	356	309	20	35	277	334	140
150-125-400/ 05504	250M	✘	-	150	125	140	277	100	100	24	550	520	24	315	400	250	457	502	1246	1291	200	150	467	349	500	400	531	406	309	20	40	289	334	140
150-125-400/ 07504	280S	✘	✘	150	125	140	277	100	100	24	550	580	24	315	400	280	479	524	1354	1399	200	150	517	368	500	400	585	457	309	20	40	289	334	140
150-125-400/ 09004	280M	-	✘	150	125	140	277	100	100	24	550	580	24	315	400	280	479	524	1409	1454	200	150	530	419	500	400	585	457	309	20	40	289	334	140
150-125-400/ 11004	315S	-	✘	150	125	140	277	100	132	24	650	664	28	315	400	315	595	595	1569	1569	200	150	621	406	500	400	662	508	309	20	50	379	379	140
200-150-200/ 03004	200L	-	✘	200	150	160	240	100	85	24	400	422	19	280	400	200	379	437	1075	1133	200	150	388	305	550	450	404	318	316	20	30	246	304	140
200-150-250/ 03004	200L	✘	✘	200	150	160	230	100	85	24	400	422	19	280	400	200	379	437	1075	1133	200	150	388	305	500	400	404	318	300	20	30	246	304	140
200-150-250/ 03704	225S	-	✘	200	150	160	230	100	100	24	450	460	19	280	400	225	426	483	1132	1189	200	150	412	286	500	400	458	356	300	20	35	277	334	140
200-150-250/ 04504	225M	-	✘	200	150	160	230	100	100	24	450	468	19	280	400	225	426	483	1180	1237	200	150	412	311	500	400	458	356	300	20	35	277	334	140
200-150-315/ 03004	200L	✘	-	200	150	160	255	100	85	24	400	422	19	280	400	200	379	437	1075	1133	200	150	388	305	550	450	404	318	304	20	30	246	304	140

424 Tolerances of mating dimensions to EN 735
425 Dimensions to EN 733
426 Dimension with single mechanical seal (A, IA, EA, FA)
427 Dimension with double mechanical seal (DB, TI)

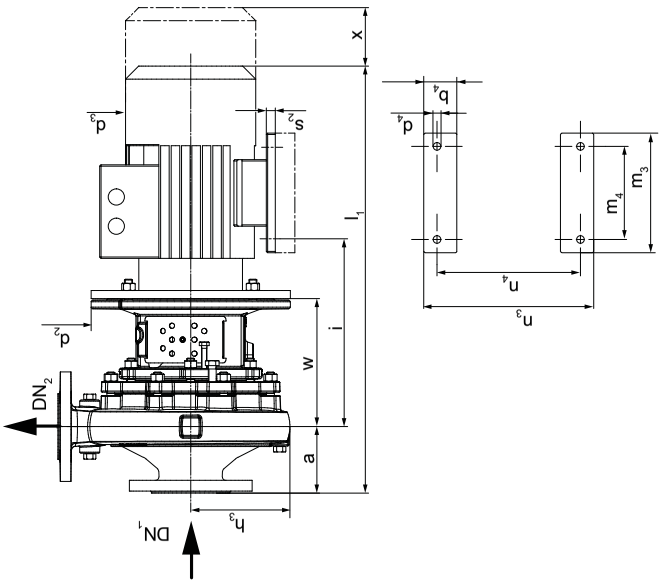
Etabloc	Motor (IEC)	n		DN_1 [425]	DN_2 [425]	a [425]	a_1	b_1 [425]	b_4	d_1 [425]	d_2	d_3	d_4	h_1 [425]	h_2 [425]	h_4	i [426]	i [427]	l_1 [426]	l_1 [427]	m_1 [425]	m_2 [425]	m_3	m_4	n_1 [425]	n_2 [425]	n_3	n_4	p	s_1 [425]	s_2	w [426]	w [427]	x [425]
		1450	1750																														
		[rpm]		[mm]																														
200-150-315/ 03704	225S	✗	✗	200	150	160	255	100	100	24	450	460	19	280	400	225	426	483	1132	1189	200	150	412	286	550	450	458	356	304	20	35	277	334	140
200-150-315/ 04504	225M	✗	✗	200	150	160	255	100	100	24	450	468	19	280	400	225	426	483	1180	1237	200	150	412	311	550	450	458	356	304	20	35	277	334	140
200-150-315/ 05504	250M	✗	✗	200	150	160	255	100	100	24	550	520	24	280	400	250	457	502	1266	1311	200	150	467	349	550	450	531	406	304	20	40	289	334	140
200-150-315/ 07504	280S	-	✗	200	150	160	255	100	100	24	550	580	24	280	400	280	479	524	1374	1419	200	150	517	368	550	450	585	457	304	20	40	289	334	140
200-150-400/ 04504	225M	✗	-	200	150	160	289	100	100	24	450	468	19	315	450	225	426	483	1180	1237	200	150	412	311	550	450	458	356	331	20	35	277	334	140
200-150-400/ 05504	250M	✗	-	200	150	160	289	100	100	24	550	520	24	315	450	250	457	502	1266	1311	200	150	467	349	550	450	531	406	331	20	40	289	334	140
200-150-400/ 07504	280S	✗	✗	200	150	160	289	100	100	24	550	580	24	315	450	280	479	524	1374	1419	200	150	517	368	550	450	585	457	331	20	40	289	334	140
200-150-400/ 09004	280M	✗	✗	200	150	160	289	100	100	24	550	580	24	315	450	280	479	524	1429	1474	200	150	530	419	550	450	585	457	331	20	40	289	334	140
200-150-400/ 11004	315S	-	✗	200	150	160	289	100	132	24	650	664	28	315	450	315	595	595	1589	1589	200	150	621	406	550	450	662	508	331	20	50	379	379	140

Pump set with support foot and motor foot (fixed speed version), ≤ 22 kW, n = 960 rpm / 1160 rpm

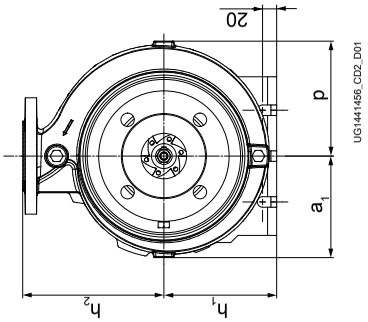
Dimensions [mm]



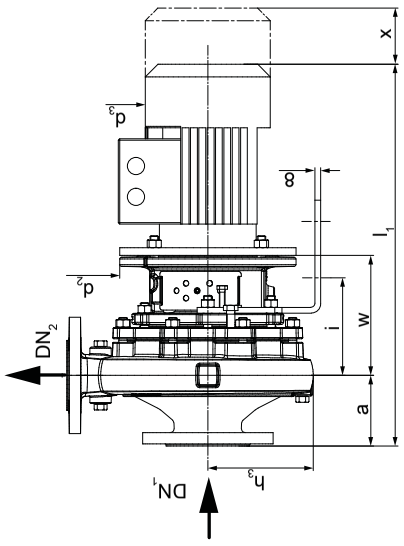
Pump set with motor foot (motor sizes 132 to 180)

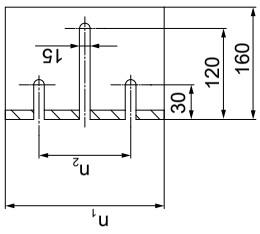


Pump set with motor foot (motor sizes 132 to 180)



Pump set with support foot (up to motor size 112)





Pump set with support foot (up to motor size 112)

n = 960 rpm / n = 1160 rpm, material variants GG / GB / GC

Dimensions of Etabloc ≤ 22 kW[428]
Values a_1, b_4, d_3, l_1, m_3, n_3 and p may vary slightly for production-related reasons.

Etabloc	Motor (IEC)	n		DN_1 [429]	DN_2 [429]	a [429]	a_1	b_4	d_2	d_3	d_4	h_1	h_2 [429]	h_3	h_4	i [430]	i [431]	l_1 [430]	l_1 [431]	m_3	m_4	n_1	n_2	n_3	n_4	p	s_2	u [432]	w [430]	w [431]	x [429]
		960	1160																											
		[rpm]		[mm]																											
40-25-160/ 00036	80M	✗	✗	40	25	80	118	-	200	162	-	160	160	107	-	118	-	491	-	-	-	225	130	-	-	118	-	-	156	-	100
40-25-160/ 00076	90S	✗	✗	40	25	80	118	-	200	190	-	160	160	107	-	118	118	518	562	-	-	225	130	-	-	118	-	-	156	200	100
40-25-200/ 00036	80M	✗	✗	40	25	80	142	-	200	162	-	160	180	137	-	118	-	491	-	-	-	225	130	-	-	142	-	-	156	-	100
40-25-200/ 00076	90S	✗	✗	40	25	80	142	-	200	190	-	160	180	137	-	118	118	518	562	-	-	225	130	-	-	142	-	-	156	200	100
50-32-125/ 00036	80M	✗	✗	50	32	80	115	-	200	162	-	160	140	100	-	118	-	491	-	-	-	225	130	-	-	115	-	-	156	-	100
50-32-125/ 00076	90S	✗	✗	50	32	80	115	-	200	190	-	160	140	100	-	118	118	518	562	-	-	225	130	-	-	115	-	-	156	200	100
50-32-125.1/ 00036	80M	✗	✗	50	32	80	116	-	200	162	-	160	140	100	-	118	-	491	-	-	-	225	130	-	-	116	-	-	156	-	100
50-32-125.1/ 00076	90S	✗	✗	50	32	80	116	-	200	190	-	160	140	100	-	118	118	518	562	-	-	225	130	-	-	116	-	-	156	200	100
50-32-160/ 00036	80M	✗	✗	50	32	80	118	-	200	162	-	160	160	115	-	118	-	491	-	-	-	225	130	-	-	128	-	-	156	-	100
50-32-160/ 00076	90S	✗	✗	50	32	80	118	-	200	190	-	160	160	115	-	118	118	518	562	-	-	225	130	-	-	128	-	-	156	200	100
50-32-160.1/ 00036	80M	✗	✗	50	32	80	116	-	200	162	-	160	160	111	-	118	-	491	-	-	-	225	130	-	-	121	-	-	156	-	100
50-32-160.1/ 00076	90S	✗	✗	50	32	80	116	-	200	190	-	160	160	111	-	118	118	518	562	-	-	225	130	-	-	121	-	-	156	200	100
50-32-200/ 00036	80M	✗	✗	50	32	80	142	-	200	162	-	160	180	137	-	118	-	491	-	-	-	225	130	-	-	143	-	-	156	-	100
50-32-200/ 00056	80M	✗	✗	50	32	80	142	-	200	162	-	160	180	137	-	118	-	491	-	-	-	225	130	-	-	143	-	-	156	-	100
50-32-200/ 00076	90S	✗	✗	50	32	80	142	-	200	190	-	160	180	137	-	118	118	518	562	-	-	225	130	-	-	143	-	-	156	200	100
50-32-200.1/ 00036	80M	✗	✗	50	32	80	142	-	200	162	-	160	180	136	-	118	-	491	-	-	-	225	130	-	-	142	-	-	156	-	100
50-32-200.1/ 00076	90S	✗	✗	50	32	80	142	-	200	190	-	160	180	136	-	118	118	518	562	-	-	225	130	-	-	142	-	-	156	200	100
50-32-250/ 00036	80M	✗	✗	50	32	100	169	-	200	162	-	160	225	166	-	118	-	511	-	-	-	225	130	-	-	178	-	-	156	-	100
50-32-250/ 00056	80M	✗	✗	50	32	100	169	-	200	162	-	160	225	166	-	118	-	511	-	-	-	225	130	-	-	178	-	-	156	-	100
50-32-250/ 00076	90S	✗	✗	50	32	100	169	-	200	190	-	160	225	166	-	118	118	538	562	-	-	225	130	-	-	178	-	-	156	200	100
50-32-250/ 00076	90L	-	✗	50	32	100	169	-	200	190	-	160	225	166	-	118	118	564	562	-	-	225	130	-	-	178	-	-	156	200	100
50-32-250.1/ 00036	80M	✗	✗	50	32	100	168	-	200	162	-	160	225	166	-	118	-	511	-	-	-	225	130	-	-	168	-	-	156	-	100
50-32-250.1/ 00056	80M	✗	✗	50	32	100	168	-	200	162	-	160	225	166	-	118	-	511	-	-	-	225	130	-	-	168	-	-	156	-	100
50-32-250.1/ 00076	90S	✗	✗	50	32	100	168	-	200	190	-	160	225	166	-	118	118	538	562	-	-	225	130	-	-	168	-	-	156	200	100
65-40-125/ 00036	80M	✗	✗	65	40	80	117	-	200	162	-	160	140	107	-	118	-	491	-	-	-	225	130	-	-	117	-	-	156	-	100
65-40-125/ 00076	90S	✗	✗	65	40	80	117	-	200	190	-	160	140	107	-	118	118	518	562	-	-	225	130	-	-	117	-	-	156	200	100
65-40-160/ 00036	80M	✗	✗	65	40	80	119	-	200	162	-	160	160	119	-	118	-	491	-	-	-	225	130	-	-	134	-	-	156	-	100
65-40-160/ 00056	80M	✗	✗	65	40	80	119	-	200	162	-	160	160	119	-	118	-	491	-	-	-	225	130	-	-	134	-	-	156	-	100
65-40-160/ 00076	90S	✗	✗	65	40	80	119	-	200	190	-	160	160	119	-	118	118	518	562	-	-	225	130	-	-	134	-	-	156	200	100
65-40-200/ 00036	80M	✗	✗	65	40	100	142	-	200	162	-	160	180	141	-	118	-	511	-	-	-	225	130	-	-	155	-	-	156	-	100

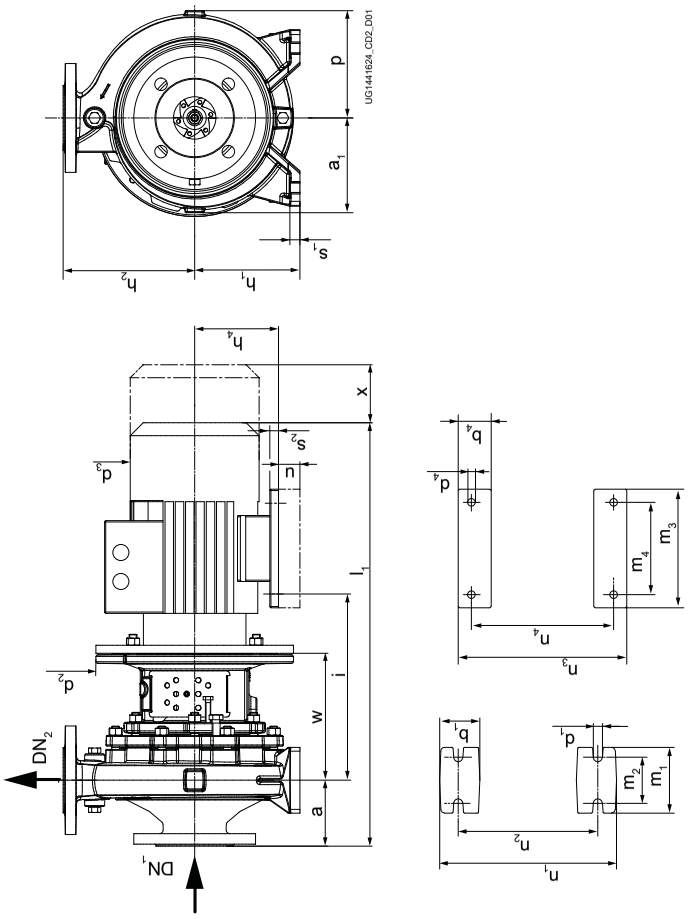
428 Tolerances of mating dimensions to EN 735
429 Dimensions to EN 733
430 Dimension with single mechanical seal (A, IA, EA, FA)
431 Dimension with double mechanical seal (DB, TI)
432 Motor feet must be shimmed.

Etabloc	Motor (IEC)	n		DN_1 429)	DN_2 429)	a 429)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 429)	h_3	h_4	i 430)	i 431)	l_1 430)	l_1 431)	m_3	m_4	n_1	n_2	n_3	n_4	p	s_2	u 432)	w 430)	w 431)	x 429)
		960	1160																											
		[rpm]		[mm]																											
65-40-200/ 00056	80M	✗	✗	65	40	100	142	-	200	162	-	160	180	141	-	118	-	511	-	-	-	225	130	-	-	155	-	-	156	-	100
65-40-200/ 00076	90S	✗	✗	65	40	100	142	-	200	190	-	160	180	141	-	118	118	538	582	-	-	225	130	-	-	155	-	-	156	200	100
65-40-250/ 00036	80M	✗	-	65	40	100	169	-	200	162	-	160	225	166	-	118	-	511	-	-	-	225	130	-	-	179	-	-	156	-	100
65-40-250/ 00056	80M	✗	✗	65	40	100	169	-	200	162	-	160	225	166	-	118	-	511	-	-	-	225	130	-	-	179	-	-	156	-	100
65-40-250/ 00076	90S	✗	✗	65	40	100	169	-	200	190	-	160	225	166	-	118	118	538	582	-	-	225	130	-	-	179	-	-	156	200	100
65-40-250/ 00116	90L	✗	✗	65	40	100	169	-	200	190	-	160	225	166	-	118	118	564	608	-	-	225	130	-	-	179	-	-	156	200	100
65-40-250/ 00156	100L	-	✗	65	40	100	169	-	250	213	-	160	225	166	-	118	118	652	696	-	-	225	130	-	-	179	-	-	170	214	100
65-40-315/ 00156	100L	✗	✗	65	40	125	207	-	250	213	-	180	250	204	-	142	142	697	745	-	-	260	180	-	-	207	-	-	190	238	100
65-40-315/ 00226	112M	✗	✗	65	40	125	207	-	250	234	-	180	250	204	-	142	142	686	734	-	-	260	180	-	-	207	-	-	190	238	100
65-40-315/ 00306	132S	-	✗	65	40	125	207	55	300	266	12	-	250	204	132	302	350	751	799	220	140	-	-	270	216	207	15	20	213	261	100
65-50-125/ 00036	80M	✗	✗	65	50	100	117	-	200	162	-	160	160	112	-	118	-	511	-	-	-	225	130	-	-	130	-	-	156	-	100
65-50-125/ 00076	90S	✗	✗	65	50	100	117	-	200	190	-	160	160	112	-	118	118	538	582	-	-	225	130	-	-	130	-	-	156	200	100
65-50-160/ 00036	80M	✗	✗	65	50	100	128	-	200	162	-	160	180	133	-	118	-	511	-	-	-	225	130	-	-	149	-	-	156	-	100
65-50-160/ 00056	80M	✗	✗	65	50	100	128	-	200	162	-	160	180	133	-	118	-	511	-	-	-	225	130	-	-	149	-	-	156	-	100
65-50-160/ 00076	90S	✗	✗	65	50	100	128	-	200	190	-	160	180	133	-	118	118	538	582	-	-	225	130	-	-	149	-	-	156	200	100
65-50-200/ 00036	80M	✗	-	65	50	100	144	-	200	162	-	160	200	150	-	118	-	511	-	-	-	225	130	-	-	163	-	-	156	-	100
65-50-200/ 00056	80M	✗	✗	65	50	100	144	-	200	162	-	160	200	150	-	118	-	511	-	-	-	225	130	-	-	163	-	-	156	-	100
65-50-200/ 00076	90S	✗	✗	65	50	100	144	-	200	190	-	160	200	150	-	118	118	538	582	-	-	225	130	-	-	163	-	-	156	200	100
65-50-200/ 00116	90L	✗	✗	65	50	100	144	-	200	190	-	160	200	150	-	118	118	564	608	-	-	225	130	-	-	163	-	-	156	200	100
65-50-200/ 00156	100L	-	✗	65	50	100	144	-	250	213	-	160	200	150	-	118	118	652	696	-	-	225	130	-	-	163	-	-	170	214	100
65-50-250/ 00056	80M	✗	-	65	50	100	170	-	200	162	-	160	225	172	-	118	-	511	-	-	-	225	130	-	-	186	-	-	156	-	100
65-50-250/ 00076	90S	✗	-	65	50	100	170	-	200	190	-	160	225	172	-	118	118	538	582	-	-	225	130	-	-	186	-	-	156	200	100
65-50-250/ 00116	90L	✗	✗	65	50	100	170	-	200	190	-	160	225	172	-	118	118	564	608	-	-	225	130	-	-	186	-	-	156	200	100
65-50-250/ 00156	100L	-	✗	65	50	100	170	-	250	213	-	160	225	172	-	118	118	652	696	-	-	225	130	-	-	186	-	-	170	214	100
65-50-250/ 00226	112M	-	✗	65	50	100	170	-	250	234	-	160	225	172	-	118	118	641	685	-	-	225	130	-	-	186	-	-	170	214	100
65-50-315/ 00156	100L	✗	-	65	50	125	207	-	250	213	-	180	280	203	-	142	142	697	745	-	-	260	180	-	-	215	-	-	190	238	100
65-50-315/ 00226	112M	✗	✗	65	50	125	207	-	250	234	-	180	280	203	-	142	142	686	734	-	-	260	180	-	-	215	-	-	190	238	100
65-50-315/ 00306	132S	✗	✗	65	50	125	207	55	300	266	12	-	280	203	132	302	350	751	799	220	140	-	-	270	216	215	15	20	213	261	100
65-50-315/ 00406	132M	-	✗	65	50	125	207	59	300	298	12	-	280	203	132	302	350	779	827	240	178	-	-	270	216	215	15	20	213	261	100
80-65-125/ 00036	80M	✗	✗	80	65	100	117	-	200	162	-	160	180	127	-	118	-	511	-	-	-	225	130	-	-	150	-	-	156	-	100
80-65-125/ 00056	80M	✗	✗	80	65	100	117	-	200	162	-	160	180	127	-	118	-	511	-	-	-	225	130	-	-	150	-	-	156	-	100
80-65-125/ 00076	90S	✗	✗	80	65	100	117	-	200	190	-	160	180	127	-	118	118	538	582	-	-	225	130	-	-	150	-	-	156	200	100
80-65-160/ 00036	80M	✗	✗	80	65	100	132	-	200	162	-	160	200	140	-	118	-	511	-	-	-	225	130	-	-	160	-	-	156	-	100
80-65-160/ 00056	80M	✗	✗	80	65	100	132	-	200	162	-	160	200	140	-	118	-	511	-	-	-	225	130	-	-	160	-	-	156	-	100
80-65-160/ 00076	90S	✗	✗	80	65	100	132	-	200	190	-	160	200	140	-	118	118	538	582	-	-	225	130	-	-	160	-	-	156	200	100
80-65-160/ 00116	90L	-	✗	80	65	100	132	-	200	190	-	160	200	140	-	118	118	564	608	-	-	225	130	-	-	160	-	-	156	200	100
80-65-200/ 00056	80M	✗	-	80	65	100	155	-	200	162	-	160	225	161	-	118	-	511	-	-	-	225	130	-	-	178	-	-	156	-	140
80-65-200/ 00076	90S	✗	-	80	65	100	155	-	200	190	-	160	225	161	-	118	118	538	582	-	-	225	130	-	-	178	-	-	156	200	140
80-65-200/ 00116	90L	✗	✗	80	65	100	155	-	200	190	-	160	225	161	-	118	118	564	608	-	-	225	130	-	-	178	-	-	156	200	140
80-65-200/ 00156	100L	-	✗	80	65	100	155	-	250	213	-	160	225	161	-	118	118	652	696	-	-	225	130	-	-	178	-	-	170	214	140

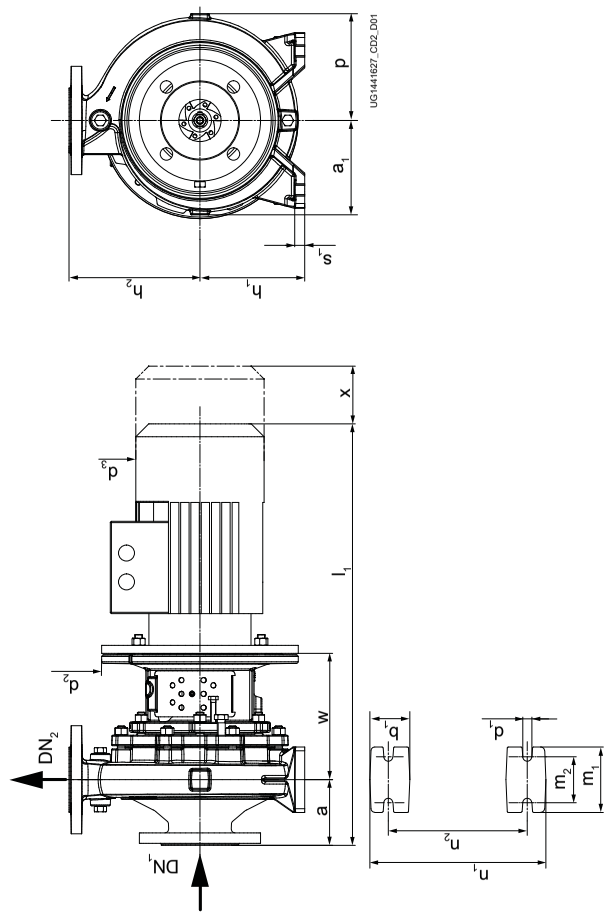
Etabloc	Motor (IEC)	n		DN_1 429)	DN_2 429)	a 429)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 429)	h_3	h_4	i 430)	i 431)	l_1 430)	l_1 431)	m_3	m_4	n_1	n_2	n_3	n_4	p	s_2	u 432)	w 430)	w 431)	x 429)
		960	1160																											
		[rpm]		[mm]																											
80-65-200/ 00226	112M	-	✗	80	65	100	155	-	250	234	-	160	225	161	-	118	118	641	685	-	-	225	130	-	-	178	-	-	170	214	140
80-65-250/ 00156	100L	✗	✗	80	65	100	179	-	250	213	-	180	250	185	-	142	142	672	720	-	-	260	180	-	-	199	-	-	190	238	140
80-65-250/ 00226	112M	✗	✗	80	65	100	179	-	250	234	-	180	250	185	-	142	142	661	709	-	-	260	180	-	-	199	-	-	190	238	140
80-65-250/ 00306	132S	-	✗	80	65	100	179	55	300	266	12	-	250	185	132	302	350	726	774	220	140	-	-	270	216	199	15	20	213	261	140
80-65-315/ 00226	112M	✗	✗	80	65	125	209	-	250	234	-	180	280	213	-	142	142	686	734	-	-	260	180	-	-	229	-	-	190	238	140
80-65-315/ 00306	132S	✗	✗	80	65	125	209	55	300	266	12	-	280	213	132	302	350	751	799	220	140	-	-	270	216	229	15	20	213	261	140
80-65-315/ 00406	132M	✗	✗	80	65	125	209	59	300	298	12	-	280	213	132	302	350	779	827	240	178	-	-	270	216	229	15	20	213	261	140
80-65-315/ 00556	132M	-	✗	80	65	125	209	59	300	298	12	-	280	213	132	302	350	779	827	240	178	-	-	270	216	229	15	20	213	261	140
100-80-160/ 00056	160M	✗	-	100	80	125	138	-	200	162	-	160	225	153	-	118	-	536	-	-	-	225	130	-	-	174	-	-	156	-	140
100-80-160/ 00076	160L	✗	✗	100	80	125	138	-	200	190	-	160	225	153	-	118	118	563	607	-	-	225	130	-	-	174	-	-	156	200	140
100-80-160/ 00116	180M	✗	✗	100	80	125	138	-	200	190	-	160	225	153	-	118	118	589	633	-	-	225	130	-	-	174	-	-	156	200	140
100-80-160/ 00156	180M	-	✗	100	80	125	138	-	250	213	-	160	225	153	-	118	118	677	721	-	-	225	130	-	-	174	-	-	170	214	140
100-80-200/ 00156	100L	✗	✗	100	80	125	159	-	250	213	-	180	250	170	-	142	142	697	745	-	-	260	180	-	-	188	-	-	190	238	140
100-80-200/ 00226	112M	✗	✗	100	80	125	159	-	250	234	-	180	250	170	-	142	142	686	734	-	-	260	180	-	-	188	-	-	190	238	140
100-80-200/ 00306	132S	✗	✗	100	80	125	159	55	300	266	12	-	250	170	132	302	350	751	799	220	140	-	-	270	216	188	15	20	213	261	140
100-80-250/ 00156	100L	✗	-	100	80	125	183	-	250	213	-	180	280	192	-	142	142	697	745	-	-	260	180	-	-	209	-	-	190	238	140
100-80-250/ 00226	112M	✗	-	100	80	125	183	-	250	234	-	180	280	192	-	142	142	686	734	-	-	260	180	-	-	209	-	-	190	238	140
100-80-250/ 00306	132S	✗	✗	100	80	125	183	55	300	266	12	-	280	192	132	302	350	751	799	220	140	-	-	270	216	209	15	20	213	261	140
100-80-250/ 00406	132M	✗	✗	100	80	125	183	59	300	298	12	-	280	192	132	302	350	779	827	240	178	-	-	270	216	209	15	20	213	261	140
100-80-250/ 00556	132M	-	✗	100	80	125	183	59	300	298	12	-	280	192	132	302	350	779	827	240	178	-	-	270	216	209	15	20	213	261	140
100-80-315/ 00306	132S	✗	-	100	80	125	218	55	300	266	12	-	315	227	132	302	350	751	799	220	140	-	-	270	216	242	15	20	213	261	140
100-80-315/ 00406	132M	✗	✗	100	80	125	218	59	300	298	12	-	315	227	132	302	350	779	827	240	178	-	-	270	216	242	15	20	213	261	140
100-80-315/ 00556	132M	✗	✗	100	80	125	218	59	300	298	12	-	315	227	132	302	350	779	827	240	178	-	-	270	216	242	15	20	213	261	140
100-80-315/ 00756	160M	✗	✗	100	80	125	218	70	350	325	15	-	315	227	160	354	408	917	971	300	210	-	-	320	254	242	21	20	246	300	140
100-80-315/ 01106	160L	-	✗	100	80	125	218	70	350	325	15	-	315	227	160	354	408	923	977	314	254	-	-	320	254	242	21	20	246	300	140
125-100-160/ 00156	100L	✗	✗	125	100	125	178	-	250	213	-	180	280	199	-	142	142	697	745	-	-	260	180	-	-	225	-	-	190	238	140
125-100-160/ 00226	112M	-	✗	125	100	125	178	-	250	234	-	180	280	199	-	142	142	686	734	-	-	260	180	-	-	225	-	-	190	238	140
125-100-200/ 00156	100L	✗	✗	125	100	125	173	-	250	213	-	180	280	189	-	142	142	697	745	-	-	260	180	-	-	212	-	-	190	238	140
125-100-200/ 00226	112M	✗	✗	125	100	125	173	-	250	234	-	180	280	189	-	142	142	686	734	-	-	260	180	-	-	212	-	-	190	238	140
125-100-200/ 00306	132S	-	✗	125	100	125	173	55	300	266	12	-	280	189	132	302	350	751	799	220	140	-	-	270	216	212	15	20	213	261	140
125-100-200/ 00406	132M	-	✗	125	100	125	173	59	300	298	12	-	280	189	132	302	350	779	827	240	178	-	-	270	216	212	15	20	213	261	140
125-100-250/ 00226	112M	✗	-	125	100	140	188	-	250	234	-	180	280	200	-	142	142	701	749	-	-	260	180	-	-	219	-	-	190	238	140
125-100-250/ 00306	132S	✗	✗	125	100	140	188	55	300	266	12	-	280	200	132	302	350	766	814	220	140	-	-	270	216	219	15	20	213	261	140
125-100-250/ 00406	132M	✗	✗	125	100	140	188	59	300	298	12	-	280	200	132	302	350	794	842	240	178	-	-	270	216	219	15	20	213	261	140
125-100-250/ 00556	132M	-	✗	125	100	140	188	59	300	298	12	-	280	200	132	302	350	794	842	240	178	-	-	270	216	219	15	20	213	261	140
125-100-250/ 00756	160M	-	✗	125	100	140	188	70	350	325	15	-	280	200	160	354	408	932	966	300	210	-	-	320	254	219	21	20	246	300	140
125-100-315/ 00406	132M	✗	-	125	100	140	225	59	300	298	12	-	315	237	132	302	350	794	842	240	178	-	-	270	216	255	15	20	213	261	140
125-100-315/ 00556	132M	✗	-	125	100	140	225	59	300	298	12	-	315	237	132	302	350	794	842	240	178	-	-	270	216	255	15	20	213	261	140
125-100-315/ 00756	160M	✗	✗	125	100	140	225	70	350	325	15	-	315	237	160	354	408	932	986	300	210	-	-	320	254	255	21	20	246	300	140
125-100-315/ 01106	160L	✗	✗	125	100	140	225	70	350	325	15	-	315	237	160	354	408	938	992	314	254	-	-	320	254	255	21	20	246	300	140

Etabloc	Motor (IEC)	n		DN_1 429)	DN_2 429)	a 429)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 429)	h_3	h_4	i 430)	i 431)	l_1 430)	l_1 431)	m_3	m_4	n_1	n_2	n_3	n_4	p	s_2	u 432)	w 430)	w 431)	x 429)
		960	1160																											
		[rpm]		[mm]																											
150-125-200/ 00226	112M	✘	-	150	125	140	189	-	250	234	-	180	315	212	-	142	142	701	749	-	-	260	180	-	-	242	-	-	190	238	140
150-125-200/ 00306	132S	✘	✘	150	125	140	189	55	300	266	12	-	315	212	132	302	350	766	814	220	140	-	-	270	216	242	15	20	213	261	140
150-125-200/ 00406	132M	-	✘	150	125	140	189	59	300	298	12	-	315	212	132	302	350	794	842	240	178	-	-	270	216	242	15	20	213	261	140
150-125-200/ 00556	132M	-	✘	150	125	140	189	59	300	298	12	-	315	212	132	302	350	794	842	240	178	-	-	270	216	242	15	20	213	261	140
150-125-250/ 00306	132S	✘	-	150	125	140	226	55	300	266	12	-	355	248	132	302	350	766	814	220	140	-	-	270	216	275	15	20	213	261	140
150-125-250/ 00406	132M	✘	✘	150	125	140	226	59	300	298	12	-	355	248	132	302	350	794	842	240	178	-	-	270	216	275	15	20	213	261	140
150-125-250/ 00556	132M	✘	✘	150	125	140	226	59	300	298	12	-	355	248	132	302	350	794	842	240	178	-	-	270	216	275	15	20	213	261	140
150-125-250/ 00756	160M	-	✘	150	125	140	226	70	350	325	15	-	355	248	160	354	408	932	986	300	210	-	-	320	254	275	21	20	246	300	140
200-150-200/ 00306	132S	✘	-	200	150	160	240	55	300	266	12	-	400	277	132	302	350	786	834	220	140	-	-	270	216	316	15	20	213	261	140
200-150-200/ 00406	132M	✘	✘	200	150	160	240	59	300	298	12	-	400	277	132	302	350	814	862	240	178	-	-	270	216	316	15	20	213	261	140
200-150-200/ 00556	132M	-	✘	200	150	160	240	59	300	298	12	-	400	277	132	302	350	814	862	240	178	-	-	270	216	316	15	20	213	261	140
200-150-200/ 00756	160M	-	✘	200	150	160	240	70	350	325	15	-	400	277	160	354	408	952	1006	300	210	-	-	320	254	316	21	20	246	300	140
200-150-250/ 00406	132M	✘	-	200	150	160	230	59	300	298	12	-	400	262	132	302	350	814	862	240	178	-	-	270	216	300	15	20	213	261	140
200-150-250/ 00556	132M	✘	✘	200	150	160	230	59	300	298	12	-	400	262	132	302	350	814	862	240	178	-	-	270	216	300	15	20	213	261	140
200-150-250/ 00756	160M	✘	✘	200	150	160	230	70	350	325	15	-	400	262	160	354	408	952	1006	300	210	-	-	320	254	300	21	20	246	300	140
200-150-250/ 01106	160L	✘	✘	200	150	160	230	70	350	325	15	-	400	262	160	354	408	958	1012	314	254	-	-	320	254	300	21	20	246	300	140
200-150-250/ 01506	180L	-	✘	200	150	160	230	80	350	370	15	-	400	262	160	367	421	1016	1070	358	279	-	-	360	279	300	23	-	246	300	140

Pump set with volute casing foot and motor foot (fixed speed version), ≤ 22 kW, n = 960 rpm / 1160 rpm



Pump set with volute casing foot and motor foot (motor sizes 132 to 180)



Pump set with volute casing foot (up to motor size 112)

n = 960 rpm / n = 1160 rpm, material variants BB / CC / SB / SC / SG

Dimensions of Etabloc ≤ 22 kW[433]
Values a_1, b_4, d_3, l_1, m_3, n_3 and p may vary slightly for production-related reasons.

Etabloc	Motor (IEC)	n		DN_1 [434]	DN_2 [434]	a [434]	a1	b_1 [434]	b_4	d_1 [434]	d_2	d_3	d_4	h_1 [434]	h_2 [434]	h_4	i [435]	i [436]	l_1 [435]	l_1 [436]	m_1 [434]	m_2 [434]	m_3	m_4	n_1 [434]	n_2 [434]	n_3	n_4	p	s_1 [434]	s_2	u [437]	w [435]	w [436]	x [434]
		960	1160																															
		[rpm]		[mm]																														
40-25-160/ 00036	80M	✗	✗	40	25	80	118	50	-	14	200	162	-	132	160	-	-	-	491	-	100	70	-	-	240	190	-	-	118	15	-	-	156	-	100
40-25-160/ 00076	90S	✗	✗	40	25	80	118	50	-	14	200	190	-	132	160	-	-	118	518	562	100	70	-	-	240	190	-	-	118	15	-	-	156	200	100
40-25-200/ 00036	80M	✗	✗	40	25	80	142	50	-	14	200	162	-	160	180	-	-	-	491	-	100	70	-	-	240	190	-	-	142	15	-	-	156	-	100
40-25-200/ 00076	90S	✗	✗	40	25	80	142	50	-	14	200	190	-	160	180	-	-	118	518	562	100	70	-	-	240	190	-	-	142	15	-	-	156	200	100
50-32-125/ 00036	80M	✗	✗	50	32	80	115	50	-	14	200	162	-	112	140	-	-	-	491	-	100	70	-	-	190	140	-	-	115	15	-	-	156	-	100
50-32-125/ 00076	90S	✗	✗	50	32	80	115	50	-	14	200	190	-	112	140	-	-	118	518	562	100	70	-	-	190	140	-	-	115	15	-	-	156	200	100
50-32-125.1/ 00036	80M	✗	✗	50	32	80	116	50	-	14	200	162	-	112	140	-	-	-	491	-	100	70	-	-	190	140	-	-	116	15	-	-	156	-	100
50-32-125.1/ 00076	90S	✗	✗	50	32	80	116	50	-	14	200	190	-	112	140	-	-	118	518	562	100	70	-	-	190	140	-	-	116	15	-	-	156	200	100
50-32-160/ 00036	80M	✗	✗	50	32	80	118	50	-	14	200	162	-	132	160	-	-	-	491	-	100	70	-	-	240	190	-	-	128	15	-	-	156	-	100
50-32-160/ 00076	90S	✗	✗	50	32	80	118	50	-	14	200	190	-	132	160	-	-	118	518	562	100	70	-	-	240	190	-	-	128	15	-	-	156	200	100
50-32-160.1/ 00036	80M	✗	✗	50	32	80	116	50	-	14	200	162	-	132	160	-	-	-	491	-	100	70	-	-	240	190	-	-	121	15	-	-	156	-	100
50-32-160.1/ 00076	90S	✗	✗	50	32	80	116	50	-	14	200	190	-	132	160	-	-	118	518	562	100	70	-	-	240	190	-	-	121	15	-	-	156	200	100
50-32-200/ 00036	80M	✗	✗	50	32	80	142	50	-	14	200	162	-	160	180	-	-	-	491	-	100	70	-	-	240	190	-	-	143	18	-	-	156	-	100
50-32-200/ 00056	80M	✗	✗	50	32	80	142	50	-	14	200	162	-	160	180	-	-	-	491	-	100	70	-	-	240	190	-	-	143	18	-	-	156	-	100
50-32-200/ 00076	90S	✗	✗	50	32	80	142	50	-	14	200	190	-	160	180	-	-	118	518	562	100	70	-	-	240	190	-	-	143	18	-	-	156	200	100
50-32-200.1/ 00036	80M	✗	✗	50	32	80	142	50	-	14	200	162	-	160	180	-	-	-	491	-	100	70	-	-	240	190	-	-	142	18	-	-	156	-	100
50-32-200.1/ 00076	90S	✗	✗	50	32	80	142	50	-	14	200	190	-	160	180	-	-	118	518	562	100	70	-	-	240	190	-	-	142	18	-	-	156	200	100
50-32-250/ 00036	80M	✗	✗	50	32	100	169	65	-	14	200	162	-	180	225	-	-	-	511	-	125	95	-	-	320	250	-	-	178	18	-	-	156	-	100
50-32-250/ 00056	80M	✗	✗	50	32	100	169	65	-	14	200	162	-	180	225	-	-	-	511	-	125	95	-	-	320	250	-	-	178	18	-	-	156	-	100
50-32-250/ 00076	90S	✗	✗	50	32	100	169	65	-	14	200	190	-	180	225	-	-	118	538	582	125	95	-	-	320	250	-	-	178	18	-	-	156	200	100
50-32-250/ 00076	90L	-	✗	50	32	100	169	65	-	14	200	190	-	180	225	-	-	118	564	608	125	95	-	-	320	250	-	-	178	18	-	-	156	200	100
50-32-250.1/ 00036	80M	✗	✗	50	32	100	168	65	-	14	200	162	-	180	225	-	-	-	511	-	125	95	-	-	320	250	-	-	168	18	-	-	156	-	100
50-32-250.1/ 00056	80M	✗	✗	50	32	100	168	65	-	14	200	162	-	180	225	-	-	-	511	-	125	95	-	-	320	250	-	-	168	18	-	-	156	-	100
50-32-250.1/ 00076	90S	✗	✗	50	32	100	168	65	-	14	200	190	-	180	225	-	-	118	538	582	125	95	-	-	320	250	-	-	168	18	-	-	156	200	100
65-40-125/ 00036	80M	✗	✗	65	40	80	117	50	-	14	200	162	-	112	140	-	-	-	491	-	100	70	-	-	210	160	-	-	117	15	-	-	156	-	100
65-40-125/ 00076	90S	✗	✗	65	40	80	117	50	-	14	200	190	-	112	140	-	-	118	518	562	100	70	-	-	210	160	-	-	117	15	-	-	156	200	100
65-40-160/ 00036	80M	✗	✗	65	40	80	119	50	-	14	200	162	-	132	160	-	-	-	491	-	100	70	-	-	240	190	-	-	134	15	-	-	156	-	100
65-40-160/ 00056	80M	✗	✗	65	40	80	119	50	-	14	200	162	-	132	160	-	-	-	491	-	100	70	-	-	240	190	-	-	134	15	-	-	156	-	100
65-40-160/ 00076	90S	✗	✗	65	40	80	119	50	-	14	200	190	-	132	160	-	-	118	518	562	100	70	-	-	240	190	-	-	134	15	-	-	156	200	100
65-40-200/ 00036	80M	✗	✗	65	40	100	142	50	-	14	200	162	-	160	180	-	-	-	511	-	100	70	-	-	265	212	-	-	155	18	-	-	156	-	100

433 Tolerances of mating dimensions to EN 735
434 Dimensions to EN 733
435 Dimension with single mechanical seal (A, IA, EA, FA)
436 Dimension with double mechanical seal (DB, TI)
437 Motor feet must be shimmed.

Etabloc	Motor (IEC)	n		DN_1 434)	DN_2 434)	a 434)	a1	b_1 434)	b_4	d_1 434)	d_2	d_3	d_4	h_1 434)	h_2 434)	h_4	i 435)	i 436)	l_1 435)	l_1 436)	m_1 434)	m_2 434)	m_3	m_4	n_1 434)	n_2 434)	n_3	n_4	p	s_1 434)	s_2	u 437)	w 435)	w 436)	x 434)
		960	1160																															
		[rpm]		[mm]																														
65-40-200/ 00056	80M	✗	✗	65	40	100	142	50	-	14	200	162	-	160	180	-	-	-	511	-	100	70	-	-	265	212	-	-	155	18	-	-	156	-	100
65-40-200/ 00076	90S	✗	✗	65	40	100	142	50	-	14	200	190	-	160	180	-	-	118	538	582	100	70	-	-	265	212	-	-	155	18	-	-	156	200	100
65-40-250/ 00036	80M	✗	-	65	40	100	169	65	-	14	200	162	-	180	225	-	-	-	511	-	125	95	-	-	320	250	-	-	179	18	-	-	156	-	100
65-40-250/ 00056	80M	✗	✗	65	40	100	169	65	-	14	200	162	-	180	225	-	-	-	511	-	125	95	-	-	320	250	-	-	179	18	-	-	156	-	100
65-40-250/ 00076	90S	✗	✗	65	40	100	169	65	-	14	200	190	-	180	225	-	-	118	538	582	125	95	-	-	320	250	-	-	179	18	-	-	156	200	100
65-40-250/ 00116	90L	✗	✗	65	40	100	169	65	-	14	200	190	-	180	225	-	-	118	564	608	125	95	-	-	320	250	-	-	179	18	-	-	156	200	100
65-40-250/ 00156	100L	-	✗	65	40	100	169	65	-	14	250	213	-	180	225	-	-	118	652	696	125	95	-	-	320	250	-	-	179	18	-	-	170	214	100
65-40-315/ 00156	100L	✗	✗	65	40	125	207	65	-	14	250	213	-	225	250	-	-	142	697	745	125	95	-	-	345	280	-	-	207	18	-	-	190	238	100
65-40-315/ 00226	112M	✗	✗	65	40	125	207	65	-	14	250	234	-	225	250	-	-	142	686	734	125	95	-	-	345	280	-	-	207	18	-	-	190	238	100
65-40-315/ 00306	132S	-	✗	65	40	125	207	65	55	14	300	266	12	225	250	132	302	350	751	799	125	95	220	140	345	280	270	216	207	18	15	20	213	261	100
65-50-125/ 00036	80M	✗	✗	65	50	100	117	50	-	14	200	162	-	132	160	-	-	-	511	-	100	70	-	-	240	190	-	-	130	18	-	-	156	-	100
65-50-125/ 00076	90S	✗	✗	65	50	100	117	50	-	14	200	190	-	132	160	-	-	118	538	582	100	70	-	-	240	190	-	-	130	18	-	-	156	200	100
65-50-160/ 00036	80M	✗	✗	65	50	100	128	50	-	14	200	162	-	160	180	-	-	-	511	-	100	70	-	-	265	212	-	-	149	18	-	-	156	-	100
65-50-160/ 00056	80M	✗	✗	65	50	100	128	50	-	14	200	162	-	160	180	-	-	-	511	-	100	70	-	-	265	212	-	-	149	18	-	-	156	-	100
65-50-160/ 00076	90S	✗	✗	65	50	100	128	50	-	14	200	190	-	160	180	-	-	118	538	582	100	70	-	-	265	212	-	-	149	18	-	-	156	200	100
65-50-200/ 00036	80M	✗	-	65	50	100	144	50	-	14	200	162	-	160	200	-	-	-	511	-	100	70	-	-	265	212	-	-	163	18	-	-	156	-	100
65-50-200/ 00056	80M	✗	✗	65	50	100	144	50	-	14	200	162	-	160	200	-	-	-	511	-	100	70	-	-	265	212	-	-	163	18	-	-	156	-	100
65-50-200/ 00076	90S	✗	✗	65	50	100	144	50	-	14	200	190	-	160	200	-	-	118	538	582	100	70	-	-	265	212	-	-	163	18	-	-	156	200	100
65-50-200/ 00116	90L	✗	✗	65	50	100	144	50	-	14	200	190	-	160	200	-	-	118	564	608	100	70	-	-	265	212	-	-	163	18	-	-	156	200	100
65-50-200/ 00156	100L	-	✗	65	50	100	144	50	-	14	250	213	-	160	200	-	-	118	652	696	100	70	-	-	265	212	-	-	163	18	-	-	170	214	100
65-50-250/ 00056	80M	✗	-	65	50	100	170	65	-	14	200	162	-	180	225	-	-	-	511	-	125	95	-	-	320	250	-	-	186	18	-	-	156	-	100
65-50-250/ 00076	90S	✗	-	65	50	100	170	65	-	14	200	190	-	180	225	-	-	118	538	582	125	95	-	-	320	250	-	-	186	18	-	-	156	200	100
65-50-250/ 00116	90L	✗	✗	65	50	100	170	65	-	14	200	190	-	180	225	-	-	118	564	608	125	95	-	-	320	250	-	-	186	18	-	-	156	200	100
65-50-250/ 00156	100L	-	✗	65	50	100	170	65	-	14	250	213	-	180	225	-	-	118	652	696	125	95	-	-	320	250	-	-	186	18	-	-	170	214	100
65-50-250/ 00226	112M	-	✗	65	50	100	170	65	-	14	250	234	-	180	225	-	-	118	641	685	125	95	-	-	320	250	-	-	186	18	-	-	170	214	100
65-50-315/ 00156	100L	✗	-	65	50	125	207	65	-	14	250	213	-	225	280	-	-	142	697	745	125	95	-	-	345	280	-	-	215	18	-	-	190	238	100
65-50-315/ 00226	112M	✗	✗	65	50	125	207	65	-	14	250	234	-	225	280	-	-	142	686	734	125	95	-	-	345	280	-	-	215	18	-	-	190	238	100
65-50-315/ 00306	132S	✗	✗	65	50	125	207	65	55	14	300	266	12	225	280	132	302	350	751	799	125	95	220	140	345	280	270	216	215	18	15	20	213	261	100
65-50-315/ 00406	132M	-	✗	65	50	125	207	65	59	14	300	298	12	225	280	132	302	350	779	827	125	95	240	178	345	280	270	216	215	18	15	20	213	261	100
80-65-125/ 00036	80M	✗	✗	80	65	100	117	65	-	14	200	162	-	160	180	-	-	-	511	-	125	95	-	-	280	212	-	-	150	18	-	-	156	-	100
80-65-125/ 00056	80M	✗	✗	80	65	100	117	65	-	14	200	162	-	160	180	-	-	-	511	-	125	95	-	-	280	212	-	-	150	18	-	-	156	-	100
80-65-125/ 00076	90S	✗	✗	80	65	100	117	65	-	14	200	190	-	160	180	-	-	118	538	582	125	95	-	-	280	212	-	-	150	18	-	-	156	200	100
80-65-160/ 00036	80M	✗	✗	80	65	100	132	65	-	14	200	162	-	160	200	-	-	-	511	-	125	95	-	-	280	212	-	-	160	18	-	-	156	-	100
80-65-160/ 00056	80M	✗	✗	80	65	100	132	65	-	14	200	162	-	160	200	-	-	-	511	-	125	95	-	-	280	212	-	-	160	18	-	-	156	-	100
80-65-160/ 00076	90S	✗	✗	80	65	100	132	65	-	14	200	190	-	160	200	-	-	118	538	582	125	95	-	-	280	212	-	-	160	18	-	-	156	200	100
80-65-160/ 00116	90L	-	✗	80	65	100	132	65	-	14	200	190	-	160	200	-	-	118	564	608	125	95	-	-	280	212	-	-	160	18	-	-	156	200	100
80-65-200/ 00056	80M	✗	-	80	65	100	155	65	-	14	200	162	-	180	225	-	-	-	511	-	125	95	-	-	320	250	-	-	178	18	-	-	156	-	140
80-65-200/ 00076	90S	✗	-	80	65	100	155	65	-	14	200	190	-	180	225	-	-	118	538	582	125	95	-	-	320	250	-	-	178	18	-	-	156	200	140
80-65-200/ 00116	90L	✗	✗	80	65	100	155	65	-	14	200	190	-	180	225	-	-	118	564	608	125	95	-	-	320	250	-	-	178	18	-	-	156	200	140
80-65-200/ 00156	100L	-	✗	80	65	100	155	65	-	14	250	213	-	180	225	-	-	118	652	696	125	95	-	-	320	250	-	-	178	18	-	-	170	214	140

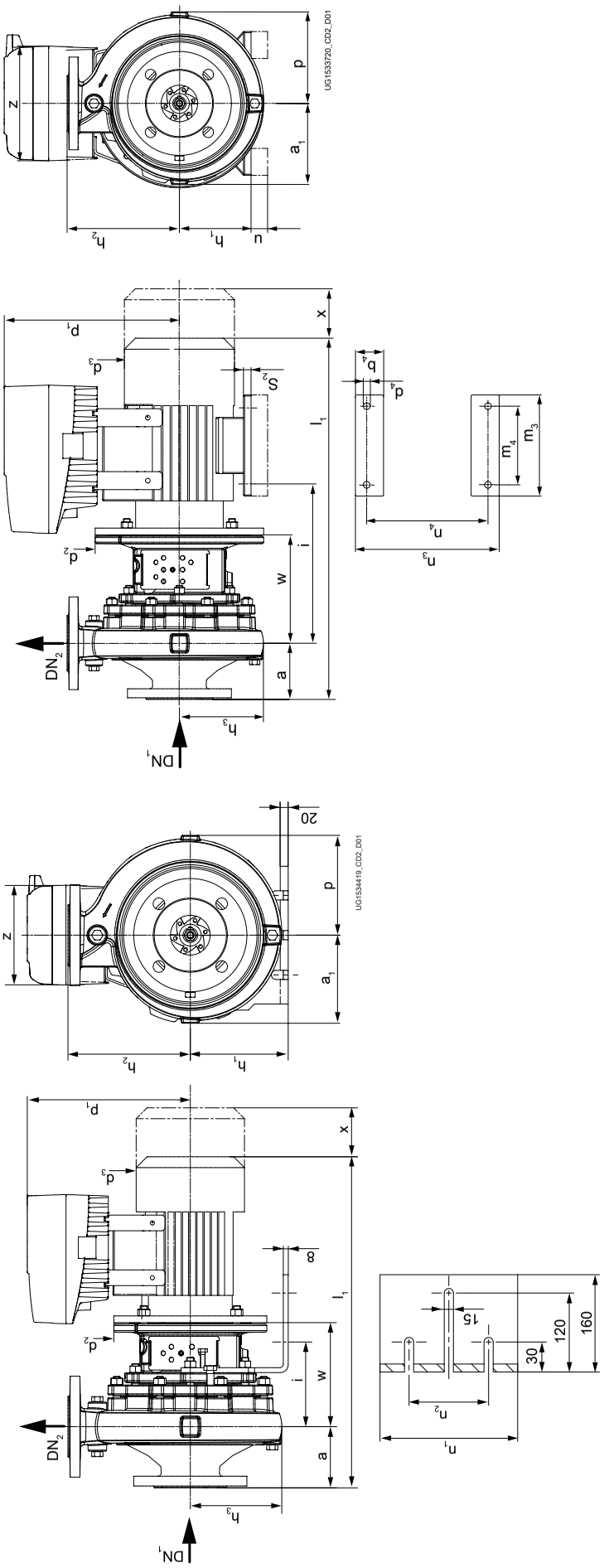
Etabloc	Motor (IEC)	n		DN_1 434)	DN_2 434)	a 434)	a1	b_1 434)	b_4	d_1 434)	d_2	d_3	d_4	h_1 434)	h_2 434)	h_4	i 435)	i 436)	l_1 435)	l_1 436)	m_1 434)	m_2 434)	m_3	m_4	n_1 434)	n_2 434)	n_3	n_4	p	s_1 434)	s_2	u 437)	w 435)	w 436)	x 434)
		960	1160																															
		[rpm]		[mm]																																
80-65-200/ 00226	112M	-	✗	80	65	100	155	65	-	14	250	234	-	180	225	-	-	118	641	685	125	95	-	-	320	250	-	-	178	18	-	-	170	214	140
80-65-250/ 00156	100L	✗	✗	80	65	100	179	80	-	19	250	213	-	200	250	-	-	142	672	720	160	120	-	-	360	280	-	-	199	20	-	-	190	238	140
80-65-250/ 00226	112M	✗	✗	80	65	100	179	80	-	19	250	234	-	200	250	-	-	142	661	709	160	120	-	-	360	280	-	-	199	20	-	-	190	238	140
80-65-250/ 00306	132S	-	✗	80	65	100	179	80	55	19	300	266	12	200	250	132	302	350	726	774	160	120	220	140	360	280	270	216	199	20	15	20	213	261	140
80-65-315/ 00226	112M	✗	✗	80	65	125	209	80	-	19	250	234	-	225	280	-	-	142	686	734	160	120	-	-	400	315	-	-	229	20	-	-	190	238	140
80-65-315/ 00306	132S	✗	✗	80	65	125	209	80	55	19	300	266	12	225	280	132	302	350	751	799	160	120	220	140	400	315	270	216	229	20	15	20	213	261	140
80-65-315/ 00406	132M	✗	✗	80	65	125	209	80	59	19	300	298	12	225	280	132	302	350	779	827	160	120	240	178	400	315	270	216	229	20	15	20	213	261	140
80-65-315/ 00556	132M	-	✗	80	65	125	209	80	59	19	300	298	12	225	280	132	302	350	779	827	160	120	240	178	400	315	270	216	229	20	15	20	213	261	140
100-80-160/ 00056	80M	✗	-	100	80	125	138	65	-	14	200	162	-	180	225	-	-	-	536	-	125	95	-	-	320	250	-	-	174	18	-	-	156	-	140
100-80-160/ 00076	90S	✗	✗	100	80	125	138	65	-	14	200	190	-	180	225	-	-	118	563	607	125	95	-	-	320	250	-	-	174	18	-	-	156	200	140
100-80-160/ 00116	90L	✗	✗	100	80	125	138	65	-	14	200	190	-	180	225	-	-	118	589	633	125	95	-	-	320	250	-	-	174	18	-	-	156	200	140
100-80-160/ 00156	100L	-	✗	100	80	125	138	65	-	14	250	213	-	180	225	-	-	118	677	721	125	95	-	-	320	250	-	-	174	18	-	-	170	214	140
100-80-200/ 00156	100L	✗	✗	100	80	125	159	65	-	14	250	213	-	180	250	-	-	142	697	745	125	95	-	-	345	280	-	-	188	18	-	-	190	238	140
100-80-200/ 00226	112M	✗	✗	100	80	125	159	65	-	14	250	234	-	180	250	-	-	142	686	734	125	95	-	-	345	280	-	-	188	18	-	-	190	238	140
100-80-200/ 00306	132S	✗	✗	100	80	125	159	65	55	14	300	266	12	180	250	132	302	350	751	799	125	95	220	140	345	280	270	216	188	18	15	20	213	261	140
100-80-250/ 00156	100L	✗	-	100	80	125	183	80	-	19	250	213	-	200	280	-	-	142	697	745	160	120	-	-	400	315	-	-	209	18	-	-	190	238	140
100-80-250/ 00226	112M	✗	-	100	80	125	183	80	-	19	250	234	-	200	280	-	-	142	686	734	160	120	-	-	400	315	-	-	209	18	-	-	190	238	140
100-80-250/ 00306	132S	✗	✗	100	80	125	183	80	55	19	300	266	12	200	280	132	302	350	751	799	160	120	220	140	400	315	270	216	209	18	15	20	213	261	140
100-80-250/ 00406	132M	✗	✗	100	80	125	183	80	59	19	300	298	12	200	280	132	302	350	779	827	160	120	240	178	400	315	270	216	209	18	15	20	213	261	140
100-80-250/ 00556	132M	-	✗	100	80	125	183	80	59	19	300	298	12	200	280	132	302	350	779	827	160	120	240	178	400	315	270	216	209	18	15	20	213	261	140
100-80-315/ 00306	132S	✗	-	100	80	125	218	80	55	19	300	266	12	250	315	132	302	350	751	799	160	120	220	140	400	315	270	216	242	20	15	20	213	261	140
100-80-315/ 00406	132M	✗	✗	100	80	125	218	80	59	19	300	298	12	250	315	132	302	350	779	827	160	120	240	178	400	315	270	216	242	20	15	20	213	261	140
100-80-315/ 00556	132M	✗	✗	100	80	125	218	80	59	19	300	298	12	250	315	132	302	350	779	827	160	120	240	178	400	315	270	216	242	20	15	20	213	261	140
100-80-315/ 00756	160M	✗	✗	100	80	125	218	80	70	19	350	325	15	250	315	160	354	408	917	971	160	120	300	210	400	315	320	254	242	20	21	20	246	300	140
100-80-315/ 01106	160L	-	✗	100	80	125	218	80	70	19	350	325	15	250	315	160	354	408	923	977	160	120	314	254	400	315	320	254	242	20	21	20	246	300	140
125-100-160/ 00156	100L	✗	✗	125	100	125	178	80	-	19	250	213	-	200	280	-	-	142	697	745	160	120	-	-	360	280	-	-	225	18	-	-	190	238	140
125-100-160/ 00226	112M	-	✗	125	100	125	178	80	-	19	250	234	-	200	280	-	-	142	686	734	160	120	-	-	360	280	-	-	225	18	-	-	190	238	140
125-100-200/ 00156	100L	✗	✗	125	100	125	173	80	-	19	250	213	-	200	280	-	-	142	697	745	160	120	-	-	360	280	-	-	212	18	-	-	190	238	140
125-100-200/ 00226	112M	✗	✗	125	100	125	173	80	-	19	250	234	-	200	280	-	-	142	686	734	160	120	-	-	360	280	-	-	212	18	-	-	190	238	140
125-100-200/ 00306	132S	-	✗	125	100	125	173	80	55	19	300	266	12	200	280	132	302	350	751	799	160	120	220	140	360	280	270	216	212	18	15	20	213	261	140
125-100-200/ 00406	132M	-	✗	125	100	125	173	80	59	19	300	298	12	200	280	132	302	350	779	827	160	120	240	178	360	280	270	216	212	18	15	20	213	261	140
125-100-250/ 00226	112M	✗	-	125	100	140	188	80	-	19	250	234	-	225	280	-	-	142	701	749	160	120	-	-	400	315	-	-	219	18	-	-	190	238	140
125-100-250/ 00306	132S	✗	✗	125	100	140	188	80	55	19	300	266	12	225	280	132	302	350	766	814	160	120	220	140	400	315	270	216	219	18	15	20	213	261	140
125-100-250/ 00406	132M	✗	✗	125	100	140	188	80	59	19	300	298	12	225	280	132	302	350	794	842	160	120	240	178	400	315	270	216	219	18	15	20	213	261	140
125-100-250/ 00556	132M	-	✗	125	100	140	188	80	59	19	300	298	12	225	280	132	302	350	794	842	160	120	240	178	400	315	270	216	219	18	15	20	213	261	140
125-100-250/ 00756	160M	-	✗	125	100	140	188	80	70	19	350	325	15	225	280	160	354	408	932	986	160	120	300	210	400	315	320	254	219	18	21	20	246	300	140
125-100-315/ 00406	132M	✗	-	125	100	140	225	80	59	19	300	298	12	250	315	132	302	350	794	842	160	120	240	178	400	315	270	216	255	18	15	20	213	261	140
125-100-315/ 00556	132M	✗	-	125	100	140	225	80	59	19	300	298	12	250	315	132	302	350	794	842	160	120	240	178	400	315	270	216	255	18	15	20	213	261	140
125-100-315/ 00756	160M	✗	✗	125	100	140	225	80	70	19	350	325	15	250	315	160	354	408	932	986	160	120	300	210	400	315	320	254	255	18	21	20	246	300	140
125-100-315/ 01106	160L	✗	✗	125	100	140	225	80	70	19	350	325	15	250	315	160	354	408	938	992	160	120	314	254	400	315	320	254	255	18	21	20	246	300	140

Etabloc	Motor (IEC)	n		DN_1 434)	DN_2 434)	a 434)	a1	b_1 434)	b_4	d_1 434)	d_2	d_3	d_4	h_1 434)	h_2 434)	h_4	i 435)	i 436)	l_1 435)	l_1 436)	m_1 434)	m_2 434)	m_3	m_4	n_1 434)	n_2 434)	n_3	n_4	p	s_1 434)	s_2	u 437)	w 435)	w 436)	x 434)
		960	1160																															
		[rpm]		[mm]																																
150-125-200/ 00226	112M	✗	-	150	125	140	189	80	-	19	250	234	-	250	315	-	-	142	701	749	160	120	-	-	400	315	-	-	242	20	-	-	190	238	140
150-125-200/ 00306	132S	✗	✗	150	125	140	189	80	55	19	300	266	12	250	315	132	302	350	766	814	160	120	220	140	400	315	270	216	242	20	15	20	213	261	140
150-125-200/ 00406	132M	-	✗	150	125	140	189	80	59	19	300	298	12	250	315	132	302	350	794	842	160	120	240	178	400	315	270	216	242	20	15	20	213	261	140
150-125-200/ 00556	132M	-	✗	150	125	140	189	80	59	19	300	298	12	250	315	132	302	350	794	842	160	120	240	178	400	315	270	216	242	20	15	20	213	261	140
150-125-250/ 00306	132S	✗	-	150	125	140	226	80	55	19	300	266	12	250	355	132	302	350	766	814	160	120	220	140	400	315	270	216	275	20	15	20	213	261	140
150-125-250/ 00406	132M	✗	✗	150	125	140	226	80	59	19	300	298	12	250	355	132	302	350	794	842	160	120	240	178	400	315	270	216	275	20	15	20	213	261	140
150-125-250/ 00556	132M	✗	✗	150	125	140	226	80	59	19	300	298	12	250	355	132	302	350	794	842	160	120	240	178	400	315	270	216	275	20	15	20	213	261	140
150-125-250/ 00756	160M	-	✗	150	125	140	226	80	70	19	350	325	15	250	355	160	354	408	932	986	160	120	300	210	400	315	320	254	275	20	21	20	246	300	140
200-150-200/ 00306	132S	✗	-	200	150	160	240	100	55	24	300	266	12	280	400	132	302	350	786	834	200	150	220	140	550	450	270	216	316	20	15	20	213	261	140
200-150-200/ 00406	132M	✗	✗	200	150	160	240	100	59	24	300	298	12	280	400	132	302	350	814	862	200	150	240	178	550	450	270	216	316	20	15	20	213	261	140
200-150-200/ 00556	132M	-	✗	200	150	160	240	100	59	24	300	298	12	280	400	132	302	350	814	862	200	150	240	178	550	450	270	216	316	20	15	20	213	261	140
200-150-200/ 00756	160M	-	✗	200	150	160	240	100	70	24	350	325	15	280	400	160	354	408	952	1006	200	150	300	210	550	450	320	254	316	20	21	20	246	300	140
200-150-250/ 00406	132M	✗	-	200	150	160	230	100	59	24	300	298	12	280	400	132	302	350	814	862	200	150	240	178	500	400	270	216	300	20	15	20	213	261	140
200-150-250/ 00556	132M	✗	✗	200	150	160	230	100	59	24	300	298	12	280	400	132	302	350	814	862	200	150	240	178	500	400	270	216	300	20	15	20	213	261	140
200-150-250/ 00756	160M	✗	✗	200	150	160	230	100	70	24	350	325	15	280	400	160	354	408	952	1006	200	150	300	210	500	400	320	254	300	20	21	20	246	300	140
200-150-250/ 01106	160L	✗	✗	200	150	160	230	100	70	24	350	325	15	280	400	160	354	408	958	1012	200	150	314	254	500	400	320	254	300	20	21	20	246	300	140
200-150-250/ 01506	180L	-	✗	200	150	160	230	100	80	24	350	370	15	280	400	180	367	421	1016	1070	200	150	358	279	500	400	360	279	300	20	23	-	246	300	140

Pump set with support foot and motor foot (variable speed version), ≤ 22 kW, n = 3000 rpm / 3600 rpm

Dimensions [mm]

Etabloc PumpDrive (up to motor size 112)



Etabloc PumpDrive (from motor size 132 to 180)

n = 3000 rpm / n = 3600 rpm, material variants GG / GB / GC

Dimensions of Etabloc ≤ 22 kW[438]
Values a_1, b_4, d_3, l_1, m_3, n_3 and p may vary slightly for production-related reasons.

Etabloc	Motor (IEC)	n		DN_1 [439]	DN_2 [439]	a [439]	a_1	b_4	d_2	d_3	d_4	h_1	h_2 [439]	h_3	h_4	i [440]	i [441]	l_1 [440]	l_1 [441]	m_3	m_4	n_1	n_2	n_3	n_4	p	p_1	s_2	u [442]	w [440]	w [441]	x [439]	z
		3000	3600																													
		[rpm]		[mm]																												
40-25-160/ 00072	80M	✗	-	40	25	80	118	-	200	154	-	160	160	107	-	118	-	469	-	-	-	225	130	-	-	118	294	-	-	156	-	100	190
40-25-160/ 00112	80M	✗	✗	40	25	80	118	-	200	154	-	160	160	107	-	118	-	469	-	-	-	225	130	-	-	118	294	-	-	156	-	100	190
40-25-160/ 00152	90S	✗	✗	40	25	80	118	-	200	174	-	160	160	107	-	118	118	506	550	-	-	225	130	-	-	118	299	-	-	156	200	100	190
40-25-160/ 00222	90L	✗	✗	40	25	80	118	-	200	174	-	160	160	107	-	118	118	553	596,5	-	-	225	130	-	-	118	299	-	-	156	200	100	211
40-25-160/ 00302	100L	-	✗	40	25	80	118	-	250	192	-	160	160	107	-	118	118	580	624	-	-	225	130	-	-	118	338	-	-	170	214	100	211
40-25-160/ 00402	112M	-	✗	40	25	80	118	-	250	216	-	160	160	107	-	118	118	610	653,5	-	-	225	130	-	-	118	353	-	-	170	214	100	211
40-25-200/ 00152	90S	✗	-	40	25	80	142	-	200	174	-	160	180	137	-	118	118	506	550	-	-	225	130	-	-	142	299	-	-	156	200	100	190
40-25-200/ 00222	90L	✗	-	40	25	80	142	-	200	174	-	160	180	137	-	118	118	553	596,5	-	-	225	130	-	-	142	299	-	-	156	200	100	211
40-25-200/ 00302	100L	✗	✗	40	25	80	142	-	250	192	-	160	180	137	-	118	118	580	624	-	-	225	130	-	-	142	338	-	-	170	214	100	211
40-25-200/ 00402	112M	✗	✗	40	25	80	142	-	250	216	-	160	180	137	-	118	118	610	653,5	-	-	225	130	-	-	142	353	-	-	170	214	100	211
40-25-200/ 00552	132S	✗	✗	40	25	80	142	55	300	258	12	-	180	137	132	282	326	658	702	180	140	-	-	260	216	142	413	16	20	193	237	100	280
40-25-200/ 00752	132S	-	✗	40	25	80	142	55	300	258	12	-	180	137	132	282	326	658	702	180	140	-	-	260	216	142	413	16	20	193	237	100	280
50-32-125/ 00112	80M	✗	-	50	32	80	115	-	200	154	-	160	140	100	-	118	-	469	-	-	-	225	130	-	-	115	294	-	-	156	-	100	190
50-32-125/ 00152	90S	✗	✗	50	32	80	115	-	200	174	-	160	140	100	-	118	118	506	550	-	-	225	130	-	-	115	299	-	-	156	200	100	190
50-32-125/ 00222	90L	✗	✗	50	32	80	115	-	200	174	-	160	140	100	-	118	118	553	596,5	-	-	225	130	-	-	115	299	-	-	156	200	100	211
50-32-125/ 00302	100L	✗	✗	50	32	80	115	-	250	192	-	160	140	100	-	118	118	580	624	-	-	225	130	-	-	115	338	-	-	170	214	100	211
50-32-125/ 00402	112M	-	✗	50	32	80	115	-	250	216	-	160	140	100	-	118	118	610	653,5	-	-	225	130	-	-	115	353	-	-	170	214	100	211
50-32-125/ 00552	132S	-	✗	50	32	80	115	55	300	258	12	-	140	100	132	282	326	658	702	180	140	-	-	260	216	115	413	16	20	193	237	100	280
50-32-125.1/ 00052	71M	✗	-	50	32	80	116	-	160	136	-	160	140	100	-	118	-	441	-	-	-	225	130	-	-	116	282	-	-	136	-	100	190
50-32-125.1/ 00072	80M	✗	-	50	32	80	116	-	200	154	-	160	140	100	-	118	-	469	-	-	-	225	130	-	-	116	294	-	-	156	-	100	190
50-32-125.1/ 00112	80M	✗	-	50	32	80	116	-	200	154	-	160	140	100	-	118	-	469	-	-	-	225	130	-	-	116	294	-	-	156	-	100	190
50-32-125.1/ 00152	90S	✗	-	50	32	80	116	-	200	174	-	160	140	100	-	118	118	506	550	-	-	225	130	-	-	116	299	-	-	156	200	100	190
50-32-125.1/ 00222	90L	✗	-	50	32	80	116	-	200	174	-	160	140	100	-	118	118	553	596,5	-	-	225	130	-	-	116	299	-	-	156	200	100	211
50-32-125.1/ 00302	100L	-	✗	50	32	80	116	-	250	192	-	160	140	100	-	118	118	580	624	-	-	225	130	-	-	116	338	-	-	170	214	100	211
50-32-125.1/ 00402	112M	-	✗	50	32	80	116	-	250	216	-	160	140	100	-	118	118	610	653,5	-	-	225	130	-	-	116	353	-	-	170	214	100	211
50-32-125.1/ 00552	132S	-	✗	50	32	80	116	55	300	258	12	-	140	100	132	282	326	658	702	180	140	-	-	260	216	116	413	16	20	193	237	100	280
50-32-160/ 00222	90L	✗	-	50	32	80	118	-	200	174	-	160	160	115	-	118	118	553	596,5	-	-	225	130	-	-	128	299	-	-	156	200	100	211
50-32-160/ 00302	100L	✗	✗	50	32	80	118	-	250	192	-	160	160	115	-	118	118	580	624	-	-	225	130	-	-	128	338	-	-	170	214	100	211
50-32-160/ 00402	112M	✗	✗	50	32	80	118	-	250	216	-	160	160	115	-	118	118	610	653,5	-	-	225	130	-	-	128	353	-	-	170	214	100	211
50-32-160/ 00552	132S	-	✗	50	32	80	118	55	300	258	12	-	160	115	132	282	326	658	702	180	140	-	-	260	216	128	413	16	20	193	237	100	280
50-32-160/ 00752	132S	-	✗	50	32	80	118	55	300	258	12	-	160	115	132	282	326	658	702	180	140	-	-	260	216	128	413	16	20	193	237	100	280

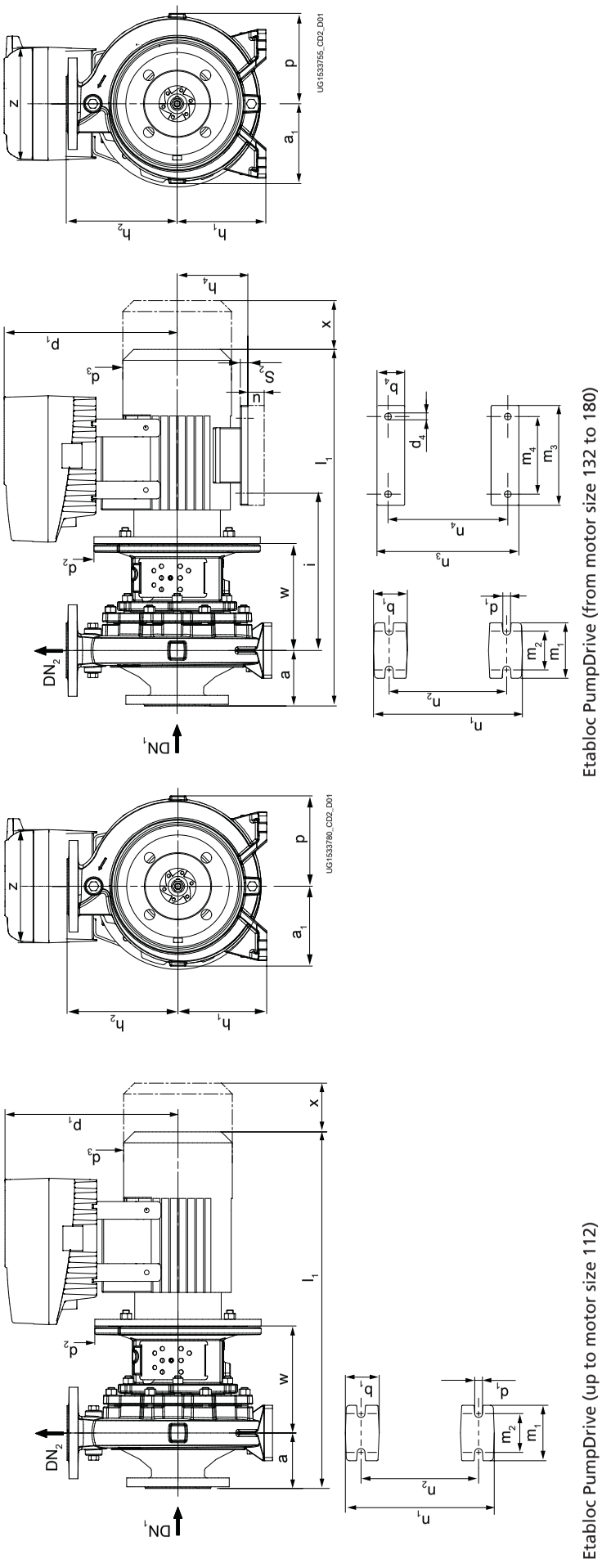
438 Tolerances of mating dimensions to EN 735
439 Dimensions to EN 733
440 Dimension with single mechanical seal (A, AV, IA, EA, FA)
441 Dimension with double mechanical seal (DB, TI)
442 Motor feet must be shimmed.

Etabloc	Motor (IEC)	n		DN_1 439)	DN_2 439)	a 439)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 439)	h_3	h_4	i 440)	i 441)	l_1 440)	l_1 441)	m_3	m_4	n_1	n_2	n_3	n_4	p	p_1	s_2	u 442)	w 440)	w 441)	x 439)	z
		3000	3600																													
		[rpm]		[mm]																												
50-32-160.1/ 00152	90S	✗	-	50	32	80	116	-	200	174	-	160	160	111	-	118	118	506	550	-	-	225	130	-	-	121	299	-	-	156	200	100	190
50-32-160.1/ 00222	90L	✗	✗	50	32	80	116	-	200	174	-	160	160	111	-	118	118	553	596,5	-	-	225	130	-	-	121	299	-	-	156	200	100	211
50-32-160.1/ 00302	100L	✗	✗	50	32	80	116	-	250	192	-	160	160	111	-	118	118	580	624	-	-	225	130	-	-	121	338	-	-	170	214	100	211
50-32-160.1/ 00402	112M	✗	✗	50	32	80	116	-	250	216	-	160	160	111	-	118	118	610	653,5	-	-	225	130	-	-	121	353	-	-	170	214	100	211
50-32-160.1/ 00552	132S	-	✗	50	32	80	116	55	300	258	12	-	160	111	132	282	326	658	702	180	140	-	-	260	216	121	413	16	20	193	237	100	280
50-32-160.1/ 00752	132S	-	✗	50	32	80	116	55	300	258	12	-	160	111	132	282	326	658	702	180	140	-	-	260	216	121	413	16	20	193	237	100	280
50-32-160.1/ 01102	160M	-	✗	50	32	80	116	70	350	310	15	-	160	111	160	334	378	811	855	264	210	-	-	318	254	121	444	23	20	226	270	100	280
50-32-200/ 00402	112M	✗	-	50	32	80	142	-	250	216	-	160	180	137	-	118	118	610	653,5	-	-	225	130	-	-	143	353	-	-	170	214	100	211
50-32-200/ 00552	132S	✗	-	50	32	80	142	55	300	258	12	-	180	137	132	282	326	658	702	180	140	-	-	260	216	143	413	16	20	193	237	100	280
50-32-200/ 00752	132S	✗	✗	50	32	80	142	55	300	258	12	-	180	137	132	282	326	658	702	180	140	-	-	260	216	143	413	16	20	193	237	100	280
50-32-200/ 01102	160M	✗	✗	50	32	80	142	70	350	310	15	-	180	137	160	334	378	811	855	264	210	-	-	318	254	143	444	23	20	226	270	100	280
50-32-200/ 01502	160M	-	✗	50	32	80	142	70	350	310	15	-	180	137	160	334	378	811	855	264	210	-	-	318	254	143	525	23	20	226	270	100	350
50-32-200.1/ 00302	100L	✗	-	50	32	80	142	-	250	192	-	160	180	136	-	118	118	580	624	-	-	225	130	-	-	142	338	-	-	170	214	100	211
50-32-200.1/ 00402	112M	✗	-	50	32	80	142	-	250	216	-	160	180	136	-	118	118	610	653,5	-	-	225	130	-	-	142	353	-	-	170	214	100	211
50-32-200.1/ 00552	132S	✗	✗	50	32	80	142	55	300	258	12	-	180	136	132	282	326	658	702	180	140	-	-	260	216	142	413	16	20	193	237	100	280
50-32-200.1/ 00752	132S	✗	✗	50	32	80	142	55	300	258	12	-	180	136	132	282	326	658	702	180	140	-	-	260	216	142	413	16	20	193	237	100	280
50-32-200.1/ 01102	160M	-	✗	50	32	80	142	70	350	310	15	-	180	136	160	334	378	811	855	264	210	-	-	318	254	142	444	23	20	226	270	100	280
50-32-200.1/ 01502	160M	-	✗	50	32	80	142	70	350	310	15	-	180	136	160	334	378	811	855	264	210	-	-	318	254	142	525	23	20	226	270	100	350
50-32-250/ 00752	132S	✗	-	50	32	100	169	55	300	358	12	-	225	166	132	282	326	678	722	180	140	-	-	260	216	178	413	16	20	193	237	100	280
50-32-250/ 01102	160M	✗	✗	50	32	100	169	70	350	310	15	-	225	166	160	334	378	831	875	264	210	-	-	318	254	178	444	23	20	226	270	100	280
50-32-250/ 01502	160M	✗	✗	50	32	100	169	70	350	310	15	-	225	166	160	334	378	831	875	264	210	-	-	318	254	178	525	23	20	226	270	100	350
50-32-250/ 01852	160L	-	✗	50	32	100	169	70	350	310	15	-	225	166	160	334	378	876	920	308	254	-	-	318	254	178	525	23	20	226	270	100	350
50-32-250/ 02202	180M	-	✗	50	32	100	169	80	350	347	15	-	225	166	180	347	391	961	1005	291	241	-	-	350	279	178	577	23	-	226	270	100	350
50-32-250.1/ 00552	132S	✗	-	50	32	100	168	55	300	258	12	-	225	166	132	282	326	678	722	180	140	-	-	260	216	168	413	16	20	193	237	100	280
50-32-250.1/ 00752	132S	✗	✗	50	32	100	168	55	300	258	12	-	225	166	132	282	326	678	722	180	140	-	-	260	216	168	413	16	20	193	237	100	280
50-32-250.1/ 01102	160M	✗	✗	50	32	100	168	70	350	310	15	-	225	166	160	334	378	831	875	264	210	-	-	318	254	168	444	23	20	226	270	100	280
50-32-250.1/ 01502	160M	✗	✗	50	32	100	168	70	350	310	15	-	225	166	160	334	378	831	875	264	210	-	-	318	254	168	525	23	20	226	270	100	350
50-32-250.1/ 01852	160L	-	✗	50	32	100	168	70	350	310	15	-	225	166	160	334	378	876	920	308	254	-	-	318	254	168	525	23	20	226	270	100	350
65-40-125/ 00152	90S	✗	-	65	40	80	117	-	200	174	-	160	140	107	-	118	118	506	550	-	-	225	130	-	-	117	299	-	-	156	200	100	190
65-40-125/ 00222	90L	✗	-	65	40	80	117	-	200	174	-	160	140	107	-	118	118	553	596,5	-	-	225	130	-	-	117	299	-	-	156	200	100	211
65-40-125/ 00302	100L	✗	-	65	40	80	117	-	250	192	-	160	140	107	-	118	118	580	624	-	-	225	130	-	-	117	338	-	-	170	214	100	211
65-40-125/ 00402	112M	✗	✗	65	40	80	117	-	250	216	-	160	140	107	-	118	118	610	653,5	-	-	225	130	-	-	117	353	-	-	170	214	100	211
65-40-125/ 00552	132S	-	✗	65	40	80	117	55	300	258	12	-	140	107	132	282	326	658	702	180	140	-	-	260	216	117	413	16	20	193	237	100	280
65-40-125/ 00752	132S	-	✗	65	40	80	117	55	300	258	12	-	140	107	132	282	326	658	702	180	140	-	-	260	216	117	413	16	20	193	237	100	280
65-40-125/ 01102	160M	-	✗	65	40	80	117	70	350	310	15	-	140	107	160	334	378	811	855	264	210	-	-	318	254	117	444	23	20	226	270	100	280
65-40-160/ 00302	100L	✗	-	65	40	80	119	-	250	192	-	160	160	119	-	118	118	580	624	-	-	225	130	-	-	134	338	-	-	170	214	100	211
65-40-160/ 00402	112M	✗	-	65	40	80	119	-	250	216	-	160	160	119	-	118	118	610	653,5	-	-	225	130	-	-	134	353	-	-	170	214	100	211
65-40-160/ 00552	132S	✗	✗	65	40	80	119	55	300	258	12	-	160	119	132	282	326	658	702	180	140	-	-	260	216	134	413	16	20	193	237	100	280
65-40-160/ 00752	132S	✗	✗	65	40	80	119	55	300	258	12	-	160	119	132	282	326	658	702	180	140	-	-	260	216	134	413	16	20	193	237	100	280
65-40-160/ 01102	160M	-	✗	65	40	80	119	70	350	310	15	-	160	119	160	334	378	811	855	264	210	-	-	318	254	134	444	23	20	226	270	100	280
65-40-160/ 01502	160M	-	✗	65	40	80	119	70	350	310	15	-	160	119	160	334	378	811	855	264	210	-	-	318	254	134	525	23	20	226	270	100	350

Etabloc	Motor (IEC)	n		DN_1 439)	DN_2 439)	a 439)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 439)	h_3	h_4	i 440)	i 441)	l_1 440)	l_1 441)	m_3	m_4	n_1	n_2	n_3	n_4	p	p_1	s_2	u 442)	w 440)	w 441)	x 439)	z
		3000	3600																													
		[rpm]		[mm]																												
65-40-200/ 00552	132S	✗	-	65	40	100	142	55	300	258	12	-	180	141	132	282	326	678	722	180	140	-	-	260	216	155	413	16	20	193	237	100	280
65-40-200/ 00752	132S	✗	-	65	40	100	142	55	300	258	12	-	180	141	132	282	326	678	722	180	140	-	-	260	216	155	413	16	20	193	237	100	280
65-40-200/ 01102	160M	✗	✗	65	40	100	142	70	350	310	15	-	180	141	160	334	378	831	875	264	210	-	-	318	254	155	444	23	20	226	270	100	280
65-40-200/ 01502	160M	✗	✗	65	40	100	142	70	350	310	15	-	180	141	160	334	378	831	875	264	210	-	-	318	254	155	525	23	20	226	270	100	350
65-40-200/ 01852	160L	✗	✗	65	40	100	142	70	350	310	15	-	180	141	160	334	378	876	920	308	254	-	-	318	254	155	525	23	20	226	270	100	350
65-40-200/ 02202	180M	✗	✗	65	40	100	142	80	350	347	15	-	180	141	180	347	391	961	1005	291	241	-	-	350	279	155	577	23		226	270	100	350
65-40-250/ 01102	160M	✗	-	65	40	100	169	70	350	310	15	-	225	166	160	334	378	831	875	264	210	-	-	318	254	179	444	23	20	226	270	100	280
65-40-250/ 01502	160M	✗	✗	65	40	100	169	70	350	310	15	-	225	166	160	334	378	831	875	264	210	-	-	318	254	179	525	23	20	226	270	100	350
65-40-250/ 01852	160L	✗	✗	65	40	100	169	70	350	310	15	-	225	166	160	334	378	876	920	308	254	-	-	318	254	179	525	23	20	226	270	100	350
65-40-250/ 02202	180M	✗	✗	65	40	100	169	80	350	347	15	-	225	166	180	347	391	961	1005	291	241	-	-	350	279	179	577	23	-	226	270	100	350
65-40-315/ 01852	160L	✗	-	65	40	125	207	70	350	310	15	-	250	204	160	354	408	921	975	308	254	-	-	318	254	207	525	23	20	246	300	100	350
65-40-315/ 02202	180M	✗	-	65	40	125	207	80	350	347	15	-	250	204	180	367	421	1006	1060	291	241	-	-	350	279	207	577	23	-	246	300	100	350
65-50-125/ 00302	100L	✗	-	65	50	100	117	-	250	192	-	160	160	112	-	118	118	600	644	-	-	225	130	-	-	130	338	-	-	170	214	100	211
65-50-125/ 00402	112M	✗	-	65	50	100	117	-	250	216	-	160	160	112	-	118	118	630	673,5	-	-	225	130	-	-	130	353	-	-	170	214	100	211
65-50-125/ 00552	132S	✗	✗	65	50	100	117	55	300	258	12	-	160	112	132	282	326	678	722	180	140	-	-	260	216	130	413	16	20	193	237	100	280
65-50-125/ 00752	132S	✗	✗	65	50	100	117	55	300	258	12	-	160	112	132	282	326	678	722	180	140	-	-	260	216	130	413	16	20	193	237	100	280
65-50-125/ 01102	160M	-	✗	65	50	100	117	70	350	310	15	-	160	112	160	334	378	831	875	264	210	-	-	318	254	130	444	23	20	226	270	100	280
65-50-125/ 01502	160M	-	✗	65	50	100	117	70	350	310	15	-	160	112	160	334	378	831	875	264	210	-	-	318	254	130	525	23	20	226	270	100	350
65-50-160/ 00552	132S	✗	-	65	50	100	128	55	300	258	12	-	180	133	132	282	326	678	722	180	140	-	-	260	216	149	413	16	20	193	237	100	280
65-50-160/ 00752	132S	✗	-	65	50	100	128	55	300	258	12	-	180	133	132	282	326	678	722	180	140	-	-	260	216	149	413	16	20	193	237	100	280
65-50-160/ 01102	160M	✗	✗	65	50	100	128	70	350	310	15	-	180	133	160	334	378	831	875	264	210	-	-	318	254	149	444	23	20	226	270	100	280
65-50-160/ 01502	160M	-	✗	65	50	100	128	70	350	310	15	-	180	133	160	334	378	831	875	264	210	-	-	318	254	149	525	23	20	226	270	100	350
65-50-160/ 01852	160L	-	✗	65	50	100	128	70	350	310	15	-	180	133	160	334	378	876	920	308	254	-	-	318	254	149	525	23	20	226	270	100	350
65-50-160/ 02202	180M	-	✗	65	50	100	128	80	350	347	15	-	180	133	180	347	391	961	1005	291	241	-	-	350	279	149	577	23	-	226	270	100	350
65-50-200/ 01102	160M	✗	-	65	50	100	144	70	350	310	15	-	200	150	160	334	378	831	875	264	210	-	-	318	254	163	444	23	20	226	270	100	280
65-50-200/ 01502	160M	✗	-	65	50	100	144	70	350	310	15	-	200	150	160	334	378	831	875	264	210	-	-	318	254	163	525	23	20	226	270	100	350
65-50-200/ 01852	160L	✗	-	65	50	100	144	70	350	310	15	-	200	150	160	334	378	876	920	308	254	-	-	318	254	163	525	23	20	226	270	100	350
65-50-200/ 02202	180M	✗	✗	65	50	100	144	80	350	347	15	-	200	150	180	347	391	961	1005	291	241	-	-	350	279	163	577	23	-	226	270	100	350
65-50-250/ 01502	160M	✗	-	65	50	100	170	70	350	310	15	-	225	172	160	334	378	831	875	264	210	-	-	318	254	186	525	23	20	226	270	100	350
65-50-250/ 01852	160L	✗	-	65	50	100	170	70	350	310	15	-	225	172	160	334	378	876	920	308	254	-	-	318	254	186	525	23	20	226	270	100	350
65-50-250/ 02202	180M	✗	✗	65	50	100	170	80	350	347	15	-	225	172	180	347	391	961	1005	291	241	-	-	350	279	186	577	23	-	226	270	100	350
80-65-125/ 00402	112M	✗	-	80	65	100	117	-	250	216	-	160	180	127	-	118	118	630	673,5	-	-	225	130	-	-	150	353	-	-	170	214	100	211
80-65-125/ 00552	132S	✗	-	80	65	100	117	55	300	258	12	-	180	127	132	282	326	678	722	180	140	-	-	260	216	150	413	16	20	193	237	100	280
80-65-125/ 00752	132S	✗	✗	80	65	100	117	55	300	258	12	-	180	127	132	282	326	678	722	180	140	-	-	260	216	150	413	16	20	193	237	100	280
80-65-125/ 01102	160M	✗	✗	80	65	100	117	70	350	310	15	-	180	127	160	334	378	831	875	264	210	-	-	318	254	150	444	23	20	226	270	100	280
80-65-125/ 01502	160M	-	✗	80	65	100	117	70	350	310	15	-	180	127	160	334	378	831	875	264	210	-	-	318	254	150	525	23	20	226	270	100	350
80-65-125/ 01852	160L	-	✗	80	65	100	117	70	350	310	15	-	180	127	160	334	378	876	920	308	254	-	-	318	254	150	525	23	20	226	270	100	350
80-65-160/ 00752	132S	✗	-	80	65	100	132	55	300	258	12	-	200	140	132	282	326	678	722	180	140	-	-	260	216	160	413	16	20	193	237	100	280
80-65-160/ 01102	160M	✗	-	80	65	100	132	70	350	310	15	-	200	140	160	334	378	831	875	264	210	-	-	318	254	160	444	23	20	226	270	100	280
80-65-160/ 01502	160M	✗	✗	80	65	100	132	70	350	310	15	-	200	140	160	334	378	831	875	264	210	-	-	318	254	160	525	23	20	226	270	100	350
80-65-160/ 01852	160L	-	✗	80	65	100	132	70	350	310	15	-	200	140	160	334	378	876	920	308	254	-	-	318	254	160	525	23	20	226	270	100	350

Etabloc	Motor (IEC)	n		DN_1 439)	DN_2 439)	a 439)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 439)	h_3	h_4	i 440)	i 441)	l_1 440)	l_1 441)	m_3	m_4	n_1	n_2	n_3	n_4	p	p_1	s_2	u 442)	w 440)	w 441)	x 439)	z
		3000	3600																													
		[rpm]		[mm]																												
80-65-160/ 02202	180M	-	✗	80	65	100	132	80	350	347	15	-	200	140	180	347	391	961	1005	291	241	-	-	350	279	160	577	23	-	226	270	100	350
80-65-200/ 01502	160M	✗	-	80	65	100	155	70	350	310	15	-	225	161	160	334	378	831	875	264	210	-	-	318	254	178	525	23	20	226	270	140	350
80-65-200/ 01852	160L	✗	-	80	65	100	155	70	350	310	15	-	225	161	160	334	378	876	920	308	254	-	-	318	254	178	525	23	20	226	270	140	350
80-65-200/ 02202	180M	✗	✗	80	65	100	155	80	350	347	15	-	225	161	180	347	391	961	1005	291	241	-	-	350	279	178	577	23	-	226	270	140	350
80-65-250/ 02202	180M	✗	-	80	65	100	179	80	350	347	15	-	250	185	180	367	421	981	1035	291	241	-	-	350	279	199	577	23	-	246	300	140	350
100-80-160/ 01502	160M	✗	-	100	80	125	138	70	350	310	15	-	225	153	160	334	378	856	900	264	210	-	-	318	254	174	525	23	20	226	270	140	350
100-80-160/ 01852	160L	✗	-	100	80	125	138	70	350	310	15	-	225	153	160	334	378	901	945	308	254	-	-	318	254	174	525	23	20	226	270	140	350
100-80-160/ 02202	180M	✗	✗	100	80	125	138	80	350	347	15	-	225	153	180	347	391	986	1030	291	241	-	-	350	279	174	577	23	-	226	270	140	350
100-80-200/ 01852	160L	✗	-	100	80	125	159	70	350	310	15	-	250	170	160	354	408	921	975	308	254	-	-	318	254	188	525	23	20	246	300	140	350
100-80-200/ 02202	180M	✗	-	100	80	125	159	80	350	347	15	-	250	170	180	367	421	1006	1060	291	241	-	-	350	279	188	577	23	-	246	300	140	350
125-100-160/ 02202	180M	✗	-	125	100	125	178	80	350	347	15	-	280	199	180	367	421	1006	1060	291	241	-	-	350	279	225	577	23	-	246	300	140	350

Pump set with volute casing foot and motor foot (variable speed version), ≤ 22 kW, n = 3000 rpm / 3600 rpm



Etabloc PumpDrive (from motor size 132 to 180)

Etabloc PumpDrive (up to motor size 112)

n = 3000 rpm / n = 3600 rpm, material variants BB / CC / SB / SC / SG

Dimensions of Etabloc ≤ 22 kW[443)]
Values a_1, b_1, b_4, d_3, l_1, m_1, m_3, n_3 and p may vary slightly for production-related reasons.

Etabloc	Motor (IEC)	n		DN_1 444)	DN_2 444)	a 444)	a_1	b_1 444)	b_4	d_1 444)	d_2	d_3	d_4	h_1 444)	h_2 444)	h_4	i 445)	i 446)	l_1 445)	l_1 446)	m_1 444)	m_2 444)	m_3	m_4	n_1 444)	n_2 444)	n_3	n_4	p	p_1	s_1 444)	s_2	u 447)	w 445)	w 446)	x 444)	z
		3000	3600	[mm]																																
		[rpm]																																		
40-25-160/ 00072	80M	✘	-	40	25	80	118	50	-	14	200	154	-	132	160	-	-	-	469	-	100	70	-	-	240	190	-	-	118	294	15	-	-	156	-	100	190
40-25-160/ 00112	80M	✘	✘	40	25	80	118	50	-	14	200	154	-	132	160	-	-	-	469	-	100	70	-	-	240	190	-	-	118	294	15	-	-	156	-	100	190
40-25-160/ 00152	90S	✘	✘	40	25	80	118	50	-	14	200	174	-	132	160	-	-	-	506	550	100	70	-	-	240	190	-	-	118	299	15	-	-	156	200	100	190
40-25-160/ 00222	90L	✘	✘	40	25	80	118	50	-	14	200	174	-	132	160	-	-	-	553	596,5	100	70	-	-	240	190	-	-	118	299	15	-	-	156	200	100	211
40-25-160/ 00302	100L	-	✘	40	25	80	118	50	-	14	250	192	-	132	160	-	-	-	580	624	100	70	-	-	240	190	-	-	118	338	15	-	-	170	214	100	211
40-25-160/ 00402	112M	-	✘	40	25	80	118	50	-	14	250	216	-	132	160	-	-	-	610	653,5	100	70	-	-	240	190	-	-	118	353	15	-	-	170	214	100	211
40-25-200/ 00152	90S	✘	-	40	25	80	142	50	-	14	200	174	-	160	180	-	-	-	506	550	100	70	-	-	240	190	-	-	142	299	15	-	-	156	200	100	190
40-25-200/ 00222	90L	✘	-	40	25	80	142	50	-	14	200	174	-	160	180	-	-	-	553	596,5	100	70	-	-	240	190	-	-	142	299	15	-	-	156	200	100	211
40-25-200/ 00302	100L	✘	✘	40	25	80	142	50	-	14	250	192	-	160	180	-	-	-	580	624	100	70	-	-	240	190	-	-	142	338	15	-	-	170	214	100	211
40-25-200/ 00402	112M	✘	✘	40	25	80	142	50	-	14	250	216	-	160	180	-	-	-	610	653,5	100	70	-	-	240	190	-	-	142	353	15	-	-	170	214	100	211
40-25-200/ 00552	132S	✘	✘	40	25	80	142	50	55	14	300	258	12	160	180	132	282	326	658	702	100	70	180	140	240	190	260	216	142	413	15	16	20	193	237	100	280
40-25-200/ 00752	132S	-	✘	40	25	80	142	50	55	14	300	258	12	160	180	132	282	326	658	702	100	70	180	140	240	190	260	216	142	413	15	16	20	193	237	100	280
50-32-125/ 00112	80M	✘	-	50	32	80	115	50	-	14	200	154	-	112	140	-	-	-	469	-	100	70	-	-	190	140	-	-	115	294	15	-	-	156	-	100	190
50-32-125/ 00152	90S	✘	✘	50	32	80	115	50	-	14	200	174	-	112	140	-	-	-	506	550	100	70	-	-	190	140	-	-	115	299	15	-	-	156	200	100	190
50-32-125/ 00222	90L	✘	✘	50	32	80	115	50	-	14	200	174	-	112	140	-	-	-	553	596,5	100	70	-	-	190	140	-	-	115	299	15	-	-	156	200	100	211
50-32-125/ 00302	100L	✘	✘	50	32	80	115	50	-	14	250	192	-	112	140	-	-	-	580	624	100	70	-	-	190	140	-	-	115	338	15	-	-	170	214	100	211
50-32-125/ 00402	112M	-	✘	50	32	80	115	50	-	14	250	216	-	112	140	-	-	-	610	653,5	100	70	-	-	190	140	-	-	115	353	15	-	-	170	214	100	211
50-32-125/ 00552	132S	-	✘	50	32	80	115	50	55	14	300	258	12	112	140	132	282	326	658	702	100	70	180	140	190	140	260	216	115	413	15	16	20	193	237	100	280
50-32-125.1/ 00052	71M	✘	-	50	32	80	116	50	-	14	160	136	-	112	140	-	-	-	441	-	100	70	-	-	190	140	-	-	116	282	15	-	-	136	-	100	190
50-32-125.1/ 00072	80M	✘	-	50	32	80	116	50	-	14	200	154	-	112	140	-	-	-	469	-	100	70	-	-	190	140	-	-	116	294	15	-	-	156	-	100	190
50-32-125.1/ 00112	80M	✘	-	50	32	80	116	50	-	14	200	154	-	112	140	-	-	-	469	-	100	70	-	-	190	140	-	-	116	294	15	-	-	156	-	100	190
50-32-125.1/ 00152	90S	✘	-	50	32	80	116	50	-	14	200	174	-	112	140	-	-	-	506	550	100	70	-	-	190	140	-	-	116	299	15	-	-	156	200	100	190
50-32-125.1/ 00222	90L	✘	-	50	32	80	116	50	-	14	200	174	-	112	140	-	-	-	553	596,5	100	70	-	-	190	140	-	-	116	299	15	-	-	156	200	100	211
50-32-125.1/ 00302	100L	-	✘	50	32	80	116	50	-	14	250	192	-	112	140	-	-	-	580	624	100	70	-	-	190	140	-	-	116	338	15	-	-	170	214	100	211
50-32-125.1/ 00402	112M	-	✘	50	32	80	116	50	-	14	250	216	-	112	140	-	-	-	610	653,5	100	70	-	-	190	140	-	-	116	353	15	-	-	170	214	100	211
50-32-125.1/ 00552	132S	-	✘	50	32	80	116	50	55	14	300	258	12	112	140	132	282	326	658	702	100	70	180	140	190	140	260	216	116	413	15	16	20	193	237	100	280
50-32-160/ 00222	90L	✘	-	50	32	80	118	50	-	14	200	174	-	132	160	-	-	-	553	596,5	100	70	-	-	240	190	-	-	128	299	15	-	-	156	200	100	211
50-32-160/ 00302	100L	✘	✘	50	32	80	118	50	-	14	250	192	-	132	160	-	-	-	580	624	100	70	-	-	240	190	-	-	128	338	15	-	-	170	214	100	211
50-32-160/ 00402	112M	✘	✘	50	32	80	118	50	-	14	250	216	-	132	160	-	-	-	610	653,5	100	70	-	-	240	190	-	-	128	353	15	-	-	170	214	100	211
50-32-160/ 00552	132S	-	✘	50	32	80	118	50	55	14	300	258	12	132	160	132	282	326	658	702	100	70	180	140	240	190	260	216	128	413	15	16	20	193	237	100	280
50-32-160/ 00752	132S	-	✘	50	32	80	118	50	55	14	300	258	12	132	160	132	282	326	658	702	100	70	180	140	240	190	260	216	128	413	15	16	20	193	237	100	280

443 Tolerances of mating dimensions to EN 735
444 Dimensions to EN 733
445 Dimension with single mechanical seal (A, AV, IA, EA, FA)
446 Dimension with double mechanical seal (DB, TI)
447 Motor feet must be shimmed.

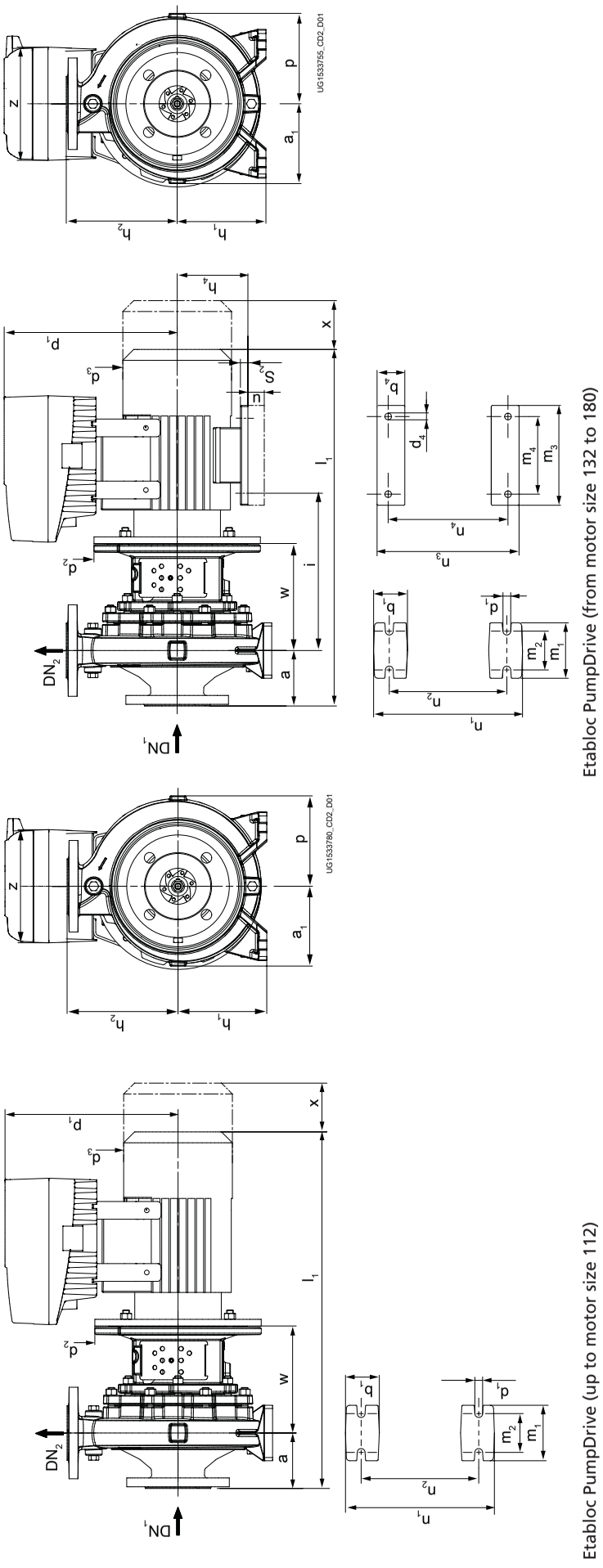
Etabloc	Motor (IEC)	n		DN_1 444)	DN_2 444)	a 444)	a_1	b_1 444)	b_4	d_1 444)	d_2	d_3	d_4	h_1 444)	h_2 444)	h_4	i 445)	i 446)	l_1 445)	l_1 446)	m_1 444)	m_2 444)	m_3	m_4	n_1 444)	n_2 444)	n_3	n_4	p	p_1	s_1 444)	s_2	u 447)	w 445)	w 446)	x 444)	z
		3000	3600																																
		[rpm]		[mm]																																
50-32-160.1/ 00152	90S	✗	-	50	32	80	116	50	-	14	200	174	-	132	160	-	-	-	506	550	100	70	-	-	240	190	-	-	121	299	15	-	-	156	200	100	190
50-32-160.1/ 00222	90L	✗	✗	50	32	80	116	50	-	14	200	174	-	132	160	-	-	-	553	596,5	100	70	-	-	240	190	-	-	121	299	15	-	-	156	200	100	211
50-32-160.1/ 00302	100L	✗	✗	50	32	80	116	50	-	14	250	192	-	132	160	-	-	-	580	624	100	70	-	-	240	190	-	-	121	338	15	-	-	170	214	100	211
50-32-160.1/ 00402	112M	✗	✗	50	32	80	116	50	-	14	250	216	-	132	160	-	-	-	610	653,5	100	70	-	-	240	190	-	-	121	353	15	-	-	170	214	100	211
50-32-160.1/ 00552	132S	-	✗	50	32	80	116	50	55	14	300	258	12	132	160	132	282	326	658	702	100	70	180	140	240	190	260	216	121	413	15	16	20	193	237	100	280
50-32-160.1/ 00752	132S	-	✗	50	32	80	116	50	55	14	300	258	12	132	160	132	282	326	658	702	100	70	180	140	240	190	260	216	121	413	15	16	20	193	237	100	280
50-32-160.1/ 01102	160M	-	✗	50	32	80	116	50	70	14	350	310	15	132	160	160	334	378	811	855	100	70	264	210	240	190	318	254	121	444	15	23	20	226	270	100	280
50-32-200/ 00402	112M	✗	-	50	32	80	142	50	-	14	250	216	-	160	180	-	-	-	610	653,5	100	70	-	-	240	190	-	-	143	353	18	-	-	170	214	100	211
50-32-200/ 00552	132S	✗	-	50	32	80	142	50	55	14	300	258	12	160	180	132	282	326	658	702	100	70	180	140	240	190	260	216	143	413	18	16	20	193	237	100	280
50-32-200/ 00752	132S	✗	✗	50	32	80	142	50	55	14	300	258	12	160	180	132	282	326	658	702	100	70	180	140	240	190	260	216	143	413	18	16	20	193	237	100	280
50-32-200/ 01102	160M	✗	✗	50	32	80	142	50	70	14	350	310	15	160	180	160	334	378	811	855	100	70	264	210	240	190	318	254	143	444	18	23	20	226	270	100	280
50-32-200/ 01502	160M	-	✗	50	32	80	142	50	70	14	350	310	15	160	180	160	334	378	811	855	100	70	264	210	240	190	318	254	143	525	18	23	20	226	270	100	350
50-32-200.1/ 00302	100L	✗	-	50	32	80	142	50	-	14	250	192	-	160	180	-	-	-	580	624	100	70	-	-	240	190	-	-	142	338	18	-	-	170	214	100	211
50-32-200.1/ 00402	112M	✗	-	50	32	80	142	50	-	14	250	216	-	160	180	-	-	-	610	653,5	100	70	-	-	240	190	-	-	142	353	18	-	-	170	214	100	211
50-32-200.1/ 00552	132S	✗	✗	50	32	80	142	50	55	14	300	258	12	160	180	132	282	326	658	702	100	70	180	140	240	190	260	216	142	413	18	16	20	193	237	100	280
50-32-200.1/ 00752	132S	✗	✗	50	32	80	142	50	55	14	300	258	12	160	180	132	282	326	658	702	100	70	180	140	240	190	260	216	142	413	18	16	20	193	237	100	280
50-32-200.1/ 01102	160M	-	✗	50	32	80	142	50	70	14	350	310	15	160	180	160	334	378	811	855	100	70	264	210	240	190	318	254	142	444	18	23	20	226	270	100	280
50-32-200.1/ 01502	160M	-	✗	50	32	80	142	50	70	14	350	310	15	160	180	160	334	378	811	855	100	70	264	210	240	190	318	254	142	525	18	23	20	226	270	100	350
50-32-250/ 00752	132S	✗	-	50	32	100	169	65	55	14	300	258	12	180	225	132	282	326	678	722	125	95	180	140	320	250	260	216	178	413	18	16	20	193	237	100	280
50-32-250/ 01102	160M	✗	✗	50	32	100	169	65	70	14	350	310	15	180	225	160	334	378	831	875	125	95	264	210	320	250	318	254	178	444	18	23	20	226	270	100	280
50-32-250/ 01502	160M	✗	✗	50	32	100	169	65	70	14	350	310	15	180	225	160	334	378	831	875	125	95	264	210	320	250	318	254	178	525	18	23	20	226	270	100	350
50-32-250/ 01852	160L	-	✗	50	32	100	169	65	70	14	350	310	15	180	225	160	334	378	876	920	125	95	308	254	320	250	318	254	178	525	18	23	20	226	270	100	350
50-32-250/ 02202	180M	-	✗	50	32	100	169	65	80	14	350	347	15	180	225	180	347	391	961	1005	125	95	291	241	320	250	350	279	178	577	18	23	-	226	270	100	350
50-32-250.1/ 00552	132S	✗	-	50	32	100	168	65	55	14	300	258	12	180	225	132	282	326	678	722	125	95	180	140	320	250	260	216	168	413	18	16	20	193	237	100	280
50-32-250.1/ 00752	132S	✗	✗	50	32	100	168	65	55	14	300	258	12	180	225	132	282	326	678	722	125	95	180	140	320	250	260	216	168	413	18	16	20	193	237	100	280
50-32-250.1/ 01102	160M	✗	✗	50	32	100	168	65	70	14	350	310	15	180	225	160	334	378	831	875	125	95	264	210	320	250	318	254	168	444	18	23	20	226	270	100	280
50-32-250.1/ 01502	160M	✗	✗	50	32	100	168	65	70	14	350	310	15	180	225	160	334	378	831	875	125	95	264	210	320	250	318	254	168	525	18	23	20	226	270	100	350
50-32-250.1/ 01852	160L	-	✗	50	32	100	168	65	70	14	350	310	15	180	225	160	334	378	876	920	125	95	308	254	320	250	318	254	168	525	18	23	20	226	270	100	350
65-40-125/ 00152	90S	✗	-	65	40	80	117	50	-	14	200	174	-	112	140	-	-	-	506	500	100	70	-	-	210	160	-	-	117	299	15	-	-	156	200	100	190
65-40-125/ 00222	90L	✗	-	65	40	80	117	50	-	14	200	174	-	112	140	-	-	-	553	596,5	100	70	-	-	210	160	-	-	117	299	15	-	-	156	200	100	211
65-40-125/ 00302	100L	✗	-	65	40	80	117	50	-	14	250	192	-	112	140	-	-	-	580	624	100	70	-	-	210	160	-	-	117	338	15	-	-	170	214	100	211
65-40-125/ 00402	112M	✗	✗	65	40	80	117	50	-	14	250	216	-	112	140	-	-	-	610	653,5	100	70	-	-	210	160	-	-	117	353	15	-	-	170	214	100	211
65-40-125/ 00552	132S	-	✗	65	40	80	117	50	55	14	300	258	12	112	140	132	282	326	658	702	100	70	180	140	210	160	260	216	117	413	15	16	20	193	237	100	280
65-40-125/ 00752	132S	-	✗	65	40	80	117	50	55	14	300	258	12	112	140	132	282	326	658	702	100	70	180	140	210	160	260	216	117	413	15	16	20	193	237	100	280
65-40-125/ 01102	160M	-	✗	65	40	80	117	50	70	14	350	310	15	112	140	160	334	378	811	855	100	70	264	210	210	160	318	254	117	444	15	23	20	226	270	100	280
65-40-160/ 00302	100L	✗	-	65	40	80	119	50	-	14	250	192	-	132	160	-	-	-	580	624	100	70	-	-	240	190	-	-	134	338	15	-	-	170	214	100	211
65-40-160/ 00402	112M	✗	-	65	40	80	119	50	-	14	250	216	-	132	160	-	-	-	610	653,5	100	70	-	-	240	190	-	-	134	353	15	-	-	170	214	100	211
65-40-160/ 00552	132S	✗	✗	65	40	80	119	50	55	14	300	258	12	132	160	132	282	326	658	702	100	70	180	140	240	190	260	216	134	413	15	16	20	193	237	100	280
65-40-160/ 00752	132S	✗	✗	65	40	80	119	50	55	14	300	258	12	132	160	132	282	326	658	702	100	70	180	140	240	190	260	216	134	413	15	16	20	193	237	100	280
65-40-160/ 01102	160M	-	✗	65	40	80	119	50	70	14	350	310	15	132	160	160	334	378	811	855	100	70	264	210	240	190	318	254	134	444	15	23	20	226	270	100	280
65-40-160/ 01502	160M	-	✗	65	40	80	119	50	70	14	350	310	15	132	160	160	334	378	811	855	100	70	264	210	240	190	318	254	134	525	15	23	20	226	270	100	350

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Etabloc	Motor (IEC)	n		DN_1 444)	DN_2 444)	a 444)	a_1	b_1 444)	b_4	d_1 444)	d_2	d_3	d_4	h_1 444)	h_2 444)	h_4	i 445)	i 446)	l_1 445)	l_1 446)	m_1 444)	m_2 444)	m_3	m_4	n_1 444)	n_2 444)	n_3	n_4	p	p_1	s_1 444)	s_2	u 447)	w 445)	w 446)	x 444)	z
		3000	3600																																
		[rpm]		[mm]																																
65-40-200/ 00552	132S	✗	-	65	40	100	142	50	55	14	300	258	12	160	180	132	282	326	678	722	100	70	180	140	265	212	260	216	155	413	18	16	20	193	237	100	280
65-40-200/ 00752	132S	✗	-	65	40	100	142	50	55	14	300	258	12	160	180	132	282	326	678	722	100	70	180	140	265	212	260	216	155	413	18	16	20	193	237	100	280
65-40-200/ 01102	160M	✗	✗	65	40	100	142	50	70	14	350	310	15	160	180	160	334	378	831	875	100	70	264	210	265	212	318	254	155	444	18	23	20	226	270	100	280
65-40-200/ 01502	160M	✗	✗	65	40	100	142	50	70	14	350	310	15	160	180	160	334	378	831	875	100	70	264	210	265	212	318	254	155	525	18	23	20	226	270	100	350
65-40-200/ 01852	160L	✗	✗	65	40	100	142	50	70	14	350	310	15	160	180	160	334	378	876	920	100	70	308	254	265	212	318	254	155	525	18	23	20	226	270	100	350
65-40-200/ 02202	180M	✗	✗	65	40	100	142	50	80	14	350	347	15	160	180	180	347	391	961	1005	100	70	291	241	265	212	350	279	155	577	18	23	-	226	270	100	350
65-40-250/ 01102	160M	✗	-	65	40	100	169	65	70	14	350	310	15	180	225	160	334	378	831	875	125	95	264	210	320	250	318	254	179	444	18	23	20	226	270	100	280
65-40-250/ 01502	160M	✗	✗	65	40	100	169	65	70	14	350	310	15	180	225	160	334	378	831	875	125	95	264	210	320	250	318	254	179	525	18	23	20	226	270	100	350
65-40-250/ 01852	160L	✗	✗	65	40	100	169	65	70	14	350	310	15	180	225	160	334	378	876	920	125	95	308	254	320	250	318	254	179	525	18	23	20	226	270	100	350
65-40-250/ 02202	180M	✗	✗	65	40	100	169	65	80	14	350	347	15	180	225	180	347	391	961	1005	125	95	291	241	320	250	350	279	179	577	18	23	-	226	270	100	350
65-40-315/ 01852	160L	✗	-	65	40	125	207	65	70	14	350	310	15	225	250	160	354	408	921	975	125	95	308	254	345	280	318	254	207	525	18	23	20	246	300	100	350
65-40-315/02202	180M	✗	-	65	40	125	207	65	80	14	350	347	15	225	250	180	367	421	1006	1060	125	95	291	241	345	280	350	279	207	577	18	23	-	246	300	100	350
65-50-125/ 00302	100L	✗	-	65	50	100	117	50	-	14	250	192	-	132	160	-	-	-	600	644	100	70	-	-	240	190	-	-	130	338	18	-	-	170	214	100	211
65-50-125/ 00402	112M	✗	-	65	50	100	117	50	-	14	250	216	-	132	160	-	-	-	630	673,5	100	70	-	-	240	190	-	-	130	353	18	-	-	170	214	100	211
65-50-125/ 00552	132S	✗	✗	65	50	100	117	50	55	14	300	258	12	132	160	132	282	326	678	722	100	70	180	140	240	190	260	216	130	413	18	16	20	193	237	100	280
65-50-125/ 00752	132S	✗	✗	65	50	100	117	50	55	14	300	258	12	132	160	132	282	326	678	722	100	70	180	140	240	190	260	216	130	413	18	16	20	193	237	100	280
65-50-125/ 01102	160M	-	✗	65	50	100	117	50	70	14	350	310	15	132	160	160	334	378	831	875	100	70	264	210	240	190	318	254	130	444	18	23	20	226	270	100	280
65-50-125/ 01502	160M	-	✗	65	50	100	117	50	70	14	350	310	15	132	160	160	334	378	831	875	100	70	264	210	240	190	318	254	130	525	18	23	20	226	270	100	350
65-50-160/ 00552	132S	✗	-	65	50	100	128	50	55	14	300	258	12	160	180	132	282	326	678	722	100	70	180	140	265	212	260	216	149	413	18	16	20	193	237	100	280
65-50-160/ 00752	132S	✗	-	65	50	100	128	50	55	14	300	258	12	160	180	132	282	326	678	722	100	70	180	140	265	212	260	216	149	413	18	16	20	193	237	100	280
65-50-160/ 01102	160M	✗	✗	65	50	100	128	50	70	14	350	310	15	160	180	160	334	378	831	875	100	70	264	210	265	212	318	254	149	444	18	23	20	226	270	100	280
65-50-160/ 01502	160M	-	✗	65	50	100	128	50	70	14	350	310	15	160	180	160	334	378	831	875	100	70	264	210	265	212	318	254	149	525	18	23	20	226	270	100	350
65-50-160/ 01852	160L	-	✗	65	50	100	128	50	70	14	350	310	15	160	180	160	334	378	876	920	100	70	308	254	265	212	318	254	149	525	18	23	20	226	270	100	350
65-50-160/ 02202	180M	-	✗	65	50	100	128	50	80	14	350	347	15	160	180	180	347	391	961	1005	100	70	291	241	265	212	350	279	149	577	18	23	-	226	270	100	350
65-50-200/ 01102	160M	✗	-	65	50	100	144	50	70	14	350	310	15	160	200	160	334	378	831	875	100	70	264	210	265	212	318	254	163	444	18	23	20	226	270	100	280
65-50-200/ 01502	160M	✗	-	65	50	100	144	50	70	14	350	310	15	160	200	160	334	378	831	875	100	70	264	210	265	212	318	254	163	525	18	23	20	226	270	100	350
65-50-200/ 01852	160L	✗	-	65	50	100	144	50	70	14	350	310	15	160	200	160	334	378	876	920	100	70	308	254	265	212	318	254	163	525	18	23	20	226	270	100	350
65-50-200/ 02202	180M	✗	✗	65	50	100	144	50	80	14	350	347	15	160	200	180	347	391	961	1005	100	70	291	241	265	212	350	279	163	577	18	23	-	226	270	100	350
65-50-250/ 01502	160M	✗	-	65	50	100	170	65	70	14	350	310	15	180	225	160	334	378	831	875	125	95	264	210	320	250	318	254	186	525	18	23	20	226	270	100	350
65-50-250/ 01852	160L	✗	-	65	50	100	170	65	70	14	350	310	15	180	225	160	334	378	876	920	125	95	308	254	320	250	318	254	186	525	18	23	20	226	270	100	350
65-50-250/ 02202	180M	✗	✗	65	50	100	170	65	80	14	350	347	15	180	225	180	347	391	961	1005	125	95	291	241	320	250	350	279	186	577	18	23	-	226	270	100	350
80-65-125/ 00402	112M	✗	-	80	65	100	117	65	-	14	250	216	-	160	180	-	-	-	630	673,5	125	95	-	-	280	212	-	-	150	353	18	-	-	170	214	100	211
80-65-125/ 00552	132S	✗	-	80	65	100	117	65	55	14	300	258	12	160	180	132	282	326	678	722	125	95	180	140	280	212	260	216	150	413	18	16	20	193	237	100	280
80-65-125/ 00752	132S	✗	✗	80	65	100	117	65	55	14	300	258	12	160	180	132	282	326	678	722	125	95	180	140	280	212	260	216	150	413	18	16	20	193	237	100	280
80-65-125/ 01102	160M	✗	✗	80	65	100	117	65	70	14	350	310	15	160	180	160	334	378	831	875	125	95	264	210	280	212	318	254	150	444	18	23	20	226	270	100	280
80-65-125/ 01502	160M	-	✗	80	65	100	117	65	70	14	350	310	15	160	180	160	334	378	831	875	125	95	264	210	280	212	318	254	150	525	18	23	20	226	270	100	350
80-65-125/ 01852	160L	-	✗	80	65	100	117	65	70	14	350	310	15	160	180	160	334	378	876	920	125	95	308	254	280	212	318	254	150	525	18	23	20	226	270	100	350
80-65-160/ 00752	132S	✗	-	80	65	100	132	65	55	14	300	258	12	160	200	132	282	326	678	722	125	95	180	140	280	212	260	216	160	413	18	16	20	193	237	100	280
80-65-160/ 01102	160M	✗	-	80	65	100	132	65	70	14	350	310	15	160	200	160	334	378	831	875	125	95	264	210	280	212	318	254	160	444	18	23	20	226	270	100	280
80-65-160/ 01502	160M	✗	✗	80	65	100	132	65	70	14	350	310	15	160	200	160	334	378	831	875	125	95	264	210	280	212	318	254	160	525	18	23	20	226	270	100	350
80-65-160/ 01852	160L	-	✗	80	65	100	132	65	70	14	350	310	15	160	200	160	334	378	876	920	125	95	308	254	280	212	318	254	160	525	18	23	20	226	270	100	350

Etabloc	Motor (IEC)	n		DN_1 444)	DN_2 444)	a 444)	a_1	b_1 444)	b_4	d_1 444)	d_2	d_3	d_4	h_1 444)	h_2 444)	h_4	i 445)	i 446)	l_1 445)	l_1 446)	m_1 444)	m_2 444)	m_3	m_4	n_1 444)	n_2 444)	n_3	n_4	p	p_1	s_1 444)	s_2	u 447)	w 445)	w 446)	x 444)	z
		3000	3600																																
		[rpm]		[mm]																																
80-65-160/ 02202	180M	-	✗	80	65	100	132	65	80	14	350	347	15	160	200	180	347	391	961	1005	125	95	291	241	280	212	350	279	160	577	18	23	-	226	270	100	350
80-65-200/ 01502	160M	✗	-	80	65	100	155	65	70	14	350	310	15	180	225	160	334	378	831	875	125	95	264	210	320	250	318	254	178	525	18	23	20	226	270	140	350
80-65-200/ 01852	160L	✗	-	80	65	100	155	65	70	14	350	310	15	180	225	160	334	378	876	920	125	95	308	254	320	250	318	254	178	525	18	23	20	226	270	140	350
80-65-200/ 02202	180M	✗	✗	80	65	100	155	65	80	14	350	347	15	180	225	180	347	391	961	1005	125	95	291	241	320	250	350	279	178	577	18	23	-	226	270	140	350
80-65-250/ 02202	180M	✗	-	80	65	100	179	80	80	19	350	347	15	200	250	180	367	421	981	1035	160	120	291	241	360	280	350	279	199	577	20	23	-	246	300	140	350
100-80-160/ 01502	160M	✗	-	100	80	125	138	65	70	14	350	310	15	180	225	160	334	378	856	900	125	95	264	210	320	250	318	254	174	525	18	23	20	226	270	140	350
100-80-160/ 01852	160L	✗	-	100	80	125	138	65	70	14	350	310	15	180	225	160	334	378	901	945	125	95	308	254	320	250	318	254	174	525	18	23	20	226	270	140	350
100-80-160/ 02202	180M	✗	✗	100	80	125	138	65	80	14	350	347	15	180	225	180	347	391	986	1030	125	95	291	241	320	250	350	279	174	577	18	23	-	226	270	140	350
100-80-200/ 01852	160L	✗	-	100	80	125	159	65	70	14	350	310	15	180	250	160	354	408	921	975	125	95	308	254	345	280	318	254	188	525	18	23	20	246	300	140	350
100-80-200/ 02202	180M	✗	-	100	80	125	159	65	80	14	350	347	15	180	250	180	367	421	1006	1060	125	95	291	241	345	280	350	279	188	577	18	23	-	246	300	140	350
125-100-160/ 02202	180M	✗	-	125	100	125	178	80	80	19	350	347	15	200	280	180	367	421	1006	1060	160	120	291	241	360	280	350	279	225	577	18	23	-	246	300	140	350

Pump set with volute casing foot and motor foot (variable speed version), ≤ 22 kW, n = 1500 rpm / 1800 rpm



n = 1500 rpm / n = 1800 rpm, material variants BB / CC / SB / SC / SG

Dimensions of Etabloc ≤ 22 kW[448]
Values a_1, b_1 , b_4, d_3, l_1, m_1, m_3, n_3 and p may vary slightly for production-related reasons.

Etabloc	Motor (IEC)	n		DN_1 [449]	DN_2 [449]	a [449]	a_1	b_1 [449]	b_4	d_1 [449]	d_2	d_3	d_4	h_1 [449]	h_2 [449]	h_4	i [450]	i [451]	l_1 [450]	l_1 [451]	m_1 [449]	m_2 [449]	m_3	m_4	n_1 [449]	n_2 [449]	n_3	n_4	p	p_1	s_1 [449]	s_2	u [452]	w [450]	w [451]	x [449]	z
		1500	1800	[mm]																																
		[rpm]																																		
40-25-160/ 00054	80M	-	✗	40	25	80	118	50	-	14	200	154	-	132	160	-	-	-	169	-	100	70	-	-	240	190	-	-	118	294	15	-	-	156	-	100	190
40-25-160/ 00114	90S	✗	✗	40	25	80	118	50	-	14	200	174	-	132	160	-	-	-	506	550	100	70	-	-	240	190	-	-	118	299	15	-	-	156	200	100	190
40-25-200/ 00054	80M	✗	✗	40	25	80	142	50	-	14	200	154	-	160	180	-	-	-	469	-	100	70	-	-	240	190	-	-	142	294	15	-	-	156	-	100	190
40-25-200/ 00074	80M	-	✗	40	25	80	142	50	-	14	200	154	-	160	180	-	-	-	469	-	100	70	-	-	240	190	-	-	142	294	15	-	-	156	-	100	190
40-25-200/ 00114	90S	-	✗	40	25	80	142	50	-	14	200	174	-	160	180	-	-	-	506	550	100	70	-	-	240	190	-	-	142	299	15	-	-	156	200	100	190
50-32-125/ 00054	80M	✗	✗	50	32	80	115	50	-	14	200	154	-	112	140	-	-	-	469	-	100	70	-	-	190	140	-	-	115	294	15	-	-	156	-	100	190
50-32-125/ 00074	80M	-	✗	50	32	80	115	50	-	14	200	154	-	112	140	-	-	-	469	-	100	70	-	-	190	140	-	-	115	294	15	-	-	156	-	100	190
50-32-125/ 00114	90S	✗	✗	50	32	80	115	50	-	14	200	174	-	112	140	-	-	-	506	550	100	70	-	-	190	140	-	-	115	299	15	-	-	156	200	100	190
50-32-125.1/ 00054	80M	✗	✗	50	32	80	116	50	-	14	200	154	-	112	140	-	-	-	469	-	100	70	-	-	190	140	-	-	116	294	15	-	-	156	-	100	190
50-32-125.1/ 00114	90S	✗	✗	50	32	80	116	50	-	14	200	174	-	112	140	-	-	-	506	550	100	70	-	-	190	140	-	-	116	299	15	-	-	156	200	100	190
50-32-160/ 00054	80M	✗	✗	50	32	80	118	50	-	14	200	154	-	132	160	-	-	-	469	-	100	70	-	-	240	190	-	-	128	294	15	-	-	156	-	100	190
50-32-160/ 00074	80M	✗	✗	50	32	80	118	50	-	14	200	154	-	132	160	-	-	-	469	-	100	70	-	-	240	190	-	-	128	294	15	-	-	156	-	100	190
50-32-160/ 00114	90S	-	✗	50	32	80	118	50	-	14	200	174	-	132	160	-	-	-	506	550	100	70	-	-	240	190	-	-	128	299	15	-	-	156	200	100	190
50-32-160.1/ 00054	80M	✗	✗	50	32	80	116	50	-	14	200	154	-	132	160	-	-	-	469	-	100	70	-	-	240	190	-	-	121	294	15	-	-	156	-	100	190
50-32-160.1/ 00074	80M	-	✗	50	32	80	116	50	-	14	200	154	-	132	160	-	-	-	469	-	100	70	-	-	240	190	-	-	121	294	15	-	-	156	-	100	190
50-32-200/ 00054	80M	✗	-	50	32	80	142	50	-	14	200	154	-	160	180	-	-	-	469	-	100	70	-	-	240	190	-	-	143	294	18	-	-	156	-	100	190
50-32-200/ 00074	80M	✗	-	50	32	80	142	50	-	14	200	154	-	160	180	-	-	-	469	-	100	70	-	-	240	190	-	-	143	294	18	-	-	156	-	100	190
50-32-200/ 00114	90S	✗	✗	50	32	80	142	50	-	14	200	174	-	160	180	-	-	-	506	550	100	70	-	-	240	190	-	-	143	299	18	-	-	156	200	100	190
50-32-200/ 00154	90L	-	✗	50	32	80	142	50	-	14	200	174	-	160	180	-	-	-	553	596,5	100	70	-	-	240	190	-	-	143	299	18	-	-	156	200	100	190
50-32-200/ 00224	100L	-	✗	50	32	80	142	50	-	14	250	192	-	160	180	-	-	-	580	624	100	70	-	-	240	190	-	-	143	338	18	-	-	170	214	100	211
50-32-200.1/ 00054	80M	✗	✗	50	32	80	142	50	-	14	200	154	-	160	180	-	-	-	469	-	100	70	-	-	240	190	-	-	142	294	18	-	-	156	-	100	190
50-32-200.1/ 00074	80M	✗	✗	50	32	80	142	50	-	14	200	154	-	160	180	-	-	-	469	-	100	70	-	-	240	190	-	-	142	294	18	-	-	156	-	100	190
50-32-200.1/ 00114	90S	-	✗	50	32	80	142	50	-	14	200	174	-	160	180	-	-	-	506	550	100	70	-	-	240	190	-	-	142	299	18	-	-	156	200	100	190
50-32-200.1/ 00154	90L	-	✗	50	32	80	142	50	-	14	200	174	-	160	180	-	-	-	553	596,5	100	70	-	-	240	190	-	-	142	299	18	-	-	156	200	100	190
50-32-250/ 00114	90S	✗	-	50	32	100	169	65	-	14	200	174	-	180	225	-	-	-	526	570	125	95	-	-	320	250	-	-	178	299	18	-	-	156	200	100	190
50-32-250/ 00154	90L	✗	✗	50	32	100	169	65	-	14	200	174	-	180	225	-	-	-	573	616,5	125	95	-	-	320	250	-	-	178	299	18	-	-	156	200	100	190
50-32-250/ 00224	100L	✗	✗	50	32	100	169	65	-	14	250	192	-	180	225	-	-	-	600	644	125	95	-	-	320	250	-	-	178	338	18	-	-	170	214	100	211
50-32-250/ 00304	100L	-	✗	50	32	100	169	65	-	14	250	192	-	180	225	-	-	-	600	644	125	95	-	-	320	250	-	-	178	338	18	-	-	170	214	100	211
50-32-250/ 00404	112M	-	✗	50	32	100	169	65	-	14	250	216	-	180	225	-	-	-	630	673,5	125	95	-	-	320	250	-	-	178	353	18	-	-	170	214	100	211
50-32-250.1/ 00074	80M	✗	-	50	32	100	168	65	-	14	200	154	-	180	225	-	-	-	489	-	125	95	-	-	320	250	-	-	168	294	18	-	-	156	-	100	190

448 Tolerances of mating dimensions to EN 735
449 Dimensions to EN 733
450 Dimension with single mechanical seal (A, AV, IA, EA, FA)
451 Dimension with double mechanical seal (DB, TI)
452 Motor feet must be shimmed.

Etabloc	Motor (IEC)	n		DN_1 449)	DN_2 449)	a 449)	a_1	b_1 449)	b_4	d_1 449)	d_2	d_3	d_4	h_1 449)	h_2 449)	h_4	i 450)	i 451)	l_1 450)	l_1 451)	m_1 449)	m_2 449)	m_3	m_4	n_1 449)	n_2 449)	n_3	n_4	p	p_1	s_1 449)	s_2	u 452)	w 450)	w 451)	x 449)	z
		1500	1800																																
		[rpm]		[mm]																																
50-32-250.1/ 00114	90S	✗	✗	50	32	100	168	65	-	14	200	174	-	180	225	-	-	-	526	570	125	95	-	-	320	250	-	-	168	299	18	-	-	156	200	100	190
50-32-250.1/ 00154	90L	✗	✗	50	32	100	168	65	-	14	200	174	-	180	225	-	-	-	573	616,5	125	95	-	-	320	250	-	-	168	299	18	-	-	156	200	100	190
50-32-250.1/ 00224	100L	-	✗	50	32	100	168	65	-	14	250	192	-	180	225	-	-	-	600	644	125	95	-	-	320	250	-	-	168	338	18	-	-	170	214	100	211
50-32-250.1/ 00304	100L	-	✗	50	32	100	168	65	-	14	250	192	-	180	225	-	-	-	600	644	125	95	-	-	320	250	-	-	168	338	18	-	-	170	214	100	211
65-40-125/ 00054	80M	✗	✗	65	40	80	117	50	-	14	200	154	-	112	140	-	-	-	469	-	100	70	-	-	210	160	-	-	117	294	15	-	-	156	-	100	190
65-40-125/ 00074	80M	-	✗	65	40	80	117	50	-	14	200	154	-	112	140	-	-	-	469	-	100	70	-	-	210	160	-	-	117	294	15	-	-	156	-	100	190
65-40-125/ 00114	90S	-	✗	65	40	80	117	50	-	14	200	174	-	112	140	-	-	-	506	550	100	70	-	-	210	160	-	-	117	299	15	-	-	156	200	100	190
65-40-160/ 00054	80M	✗	-	65	40	80	119	50	-	14	200	154	-	132	160	-	-	-	469	-	100	70	-	-	240	190	-	-	134	294	15	-	-	156	-	100	190
65-40-160/ 00074	80M	✗	✗	65	40	80	119	50	-	14	200	154	-	132	160	-	-	-	469	-	100	70	-	-	240	190	-	-	134	294	15	-	-	156	-	100	190
65-40-160/ 00114	90S	✗	✗	65	40	80	119	50	-	14	200	174	-	132	160	-	-	-	506	550	100	70	-	-	240	190	-	-	134	299	15	-	-	156	200	100	190
65-40-160/ 00154	90L	-	✗	65	40	80	119	50	-	14	200	174	-	132	160	-	-	-	553	596,5	100	70	-	-	240	190	-	-	134	299	15	-	-	156	200	100	190
65-40-160/ 00224	100L	-	✗	65	40	80	119	50	-	14	250	192	-	132	160	-	-	-	580	624	100	70	-	-	240	190	-	-	134	338	15	-	-	170	214	100	211
65-40-200/ 00074	80M	✗	-	65	40	100	142	50	-	14	200	154	-	160	180	-	-	-	489	-	100	70	-	-	265	212	-	-	155	294	18	-	-	156	-	100	190
65-40-200/ 00114	90S	✗	-	65	40	100	142	50	-	14	200	174	-	160	180	-	-	-	526	570	100	70	-	-	265	212	-	-	155	299	18	-	-	156	200	100	190
65-40-200/ 00154	90L	✗	✗	65	40	100	142	50	-	14	200	174	-	160	180	-	-	-	573	616,5	100	70	-	-	265	212	-	-	155	299	18	-	-	156	200	100	190
65-40-200/ 00224	100L	-	✗	65	40	100	142	50	-	14	250	192	-	160	180	-	-	-	600	644	100	70	-	-	265	212	-	-	155	338	18	-	-	170	214	100	211
65-40-200/ 00304	100L	-	✗	65	40	100	142	50	-	14	250	192	-	160	180	-	-	-	600	644	100	70	-	-	265	212	-	-	155	338	18	-	-	170	214	100	211
65-40-250/ 00114	90S	✗	-	65	40	100	169	65	-	14	200	174	-	180	225	-	-	-	526	570	125	95	-	-	320	250	-	-	179	299	18	-	-	156	200	100	190
65-40-250/ 00154	90L	✗	-	65	40	100	169	65	-	14	200	174	-	180	225	-	-	-	573	616,5	125	95	-	-	320	250	-	-	179	299	18	-	-	156	200	100	190
65-40-250/ 00224	100L	✗	✗	65	40	100	169	65	-	14	250	192	-	180	225	-	-	-	600	644	125	95	-	-	320	250	-	-	179	338	18	-	-	170	214	100	211
65-40-250/ 00304	100L	✗	✗	65	40	100	169	65	-	14	250	192	-	180	225	-	-	-	600	644	125	95	-	-	320	250	-	-	179	338	18	-	-	170	214	100	211
65-40-250/ 00404	112M	-	✗	65	40	100	169	65	-	14	250	216	-	180	225	-	-	-	630	673,5	125	95	-	-	320	250	-	-	179	353	18	-	-	170	214	100	211
65-40-250/ 00554	132S	-	✗	65	40	100	169	65	55	14	300	258	12	180	225	132	282	326	678	722	125	95	180	140	320	250	260	216	179	413	18	16	20	193	237	100	280
65-40-315/ 00224	100L	✗	-	65	40	125	207	65	-	14	250	192	-	225	250	-	-	-	645	692,5	125	95	-	-	345	280	-	-	207	338	18	-	-	190	238	100	211
65-40-315/ 00304	100L	✗	-	65	40	125	207	65	-	14	250	192	-	225	250	-	-	-	645	692,5	125	95	-	-	345	280	-	-	207	338	18	-	-	190	238	100	211
65-40-315/ 00404	112M	✗	✗	65	40	125	207	65	-	14	250	216	-	225	250	-	-	-	675	722	125	95	-	-	345	280	-	-	207	353	18	-	-	190	238	100	211
65-40-315/ 00554	132S	✗	✗	65	40	125	207	65	55	14	300	258	12	225	250	132	302	350	723	770,5	125	95	180	140	345	280	260	216	207	413	18	16	20	213	261	100	280
65-40-315/ 00754	132M	-	✗	65	40	125	207	65	59	14	300	258	12	225	250	132	302	350	765	812,5	125	95	218	178	345	280	260	216	207	413	18	16	20	213	261	100	280
65-40-315/ 01104	160M	-	✗	65	40	125	207	65	70	14	350	310	15	225	250	160	354	408	876	930	125	95	264	210	345	280	318	254	207	444	18	23	20	246	300	100	280
65-50-125/ 00054	80M	✗	-	65	50	100	117	50	-	14	200	154	-	132	160	-	-	-	489	-	100	70	-	-	240	190	-	-	130	294	18	-	-	156	-	100	190
65-50-125/ 00074	80M	✗	✗	65	50	100	117	50	-	14	200	154	-	132	160	-	-	-	489	-	100	70	-	-	240	190	-	-	130	294	18	-	-	156	-	100	190
65-50-125/ 00114	90S	✗	✗	65	50	100	117	50	-	14	200	174	-	132	160	-	-	-	526	570	100	70	-	-	240	190	-	-	130	299	18	-	-	156	200	100	190
65-50-125/ 00154	90L	-	✗	65	50	100	117	50	-	14	200	174	-	132	160	-	-	-	573	616,5	100	70	-	-	240	190	-	-	130	299	18	-	-	156	200	100	190
65-50-160/ 00074	80M	✗	-	65	50	100	128	50	-	14	200	154	-	160	180	-	-	-	489	-	100	70	-	-	265	212	-	-	149	294	18	-	-	156	-	100	190
65-50-160/ 00114	90S	✗	✗	65	50	100	128	50	-	14	200	174	-	160	180	-	-	-	526	570	100	70	-	-	265	212	-	-	149	299	18	-	-	156	200	100	190
65-50-160/ 00154	90L	✗	✗	65	50	100	128	50	-	14	200	174	-	160	180	-	-	-	573	616,5	100	70	-	-	265	212	-	-	149	299	18	-	-	156	200	100	190
65-50-160/ 00224	100L	-	✗	65	50	100	128	50	-	14	250	192	-	160	180	-	-	-	600	644	100	70	-	-	265	212	-	-	149	338	18	-	-	170	214	100	211
65-50-160/ 00304	100L	-	✗	65	50	100	128	50	-	14	250	192	-	160	180	-	-	-	600	644	100	70	-	-	265	212	-	-	149	338	18	-	-	170	214	100	211
65-50-200/ 00154	90L	✗	-	65	50	100	144	50	-	14	200	174	-	160	200	-	-	-	573	616,5	100	70	-	-	265	212	-	-	163	299	18	-	-	156	200	100	190
65-50-200/ 00224	100L	✗	✗	65	50	100	144	50	-	14	250	192	-	160	200	-	-	-	600	644	100	70	-	-	265	212	-	-	163	338	18	-	-	170	214	100	211
65-50-200/ 00304	100L	✗	✗	65	50	100	144	50	-	14	250	192	-	160	200	-	-	-	600	644	100	70	-	-	265	212	-	-	163	338	18	-	-	170	214	100	211

Etabloc	Motor (IEC)	n		DN_1 [449]	DN_2 [449]	a [449]	a_1	b_1 [449]	b_4	d_1 [449]	d_2	d_3	d_4	h_1 [449]	h_2 [449]	h_4	i [450]	i [451]	l_1 [450]	l_1 [451]	m_1 [449]	m_2 [449]	m_3	m_4	n_1 [449]	n_2 [449]	n_3	n_4	p	p_1	s_1 [449]	s_2	u [452]	w [450]	w [451]	x [449]	z
		1500	1800																																
		[rpm]		[mm]																																
65-50-200/ 00404	112M	-	✗	65	50	100	144	50	-	14	250	216	-	160	200	-	-	-	630	673,5	100	70	-	-	265	212	-	-	163	353	18	-	-	170	214	100	211
65-50-200/ 00554	132S	-	✗	65	50	100	144	50	55	14	300	258	12	160	200	132	282	326	678	722	100	70	180	140	265	212	260	216	163	413	18	16	20	193	237	100	280
65-50-250/ 00224	100L	✗	-	65	50	100	170	65	-	14	250	192	-	180	225	-	-	-	600	644	125	95	-	-	320	250	-	-	186	338	18	-	-	170	214	100	211
65-50-250/ 00304	100L	✗	-	65	50	100	170	65	-	14	250	192	-	180	225	-	-	-	600	644	125	95	-	-	320	250	-	-	186	338	18	-	-	170	214	100	211
65-50-250/ 00404	112M	✗	✗	65	50	100	170	65	-	14	250	216	-	180	225	-	-	-	630	673,5	125	95	-	-	320	250	-	-	186	353	18	-	-	170	214	100	211
65-50-250/ 00554	132S	-	✗	65	50	100	170	65	55	14	300	258	12	180	225	132	282	326	678	722	125	95	180	140	320	250	260	216	186	413	18	16	20	193	237	100	280
65-50-250/ 00754	132M	-	✗	65	50	100	170	65	59	14	300	258	12	180	225	132	282	326	720	764	125	95	218	178	320	250	260	216	186	413	18	16	20	193	237	100	280
65-50-315/ 00304	100L	✗	-	65	50	125	207	65	-	14	250	192	-	225	280	-	-	-	645	692,5	125	95	-	-	345	280	-	-	215	338	18	-	-	190	238	100	211
65-50-315/ 00404	112M	✗	-	65	50	125	207	65	-	14	250	216	-	225	280	-	-	-	675	722	125	95	-	-	345	280	-	-	215	353	18	-	-	190	238	100	211
65-50-315/ 00554	132S	✗	-	65	50	125	207	65	55	14	300	258	12	225	280	132	302	350	723	770,5	125	95	180	140	345	280	260	216	215	413	18	16	20	213	261	100	280
65-50-315/ 00754	132M	✗	✗	65	50	125	207	65	59	14	300	258	12	225	280	132	302	350	765	812,5	125	95	218	178	345	280	260	216	215	413	18	16	20	213	261	100	280
65-50-315/ 01104	160M	-	✗	65	50	125	207	65	70	14	350	310	15	225	280	160	354	408	876	930	125	95	264	210	345	280	318	254	215	444	18	23	20	246	300	100	280
65-50-315/ 01504	160L	-	✗	65	50	125	207	65	70	14	350	310	15	225	280	160	354	408	921	975	125	95	308	254	345	280	318	254	215	525	18	23	20	246	300	100	350
80-65-125/ 00054	80M	✗	-	80	65	100	117	65	-	14	200	154	-	160	180	-	-	-	489	-	125	95	-	-	280	212	-	-	150	294	18	-	-	156	-	100	190
80-65-125/ 00074	80M	✗	-	80	65	100	117	65	-	14	200	154	-	160	180	-	-	-	489	-	125	95	-	-	280	212	-	-	150	294	18	-	-	156	-	100	190
80-65-125/ 00114	90S	✗	✗	80	65	100	117	65	-	14	200	174	-	160	180	-	-	-	526	570	125	95	-	-	280	212	-	-	150	299	18	-	-	156	200	100	190
80-65-125/ 00154	90L	-	✗	80	65	100	117	65	-	14	200	174	-	160	180	-	-	-	573	616,5	125	95	-	-	280	212	-	-	150	299	18	-	-	156	200	100	190
80-65-125/ 00224	100L	-	✗	80	65	100	117	65	-	14	250	192	-	160	180	-	-	-	600	644	125	95	-	-	280	212	-	-	150	338	18	-	-	170	214	100	211
80-65-160/ 00114	90S	✗	-	80	65	100	132	65	-	14	200	174	-	160	200	-	-	-	526	570	125	95	-	-	280	212	-	-	160	299	18	-	-	156	200	100	190
80-65-160/ 00154	90L	✗	✗	80	65	100	132	65	-	14	200	174	-	160	200	-	-	-	573	616,5	125	95	-	-	280	212	-	-	160	299	18	-	-	156	200	100	190
80-65-160/ 00224	100L	✗	✗	80	65	100	132	65	-	14	250	192	-	160	200	-	-	-	600	644	125	95	-	-	280	212	-	-	160	338	18	-	-	170	214	100	211
80-65-160/ 00304	100L	-	✗	80	65	100	132	65	-	14	250	192	-	160	200	-	-	-	600	644	125	95	-	-	280	212	-	-	160	338	18	-	-	170	214	100	211
80-65-160/ 00404	112M	-	✗	80	65	100	132	65	-	14	250	216	-	160	200	-	-	-	630	673,5	125	95	-	-	280	212	-	-	160	353	18	-	-	170	214	100	211
80-65-200/ 00224	100L	✗	-	80	65	100	155	65	-	14	250	192	-	180	225	-	-	-	600	644	125	95	-	-	320	250	-	-	178	338	18	-	-	170	214	140	211
80-65-200/ 00304	100L	✗	✗	80	65	100	155	65	-	14	250	192	-	180	225	-	-	-	600	644	125	95	-	-	320	250	-	-	178	338	18	-	-	170	214	140	211
80-65-200/ 00404	112M	✗	✗	80	65	100	155	65	-	14	250	216	-	180	225	-	-	-	630	673,5	125	95	-	-	320	250	-	-	178	353	18	-	-	170	214	140	211
80-65-200/ 00554	132S	-	✗	80	65	100	155	65	55	14	300	258	12	180	225	132	282	326	678	722	125	95	180	140	320	250	260	216	178	413	18	16	20	193	237	140	280
80-65-200/ 00754	132M	-	✗	80	65	100	155	65	59	14	300	258	12	180	225	132	282	326	720	764	125	95	218	178	320	250	260	216	178	413	18	16	20	193	237	140	280
80-65-250/ 00304	100L	✗	-	80	65	100	179	80	-	19	250	192	-	200	250	-	-	-	620	667,5	160	120	-	-	360	280	-	-	199	338	20	-	-	190	238	140	211
80-65-250/ 00404	112M	✗	-	80	65	100	179	80	-	19	250	216	-	200	250	-	-	-	650	697	160	120	-	-	360	280	-	-	199	353	20	-	-	190	238	140	211
80-65-250/ 00554	132S	✗	✗	80	65	100	179	80	55	19	300	258	12	200	250	132	302	350	698	745,5	160	120	180	140	360	280	260	216	199	413	20	16	20	213	261	140	280
80-65-250/ 00754	132M	-	✗	80	65	100	179	80	59	19	300	258	12	200	250	132	302	350	740	787,5	160	120	218	178	360	280	260	216	199	413	20	16	20	213	261	140	280
80-65-250/ 01104	160M	-	✗	80	65	100	179	80	70	19	350	310	15	200	250	160	354	408	851	905	160	120	264	210	360	280	318	254	199	444	20	23	20	246	300	140	280
80-65-315/ 00554	132S	✗	-	80	65	125	209	80	55	19	300	258	12	225	280	132	302	350	723	770,5	160	120	180	140	400	315	260	216	229	413	20	16	20	213	261	140	280
80-65-315/ 00754	132M	✗	-	80	65	125	209	80	59	19	300	258	12	225	280	132	302	350	765	812,5	160	120	218	178	400	315	260	216	229	413	20	16	20	213	261	140	280
80-65-315/ 01104	160M	✗	✗	80	65	125	209	80	70	19	350	310	15	225	280	160	354	408	876	930	160	120	264	210	400	315	318	254	229	444	20	23	20	246	300	140	280
80-65-315/ 01504	160L	✗	✗	80	65	125	209	80	70	19	350	310	15	225	280	160	354	408	921	975	160	120	308	254	400	315	318	254	229	525	20	23	20	246	300	140	350
80-65-315/ 01854	180M	-	✗	80	65	125	209	80	80	19	350	347	15	225	280	180	367	421	1006	1060	160	120	291	241	400	315	350	279	229	577	20	23	-	246	300	140	350
80-65-315/ 02204	180L	-	✗	80	65	125	209	80	80	19	350	347	15	225	280	180	367	421	1034	1088	160	120	319	279	400	315	350	279	229	577	20	23	-	246	300	140	350
100-80-160/ 00154	90L	✗	-	100	80	125	138	65	-	14	200	174	-	180	225	-	-	-	598	641,5	125	95	-	-	320	250	-	-	174	299	18	-	-	156	200	140	190
100-80-160/ 00224	100L	✗	-	100	80	125	138	65	-	14	250	192	-	180	225	-	-	-	625	669	125	95	-	-	320	250	-	-	174	338	18	-	-	170	214	140	211

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Etabloc	Motor (IEC)	n		DN_1 449)	DN_2 449)	a 449)	a_1	b_1 449)	b_4	d_1 449)	d_2	d_3	d_4	h_1 449)	h_2 449)	h_4	i 450)	i 451)	l_1 450)	l_1 451)	m_1 449)	m_2 449)	m_3	m_4	n_1 449)	n_2 449)	n_3	n_4	p	p_1	s_1 449)	s_2	u 452)	w 450)	w 451)	x 449)	z
		1500	1800																																
		[rpm]		[mm]																																
100-80-160/ 00304	100L	✗	✗	100	80	125	138	65	-	14	250	192	-	180	225	-	-	-	625	669	125	95	-	-	320	250	-	-	174	338	18	-	-	170	214	140	211
100-80-160/ 00404	112M	-	✗	100	80	125	138	65	-	14	250	216	-	180	225	-	-	-	655	698,5	125	95	-	-	320	250	-	-	174	353	18	-	-	170	214	140	211
100-80-160/ 00554	132S	-	✗	100	80	125	138	65	55	14	300	258	12	180	225	132	282	326	703	747	125	95	180	140	320	250	260	216	174	413	18	16	20	193	237	140	280
100-80-200/ 00224	100L	✗	-	100	80	125	159	65	-	14	250	192	-	180	250	-	-	-	645	692,5	125	95	-	-	345	280	-	-	188	338	18	-	-	190	238	140	211
100-80-200/ 00304	100L	✗	-	100	80	125	159	65	-	14	250	192	-	180	250	-	-	-	645	692,5	125	95	-	-	345	280	-	-	188	338	18	-	-	190	238	140	211
100-80-200/ 00404	112M	✗	-	100	80	125	159	65	-	14	250	216	-	180	250	-	-	-	675	722	125	95	-	-	345	280	-	-	188	353	18	-	-	190	238	140	211
100-80-200/ 00554	132S	✗	✗	100	80	125	159	65	55	14	300	258	12	180	250	132	302	350	723	770,5	125	95	180	140	345	280	260	216	188	413	18	16	20	213	261	140	280
100-80-200/ 00754	132M	-	✗	100	80	125	159	65	59	14	300	258	12	180	250	132	302	350	765	812,5	125	95	218	178	345	280	260	216	188	413	18	16	20	213	261	140	280
100-80-200/ 01104	160M	-	✗	100	80	125	159	65	70	14	350	310	15	180	250	160	354	408	876	930	125	95	264	210	345	280	318	254	188	444	18	23	20	246	300	140	280
100-80-250/ 00404	112M	✗	-	100	80	125	183	80	-	19	250	216	-	200	280	-	-	-	675	722	160	120	-	-	400	315	-	-	209	353	18	-	-	190	238	140	211
100-80-250/ 00554	132S	✗	-	100	80	125	183	80	55	19	300	258	12	200	280	132	302	350	723	770,5	160	120	180	140	400	315	260	216	209	413	18	16	20	213	261	140	280
100-80-250/ 00754	132M	✗	✗	100	80	125	183	80	59	19	300	258	12	200	280	132	302	350	765	812,5	160	120	218	178	400	315	260	216	209	413	18	16	20	213	261	140	280
100-80-250/ 01104	160M	✗	✗	100	80	125	183	80	70	19	350	310	15	200	280	160	354	408	876	930	160	120	264	210	400	315	318	254	209	444	18	23	20	246	300	140	280
100-80-250/ 01504	160L	-	✗	100	80	125	183	80	70	19	350	310	15	200	280	160	354	408	921	975	160	120	308	254	400	315	318	254	209	525	18	23	20	246	300	140	350
100-80-250/ 01854	180M	-	✗	100	80	125	183	80	80	19	350	347	15	200	280	180	367	421	1006	1060	160	120	291	241	400	315	350	279	209	577	18	23	-	246	300	140	350
100-80-315/ 00754	132M	✗	-	100	80	125	218	80	59	19	300	258	12	250	315	132	302	350	765	812,5	160	120	218	178	400	315	260	216	242	413	20	16	20	213	261	140	280
100-80-315/ 01104	160M	✗	-	100	80	125	218	80	70	19	350	310	15	250	315	160	354	408	876	930	160	120	264	210	400	315	318	254	242	444	20	23	20	246	300	140	280
100-80-315/ 01504	160L	✗	✗	100	80	125	218	80	70	19	350	310	15	250	315	160	354	408	921	975	160	120	308	254	400	315	318	254	242	525	20	23	20	246	300	140	350
100-80-315/ 01854	180M	✗	✗	100	80	125	218	80	80	19	350	347	15	250	315	180	367	421	1006	1060	160	120	291	241	400	315	350	279	242	577	20	23	-	246	300	140	350
100-80-315/ 02204	180L	✗	✗	100	80	125	218	80	80	19	350	347	15	250	315	180	367	421	1034	1088	160	120	319	279	400	315	350	279	242	577	20	23	-	246	300	140	350
125-100-160/ 00304	100L	✗	-	125	100	125	178	80	-	19	250	192	-	200	280	-	-	-	645	692,5	160	120	-	-	360	280	-	-	225	338	18	-	-	190	238	140	211
125-100-160/ 00404	112M	✗	-	125	100	125	178	80	-	19	250	216	-	200	280	-	-	-	975	722	160	120	-	-	360	280	-	-	225	353	18	-	-	190	238	140	211
125-100-160/ 00554	132S	✗	✗	125	100	125	178	80	55	19	300	258	12	200	280	132	302	350	723	770,5	160	120	180	140	360	280	260	216	225	413	18	16	20	213	261	140	280
125-100-160/ 00754	132M	-	✗	125	100	125	178	80	59	19	300	258	12	200	280	132	302	350	765	812,5	160	120	218	178	360	280	260	216	225	413	18	16	20	213	261	140	280
125-100-200/ 00404	112M	✗	-	125	100	125	173	80	-	19	250	216	-	200	280	-	-	-	675	722	160	120	-	-	360	280	-	-	212	353	18	-	-	190	238	140	211
125-100-200/ 00554	132S	✗	-	125	100	125	173	80	55	19	300	258	12	200	280	132	302	350	723	770,5	160	120	180	140	360	280	260	216	212	413	18	16	20	213	261	140	280
125-100-200/ 00754	132M	✗	✗	125	100	125	173	80	59	19	300	258	12	200	280	132	302	350	765	812,5	160	120	218	178	360	280	260	216	212	413	18	16	20	213	261	140	280
125-100-200/ 01104	160M	✗	✗	125	100	125	173	80	70	19	350	310	15	200	280	160	354	408	876	930	160	120	264	210	360	280	318	254	212	444	18	23	20	246	300	140	280
125-100-200/ 01504	160L	-	✗	125	100	125	173	80	70	19	350	310	15	200	280	160	354	408	921	975	160	120	308	254	360	280	318	254	212	525	18	23	20	246	300	140	350
125-100-250/ 00754	132M	✗	-	125	100	140	188	80	59	19	300	258	12	225	280	132	302	350	780	827,5	160	120	218	178	400	315	260	216	219	413	18	16	20	213	261	140	280
125-100-250/ 01104	160M	✗	✗	125	100	140	188	80	70	19	350	310	15	225	280	160	354	408	891	945	160	120	264	210	400	315	318	254	219	444	18	23	20	246	300	140	280
125-100-250/ 01504	160L	✗	✗	125	100	140	188	80	70	19	350	310	15	225	280	160	354	408	936	990	160	120	308	254	400	315	318	254	219	525	18	23	20	246	300	140	350
125-100-250/ 01854	180M	-	✗	125	100	140	188	80	80	19	350	347	15	225	280	180	367	421	1021	1075	160	120	291	241	400	315	350	279	219	577	18	23	-	246	300	140	350
125-100-250/ 02204	180L	-	✗	125	100	140	188	80	80	19	350	347	15	225	280	180	367	421	1049	1103	160	120	319	279	400	315	350	279	219	577	18	23	-	246	300	140	350
125-100-315/ 01504	160L	✗	-	125	100	140	225	80	70	19	350	310	15	250	315	160	354	408	936	990	160	120	308	254	400	315	318	254	255	525	18	23	20	246	300	140	350
125-100-315/ 01854	180M	✗	-	125	100	140	225	80	80	19	350	347	15	250	315	180	367	421	1021	1075	160	120	291	241	400	315	350	279	255	577	18	23	-	246	300	140	350
125-100-315/ 02204	180L	✗	-	125	100	140	225	80	80	19	350	347	15	250	315	180	367	421	1049	1103	160	120	319	279	400	315	350	279	255	577	18	23	-	246	300	140	350
150-125-200/ 00754	132M	✗	-	150	125	140	189	80	59	19	300	258	12	250	315	132	302	350	780	827,5	160	120	218	178	400	315	260	216	242	413	20	16	20	213	261	140	280
150-125-200/ 01104	160M	✗	✗	150	125	140	189	80	70	19	350	310	15	250	315	160	354	408	891	945	160	120	264	210	400	315	318	254	242	444	20	23	20	246	300	140	280
150-125-200/ 01504	160L	✗	✗	150	125	140	189	80	70	19	350	310	15	250	315	160	354	408	936	990	160	120	308	254	400	315	318	254	242	525	20	23	20	246	300	140	350
150-125-200/ 01854	180M	-	✗	150	125	140	189	80	80	19	350	347	15	250	315	180	367	421	1021	1075	160	120	291	241	400	315	350	279	242	577	20	23	-	246	300	140	350

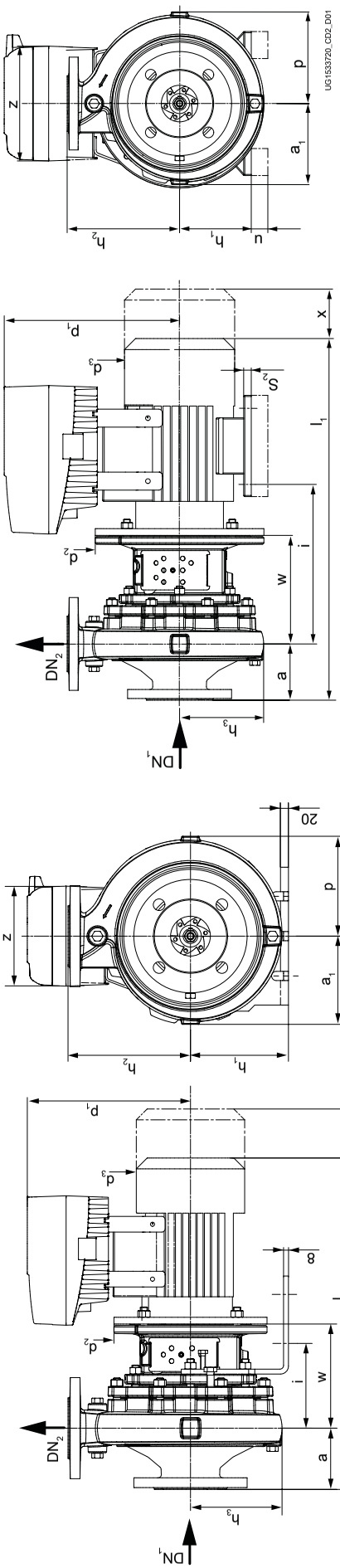
Etabloc	Motor (IEC)	n		DN_1 [449]	DN_2 [449]	a [449]	a_1	b_1 [449]	b_4	d_1 [449]	d_2	d_3	d_4	h_1 [449]	h_2 [449]	h_4	i [450]	i [451]	l_1 [450]	l_1 [451]	m_1 [449]	m_2 [449]	m_3	m_4	n_1 [449]	n_2 [449]	n_3	n_4	p	p_1	s_1 [449]	s_2	u [452]	w [450]	w [451]	x [449]	z
		1500	1800																																
		[rpm]		[mm]																																
150-125-200/ 02204	180L	-	✗	150	125	140	189	80	80	19	350	347	15	250	315	180	367	421	1049	1103	160	120	319	279	400	315	350	279	242	577	20	23	-	246	300	140	350
150-125-250/ 01104	160M	✗	-	150	125	140	226	80	70	19	350	310	15	250	355	160	354	408	891	945	160	120	264	210	400	315	318	254	275	444	20	23	20	246	300	140	280
150-125-250/ 01504	160L	✗	✗	150	125	140	226	80	70	19	350	310	15	250	355	160	354	408	936	990	160	120	308	254	400	315	318	254	275	525	20	23	20	246	300	140	350
150-125-250/ 01854	180M	✗	✗	150	125	140	226	80	80	19	350	347	15	250	355	180	367	421	1021	1075	160	120	291	241	400	315	350	279	275	577	20	23	-	246	300	140	350
150-125-250/ 02204	180L	-	✗	150	125	140	226	80	80	19	350	347	15	250	355	180	367	421	1049	1103	160	120	319	279	400	315	350	279	275	577	20	23	-	246	300	140	350
200-150-200/ 00754	132M	✗	-	200	150	160	240	100	59	24	300	258	12	280	400	132	302	350	800	847,5	200	150	218	178	550	450	260	216	316	413	20	16	20	213	261	140	280
200-150-200/ 01104	160M	✗	-	200	150	160	240	100	70	24	350	310	15	280	400	160	354	408	911	965	200	150	264	210	550	450	318	254	316	444	20	23	20	246	300	140	280
200-150-200/ 01504	160L	✗	✗	200	150	160	240	100	70	24	350	310	15	280	400	160	354	408	956	1010	200	150	308	254	550	450	318	254	316	525	20	23	20	246	300	140	350
200-150-200/ 01854	180M	-	✗	200	150	160	240	100	80	24	350	347	15	280	400	180	367	421	1041	1095	200	150	291	241	550	450	350	279	316	577	20	23	-	246	300	140	350
200-150-200/ 02204	180L	-	✗	200	150	160	240	100	80	24	350	347	15	280	400	180	367	421	1069	1123	200	150	319	279	550	450	350	279	316	577	20	23	-	246	300	140	350
200-150-250/ 01504	160L	✗	-	200	150	160	230	100	70	24	350	310	15	280	400	160	354	408	956	1010	200	150	308	254	500	400	318	254	300	525	20	23	20	246	300	140	350
200-150-250/ 01854	180M	✗	-	200	150	160	230	100	80	24	350	347	15	280	400	180	367	421	1041	1095	200	150	291	241	500	400	350	279	300	577	20	23	-	246	300	140	350
200-150-250/ 02204	180L	✗	✗	200	150	160	230	100	80	24	350	347	15	280	400	180	367	421	1069	1123	200	150	319	279	500	400	350	279	300	577	20	23	-	246	300	140	350

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Pump set with support foot and motor foot (variable speed version), ≤ 22 kW, n = 1500 rpm / 1800 rpm

Dimensions [mm]

Etabloc PumpDrive (up to motor size 112)



Etabloc PumpDrive (from motor size 132 to 180)

n = 1500 rpm / n = 1800 rpm, material variants GG / GB / GC

Dimensions of Etabloc ≤ 22 kW[453)]
Values a_1, b_4, d_3, l_1, m_3, n_3 and p may vary slightly for production-related reasons.

Etabloc	Motor (IEC)	n		DN_1 [454)]	DN_2 [454)]	a [454)]	a_1	b_4	d_2	d_3	d_4	h_1	h_2 [454)]	h_3	h_4	i [455)]	i [456)]	l_1 [455)]	l_1 [456)]	m_3	m_4	n_1	n_2	n_3	n_4	p	p_1	s_2	u [457)]	w [455)]	w [456)]	x [454)]	Z
		1500	1800																													
		[rpm]		[mm]																													
40-25-160/ 00054	80M	-	✗	40	25	80	118	-	200	154	-	160	160	107	-	118	-	469	-	-	-	225	130	-	-	118	294	-	-	156	-	100	190
40-25-160/ 00114	90S	✗	✗	40	25	80	118	-	200	174	-	160	160	107	-	118	118	506	550	-	-	225	130	-	-	118	299	-	-	156	200	100	190
40-25-200/ 00054	80M	✗	✗	40	25	80	142	-	200	154	-	160	180	137	-	118	-	469	-	-	-	225	130	-	-	142	294	-	-	156	-	100	190
40-25-200/ 00074	80M	-	✗	40	25	80	142	-	200	154	-	160	180	137	-	118	-	469	-	-	-	225	130	-	-	142	294	-	-	156	-	100	190
40-25-200/ 00114	90S	-	✗	40	25	80	142	-	200	174	-	160	180	137	-	118	118	506	550	-	-	225	130	-	-	142	299	-	-	156	200	100	190
50-32-125/ 00054	80M	✗	✗	50	32	80	115	-	200	154	-	160	140	100	-	118	-	469	-	-	-	225	130	-	-	115	294	-	-	156	-	100	190
50-32-125/ 00074	80M	-	✗	50	32	80	115	-	200	154	-	160	140	100	-	118	-	469	-	-	-	225	130	-	-	115	294	-	-	156	-	100	190
50-32-125/ 00114	90S	✗	✗	50	32	80	115	-	200	174	-	160	140	100	-	118	118	506	550	-	-	225	130	-	-	115	299	-	-	156	200	100	190
50-32-125.1/ 00054	80M	✗	✗	50	32	80	116	-	200	154	-	160	140	100	-	118	-	469	-	-	-	225	130	-	-	116	294	-	-	156	-	100	190
50-32-125.1/ 00114	90S	✗	✗	50	32	80	116	-	200	174	-	160	140	100	-	118	118	506	550	-	-	225	130	-	-	116	299	-	-	156	200	100	190
50-32-160/ 00054	80M	✗	✗	50	32	80	118	-	200	154	-	160	160	115	-	118	-	469	-	-	-	225	130	-	-	128	294	-	-	156	-	100	190
50-32-160/ 00074	80M	✗	✗	50	32	80	118	-	200	154	-	160	160	115	-	118	-	469	-	-	-	225	130	-	-	128	294	-	-	156	-	100	190
50-32-160/ 00114	90S	-	✗	50	32	80	118	-	200	174	-	160	160	115	-	118	118	506	550	-	-	225	130	-	-	128	299	-	-	156	200	100	190
50-32-160.1/ 00054	80M	✗	✗	50	32	80	116	-	200	154	-	160	160	111	-	118	-	469	-	-	-	225	130	-	-	121	294	-	-	156	-	100	190
50-32-160.1/ 00074	80M	-	✗	50	32	80	116	-	200	154	-	160	160	111	-	118	-	469	-	-	-	225	130	-	-	121	294	-	-	156	-	100	190
50-32-200/ 00054	80M	✗	-	50	32	80	142	-	200	154	-	160	180	137	-	118	-	469	-	-	-	225	130	-	-	143	294	-	-	156	-	100	190
50-32-200/ 00074	80M	✗	-	50	32	80	142	-	200	154	-	160	180	137	-	118	-	469	-	-	-	225	130	-	-	143	294	-	-	156	-	100	190
50-32-200/ 00114	90S	✗	✗	50	32	80	142	-	200	174	-	160	180	137	-	118	118	506	550	-	-	225	130	-	-	143	299	-	-	156	200	100	190
50-32-200/ 00154	90L	-	✗	50	32	80	142	-	200	174	-	160	180	137	-	118	118	553	597	-	-	225	130	-	-	143	299	-	-	156	200	100	190
50-32-200/ 00224	100L	-	✗	50	32	80	142	-	250	192	-	160	180	137	-	118	118	580	624	-	-	225	130	-	-	143	338	-	-	170	214	100	211
50-32-200.1/ 00054	80M	✗	✗	50	32	80	142	-	200	154	-	160	180	136	-	118	-	469	-	-	-	225	130	-	-	142	294	-	-	156	-	100	190
50-32-200.1/ 00074	80M	✗	✗	50	32	80	142	-	200	154	-	160	180	136	-	118	-	469	-	-	-	225	130	-	-	142	294	-	-	156	-	100	190
50-32-200.1/ 00114	90S	-	✗	50	32	80	142	-	200	174	-	160	180	136	-	118	118	506	550	-	-	225	130	-	-	142	299	-	-	156	200	100	190
50-32-200.1/ 00154	90L	-	✗	50	32	80	142	-	200	174	-	160	180	136	-	118	118	553	597	-	-	225	130	-	-	142	299	-	-	156	200	100	190
50-32-250/ 00114	90S	✗	-	50	32	100	169	-	200	174	-	160	225	166	-	118	118	526	570	-	-	225	130	-	-	178	299	-	-	156	200	100	190
50-32-250/ 00154	90L	✗	✗	50	32	100	169	-	200	174	-	160	225	166	-	118	118	573	617	-	-	225	130	-	-	178	299	-	-	156	200	100	190
50-32-250/ 00224	100L	✗	✗	50	32	100	169	-	250	192	-	160	225	166	-	118	118	600	644	-	-	225	130	-	-	178	338	-	-	170	214	100	211
50-32-250/ 00304	100L	-	✗	50	32	100	169	-	250	192	-	160	225	166	-	118	118	600	644	-	-	225	130	-	-	178	338	-	-	170	214	100	211
50-32-250/ 00404	112M	-	✗	50	32	100	169	-	250	216	-	160	225	166	-	118	118	630	674	-	-	225	130	-	-	178	353	-	-	170	214	100	211
50-32-250.1/ 00074	80M	✗	-	50	32	100	168	-	200	154	-	160	225	166	-	118	-	489	-	-	-	225	130	-	-	168	294	-	-	156	-	100	190

453 Tolerances of mating dimensions to EN 735
454 Dimensions to EN 733
455 Dimension with single mechanical seal (A, AV, IA, EA, FA)
456 Dimension with double mechanical seal (DB, TI)
457 Motor feet must be shimmed.

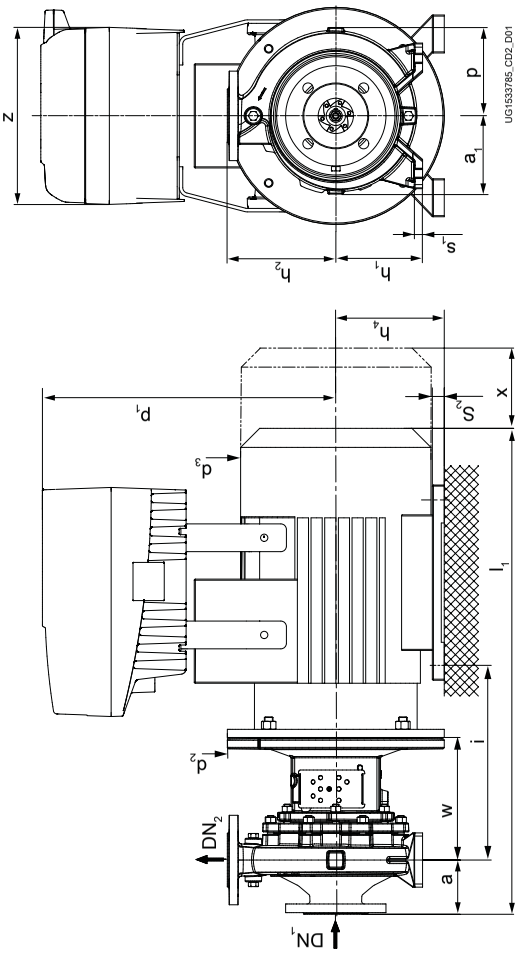
Etabloc	Motor (IEC)	n		DN_1 454)	DN_2 454)	a 454)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 454)	h_3	h_4	i 455)	i 456)	l_1 455)	l_1 456)	m_3	m_4	n_1	n_2	n_3	n_4	p	p_1	s_2	u 457)	w 455)	w 456)	x 454)	Z
		1500	1800																													
		[rpm]		[mm]																												
50-32-250.1/ 00114	90S	✗	✗	50	32	100	168	-	200	174	-	160	225	166	-	118	118	526	570	-	-	225	130	-	-	168	299	-	-	156	200	100	190
50-32-250.1/ 00154	90L	✗	✗	50	32	100	168	-	200	174	-	160	225	166	-	118	118	573	617	-	-	225	130	-	-	168	299	-	-	156	200	100	190
50-32-250.1/ 00224	100L	-	✗	50	32	100	168	-	250	192	-	160	225	166	-	118	118	600	644	-	-	225	130	-	-	168	338	-	-	170	214	100	211
50-32-250.1/ 00304	100L	-	✗	50	32	100	168	-	250	192	-	160	225	166	-	118	118	600	644	-	-	225	130	-	-	168	338	-	-	170	214	100	211
65-40-125/ 00054	80M	✗	✗	65	40	80	117	-	200	154	-	160	140	107	-	118	-	469	-	-	-	225	130	-	-	117	294	-	-	156	-	100	190
65-40-125/ 00074	80M	-	✗	65	40	80	117	-	200	154	-	160	140	107	-	118	-	469	-	-	-	225	130	-	-	117	294	-	-	156	-	100	190
65-40-125/ 00114	90S	-	✗	65	40	80	117	-	200	174	-	160	140	107	-	118	118	506	550	-	-	225	130	-	-	117	299	-	-	156	200	100	190
65-40-160/ 00054	80M	✗	-	65	40	80	119	-	200	154	-	160	160	119	-	118	-	469	-	-	-	225	130	-	-	134	294	-	-	156	-	100	190
65-40-160/ 00074	80M	✗	✗	65	40	80	119	-	200	154	-	160	160	119	-	118	-	469	-	-	-	225	130	-	-	134	294	-	-	156	-	100	190
65-40-160/ 00114	90S	✗	✗	65	40	80	119	-	200	174	-	160	160	119	-	118	118	506	550	-	-	225	130	-	-	134	299	-	-	156	200	100	190
65-40-160/ 00154	90L	-	✗	65	40	80	119	-	200	174	-	160	160	119	-	118	118	553	597	-	-	225	130	-	-	134	299	-	-	156	200	100	190
65-40-160/ 00224	100L	-	✗	65	40	80	119	-	250	192	-	160	160	119	-	118	118	580	624	-	-	225	130	-	-	134	338	-	-	170	214	100	211
65-40-200/ 00074	80M	✗	-	65	40	100	142	-	200	154	-	160	180	141	-	118	-	489	-	-	-	225	130	-	-	155	294	-	-	156	-	100	190
65-40-200/ 00114	90S	✗	-	65	40	100	142	-	200	174	-	160	180	141	-	118	118	526	570	-	-	225	130	-	-	155	299	-	-	156	200	100	190
65-40-200/ 00154	90L	✗	✗	65	40	100	142	-	200	174	-	160	180	141	-	118	118	573	617	-	-	225	130	-	-	155	299	-	-	156	200	100	190
65-40-200/ 00224	100L	-	✗	65	40	100	142	-	250	192	-	160	180	141	-	118	118	600	644	-	-	225	130	-	-	155	338	-	-	170	214	100	211
65-40-200/ 00304	100L	-	✗	65	40	100	142	-	250	192	-	160	180	141	-	118	118	600	644	-	-	225	130	-	-	155	338	-	-	170	214	100	211
65-40-250/ 00114	90S	✗	-	65	40	100	169	-	200	174	-	160	225	166	-	118	118	526	570	-	-	225	130	-	-	179	299	-	-	156	200	100	190
65-40-250/ 00154	90L	✗	-	65	40	100	169	-	200	174	-	160	225	166	-	118	118	573	617	-	-	225	130	-	-	179	299	-	-	156	200	100	190
65-40-250/ 00224	100L	✗	✗	65	40	100	169	-	250	192	-	160	225	166	-	118	118	600	644	-	-	225	130	-	-	179	338	-	-	170	214	100	211
65-40-250/ 00304	100L	✗	✗	65	40	100	169	-	250	192	-	160	225	166	-	118	118	600	644	-	-	225	130	-	-	179	338	-	-	170	214	100	211
65-40-250/ 00404	112M	-	✗	65	40	100	169	-	250	216	-	160	225	166	-	118	118	630	674	-	-	225	130	-	-	179	353	-	-	170	214	100	211
65-40-250/ 00554	132S	-	✗	65	40	100	169	55	300	258	12	-	225	166	132	282	326	678	722	180	140	-	-	260	216	179	413	16	20	193	237	100	280
65-40-315/ 00224	100L	✗	-	65	40	125	207	-	250	192	-	180	250	204	-	142	142	645	693	-	-	260	180	-	-	207	338	-	-	190	238	100	211
65-40-315/ 00304	100L	✗	-	65	40	125	207	-	250	192	-	180	250	204	-	142	142	645	693	-	-	260	180	-	-	207	338	-	-	190	238	100	211
65-40-315/ 00404	112M	✗	✗	65	40	125	207	-	250	216	-	180	250	204	-	142	142	675	722	-	-	260	180	-	-	207	353	-	-	190	238	100	211
65-40-315/ 00554	132S	✗	✗	65	40	125	207	55	300	258	12	-	250	204	132	302	350	723	771	180	140	-	-	260	216	207	413	16	20	213	261	100	280
65-40-315/ 00754	132M	-	✗	65	40	125	207	59	300	258	12	-	250	204	132	302	350	765	813	218	178	-	-	260	216	207	413	16	20	213	261	100	280
65-40-315/ 01104	160M	-	✗	65	40	125	207	70	350	310	15	-	250	204	160	354	408	876	930	264	210	-	-	318	254	207	444	23	20	246	300	100	280
65-50-125/ 00054	80M	✗	-	65	50	100	117	-	200	154	-	160	160	112	-	118	-	489	-	-	-	225	130	-	-	130	294	-	-	156	-	100	190
65-50-125/ 00074	80M	✗	✗	65	50	100	117	-	200	154	-	160	160	112	-	118	-	489	-	-	-	225	130	-	-	130	294	-	-	156	-	100	190
65-50-125/ 00114	90S	✗	✗	65	50	100	117	-	200	174	-	160	160	112	-	118	118	526	570	-	-	225	130	-	-	130	299	-	-	156	200	100	190
65-50-125/ 00154	90L	-	✗	65	50	100	117	-	200	174	-	160	160	112	-	118	118	573	617	-	-	225	130	-	-	130	299	-	-	156	200	100	190
65-50-160/ 00074	80M	✗	-	65	50	100	128	-	200	154	-	160	180	133	-	118	-	489	-	-	-	225	130	-	-	149	294	-	-	156	-	100	190
65-50-160/ 00114	90S	✗	✗	65	50	100	128	-	200	174	-	160	180	133	-	118	118	526	570	-	-	225	130	-	-	149	299	-	-	156	200	100	190
65-50-160/ 00154	90L	✗	✗	65	50	100	128	-	200	174	-	160	180	133	-	118	118	573	617	-	-	225	130	-	-	149	299	-	-	156	200	100	190
65-50-160/ 00224	100L	-	✗	65	50	100	128	-	250	192	-	160	180	133	-	118	118	600	644	-	-	225	130	-	-	149	338	-	-	170	214	100	211
65-50-160/ 00304	100L	-	✗	65	50	100	128	-	250	192	-	160	180	133	-	118	118	600	644	-	-	225	130	-	-	149	338	-	-	170	214	100	211
65-50-200/ 00154	90L	✗	-	65	50	100	144	-	200	174	-	160	200	150	-	118	118	573	617	-	-	225	130	-	-	163	299	-	-	156	200	100	190
65-50-200/ 00224	100L	✗	✗	65	50	100	144	-	250	192	-	160	200	150	-	118	118	600	644	-	-	225	130	-	-	163	338	-	-	170	214	100	211
65-50-200/ 00304	100L	✗	✗	65	50	100	144	-	250	192	-	160	200	150	-	118	118	600	644	-	-	225	130	-	-	163	338	-	-	170	214	100	211

Etabloc	Motor (IEC)	n		DN_1 454)	DN_2 454)	a 454)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 454)	h_3	h_4	i 455)	i 456)	l_1 455)	l_1 456)	m_3	m_4	n_1	n_2	n_3	n_4	p	p_1	s_2	u 457)	w 455)	w 456)	x 454)	Z
		1500	1800																													
		[rpm]		[mm]																												
65-50-200/ 00404	112M	-	✗	65	50	100	144	-	250	216	-	160	200	150	-	118	118	630	674	-	-	225	130	-	-	163	353	-	-	170	214	100	211
65-50-200/ 00554	132S	-	✗	65	50	100	144	55	300	258	12	-	200	150	132	282	326	678	722	180	140	-	-	260	216	163	413	16	20	193	237	100	280
65-50-250/ 00224	100L	✗	-	65	50	100	170	-	250	192	-	160	225	172	-	118	118	600	644	-	-	225	130	-	-	186	338	-	-	170	214	100	211
65-50-250/ 00304	100L	✗	-	65	50	100	170	-	250	192	-	160	225	172	-	118	118	600	644	-	-	225	130	-	-	186	338	-	-	170	214	100	211
65-50-250/ 00404	112M	✗	✗	65	50	100	170	-	250	216	-	160	225	172	-	118	118	630	674	-	-	225	130	-	-	186	353	-	-	170	214	100	211
65-50-250/ 00554	132S	-	✗	65	50	100	170	55	300	258	12	-	225	172	132	282	326	678	722	180	140	-	-	260	216	186	413	16	20	193	237	100	280
65-50-250/ 00754	132M	-	✗	65	50	100	170	59	300	258	12	-	225	172	132	282	326	720	764	218	178	-	-	260	216	186	413	16	20	193	237	100	280
65-50-315/ 00304	100L	✗	-	65	50	125	207	-	250	192	-	180	280	203	-	142	142	645	693	-	-	260	180	-	-	215	338	-	-	190	238	100	211
65-50-315/ 00404	112M	✗	-	65	50	125	207	-	250	216	-	180	280	203	-	142	142	675	722	-	-	260	180	-	-	215	353	-	-	190	238	100	211
65-50-315/ 00554	132S	✗	-	65	50	125	207	55	300	258	12	-	280	203	132	302	350	723	771	180	140	-	-	260	216	215	413	16	20	213	261	100	280
65-50-315/ 00754	132M	✗	✗	65	50	125	207	59	300	258	12	-	280	203	132	302	350	765	813	218	178	-	-	260	216	215	413	16	20	213	261	100	280
65-50-315/ 01104	160M	-	✗	65	50	125	207	70	350	310	15	-	280	203	160	354	408	876	930	264	210	-	-	318	254	215	444	23	20	246	300	100	280
65-50-315/ 01504	160L	-	✗	65	50	125	207	70	350	310	15	-	280	203	160	354	408	921	975	308	254	-	-	318	254	215	525	23	20	246	300	100	350
80-65-125/ 00054	80M	✗	-	80	65	100	117	-	200	154	-	160	180	127	-	118	-	489	-	-	-	225	130	-	-	150	294	-	-	156	-	100	190
80-65-125/ 00074	80M	✗	-	80	65	100	117	-	200	154	-	160	180	127	-	118	-	489	-	-	-	225	130	-	-	150	294	-	-	156	-	100	190
80-65-125/ 00114	90S	✗	✗	80	65	100	117	-	200	174	-	160	180	127	-	118	118	526	570	-	-	225	130	-	-	150	299	-	-	156	200	100	190
80-65-125/ 00154	90L	-	✗	80	65	100	117	-	200	174	-	160	180	127	-	118	118	573	617	-	-	225	130	-	-	150	299	-	-	156	200	100	190
80-65-125/ 00224	100L	-	✗	80	65	100	117	-	250	192	-	160	180	127	-	118	118	600	644	-	-	225	130	-	-	150	338	-	-	170	214	100	211
80-65-160/ 00114	90S	✗	-	80	65	100	132	-	200	174	-	160	200	140	-	118	118	526	570	-	-	225	130	-	-	160	299	-	-	156	200	100	190
80-65-160/ 00154	90L	✗	✗	80	65	100	132	-	200	174	-	160	200	140	-	118	118	573	617	-	-	225	130	-	-	160	299	-	-	156	200	100	190
80-65-160/ 00224	100L	✗	✗	80	65	100	132	-	250	192	-	160	200	140	-	118	118	600	644	-	-	225	130	-	-	160	338	-	-	170	214	100	211
80-65-160/ 00304	100L	-	✗	80	65	100	132	-	250	192	-	160	200	140	-	118	118	600	644	-	-	225	130	-	-	160	338	-	-	170	214	100	211
80-65-160/ 00404	112M	-	✗	80	65	100	132	-	250	216	-	160	200	140	-	118	118	630	674	-	-	225	130	-	-	160	353	-	-	170	214	100	211
80-65-200/ 00224	100L	✗	-	80	65	100	155	-	250	192	-	160	225	161	-	118	118	600	644	-	-	225	130	-	-	178	338	-	-	170	214	140	211
80-65-200/ 00304	100L	✗	✗	80	65	100	155	-	250	192	-	160	225	161	-	118	118	600	644	-	-	225	130	-	-	178	338	-	-	170	214	140	211
80-65-200/ 00404	112M	✗	✗	80	65	100	155	-	250	216	-	160	225	161	-	118	118	630	674	-	-	225	130	-	-	178	353	-	-	170	214	140	211
80-65-200/ 00554	132S	-	✗	80	65	100	155	55	300	258	12	-	225	161	132	282	326	678	722	180	140	-	-	260	216	178	413	16	20	193	237	140	280
80-65-200/ 00754	132M	-	✗	80	65	100	155	59	300	258	12	-	225	161	132	282	326	720	764	218	178	-	-	260	216	178	413	16	20	193	237	140	280
80-65-250/ 00304	100L	✗	-	80	65	100	179	-	250	192	-	180	250	185	-	142	142	620	668	-	-	260	180	-	-	199	338	-	-	190	238	140	211
80-65-250/ 00404	112M	✗	-	80	65	100	179	-	250	216	-	180	250	185	-	142	142	650	697	-	-	260	180	-	-	199	353	-	-	190	238	140	211
80-65-250/ 00554	132S	✗	✗	80	65	100	179	55	300	258	12	-	250	185	132	302	350	698	746	180	140	-	-	260	216	199	413	16	20	213	261	140	280
80-65-250/ 00754	132M	-	✗	80	65	100	179	59	300	258	12	-	250	185	132	302	350	740	788	218	178	-	-	260	216	199	413	16	20	213	261	140	280
80-65-250/ 01104	160M	-	✗	80	65	100	179	70	350	310	15	-	250	185	160	354	408	851	905	264	210	-	-	318	254	199	444	23	20	246	300	140	280
80-65-315/ 00554	132S	✗	-	80	65	125	209	55	300	258	12	-	280	213	132	302	350	723	771	180	140	-	-	260	216	229	413	16	20	213	261	140	280
80-65-315/ 00754	132M	✗	-	80	65	125	209	59	300	258	12	-	280	213	132	302	350	765	813	218	178	-	-	260	216	229	413	16	20	213	261	140	280
80-65-315/ 01104	160M	✗	✗	80	65	125	209	70	350	310	15	-	280	213	160	354	408	876	930	264	210	-	-	318	254	229	444	23	20	246	300	140	280
80-65-315/ 01504	160L	✗	✗	80	65	125	209	70	350	310	15	-	280	213	160	354	408	921	975	308	254	-	-	318	254	229	525	23	20	246	300	140	350
80-65-315/ 01854	180M	-	✗	80	65	125	209	80	350	347	15	-	280	213	180	367	421	1006	1060	291	241	-	-	350	279	229	577	23	-	246	300	140	350
80-65-315/ 02204	180L	-	✗	80	65	125	209	80	350	347	15	-	280	213	180	367	421	1034	1088	319	279	-	-	350	279	229	577	23	-	246	300	140	350
100-80-160 /00154	90L	✗	-	100	80	125	138	-	200	174	-	160	225	153	-	118	118	598	642	-	-	225	130	-	-	174	299	-	-	156	200	140	190
100-80-160/ 00224	100L	✗	-	100	80	125	138	-	250	192	-	160	225	153	-	118	118	625	669	-	-	225	130	-	-	174	338	-	-	170	214	140	211

Etabloc	Motor (IEC)	n		DN_1 454)	DN_2 454)	a 454)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 454)	h_3	h_4	i 455)	i 456)	l_1 455)	l_1 456)	m_3	m_4	n_1	n_2	n_3	n_4	p	p_1	s_2	u 457)	w 455)	w 456)	x 454)	Z
		1500	1800																													
		[rpm]		[mm]																													
100-80-160/ 00304	100L	✗	✗	100	80	125	138	-	250	192	-	160	225	153	-	118	118	625	669	-	-	225	130	-	-	174	338	-	-	170	214	140	211
100-80-160/ 00404	112M	-	✗	100	80	125	138	-	250	216	-	160	225	153	-	118	118	655	699	-	-	225	130	-	-	174	353	-	-	170	214	140	211
100-80-160/ 00554	132S	-	✗	100	80	125	138	55	300	258	12	-	225	153	132	282	326	703	747	180	140	-	-	260	216	174	413	16	20	193	237	140	280
100-80-200/ 00224	100L	✗	-	100	80	125	159	-	250	192	-	180	250	170	-	142	142	645	693	-	-	260	180	-	-	188	338	-	-	190	238	140	211
100-80-200/ 00304	100L	✗	-	100	80	125	159	-	250	192	-	180	250	170	-	142	142	645	693	-	-	260	180	-	-	188	338	-	-	190	238	140	211
100-80-200/ 00404	112M	✗	-	100	80	125	159	-	250	216	-	180	250	170	-	142	142	675	722	-	-	260	180	-	-	188	353	-	-	190	238	140	211
100-80-200/ 00554	132S	✗	✗	100	80	125	159	55	300	258	12	-	250	170	132	302	350	723	771	180	140	-	-	260	216	188	413	16	20	213	261	140	280
100-80-200/ 00754	132M	-	✗	100	80	125	159	59	300	258	12	-	250	170	132	302	350	765	813	218	178	-	-	260	216	188	413	16	20	213	261	140	280
100-80-200/ 01104	160M	-	✗	100	80	125	159	70	350	310	15	-	250	170	160	354	408	876	930	264	210	-	-	318	254	188	444	23	20	246	300	140	280
100-80-250/ 00404	112M	✗	-	100	80	125	183	-	250	216	-	180	280	192	-	142	142	675	722	-	-	260	180	-	-	209	353	-	-	190	238	140	211
100-80-250/ 00554	132S	✗	-	100	80	125	183	55	300	258	12	-	280	192	132	302	350	723	771	180	140	-	-	260	216	209	413	16	20	213	261	140	280
100-80-250/ 00754	132M	✗	✗	100	80	125	183	59	300	258	12	-	280	192	132	302	350	765	813	218	178	-	-	260	216	209	413	16	20	213	261	140	280
100-80-250/ 01104	160M	✗	✗	100	80	125	183	70	350	310	15	-	280	192	160	354	408	876	930	264	210	-	-	318	254	209	444	23	20	246	300	140	280
100-80-250/ 01504	160L	-	✗	100	80	125	183	70	350	310	15	-	280	192	160	354	408	921	975	308	254	-	-	318	254	209	525	23	20	246	300	140	350
100-80-250/ 01854	180M	-	✗	100	80	125	183	80	350	347	15	-	280	192	180	367	421	1006	1060	291	241	-	-	350	279	209	577	23	-	246	300	140	350
100-80-315/ 00754	132M	✗	-	100	80	125	218	59	300	258	12	-	315	227	132	302	350	765	813	218	178	-	-	260	216	242	413	16	20	213	261	140	280
100-80-315/ 01104	160M	✗	-	100	80	125	218	70	350	310	15	-	315	227	160	354	408	876	930	264	210	-	-	318	254	242	444	23	20	246	300	140	280
100-80-315/ 01504	160L	✗	✗	100	80	125	218	70	350	310	15	-	315	227	160	354	408	921	975	308	254	-	-	318	254	242	525	23	20	246	300	140	350
100-80-315/ 01854	180M	✗	✗	100	80	125	218	80	350	347	15	-	315	227	180	367	421	1006	1060	291	241	-	-	350	279	242	577	23	-	246	300	140	350
100-80-315/ 02204	180L	✗	✗	100	80	125	218	80	350	347	15	-	315	227	180	367	421	1034	1088	319	279	-	-	350	279	242	577	23	-	246	300	140	350
125-100-160/ 00304	100L	✗	-	125	100	125	178	-	250	192	-	180	280	199	-	142	142	645	693	-	-	260	180	-	-	225	338	-	-	190	238	140	211
125-100-160/ 00404	112M	✗	-	125	100	125	178	-	250	216	-	180	280	199	-	142	142	675	722	-	-	260	180	-	-	225	353	-	-	190	238	140	211
125-100-160/ 00554	132S	✗	✗	125	100	125	178	55	300	258	12	-	280	199	132	302	350	723	771	180	140	-	-	260	216	225	413	16	20	213	261	140	280
125-100-160/ 00754	132M	-	✗	125	100	125	178	59	300	258	12	-	280	199	132	302	350	765	813	218	178	-	-	260	216	225	413	16	20	213	261	140	280
125-100-200/ 00404	112M	✗	-	125	100	125	173	-	250	216	-	180	280	189	-	142	142	675	722	-	-	260	180	-	-	212	353	-	-	190	238	140	211
125-100-200/ 00554	132S	✗	-	125	100	125	173	55	300	258	12	-	280	189	132	302	350	723	771	180	140	-	-	260	216	212	413	16	20	213	261	140	280
125-100-200/ 00754	132M	✗	✗	125	100	125	173	59	300	258	12	-	280	189	132	302	350	765	813	218	178	-	-	260	216	212	413	16	20	213	261	140	280
125-100-200/ 01104	160M	✗	✗	125	100	125	173	70	350	310	15	-	280	189	160	354	408	876	930	264	210	-	-	318	254	212	444	23	20	246	300	140	280
125-100-200/ 01504	160L	-	✗	125	100	125	173	70	350	310	15	-	280	189	160	354	408	921	975	308	254	-	-	318	254	212	525	23	20	246	300	140	350
125-100-250/ 00754	132M	✗	-	125	100	140	188	59	300	258	12	-	280	200	132	302	350	780	828	218	178	-	-	260	216	219	413	16	20	213	261	140	280
125-100-250/ 01104	160M	✗	✗	125	100	140	188	70	350	310	15	-	280	200	160	354	408	891	945	264	210	-	-	318	254	219	444	23	20	246	300	140	280
125-100-250/ 01504	160L	✗	✗	125	100	140	188	70	350	310	15	-	280	200	160	354	408	936	990	308	254	-	-	318	254	219	525	23	20	246	300	140	350
125-100-250/ 01854	180M	-	✗	125	100	140	188	80	350	347	15	-	280	200	180	367	421	1021	1075	291	241	-	-	350	279	219	577	23	-	246	300	140	350
125-100-250/ 02204	180L	-	✗	125	100	140	188	80	350	347	15	-	280	200	180	367	421	1049	1103	319	279	-	-	350	279	219	577	23	-	246	300	140	350
125-100-315/ 01504	160L	✗	-	125	100	140	225	70	350	310	15	-	315	237	160	354	408	936	990	308	254	-	-	318	254	255	525	23	20	246	300	140	350
125-100-315/ 01854	180M	✗	-	125	100	140	225	80	350	347	15	-	315	237	180	367	421	1021	1075	291	241	-	-	350	279	255	577	23	-	246	300	140	350
125-100-315/ 02204	180L	✗	-	125	100	140	225	80	350	347	15	-	315	237	180	367	421	1049	1103	319	279	-	-	350	279	255	577	23	-	246	300	140	350
150-125-200/ 00754	132M	✗	-	150	125	140	189	59	300	258	12	-	315	212	132	302	350	780	828	218	178	-	-	260	216	242	413	16	20	213	261	140	280
150-125-200/ 01104	160M	✗	✗	150	125	140	189	70	350	310	15	-	315	212	160	354	408	891	945	264	210	-	-	318	254	242	444	23	20	246	300	140	280
150-125-200/ 01504	160L	✗	✗	150	125	140	189	70	350	310	15	-	315	212	160	354	408	936	990	308	254	-	-	318	254	242	525	23	20	246	300	140	350
150-125-200/ 01854	180M	-	✗	150	125	140	189	80	350	347	15	-	315	212	180	367	421	1021	1075	291	241	-	-	350	279	242	577	23	-	246	300	140	350

Etabloc	Motor (IEC)	n		DN_1 454)	DN_2 454)	a 454)	a_1	b_4	d_2	d_3	d_4	h_1	h_2 454)	h_3	h_4	i 455)	i 456)	l_1 455)	l_1 456)	m_3	m_4	n_1	n_2	n_3	n_4	p	p_1	s_2	u 457)	w 455)	w 456)	x 454)	Z
		1500	1800																													
		[rpm]		[mm]																														
150-125-200/ 02204	180L	-	✘	150	125	140	189	80	350	347	15	-	315	212	180	367	421	1049	1103	319	279	-	-	350	279	242	577	23	-	246	300	140	350
150-125-250/ 01104	160M	✘	-	150	125	140	226	70	350	310	15	-	355	248	160	354	408	891	945	264	210	-	-	318	254	275	444	23	20	246	300	140	280
150-125-250/ 01504	160L	✘	✘	150	125	140	226	70	350	310	15	-	355	248	160	354	408	936	990	308	254	-	-	318	254	275	525	23	20	246	300	140	350
150-125-250/ 01854	180M	✘	✘	150	125	140	226	80	350	347	15	-	355	248	180	367	421	1021	1075	291	241	-	-	350	279	275	577	23	-	246	300	140	350
150-125-250/ 02204	180L	-	✘	150	125	140	226	80	350	347	15	-	355	248	180	367	421	1049	1103	319	279	-	-	350	279	275	577	23	-	246	300	140	350
200-150-200/ 00754	132M	✘	-	200	150	160	240	59	300	258	12	-	400	277	132	302	350	800	847,5	218	178	-	-	260	216	316	413	16	20	213	261	140	280
200-150-200/ 01104	160M	✘	-	200	150	160	240	70	350	310	15	-	400	277	160	354	408	911	965	264	210	-	-	318	254	316	444	23	20	246	300	140	280
200-150-200/ 01504	160L	✘	✘	200	150	160	240	70	350	310	15	-	400	277	160	354	408	956	1010	308	254	-	-	318	254	316	525	23	20	246	300	140	350
200-150-200/ 01854	180M	-	✘	200	150	160	240	80	350	347	15	-	400	277	180	367	421	1041	1095	291	241	-	-	350	279	316	577	23	-	246	300	140	350
200-150-200/ 02204	180L	-	✘	200	150	160	240	80	350	347	15	-	400	277	180	367	421	1069	1123	319	279	-	-	350	279	316	577	23	-	246	300	140	350
200-150-250/ 01504	160L	✘	-	200	150	160	230	70	350	310	15	-	400	262	160	354	408	956	1010	308	254	-	-	318	254	300	525	23	20	246	300	140	350
200-150-250/ 01854	180M	✘	-	200	150	160	230	80	350	347	15	-	400	262	180	367	421	1041	1095	291	241	-	-	350	279	300	577	23	-	246	300	140	350
200-150-250/ 02204	180L	✘	✘	200	150	160	230	80	350	347	15	-	400	262	180	367	421	1069	1123	319	279	-	-	350	279	300	577	23	-	246	300	140	350

Pump set with volute casing foot and motor foot (variable speed version), 30 kW to 45 kW, n = 3000 rpm / 3600 rpm



Etabloc PumpDrive (from motor size 200 to 225)

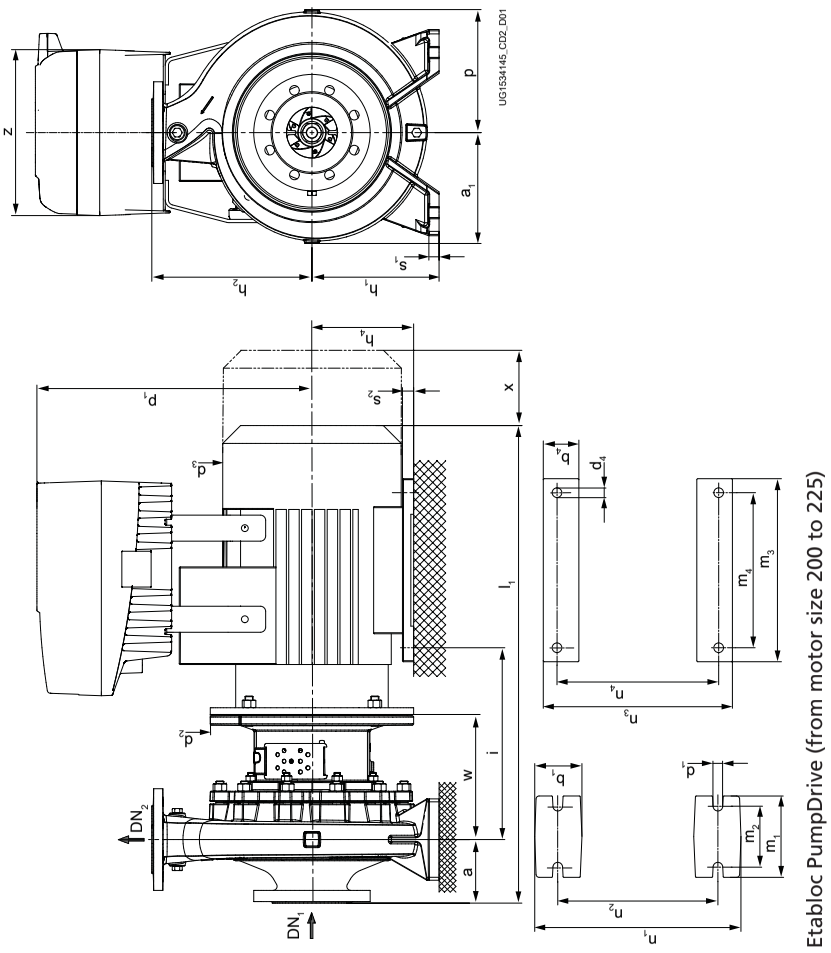
n = 3000 rpm / n = 3600 rpm, material variants GG / GB / GC / BB / CC / SB / SC / SG

Dimensions of Etabloc 30 kW to 45 kW[458)]
Values a_1, b_1 , b_4, d_3, l_1, m_1, m_3, n_3 and p may vary slightly for production-related reasons.

Etabloc	Motor (IEC)	n		DN_1 459)	DN_2 459)	a 459)	a_1	b_1 459)	b_4	d_1 459)	d_2	d_3	d_4	h_1 459)	h_2 459)	h_4	i 460)	i 461)	l_1 460)	l_1 461)	m_1 459)	m_2 459)	m_3	m_4	n_1 459)	n_2 459)	n_3	n_4	p	p_1	s_1 459)	s_2	w 460)	w 461)	x 459)	z
		3000	3600																																
		[rpm]		[mm]																																
50-32-250/ 03002	200L	-	✘	50	32	100	169	65	85	14	400	381	19	180	225	200	359	397	1062	1100	125	95	365	305	320	250	380	318	178	626	18	23	226	264	100	350
65-40-250/ 03002	200L	✘	✘	65	40	100	169	65	85	14	400	381	19	180	225	200	359	397	1062	1100	125	95	365	305	320	250	380	318	179	626	18	23	226	264	100	350
65-40-250/ 03702	200L	-	✘	65	40	100	169	65	85	14	400	381	19	180	225	200	359	397	1062	1100	125	95	365	305	320	250	380	318	179	675	18	23	226	264	100	455
65-40-315/ 03002	200L	✘	-	65	40	125	207	65	85	14	400	381	19	225	250	200	379	437	1107	1165	125	95	365	305	345	280	380	318	207	626	18	23	246	304	100	350
65-40-315/ 03702	200L	✘	-	65	40	125	207	65	85	14	400	381	19	225	250	200	379	437	1107	1165	125	95	365	305	345	280	380	318	207	675	18	23	246	304	100	455
65-50-200/ 03002	200L	✘	✘	65	50	100	144	50	85	14	400	381	19	160	200	200	359	397	1062	1100	100	70	365	305	265	212	380	318	163	626	18	23	226	264	100	350
65-50-200/ 03702	200L	-	✘	65	50	100	144	50	85	14	400	381	19	160	200	200	359	397	1062	1100	100	70	365	305	265	212	380	318	163	675	18	23	226	264	100	455
65-50-250/ 03002	200L	✘	✘	65	50	100	170	65	85	14	400	381	19	180	225	200	359	397	1062	1100	125	95	365	305	320	250	380	318	186	626	18	23	226	264	100	350
65-50-250/ 03702	200L	✘	✘	65	50	100	170	65	85	14	400	381	19	180	225	200	359	397	1062	1100	125	95	365	305	320	250	380	318	186	675	18	23	226	264	100	455
65-50-315/ 03702	200L	✘	-	65	50	125	207	65	85	14	400	381	19	225	280	200	379	437	1107	1165	125	95	365	305	345	280	380	318	215	675	18	23	246	304	100	455
80-65-160/ 03002	200L	-	✘	80	65	100	132	65	85	14	400	381	19	160	200	200	359	397	1062	1100	125	95	365	305	280	212	380	318	160	626	18	23	226	264	100	350
80-65-200/ 03002	200L	✘	✘	80	65	100	155	65	85	14	400	381	19	180	225	200	359	397	1062	1100	125	95	365	305	320	250	380	318	178	626	18	23	226	264	140	350
80-65-200/ 03702	200L	✘	✘	80	65	100	155	65	85	14	400	381	19	180	225	200	359	397	1062	1100	125	95	365	305	320	250	380	318	178	675	18	23	226	264	140	455
80-65-250/ 03002	200L	✘	-	80	65	100	179	80	85	19	400	381	19	200	250	200	379	437	1082	1140	160	120	365	305	360	280	380	318	199	626	20	23	246	304	140	350
80-65-250/ 03702	200L	✘	✘	80	65	100	179	80	85	19	400	381	19	200	250	200	379	437	1082	1140	160	120	365	305	360	280	380	318	199	675	20	23	246	304	140	455
100-80-160/ 03002	200L	✘	✘	100	80	125	138	65	85	14	400	381	19	180	225	200	359	397	1087	1125	125	95	365	305	320	250	380	318	174	626	18	23	226	264	140	350
100-80-160/ 03702	200L	-	✘	100	80	125	138	65	85	14	400	381	19	180	225	200	359	397	1087	1125	125	95	365	305	320	250	380	318	174	675	18	23	226	264	140	455
100-80-200/ 03002	200L	✘	-	100	80	125	159	65	85	14	400	381	19	180	250	200	379	437	1107	1165	125	95	365	305	345	280	380	318	188	626	18	23	246	304	140	350
100-80-200/ 03702	200L	✘	-	100	80	125	159	65	85	14	400	381	19	180	250	200	379	437	1107	1165	125	95	365	305	345	280	380	318	188	675	18	23	246	304	140	455
100-80-250/ 03002	200L	✘	-	100	80	125	183	80	85	19	400	381	19	200	280	200	379	437	1107	1165	160	120	365	305	400	315	380	318	209	626	18	23	246	304	140	350
100-80-250/ 03702	200L	✘	-	100	80	125	183	80	85	19	400	381	19	200	280	200	379	437	1107	1165	160	120	365	305	400	315	380	318	209	675	18	23	246	304	140	455
125-100-160/ 03002	200L	✘	-	125	100	125	178	80	85	19	400	381	19	200	280	200	379	437	1107	1165	160	120	365	305	360	280	380	318	225	626	18	23	246	304	140	350
125-100-160/ 03702	200L	✘	✘	125	100	125	178	80	85	19	400	381	19	200	280	200	379	437	1107	1165	160	120	365	305	360	280	380	318	225	675	18	23	246	304	140	455
125-100-200/ 03002	200L	✘	-	125	100	125	173	80	85	19	400	381	19	200	280	200	379	437	1107	1165	160	120	365	305	360	280	380	318	212	626	18	23	246	304	140	350
125-100-200/ 03702	200L	✘	-	125	100	125	173	80	85	19	400	381	19	200	280	200	379	437	1107	1165	160	120	365	305	360	280	380	318	212	675	18	23	246	304	140	455

458 Tolerances of mating dimensions to EN 735
459 Dimensions to EN 733
460 Dimension with single mechanical seal (A, AV, IA, EA, FA)
461 Dimension with double mechanical seal (DB, TI)

Pump set with volute casing foot and motor foot (variable speed version), 30 kW to 45 kW, n = 1500 rpm / 1800 rpm



Etabloc PumpDrive (from motor size 200 to 225)

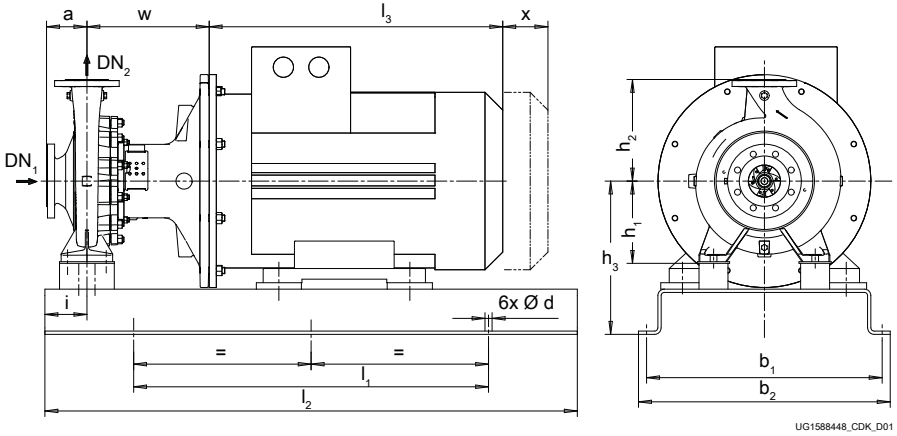
n = 1500 rpm / n = 1800 rpm, material variants GG / GB / GC / BB / CC / SB / SC / SG

Dimensions of Etabloc 30 kW to 45 kW[462)]
Values a_1, b_1 , b_4, d_3, l_1, m_1, m_3, n_3 and p may vary slightly for production-related reasons.

Etabloc	Motor (IEC)	n		DN_1 463)	DN_2 463)	a 463)	a_1	b_1 463)	b_4	d_1 463)	d_2	d_3	d_4	h_1 463)	h_2 463)	h_4	i 464)	i 465)	l_1 464)	l_1 465)	m_1 463)	m_2 463)	m_3	m_4	n_1 463)	n_2 463)	n_3	n_4	p	p_1	s_1 463)	s_2	w 464)	w 465)	x 463)	z
		1500	1800																																
		[rpm]		[mm]																																
100-80-315/ 03004	200L	-	✗	100	80	125	218	80	85	19	400	381	19	250	315	200	379	437	1107	1165	160	120	365	305	400	315	380	318	242	626	20	23	246	304	140	350
100-80-315/ 03704	225S	-	✗	100	80	125	218	80	100	19	450	431	19	250	315	225	426	483	1149	1206	160	120	346	286	400	315	436	356	242	699	20	30	277	334	140	455
100-80-400/ 03004	200L	✗	✗	100	80	125	257	80	85	19	400	381	19	280	355	200	379	437	1107	1165	160	120	365	305	435	355	380	318	280	626	20	23	246	304	140	350
100-80-400/ 03704	225S	✗	✗	100	80	125	257	80	100	19	450	431	19	280	355	225	426	483	1149	1206	160	120	346	286	435	355	436	356	280	699	20	30	277	334	140	455
100-80-400/ 04504	225M	-	✗	100	80	125	257	80	100	19	450	431	19	280	355	225	426	483	1174	1231	160	120	371	311	435	355	436	356	280	699	20	30	277	334	140	455
125-100-315/ 03004	200L	✗	✗	125	100	140	225	80	85	19	400	381	19	250	315	200	379	437	1122	1180	160	120	365	305	400	315	380	318	255	626	18	23	246	304	140	350
125-100-315/ 03704	225S	-	✗	125	100	140	225	80	100	19	450	431	19	250	315	225	426	483	1164	1221	160	120	346	286	400	315	436	356	255	699	18	30	277	334	140	455
125-100-315/ 04504	225M	-	✗	125	100	140	225	80	100	19	450	431	19	250	315	225	426	483	1189	1246	160	120	371	311	400	315	436	356	255	699	18	30	277	334	140	455
125-100-400/ 03004	200L	✗	-	125	100	140	255	100	85	24	400	381	19	280	355	200	379	437	1122	1180	200	150	365	305	500	400	380	318	283	626	20	23	246	304	140	350
125-100-400/ 03704	225S	✗	✗	125	100	140	255	100	100	24	450	431	19	280	355	225	426	483	1164	1221	200	150	346	286	500	400	436	356	283	699	20	30	277	334	140	455
125-100-400/ 04504	225M	✗	✗	125	100	140	255	100	100	24	450	431	19	280	355	225	426	483	1189	1246	200	150	371	311	500	400	436	356	283	699	20	30	277	334	140	455
150-125-250/ 03004	200L	-	✗	150	125	140	226	80	85	19	400	381	19	250	355	200	379	437	1122	1180	160	120	365	305	400	315	380	318	275	626	20	23	246	304	140	350
150-125-315/ 03004	200L	✗	✗	150	125	140	243	100	85	24	400	381	19	280	355	200	379	437	1122	1180	200	150	365	305	500	400	380	318	280	626	20	23	246	304	140	350
150-125-315/ 03704	225S	✗	✗	150	125	140	243	100	100	24	450	431	19	280	355	225	426	483	1164	1221	200	150	346	286	500	400	436	356	280	699	20	30	277	334	140	455
150-125-315/ 04504	225M	-	✗	150	125	140	243	100	100	24	450	431	19	280	355	225	426	483	1189	1246	200	150	371	311	500	400	436	356	280	699	20	30	277	334	140	455
150-125-400/ 03004	200L	✗	-	150	125	140	277	100	85	24	400	381	19	315	400	200	379	437	1122	1180	200	150	365	305	500	400	380	318	309	626	20	23	246	304	140	350
150-125-400/ 03704	225S	✗	-	150	125	140	277	100	100	24	450	431	19	315	400	225	426	483	1164	1221	200	150	346	286	500	400	436	356	309	699	20	30	277	334	140	455
150-125-400/ 04504	225M	✗	-	150	125	140	277	100	100	24	450	431	19	315	400	225	426	483	1189	1246	200	150	371	311	500	400	436	356	309	699	20	30	277	334	140	455
200-150-200/ 03004	200L	-	✗	200	150	160	240	100	85	24	400	381	19	280	400	200	379	437	1142	1200	200	150	365	305	550	450	380	318	316	626	20	23	246	304	140	350
200-150-250/ 03004	200L	✗	✗	200	150	160	230	100	85	24	400	381	19	280	400	200	379	437	1142	1200	200	150	365	305	500	400	380	318	300	626	20	23	246	304	140	350
200-150-250/ 03704	225S	-	✗	200	150	160	230	100	100	24	450	431	19	280	400	225	426	483	1184	1241	200	150	346	286	500	400	436	356	300	699	20	30	277	334	140	455
200-150-250/ 04504	225M	-	✗	200	150	160	230	100	100	24	450	431	19	280	400	225	426	483	1209	1266	200	150	371	311	500	400	436	356	300	699	20	30	277	334	140	455
200-150-315/ 03004	200L	✗	-	200	150	160	255	100	85	24	400	381	19	280	400	200	379	437	1142	1200	200	150	365	305	550	450	380	318	304	626	20	23	246	304	140	350
200-150-315/ 03704	225S	✗	✗	200	150	160	255	100	100	24	450	431	19	280	400	225	426	483	1184	1241	200	150	346	286	550	450	436	356	304	699	20	30	277	334	140	455
200-150-315/ 04504	225M	✗	✗	200	150	160	255	100	100	24	450	431	19	280	400	225	426	483	1209	1266	200	150	371	311	550	450	436	356	304	699	20	30	277	334	140	455
200-150-400/ 04504	225M	✗	-	200	150	160	289	100	100	24	450	431	19	315	450	225	426	483	1209	1266	200	150	371	311	550	450	436	356	331	699	20	30	277	334	140	455

462 Tolerances of mating dimensions to EN 735
463 Dimensions to EN 733
464 Dimension with single mechanical seal (A, AV, IA, EA, FA)
465 Dimension with double mechanical seal (DB, TI)

Pump set with baseplate (fixed speed version), 55 kW to 110 kW, n = 2900 rpm / 3500 rpm



Pump set with baseplate (motor sizes 250 to 315)

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

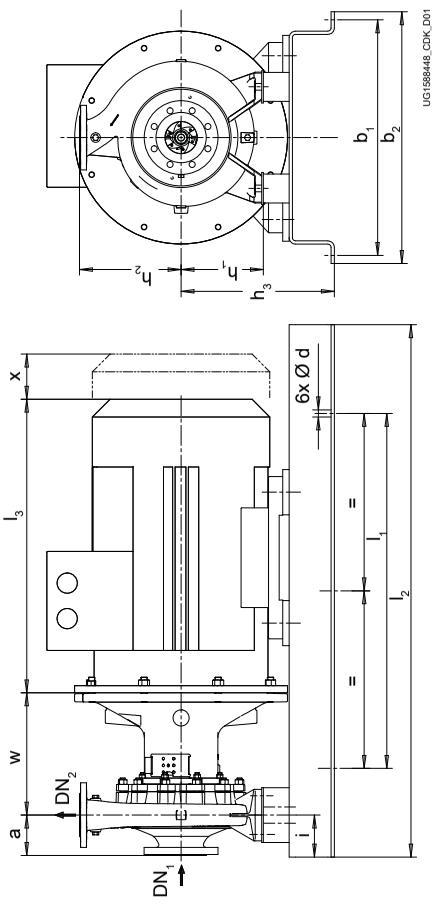
n = 2900 rpm / n = 3500 rpm, material variants GG / GB / GC / BB / CC / SB / SC / SG

Dimensions of Etabloc from 55 kW to 110 kW[466)]

Etabloc	Motor	n		Baseplate to ZN 1393	DN_1 [467)]	DN_2 [467)]	a [467)]	b_1	b_2	d	h_1 [467)]	h_2 [467)]	h_3	i	l_1	l_2	l_3≈	w [468)]	w [469)]	x [467)]
		2900	3500																	
		[rpm]			[mm]															
65-50-315/05502	250M	✗	-	10B	65	50	125	600	650	22	225	280	420	112	1060	1600	817	289	334	100
65-50-315/07502	280S	✗	-	11B	65	50	125	670	720	22	225	250	420	112	1060	1600	925	289	334	100
80-65-250/05502	250M	-	✗	10B	80	65	100	600	650	22	200	250	420	130	1060	1600	817	289	334	140
80-65-250/07502	280S	-	✗	11B	80	65	100	670	720	22	200	250	420	130	1060	1600	925	289	334	140
80-65-315/05502	250M	✗	-	10B	80	65	100	600	650	22	225	250	420	130	1060	1600	817	289	334	140
80-65-315/07502	280S	✗	-	11B	80	65	100	670	720	22	225	250	420	130	1060	1600	925	289	334	140
80-65-315/09002	280M	✗	-	10B	80	65	100	670	720	22	225	250	420	130	1060	1600	980	289	334	140
100-80-200/05502	250M	-	✗	10B	100	80	125	600	650	22	180	250	420	112	1060	1600	817	289	334	140
100-80-200/07502	280S	-	✗	11B	100	80	125	670	720	22	180	250	420	112	1060	1600	925	289	334	140
100-80-250/05502	250M	✗	✗	10B	100	80	125	600	650	22	200	280	420	130	1060	1600	817	289	334	140
100-80-250/07502	280S	✗	✗	11B	100	80	125	670	720	22	200	280	420	130	1060	1600	925	289	334	140
100-80-250/09002	280M	-	✗	11B	100	80	125	670	720	22	200	280	420	130	1060	1600	980	289	334	140
100-80-250/11002	315S	-	✗	12B	100	80	125	730	780	22	200	280	475	130	1100	1650	1080	379	379	140
100-80-315/07502	280S	✗	-	11B	100	80	125	670	720	22	250	315	420	130	1060	1600	925	289	334	140
100-80-315/09002	280M	✗	-	11B	100	80	125	670	720	22	250	315	420	130	1060	1600	980	289	334	140
100-80-315/11002	315S	✗	-	12B	100	80	125	730	780	22	250	315	475	130	1100	1650	1080	379	379	140
125-100-160/05502	250M	-	✗	10B	125	100	125	600	650	22	200	280	420	130	1060	1600	817	289	334	140
125-100-200/05502	250M	✗	-	10B	125	100	125	600	650	22	200	280	420	130	1060	1600	817	289	334	140
125-100-200/07502	280S	✗	-	11B	125	100	125	670	720	22	200	280	420	130	1060	1600	925	289	334	140
125-100-200/09002	280M	✗	-	11B	125	100	125	670	720	22	200	280	420	130	1060	1600	980	289	334	140
125-100-250/05502	250M	✗	-	10B	125	100	140	600	650	22	225	280	420	130	1060	1600	817	289	334	140
125-100-250/07502	280S	✗	✗	11B	125	100	140	670	720	22	225	280	420	130	1060	1600	925	289	334	140
125-100-250/09002	280M	✗	✗	11B	125	100	140	670	720	22	225	280	420	130	1060	1600	980	289	334	140
125-100-250/11002	315S	✗	✗	12B	125	100	140	730	780	22	225	280	475	130	1100	1650	1080	379	379	140
150-125-200/05502	250M	✗	-	10B	150	125	140	600	650	22	250	315	420	130	1060	1600	817	289	334	140
150-125-200/07502	280S	✗	✗	11B	150	125	140	670	720	22	250	315	420	130	1060	1600	925	289	334	140
150-125-200/09002	280M	✗	✗	11B	150	125	140	670	720	22	250	315	420	130	1060	1600	980	289	334	140
150-125-200/11002	315S	-	✗	12B	150	125	140	730	780	22	250	315	475	130	1100	1650	1080	379	379	140

466 Tolerances of mating dimensions to EN 735
467 Dimensions to EN 733
468 Dimension of Etabloc with single mechanical seal (A, AV, IA, EA, FA)
469 Dimension of Etabloc with double mechanical seal (DB, TI)

Pump set with baseplate (fixed speed version), 55 kW to 110 kW, n = 1450 rpm / 1750 rpm



Pump set with baseplate (motor sizes 250 to 315)

n = 1450 rpm / n = 1750 rpm, material variants GG / GB / GC / BB / CC / SB / SC / SG

Dimensions of Etabloc from 55 kW to 110 kW[470)]

Etabloc	Motor	n		Baseplate to ZN 1393	DN_1 [471)]	DN_2 [471)]	a [471)]	b_1	b_2	d	h_1 [471)]	h_2 [471)]	h_3	i	l_1	l_2	l_3≈	w [472)]	w [473)]	x [471)]
		1450	1750																	
		[rpm]			[mm]															
100-80-400/05504	250M	-	✘	10B	100	80	125	600	650	22	280	355	420	112	1060	1600	862	289	334	140
125-100/400/05504	250M	-	✘	10B	125	100	140	600	650	22	280	355	420	112	1060	1600	862	289	334	140
125-100-400/07504	280S	-	✘	11B	125	100	140	670	720	22	280	355	420	112	1060	1600	970	289	334	140
150-125-315-05504	250M	-	✘	10B	150	125	140	600	650	22	280	355	420	112	1060	1600	862	289	334	140
150-125-400/05504	250M	✘	-	10B	150	125	140	600	650	22	315	400	455	112	1060	1600	862	289	334	140
150-125-400/07504	280S	✘	✘	11B	150	125	140	670	720	22	315	400	455	112	1060	1600	970	289	334	140
150-125-400/09004	280M	-	✘	11B	150	125	140	670	720	22	315	400	455	112	1060	1600	1025	289	334	140
150-125-400/11004	315S	-	✘	12B	150	125	140	730	780	22	315	400	475	112	1100	1650	1050	379	379	140
200-150-315/05504	250M	✘	✘	11B	200	150	160	670	720	22	280	400	420	112	1060	1600	862	289	334	140
200-150-315/07504	280S	-	✘	11B	200	150	160	670	720	22	280	400	420	112	1060	1600	970	289	334	140
200-150-400/05504	250M	✘	-	11B	200	150	160	670	720	22	315	450	455	112	1060	1600	862	289	334	140
200-150-400/07504	280S	✘	✘	11B	200	150	160	670	720	22	315	450	455	112	1060	1600	970	289	334	140
200-150-400/09004	280M	✘	✘	11B	200	150	160	670	720	22	315	450	455	112	1060	1600	1025	289	334	140
200-150-400/11004	315S	-	✘	12B	200	150	160	730	780	22	315	450	475	112	1100	1650	1050	379	379	140

470 Tolerances of mating dimensions to EN 735
471 Dimensions to EN 733
472 Dimension of Etabloc with single mechanical seal (A, AV, IA, EA, FA)
473 Dimension of Etabloc with double mechanical seal (DB, TI)

Installation types

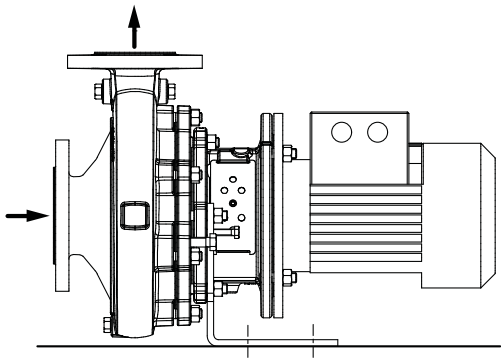


Fig. 303: Horizontal installation, fastened below, pump set with support foot, motor size ≤ 112

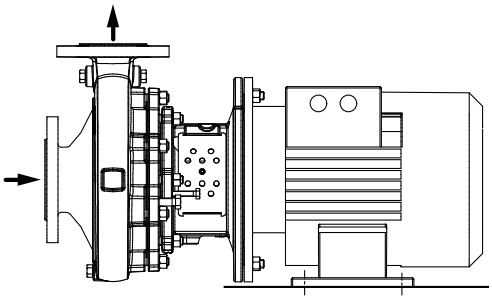


Fig. 304: Horizontal installation, fastened below, pump set, motor sizes 132 - 180

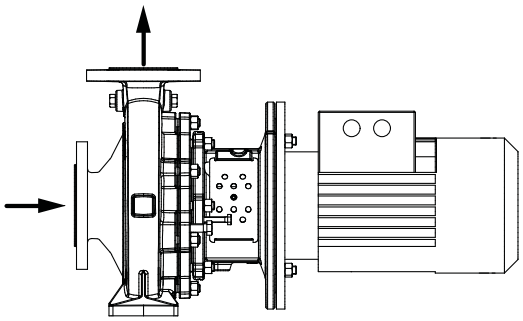


Fig. 305: Horizontal installation, fastened below, pump set with volute casing foot, motor size ≤ 112

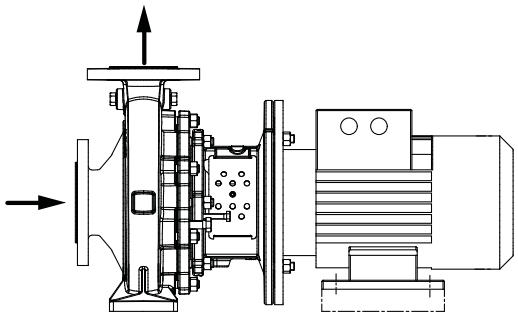


Fig. 306: Horizontal installation, fastened below, pump set with volute casing foot, motor sizes 132 - 180

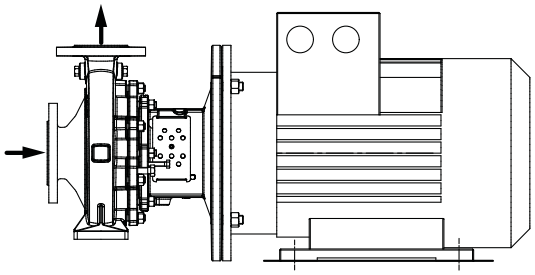


Fig. 307: Horizontal installation, fastened below, pump set, motor sizes 200 - 315, 2-pole

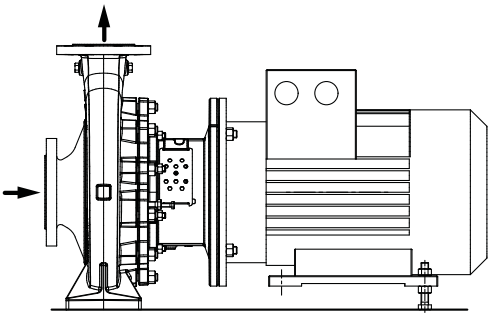


Fig. 308: Horizontal installation, fastened below, pump set with volute casing foot, motor sizes 200 - 315, 4-pole

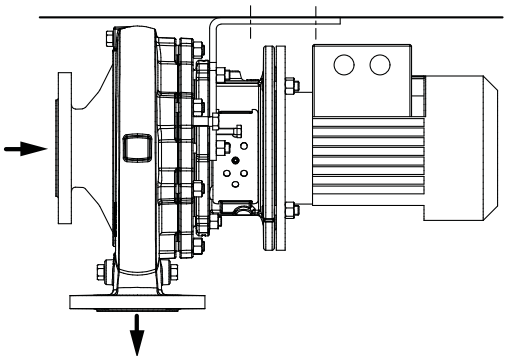


Fig. 309: Horizontal installation, fastened above, pump set with support foot, motor size ≤ 112

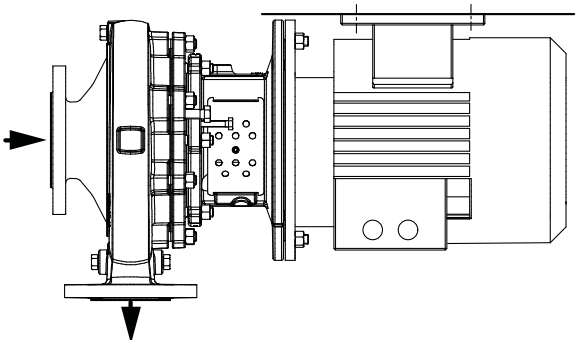


Fig. 310: Horizontal installation, fastened above, pump set, motor sizes 132 - 180

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

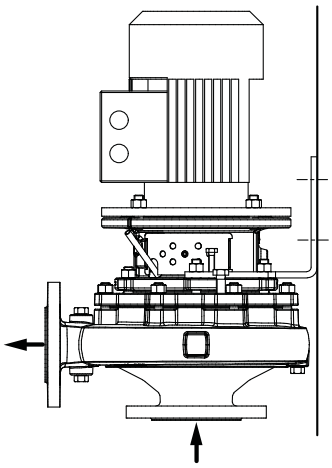


Fig. 311: Vertical installation, pump set with support foot, motor size ≤ 112 (A vent valve must be fitted to avoid dry running of the mechanical seal.)

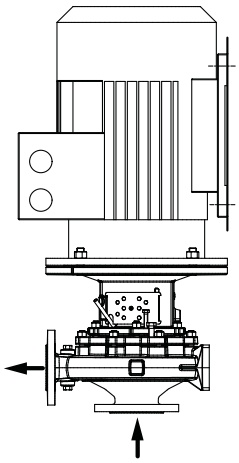


Fig. 312: Vertical installation, pump set with volute casing foot, motor sizes 132 - 180 and 200 - 315, 2-pole (A vent valve must be fitted to avoid dry running of the mechanical seal.)

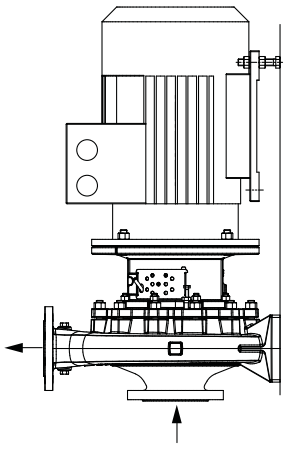


Fig. 313: Vertical installation, pump set with volute casing foot, motor sizes 200 - 315, 4-pole (A vent valve must be fitted to avoid dry running of the mechanical seal.)

Close-coupled Pumps

Etachrom B

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000066

Product benefits

- Maintenance-free mechanical seal ensures operating reliability
- Easy to dismantle due to back pull-out design; no need to remove the pump casing from the piping
- Optimised hydraulic components for high efficiency help reduce energy consumption
- Corrosion-resistant: wetted components made of stainless steel (1.4571)
- Long service life, maintenance-free with high-quality standardised mechanical seal to EN 12756

Further information

Prices on request

Selection charts 861
Dimensions 862

Further information

	AS0, AS1, AS2, AS4, AS5 (⇨ Page 1031)	Switchgear / monitoring unit
	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[474)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

474 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
	Europe	This product is subject to the provisions of the "Ecodesign" Directive 2009/125/EC and meets, as a minimum, the ecodesign requirements established in 2015 for water pumps with a maximum nominal shaft power of 150 kW as per Regulation (EU) No. 547/2012.

Certifications

Overview

Label	Effective in:	Comment
	All countries	Certified quality management to ISO 9001

Main applications

- Cleaning systems (bottle rinsing, crate washing and similar systems)
- Water treatment systems
- Water supply systems
- Fire-fighting systems
- Spray irrigation systems
- General irrigation systems
- Drainage systems
- Hot-water heating systems
- Air-conditioning systems
- Industrial washing machines
- General industry
- Disposal of paint sludge
- Surface treatment systems

Operating data

Operating properties

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q [m³/h]	≤ 260	≤ 210
	Q [l/s]	≤ 72,2	≤ 58,3
Head	H [m]	≤ 105	≤ 104
Fluid temperature	T [°C]	≥ -30	≥ -30
		≤ +110	≤ +110
Operating pressure	p [bar]	≤ 12 [476)]	≤ 12

Fluids handled

- Service water
- Drinking water
- High-temperature hot water
- Cooling water
- Swimming pool water[475)]
- Process water
- Fire-fighting water
- Condensate
- Oil

Further information on fluids handled

Overview of fluids handled (⇨ Page 858)

475 Swimming pool water (0.4 to 1.4 mg/l free chlorine, max. 0.6 mg/l combined chlorine, pH 6.9 to 7.7, water hardness 10 to 30 °dH, max. salt content 7 g/l)

476 The sum of inlet pressure and shut-off head must not exceed the value indicated.

Design details

Design

- Design with materials to Regulation (EC) No. 1935/2004 can be provided.
- Design to ATEX

Design

- Circular casing pumps
- Close-coupled design
- Back pull-out design
- Flanges to EN 1092-1
- Horizontal installation
- Single-stage
- Dimensions and ratings to EN 733
- Rigid connection between pump and motor
- Pump and motor connected by a stub shaft
- Fixed speed version (without PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R) / variable speed version (with PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R)

Pump casing

- Circular casing
- Replaceable casing wear rings

Installation

- Pump foot
- Motor foot
- Foot base with vertically adjustable ball feet
- Foot base with vertically adjustable machine mounts

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM V1 ≤ 4.00 kW
- Type of construction IM V15 ≥ 5.50 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM V1 ≤ 4.00 kW
- Type of construction IM V15 ≥ 5.50 kW
- Enclosure IP55
- Duty type: continuous duty S1
- II 3G Ex ec IIC T3 Gc
- II 2G Ex eb IIC T3 Gb
- II 2G Ex db (eb) IIB T4 Gb
- II 2G Ex db (eb) IIC T4 Gb

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[477)] (PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM V1 ≤ 4.00 kW
- Type of construction IM V15 ≥ 5.50 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 0.55 kW to 45 kW
- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2 / PumpDrive 2 Eco:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for motor mounting, wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

PumpMeter:

- Intelligent pressure transmitter for pumps, with on-site display of measured values and operating data
- For recording the load profile of the pump
- Supplied completely assembled and parameterised for the individual pump

477 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Shaft seal

- Single mechanical seal to EN 12756
- The shaft is fitted with a replaceable shaft sleeve in the shaft seal area (sizes 080-065-250, 100-080-200, 100-080-250)

Impeller type

- Closed radial impeller with multiply curved vanes
- Free-flow impeller

Designation

Designation example

Position																																											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
E	T	C	B	0	5	0	-	0	2	5	-	1	2	5		C	C	S	A	A	0	7	D	1	0	1	0	0	2	e	x	B	P	D	2		M	K	S	B	I	E	4
See name plate and data sheet																																	See data sheet										

Designation key

Position	Code	Description	
1-4	Pump type		
	ETCB	Etachrom B	
	ETCF	Etachrom B bottle rinser variant	
5-16	Size, e.g.		
	050	Nominal suction nozzle diameter [mm]	
	025	Nominal discharge nozzle diameter [mm]	
	125	Nominal impeller diameter [mm]	
16	F	Etachrom B with free-flow impeller (size 065-050-125 only)	
17	Pump casing material		
	C	Stainless steel	1.4571
18	Impeller material		
	C	Stainless steel	1.4571/1.4408
19	Design		
	E	Materials in contact with food to Regulation (EC) 1935/2005	
	F	Bottle rinser variant	
	H	Approved for drinking water to ACS	
	K	Approved for drinking water to KSB standard	
	U	Approved for drinking water to UBA	
	S	Standard	
	W	Approved for drinking water to WRAS	
	X	Non-standard (BT3D, BT3)	
20-21	Casing cover		
	AA	Internal circulation (seal chamber only)	
	AS	Internal circulation (seal chamber only), casing cover with anti-swirl baffles	
	AV	Vented seal chamber	
	EA	External circulation	
	ES	External circulation, casing cover with anti-swirl baffles	
	FA	External flushing	
	FS	External flushing, casing cover with anti-swirl baffles	
22-23	Seal code, single mechanical seal		
	01	Q1Q1VGG	1A (ZN1181)
	07	Q1Q1EGG	1A (ZN1181)
	09	U3U3VGG	MG13G60
	10	Q1Q1X4GG	1 (ZN1181)
	11	BQ1EGG-WA (WA = drinking water)	1 (ZN1181)
	12	Q12Q1M1GG1	M37GN83
	17	Q1BVGG	M7N
	26	XYHY2VY	Roten Uniten 3
	45	BQ7E1GG/Y10	KU 022 S0 - eMG12G6
	46	Q7Q7E1GG/Y10	KU 022 S0 - eMG12G6
	66	Q7Q7EGG/Y10-WA	eMG13G6
	67	Q6Q6X4GG	MG13G60
	68	BQ7V16GG/Y10	KU 022 S0 - eMG12G6
	69	Q7Q7V16GG/Y10	KU 022 S0 - eMG12G6
24	Scope of supply		
	A	Pump, without motor (figure 0 bare-shaft pump)	
	D	Pump, motor	
25	Shaft unit		
	1	Shaft unit 25.1	
	2	Shaft unit 25.2	

Position	Code	Description
25	3	Shaft unit 35
26-29	Motor rating P_N [kW]	
	0750	7,50
	...	...
	0300	30,00
30	Number of motor poles	
31-32	Explosion protection	
	ex	With explosion-proof motor
	--	Without explosion-proof motor
33	Product generation	
	B	Etachrom B 2015
34-37	PumpDrive	
	PD2	PumpDrive 2
	PD2E	PumpDrive 2 Eco
38	PumpMeter	
	M	PumpMeter
39-41	Motor manufacturer	
	KSB	KSB
	SIE	Siemens
	LOH	Loher
	HAL	Halter
42-44	Efficiency class	

Materials

Overview of available materials

Part No.	Description	Material	Fluid temperature [°C]	
			T_{min}	T_{max}
101	Pump casing	CrNiMo steel 1.4571	-30	+110
132.01	Intermediate piece	Grey cast iron EN-GJL-250 / cataphoresis	-30	+110
163	Discharge cover	CrNiMo steel 1.4571	-30	+110
183	Foot	S235 JR	-30	+110
210	Shaft	CrNiMo steel 1.4571	-30	+110
230	Impeller	CrNiMo steel 1.4571	-30	+110
		CrNiMo steel 1.4408	-30	+110
341	Drive lantern	Grey cast iron EN-GJL-250 / cataphoresis	-30	+110
412.35	O-ring	EPDM 70	-30	+110
		HNBR 75	-30	+110
		FKM80	-30	+110
502.01	Casing wear ring	CrNiMo steel 1.4571	-30	+110
502.02	Casing wear ring	CrNiMo steel 1.4571	-30	+110
523	Shaft sleeve	CrNiMo steel 1.4571	-30	+110
901.99	Hexagon head bolt	Steel 8.8 A2A	-30	+110
903.01	Screw plug	CrNiMo steel A4	-30	+110
920.01	Nut	CrNiMo steel A4	-30	+110

The pumps are free from substances impairing the adhesive strength of the paint, such as silicone.

Overview of product features / selection tables

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

Symbols key

Symbol	Description
✗	Standard
-	Version not available / not feasible

The table of fluids handled is a selection aid for different applications. It serves as guidance and is based on long-standing experience. The data are reference values and are not to be considered generally binding recommendations. They shall not be the basis for warranty claims. Please contact your nearest sales branch for in-depth advice.

Example:	Pure water 15 °C, Q = 40 m³/h, H = 51 m
Selection:	Etachrom B 065-040-200 CC A11D2
065-040-200	Size (as per characteristic curve 2900 rpm)
11	Variant code (according to selection table)
	Motor rating required: 11 kW

Selection table

Fluids handled	Fluid	Variant	Application limits		Shaft seal (mechanical seal)												
			Percentage	Temperature	Q1Q1VGG	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG-WA[478]	Q12Q1M1GG1	Q1BVGG	BQ7E1GG/Y10[479]	Q7Q7E1GG/Y10[479]	Q7Q7EGG/Y10-WA	Q6Q6X4GG	BQ7V16GG/Y10[479]	Q7Q7V16GG/Y10[479]
					Design code												
			[%]	[°C]	01	07	09	10	11	12	17	45	46	66	67	68	69
Alkaline cleaning agents	10120	50120	-	-	-	✗	-	✗	-	✗	-	-	-	-	-	-	-
Alkaline degreasing solution	10120	51134	≤ 10 NaOH	80	-	✗	-	-	-	-	-	-	-	-	-	-	-
Alcohol (ethanol)	10171	50171	-	-	-	-	-	-	✗	-	-	✗	✗	-	-	-	-
Ammonia water (ammonia solution)	10113	50113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ammonium bicarbonate	10116	50116	≤ 10	≤ 40	-	-	-	-	✗	-	-	-	-	-	-	-	-
Cider	10327	50338	-	-	-	-	-	-	✗	-	-	✗	✗	-	-	-	-
Ethanol (alcohol)	10171	50171	-	-	-	-	-	-	✗	-	-	✗	✗	-	-	-	-
Ethylene glycol[480]	10205	50207	-	-	-	✗	-	-	✗	-	-	-	-	✗	-	-	-
Petrol	10301	50301	-	-	-	-	-	-	-	-	✗	-	-	-	-	-	-
Beer mash	10328	50328	-	-	-	-	-	-	-	✗	-	-	-	-	-	-	-
Beer wort	10329	50329	-	-	-	-	-	-	-	✗	-	-	-	-	-	-	-
Spirits	10327	50330	-	-	-	-	-	-	✗	-	-	✗	✗	-	-	-	-
Butanol	10170	50170	-	-	-	-	-	-	✗	-	-	-	-	-	-	-	-
Butanoic acid	10436	50436	100	≤ 30	-	-	-	-	✗	✗	-	-	-	-	-	-	-
Calcium acetate	10386	50386	10	-	-	-	-	-	✗	-	-	-	-	-	-	-	-
Calcium nitrate	10389	50389	≤ 10	≤ 30	-	-	-	✗	-	-	-	-	-	-	-	-	-

478 Combinations of soft/hard seal face materials (BQ1) can only be used for fluids up to a total solids content of 50 mg/l. Higher total solids contents will result in leakage and a shorter service life.

479 FDA-approved

480 Antifreeze agent on ethylene glycol basis with inhibitors. Content: > 20 % to 50 % (e.g. Antifrogen N)

Fluids handled	Fluid	Variant	Application limits		Shaft seal (mechanical seal)												
			Percentage	Temperature	Q1Q1VGG	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG-WA[478]	Q12Q1M1GG1	Q1BVGG	BQ7E1GG/Y10[479]	Q7Q7E1GG/Y10[479]	Q7Q7EGG/Y10-WA	Q6Q6X4GG	BQ7V16GG/Y10[479]	Q7Q7V16GG/Y10[479]
					Design code												
			[%]	[°C]	01	07	09	10	11	12	17	45	46	66	67	68	69
Cleaning in place (CIP) without further specifications	10861	50861	-	-	-	✘	-	-	-	✘	-	-	-	-	-	-	-
Deionised water (fully desalinated)[481]	10669	50669	-	≤ 110	-	-	-	-	✘	-	-	-	-	-	✘	-	-
Distilled water	10669	50669	-	≤ 60	-	-	-	-	✘	-	-	-	-	-	-	-	-
Diesel oil	10304	50304	-	-	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Decarbonised water[482]	10669	50673	-	≤ 60	-	-	-	-	✘	-	-	-	-	-	-	-	-
Peanut oil	10350	50364	-	≤ 90	-	-	-	✘	-	-	✘	-	-	-	-	✘	✘
Vinegar (= 5 % acetic acid)	10439	50439	≤ 5	-	-	-	-	-	✘	-	-	-	-	-	-	-	-
Ethanol	10171	51987	-	-	-	-	-	-	✘	-	-	✘	✘	-	-	-	-
Condenser water (sugar production)	10332	50332	-	-	-	-	-	-	-	-	-	✘	✘	-	-	-	-
Fire-fighting water[482]	10199	50204	-	≤ 25[48 3)]	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Lye for bottle rinsers	10111	Var.[484]	≤ 10	≤ 80	-	✘	-	-	-	✘	-	-	-	-	-	-	-
Antifreeze agent (ethylene glycol)[480]	10214	Var.[484]	See [480]	≤ 110	-	✘	-	-	✘	-	-	-	-	✘	-	-	-
Ethylene glycol base anti-freeze, inhibited	10270	Var.[484]	See [480]	≤ 110	-	✘	-	-	✘	-	-	-	-	✘	-	-	-
Antifreeze agent (propylene glycol)[480]	10962	Var.[484]	See [480]	≤ 110	-	✘	-	-	✘	-	-	-	-	✘	-	-	-
Propylene glycol base anti-freeze, inhibited	10963	Var.[484]	See [480]	≤ 110	-	✘	-	-	✘	-	-	-	-	✘	-	-	-
Tannic acid	10445	Var.[484]	≤ 50	-	-	-	-	-	-	-	✘	-	-	-	-	-	-
Beverages containing carbon dioxide	10846	50846	≤ 00	-	-	-	-	-	-	-	-	✘	✘	-	-	-	-
Glycerine	10311	Var.[484]	≤ 90	-	-	-	-	-	-	-	✘	-	-	-	-	-	-
Fuel oil, light	10308	50308	-	≤ 60	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Heating water[485]	10499	50499	-	≤ 110	-	-	-	✘	✘	-	-	-	-	-	-	-	-
Hydraulic oil	10346	50351	-	-	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Potassium hydroxide	10121	Var.[484]	≤ 10	≤ 80	-	✘	-	✘	-	-	-	-	-	-	-	-	-
Potassium carbonate	10123	50122	≤ 10	≤ 80	-	✘	-	-	✘	-	-	-	-	-	-	-	-
Aluminium potassium sulphate	10381	50381	≤ 3	≤ 20	✘	-	-	-	-	-	-	-	-	-	-	-	-
Potassium sulphate	10401	50402	≤ 3	-	-	-	-	-	-	-	✘	-	-	-	-	-	-
Kerosene (jet fuel)	10317	51168	-	≤ 60	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Condensate[481]	10495	50660	-	≤ 110	-	-	-	-	✘	-	-	-	-	-	-	-	-
Cooling water (without antifreeze)	10668	Var.[484]	-	≤ 90[48 3)]	-	-	-	✘	-	-	-	-	-	-	-	-	-
Cooling water pH ≧ 7.5 (with antifreeze)[480]	10214	Var.[484]	-	≤ 110	-	✘	-	-	✘	-	-	-	-	✘	-	-	-
Cooling lubricant (Cimcool)	10188	50188	-	≤ 60	-	-	✘	-	-	-	-	-	-	-	-	-	-
Copper sulphate	10407	50407	≤ 5	RT[486]	-	-	-	-	✘	-	-	-	-	-	-	-	-
Slightly contaminated water[482]	10484	50696	-	≤ 60[48 3)]	-	-	-	✘	-	-	-	-	-	-	-	-	-
Linseed oil	10350	50368	-	≤ 90	-	-	-	✘	-	-	✘	-	-	-	-	✘	✘
Corn oil	10350	50369	-	≤ 90	-	-	-	✘	-	-	✘	-	-	-	-	✘	✘
Maleic acid	10445	51684	≤ 10	-	-	-	-	-	-	-	✘	-	-	-	-	-	-
Methyl alcohol (methanol)	10174	50174	-	-	-	-	-	-	✘	-	-	-	-	-	-	-	-

481 Conductivity at 25 °C: < 250 µS/cm, SiO_2 silicate content ≤ 10 mg/l
482 Chloride content ≤ 300 mg/l; if the value is exceeded, water analysis is required.
483 Mechanical seal suitable for t ≤ 110 °C
484 Var. = various
485 Conductivity at 25 °C: 100 to 800 µS/cm
486 RT = room temperature

Fluids handled	Fluid	Variant	Application limits		Shaft seal (mechanical seal)												
			Percentage	Temperature	Q1Q1VGG	Q1Q1EGG	U3U3VGG	Q1Q1X4GG	BQ1EGG-WA[478]	Q12Q1M1GG1	Q1BVGG	BQ7E1GG/Y10[479]	Q7Q7E1GG/Y10[479]	Q7Q7EGG/Y10-WA	Q6Q6X4GG	BQ7V16GG/Y10[479]	Q7Q7V16GG/Y10[479]
					Design code												
			[%]	[°C]	01	07	09	10	11	12	17	45	46	66	67	68	69
Lactic acid	10449	Var.[484]	≤ 50	-	-	-	-	-	-	-	✘	-	-	-	-	-	-
Mineral oil	10346	50352	-	-	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Sodium hydrogen carbonate	10151	50151	≤ 6	≤ 20	-	-	-	✘	-	-	-	-	-	-	-	-	-
Sodium hydroxide (caustic soda)	10111	51673	≤ 10	≤ 80	✘	-	-	-	-	✘	-	-	-	-	-	-	-
Sodium carbonate	10146	50146	≤ 6	≤ 60	-	-	-	-	✘	-	-	-	-	-	-	-	-
Sodium nitrate	10423	50423	≤ 10	≤ 90	-	-	-	-	✘	-	-	-	-	-	-	-	-
Sodium sulphate	10395	50395	≤ 5	≤ 60	-	-	-	-	✘	-	-	-	-	-	-	-	-
Caustic soda (sodium hydroxide)	10158	50158	≤ 20	≤ 60	-	-	-	-	✘	-	-	-	-	-	-	-	-
Paraffin	10319	51687	-	-	-	-	-	-	-	-	✘	-	-	-	-	-	-
Kerosene	10310	50310	-	-	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Vegetable oil, pure	10350	Var.[484]	-	≤ 90	-	-	-	✘	-	-	✘	-	-	-	-	✘	✘
Phosphoric acid	10452	50947	≤ 5	≤ 40	✘	-	-	-	-	-	✘	-	-	-	-	-	-
Phosphoric acid	10452	50452	≤ 10	≤ 40	✘	-	-	-	-	-	✘	-	-	-	-	-	-
Propanol (propyl alcohol)	10170	51096	-	-	-	-	-	-	✘	-	-	-	-	-	-	-	-
Rapeseed oil	10350	50370	-	≤ 90	-	-	-	✘	-	-	✘	-	-	-	-	✘	✘
Raw water[482]	10658	50658	-	≤ 60[48 3]	-	-	-	✘	-	-	-	-	-	-	-	-	-
Lubricating oil	10347	Var.[484]	-	-	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Cutting oil	10346	50356	-	-	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Sulphuric acid	10455	50455	≤ 5	20	✘	-	-	-	-	-	-	-	-	-	-	-	-
Sulphuric acid	10455	50456	≤ 2,5	≤ 50	✘	-	-	-	-	-	-	-	-	-	-	-	-
Sulphurous acid	10456	51129	≤ 10	25	✘	-	-	-	-	-	-	-	-	-	-	-	-
Swimming pool water (fresh water)	10655	50725	-	≤ 60	-	-	-	✘	-	-	-	-	-	-	-	-	-
Silicone oil	10346	50357	-	-	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Soy-bean oil	10350	50371	-	≤ 90	-	-	-	✘	-	-	✘	-	-	-	-	✘	✘
Edible oil	10350	Var.[484]	-	≤ 90	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Surface water	10683	Var.[484]	-	≤ 60[48 3]	-	-	-	✘	-	-	-	-	-	-	-	-	-
Partly desalinated water	10669	50736	-	≤ 110	-	-	-	-	✘	-	-	-	-	-	-	-	-
Drinking water[482]	10665	Var.[484]	-	≤ 60[48 3]	-	-	-	-	✘	-	-	-	-	-	-	-	-
Turbine oil (does not apply to SFD oils)	10347	50347	-	≤ 80	-	-	-	✘	-	-	✘	-	-	-	-	-	-
Water / bathing water (fresh water)[482]	10665	50725	-	≤ 60	-	-	-	-	✘	-	-	-	-	-	-	-	-
Water, desalinated[487]	10669	50837	-	-	-	-	-	-	✘	-	-	-	-	-	✘	-	-
Water/oil emulsion	10192	51166	95%/5%	≤ 60	-	-	✘	-	-	-	✘	-	-	-	-	-	-
Tartaric acid	10460	50460	≤ 50	-	-	-	-	-	-	-	✘	-	-	-	-	-	-
Citric acid	10438	50438	≤ 50	RT[486]	-	-	-	-	✘	-	✘	-	-	-	-	-	-
Sugar juice (sugar production)	19005	50333	20	≤ 100	-	-	-	-	-	✘	✘	-	-	-	-	-	-

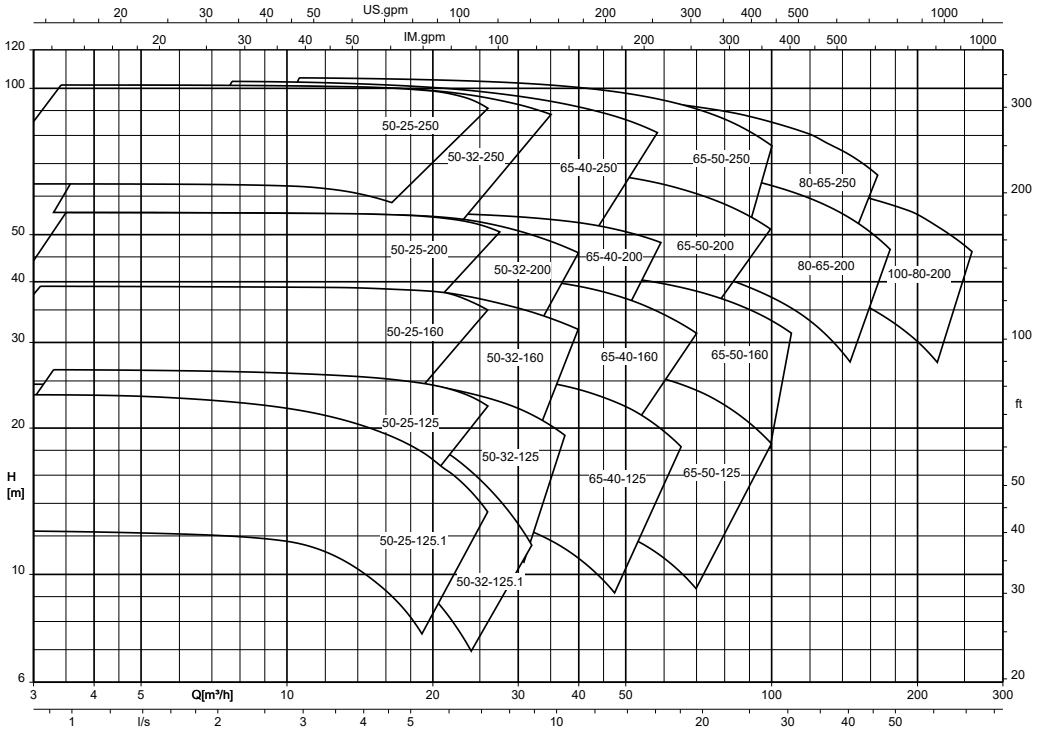
Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

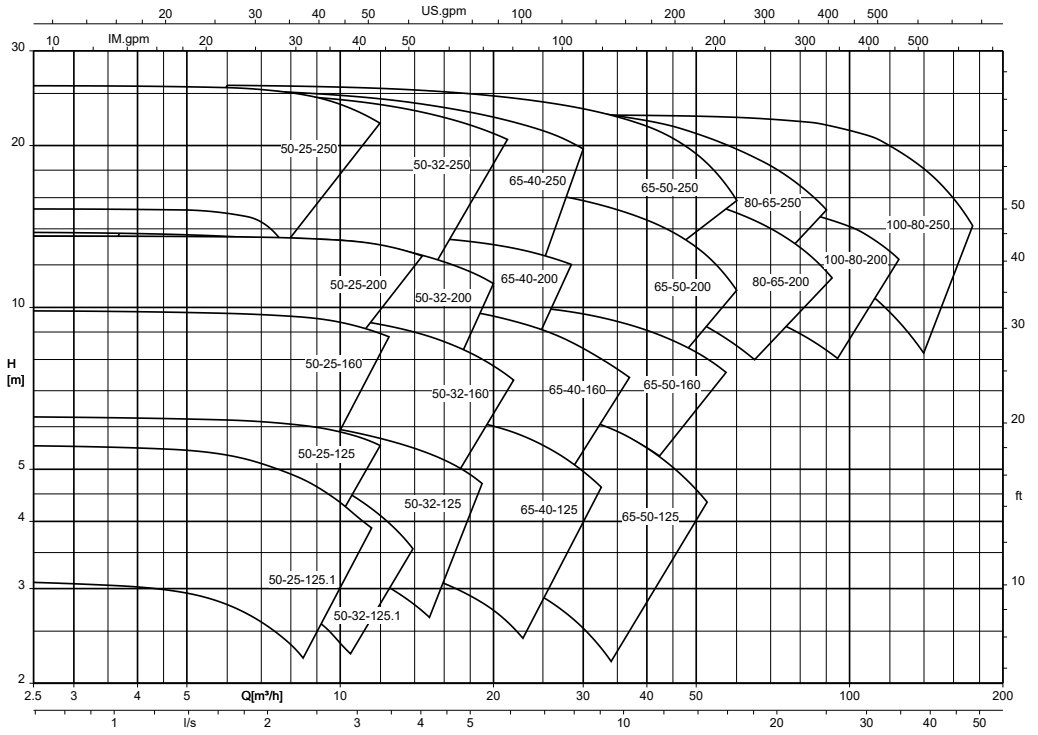
[487] Conductivity > 2 µS/cm < 10 µS/cm, SiO2 < 10 mg/l, solids max. 5 mg/l

Selection charts

Etachrom B, n = 2900 rpm



Etachrom B, n = 1450 rpm



Related documents

Information/documents

Document	Reference number
Characteristic curves booklet (50 Hz/60 Hz) Fixed speed version	1212.56
Characteristic curves booklet Variable speed version	1212.57

Dimensions

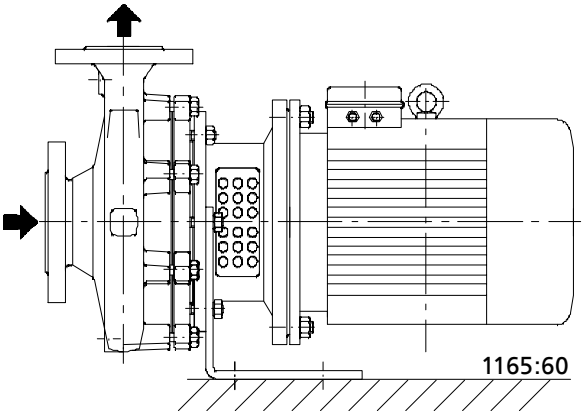
Related documents

Information/documents

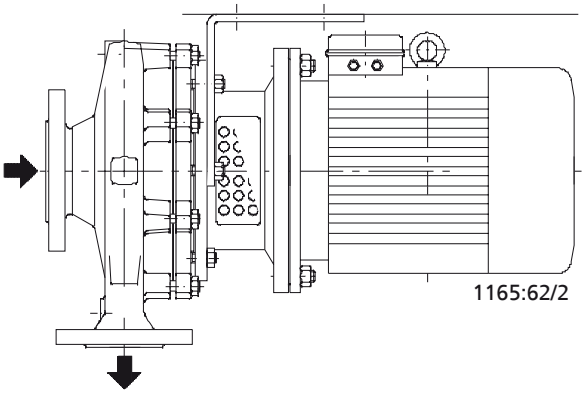
Document	Reference number
Type series booklet Etachrom B	1213.5

Installation types

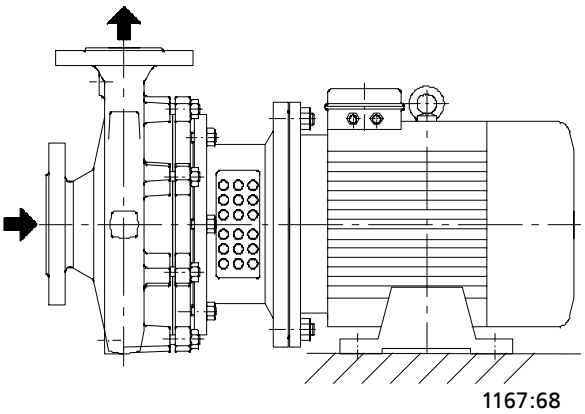
Horizontal installation



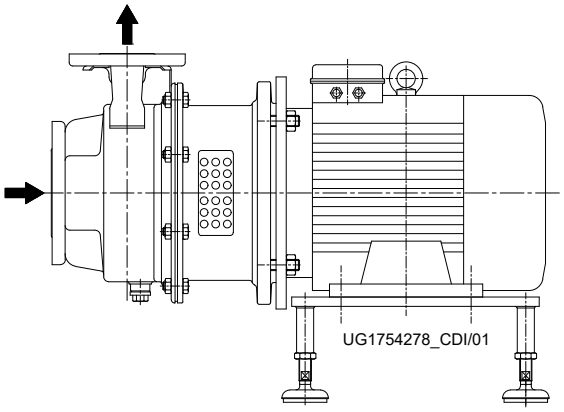
Pump foot, fastened below
Up to motor size 112 = 4 kW



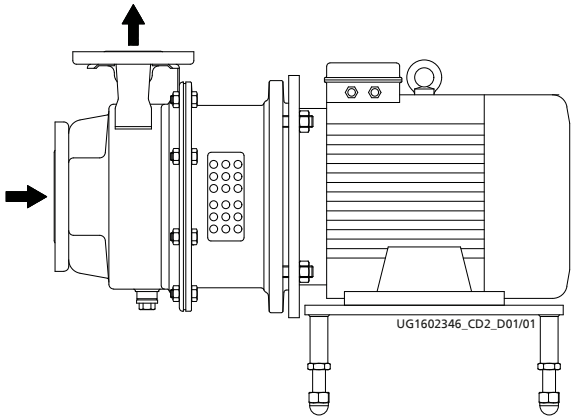
Pump foot, fastened above
Up to motor size 112 = 4 kW
Motor must be turned through 180°.



Motor foot, fastened below
Motor size 132 = 5.5 kW to 225 = 45 kW

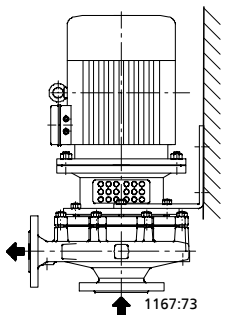


Machine mount
Motor size 80 = 0.55 kW to 225 = 45 kW



Ball feet
Motor size 80 = 0.55 kW to 225 = 45 kW

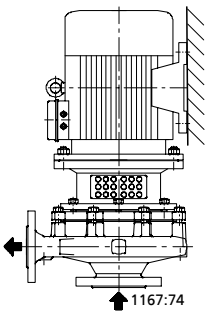
Vertical installation[488)]



Pump foot, fastened at the side

Up to motor size 112 = 4 kW

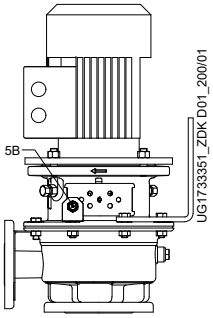
For vertical installation with the motor on top, use connection 5B for venting.



Motor foot, fastened at the side

From motor size 132 = 5.5 kW to 225 = 45 kW

For vertical installation with the motor on top, use connection 5B for venting.



Vent valve (5B)

Design with vent valve for vertical installation

488 A vent valve must be fitted to prevent dry running of the mechanical seal.

Interchangeability of Etachrom B and Etachrom L pump components

Symbols key

Symbol	Description
*	Component interchangeable with Etachrom L; impellers must be of the same diameter
○	Components differ
✗	Component not fitted
□	Pump/motor combination not possible

Etachrom B pump components[489]

Size	Shaft unit	Pump casing	Intermediate piece	Discharge cover	Pump foot[490]	Shaft							Impeller	O-ring	Mechanical seal	Casing wear ring, suction side	Casing wear ring, discharge side	Shaft sleeve
		101	132.01	163	183	210							230	412.35	433	502.01	502.02	523
						Motor												
						80	90	100/112	132	160	180	200/225						
050-025-125.1	WS 25.1	1	✗	1*	1	1	2	□	□	□	□	□	1*	1*	1*	1*	✗	✗
050-025-125	WS 25.1	1	✗	1*	1	1	2	3	□	□	□	□	2*	1*	1*	1*	✗	✗
050-025-160	WS 25.1	○	✗	5*	2	1	2	3	4	□	□	□	3*	2*	1*	1*	✗	✗
050-025-200	WS 25.1	○	✗	2*	3	1	2	3	4	5	□	□	4*	3*	1*	1*	1*	✗
050-025-250	WS 25.2	○	1*	3*	4	6	7	8	9	10	□	□	5*	4*	2*	6*	2*	✗
050-032-125.1	WS 25.1	2	✗	1*	1	1	2	□	□	□	□	□	1*	1*	1*	1*	✗	✗
050-032-125	WS 25.1	2	✗	1*	1	1	2	3	□	□	□	□	2*	1*	1*	1*	✗	✗
050-032-160	WS 25.1	○	✗	5*	2	1	2	3	4	□	□	□	3*	2*	1*	1*	✗	✗
050-032-200	WS 25.1	○	✗	2*	3	1	2	3	4	5	□	□	4*	3*	1*	1*	1*	✗
050-032-250	WS 25.2	○	1*	3*	4	6	7	8	9	10	□	□	5*	4*	2*	6*	2*	✗
065-040-125	WS 25.1	○	✗	1*	1	1	2	3	□	□	□	□	○*	1*	1*	2*	✗	✗
065-040-160	WS 25.1	○	✗	○*	2	1	2	3	4	5	□	□	○*	2*	1*	2*	1*	✗
065-040-200	WS 25.1	○	✗	2*	3	□	2	□	4	5	□	□	○*	3*	1*	2*	1*	✗
065-040-250	WS 25.2	○	1*	3*	4	□	7	8	9	10	11	□	○*	4*	2*	3*	2*	✗
065-050-125	WS 25.1	○	✗	○*	2	1	2	3	4	□	□	□	○*	2*	1*	2*	✗	✗
065-050-160	WS 25.1	○	✗	○*	2	1	2	□	4	5	□	□	○*	2*	1*	2*	1*	✗
065-050-200	WS 25.2	○	2*	○*	4	6	7	8	9	10	11	□	○*	5*	2*	3*	2*	✗
065-050-250	WS 25.2	○	1*	3*	4	□	7	8	□	10	11	12	○*	4*	2*	3*	2*	✗
080-065-200	WS 25.2	○	1*	○*	4	□	7	8	□	10	11	12	○*	4*	2*	4*	○*	✗
080-065-250	WS 35	○	3*	4*	5	□	□	12	13	14	15	16	○*	4*	3*	4*	3*	1*
100-080-200	WS 35	○	3*	4*	5	□	□	12	13	14	15	16	○*	4*	3*	5*	3*	1*
100-080-250	WS 35	○	3*	4*	5	□	□	12	13	14	□	□	○*	4*	3*	5*	3*	1*
						Drive lantern 341												
050-025-125.1	WS 25.1	-	-	-	-	1	1	□	□	□	□	□	-	-	-	-	-	-
050-025-125	WS 25.1	-	-	-	-	1	1	2	□	□	□	□	-	-	-	-	-	-
050-025-160	WS 25.1	-	-	-	-	3	3	4	5	□	□	□	-	-	-	-	-	-
050-025-200	WS 25.1	-	-	-	-	7	7	8	9	10	□	□	-	-	-	-	-	-
050-025-250	WS 25.2	-	-	-	-	11	11	12	13	14	□	□	-	-	-	-	-	-
050-032-125.1	WS 25.1	-	-	-	-	1	1	□	□	□	□	□	-	-	-	-	-	-
050-032-125	WS 25.1	-	-	-	-	1	1	2	□	□	□	□	-	-	-	-	-	-

489 Pump components featuring the same number in a column are interchangeable, i.e. same number = same component
490 Up to motor size 112 = 4.0 kW only

Size	Shaft unit	Pump casing	Intermediate piece	Discharge cover	Pump foot[490]	Shaft							Impeller	O-ring	Mechanical seal	Casing wear ring, suction side	Casing wear ring, discharge side	Shaft sleeve
		101	132.01	163	183	210							230	412.35	433	502.01	502.02	523
						Motor												
						80	90	100/112	132	160	180	200/225						
050-032-160	WS 25.1	-	-	-	-	3	3	4	5	□	□	□	-	-	-	-	-	-
050-032-200	WS 25.1	-	-	-	-	7	7	8	9	10	□	□	-	-	-	-	-	-
050-032-250	WS 25.2	-	-	-	-	11	11	12	13	14	□	□	-	-	-	-	-	-
065-040-125	WS 25.1	-	-	-	-	1	1	2	□	□	□	□	-	-	-	-	-	-
065-040-160	WS 25.1	-	-	-	-	3	3	4	5	6	□	□	-	-	-	-	-	-
065-040-200	WS 25.1	-	-	-	-	7	7	□	9	10	□	□	-	-	-	-	-	-
065-040-250	WS 25.2	-	-	-	-	□	11	12	13	14	14	□	-	-	-	-	-	-
065-050-125	WS 25.1	-	-	-	-	3	3	4	5	□	□	□	-	-	-	-	-	-
065-050-160	WS 25.1	-	-	-	-	3	3	□	5	6	□	□	-	-	-	-	-	-
065-050-200	WS 25.2	-	-	-	-	11	11	12	13	14	14	□	-	-	-	-	-	-
065-050-250	WS 25.2	-	-	-	-	□	11	12	□	14	14	13	-	-	-	-	-	-
080-065-200	WS 25.2	-	-	-	-	□	11	12	□	14	14	13	-	-	-	-	-	-
080-065-250	WS 35	-	-	-	-	□	□	15	16	17	17	16	-	-	-	-	-	-
100-080-200	WS 35	-	-	-	-	□	□	15	16	17	17	16	-	-	-	-	-	-
100-080-250	WS 35	-	-	-	-	□	□	□	16	17	□	□	-	-	-	-	-	-

Motor rating

Motor	Rating
80	.../054, .../074, .../072, .../112
90	.../114, .../154, .../152, .../222
100	.../224, .../304, .../302
112	.../404, .../402
132	.../552, .../554, .../752, .../754
160	.../1102, .../1104, .../1502, .../1852
180	.../2202
200	.../3002, .../3702
225	.../4502

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Recommended spare parts stock for 2 years' operation to DIN 24296

Quantity of spare parts for recommended spare parts stock

Part No.	Description	Number of pumps (including stand-by pumps)						
		2	3	4	5	6 and 7	8 and 9	10 and more
210	Shaft	1	1	1	2	2	2	20 %
230	Impeller	1	1	1	2	2	2	20 %
412.35	O-ring	4	6	8	8	9	12	150 %
433	Mechanical seal	1	1	2	2	2	3	25 %
502.01[491)]	Casing wear ring, suction side	2	2	2	3	3	4	50 %
502.02[492)]	Casing wear ring, discharge side	2	2	2	3	3	4	50 %
502.06[493)]	Casing wear ring, impeller	2	2	2	3	3	4	50 %
523[494)]	Shaft sleeve	2	2	2	3	3	4	50 %
400.75[494)]	Gasket	4	6	8	8	9	10	100 %

491 Not for Etachrom B 065-050-125 with free-flow impeller

492 Not for Etachrom B 050-025-125.1, 050-025-125, 050-025-160, 050-032-125.1, 050-032-125, 050-032-160, 065-040-125, 065-050-125

493 Only for Etachrom B 080-065-250, 100-080-250

494 Only for Etachrom B 080-065-250, 100-080-200, 100-080-250

Standardised Water Pumps

Etaseco

http://shop.ksb.com/catalog/k0/en/product/ES000122

Product benefits

- Reliability provided by well-proven hydraulic system with excellent efficiencies and NPSH values
- High functional reliability through self-venting of the pump set via hollow shaft with radial bores
- High operating reliability by thermal motor protection (optional) and use of corrosion-resistant materials for the stator can and rotor can
- Space-saving and easy to install due to close-coupled design
- Long service life due to high-quality plain bearings with long inspection intervals
- Leak-free, maintenance-free and low-noise operation with modern canned motor technology
- Convenient draining and cleaning via flushing connection if required

Further information

Prices on request

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

Horizontal or vertical seal-less volute casing pump in back pull-out design with fully enclosed canned motor, low noise emission, with radial impeller, single-stage, single-entry, casing connecting dimensions to EN 733, or in in-line design.

Main applications

- Cooling circuits
- Transport engineering
- Environmental engineering
- Industry

Operating data

Operating properties

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q [m³/h]	≤ 250	≤ 320
Head	H [m]	≤ 100	≤ 100
Fluid temperature	T [°C]	≥ -40	
		≤ +140	
Ambient temperature	T [°C]	≥ -50	
		≤ +85	
Operating pressure	p [bar]	≤ 16	

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Thermal Oil Pumps / Hot Water Pumps

Etanorm SYT

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000790

Product benefits

- Improved efficiency and NPSHreq by experimentally verified hydraulic design of impellers (vanes)
- Operating costs reduced by trimming the nominal impeller diameter to match the specified duty point
- Little wear, low vibration levels and excellent smooth running characteristics thanks to good suction performance and virtually cavitation-free operation across a wide operating range
- Casing sealed reliably – even in varying operating conditions – by confined casing gasket
- Extended selection chart with additional pump sizes for small flow rates
- Easy to dismantle due to back pull-out design; no need to remove the pump casing from the piping
- Easy to dismantle using forcing screws at the interface between casing cover and bearing bracket
- Optimum venting via the highly effective VenJet® venting chamber
- Top reliability with double mechanical seal in tandem arrangement
- High resistance by anti-seize product-lubricated carbon plain bearing or SIC/SIC bearing

Further information

Prices on request

Selection charts 877
Dimensions 879

Further information

	KSB Leakage Sensor (⇨ Page 1074)	Intelligent leakage monitor for pumps with mechanical seal
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[495)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

495 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Main applications

- Heat transfer systems
- Hot water circulation

Fluids handled

- High-temperature hot water
- Thermal oil

Operating data

Operating properties in standard applications

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q [m³/h]	≤ 625	≤ 754
Head	H [m]	≤ 102	≤ 100
Fluid temperature	T [°C]	≥ -30	≥ -30
Thermal oil		≤ +350	≤ +350
Fluid temperature		≤ +180	≤ +180
Hot water			
Operating pressure	p [bar]	≤ 16	≤ 16

Operating properties in marine applications, to DNV GL

Characteristic		Value		
		Class I[496]	Class II[497]	Class III[498]
				Steam
Design pressure	p [bar]	> 16	≤ 16	≤ 7
Design temperature	T [°C]	> 300	≤ 300	≤ 170
				Thermal oil
Design pressure	p [bar]	> 16	≤ 16	≤ 7
Design temperature	T [°C]	> 300	≤ 300	≤ 150
				Fuel oil, lubricating oil, combustible hydraulic oil
Design pressure	p [bar]	> 16	≤ 16	≤ 7
Design temperature	T [°C]	> 150	≤ 150	≤ 60
				Other fluids [499]
Design pressure	p [bar]	> 40	≤ 40	≤ 16
Design temperature	T [°C]	> 300	≤ 300	≤ 200

Loading pipes for flammable liquids on offshore supply vessels belong to the same piping class as the fuel. Class II piping suffices outside of category A engine rooms.

Pipes for toxic or corrosive fluids belong to piping class I.

Loading pipes for chemicals or liquefied gases are not specified in the table.

496 At least one condition must be met for class I piping (design pressure or design temperature).
497 Both conditions must be met for class II piping (design pressure and design temperature).
498 Both conditions must be met for class III piping (design pressure and design temperature).
499 Cargo oil pipes on oil tankers and open pipe outlets (drains, overflows, ventilation, boiler drain pipes, etc.), irrespective of pressure and temperature, belong to class III.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Design details

Design

- Volute casing pump
- Horizontal installation
- Back pull-out design
- Single-stage
- Dimensions and ratings to EN 733
- Fixed speed version (without PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R) / variable speed version (with PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R)

Pump casing

- Radially split volute casing
- Volute casing with integrally cast pump feet
- Replaceable casing wear rings

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM B3
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM B3
- Enclosure IP55
- Duty type: continuous duty S1
- II 3G Ex ec IIC T3 Gc
- II 2G Ex eb IIC T3 Gb
- II 2G Ex db (eb) IIB T4 Gb
- II 2G Ex db (eb) IIC T4 Gb

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[500)] (PumpDrive required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM B3
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 0.55 kW to 45 kW
- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2 / PumpDrive 2 Eco:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types motor mounting (only for fluid temperature ≤ 110 °C), wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

Shaft seal

- KSB single mechanical seal
- KSB double mechanical seal
- To EN 12756

Impeller type

- Closed radial impeller with multiply curved vanes

Bearings

- Various application-oriented bearings

Drive end:

- Grease-packed deep groove ball bearing

Pump-end:

- Carbon bearing / SiC/SiC bearing lubricated by fluid handled

500 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Designation

Designation example

Position																																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
E	T	N	Y	0	5	0	-	0	3	2	-	1	2	5	1	S	G	S	D	B	0	8	L	D	2	0	0	7	5	2	B	P	D	2	E	
See name plate and data sheet																										See data sheet										

Designation key

Position	Code	Description	
1-4	Pump type		
	ETNY	Etanorm SYT	
5-16	Size, e.g.		
	050	Nominal suction nozzle diameter [mm]	
	032	Nominal discharge nozzle diameter [mm]	
	1251	Nominal impeller diameter [mm]	
17	Pump casing material		
	E	Cast steel	GP240GH+N / A216 Gr. WCB
	S	Nodular cast iron	EN-GJS-400-15
18	Impeller material		
	C	Stainless steel	1.4408 / A743 CF8M
	G	Cast iron	EN-GJL-250/A48 Cl. 35B
19	Design		
	D	DNV GL (BT3)	
	S	Standard	
	X	Non-standard (BT3D, BT3)	
20	Casing cover		
	D	Casing cover	
21	Shaft seal type		
	B	Dead-end arrangement	
22-23	Seal code, single mechanical seal		
	08	AQ1V7GG	NU033M0-4EYS
	Seal code, double mechanical seal in tandem arrangement		
	25	AQ1V7GG	KU033M0-4EYT
		AQ1V7GG	KU033M0-4EYT
24	Bearing bracket		
	L	Version for heat transfer fluid, with leakage barrier	
	Y	Version for heat transfer fluid	
25	Scope of supply		
	A	Pump only (Fig. 0)	
	B	Pump, baseplate	
	C	Pump, baseplate, coupling, coupling guard	
	D	Pump, baseplate, coupling, coupling guard, motor	
	E	Back pull-out unit	
26	Shaft unit		
	2	Shaft unit 25, bearing bracket LS (standard)	
	3	Shaft unit 35, bearing bracket LS (standard)	
	5	Shaft unit 55, bearing bracket LS (standard)	
27-30	Motor rating P_N [kW]		
	0075	0,75	
	...	...	
	1320	132,00	
31	Number of motor poles		
32	Product generation		
	B	Etanorm SYT 2014	
33-36	Design		
	-	Fixed speed version	
	PD2	Variable speed version, with PumpDrive 2	
	PD2E	Variable speed version, with PumpDrive 2 Eco	

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Materials

Symbols key

Symbol	Description
✘	Standard
-	Version not available / not feasible

Overview of available materials

Part No.	Description	Material	Material variant	
			SG	SC
102	Volute casing	Nodular cast iron JS1030 / 536 Gr. 60-40-18	✘	✘
161	Casing cover	Nodular cast iron JS1030 / A536 Gr. 60-40-18	✘	✘
210	Shaft	Chrome steel 1.4021 + QTHRC50	✘	✘
230	Impeller	Grey cast iron JL1040 / A 48 Cl. 35B	✘	-
		Stainless steel 1.4408 / A743 Gr. CF8M	-	✘
310	Plain bearing	Carbon KHK	✘	✘
		SiC / SiC	✘	✘
330	Bearing bracket	Nodular cast iron JS1030 / A536 Gr. 60-40-18	✘	✘
411.10/.15	Sealing elements	BU9593 / HDR	✘	✘
502.01	Casing wear ring, suction side	Grey cast iron JL1040 / Cl.	✘	✘
502.02	Casing wear ring, discharge side	Grey cast iron JL1040 / Cl.	✘	✘
902	Studs	Steel 8.8	✘	✘
903	Plug	Steel	✘	✘
920	Nut	8+A2A / 8+B633 SC1 TP3	✘	✘
920.95	Impeller nut	8	✘	✘

Overview of product features / selection tables

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

Symbols key

Symbol	Description
✗	Standard
-	Version not available / not feasible

Excerpt from the overview of fluids handled with associated material variants

Fluid handled	Application limits[501]	Materials Casing/impeller		Shaft seal	
		Nodular cast iron / grey cast iron	Nodular cast iron / stainless steel	Single mechanical seal AQ1V7GG	Double mechanical seal AQ1V7GG / AQ1V7GG in tandem arrangement
		SG	SC	Code 08	Code 25
High-temperature hot water[502]	t ≤ 180 °C p ≤ 16 bar	✗	✗	✗	-
Thermal oil on mineral oil basis	t ≤ -30 to 350 °C p ≤ 16 bar	✗	✗	✗	✗
Thermal oil on synthetic basis, vapour pressure ≤ 1 bar at operating temperature	t ≤ -30 to 350 °C p ≤ 16 bar	✗	✗	✗	✗
Thermal oil on synthetic basis, vapour pressure ≥ 1 bar at operating temperature	t ≤ -30 to 350 °C p ≤ 16 bar	✗	✗	-	✗

501 The inlet pressure must not fall below atmospheric pressure.

502 Low-salt or fully desalinated water to VdTÜV technical instruction leaflet / AGFW technical instruction leaflet TCN 1466 (VdTÜV) 5/15 (AGFW), edition 02.89

Overview of variants

Other designs on request

Overview of Etanorm SYT / Etabloc SYT / Etaline SYT variants

Design	102 / Volute casing	230 / Impeller	Mechanical seal	T [°C]	Main applications: Chemical industry / pharmaceutical industry	Plastic processing	Timber industry / paper industry / cardboard industry	Soap industry / laundry agent industry	Food industry	Textile industry	Mineral oil industry	Bitumen industry / tar processing industry	Metal processing industry	Aluminium industry
SG08	Nodular cast iron EN-GJS-400-15/ 536 Gr. 60-40-18	Grey cast iron EN-GJL-250/ A 48 Cl. 35B	Mech. seal AQ1V7GG	≥ -30 - ≤ +180[503] / 350[504]	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
SC08	Nodular cast iron EN-GJS-400-15/ 536 Gr. 60-40-18	Chrome steel 1.4408/ A 743 Gr. CF8M	Mech. seal AQ1V7GG	≥ -30 - ≤ +180[503] / 350[504]	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

503 High-temperature hot water
504 Thermal oil

Technical data

Etanorm SYT

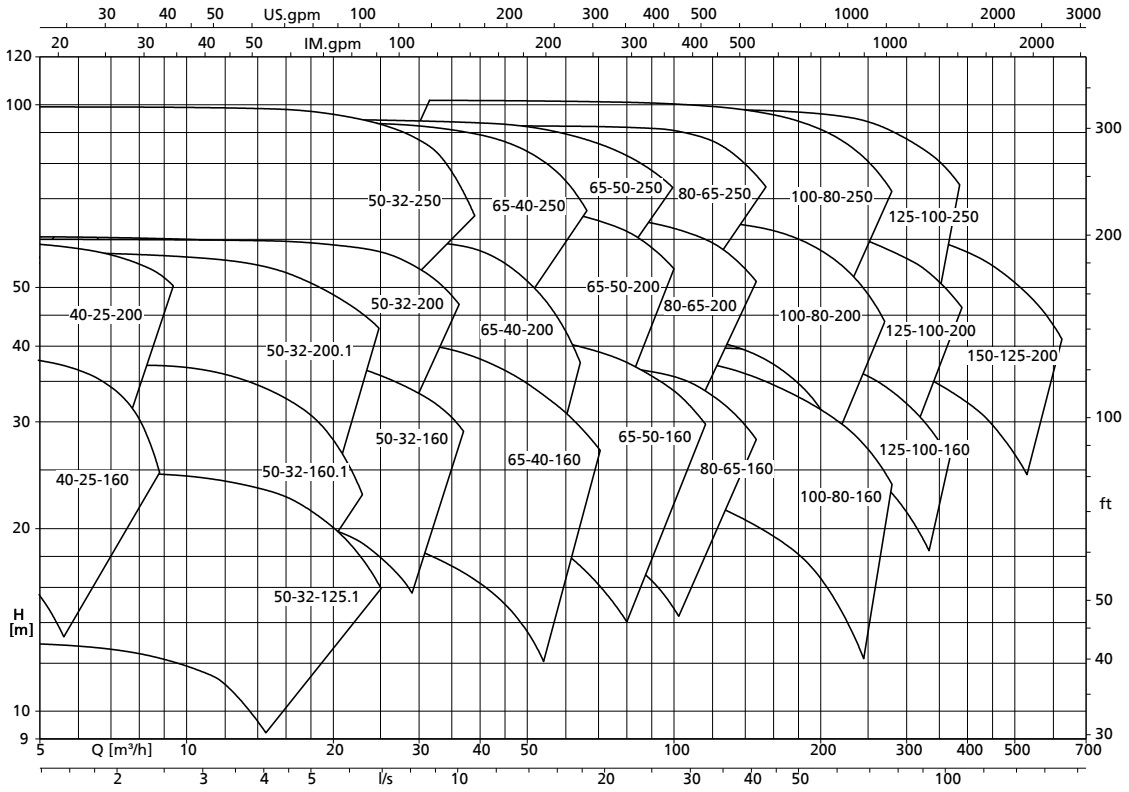
Technical data

Etanorm SYT	Shaft unit	Impeller				Speed limit	
		Outlet	Inlet	Nominal diameter		max.	min.
			Diameter	max.	min.		
		[mm]				[rpm]	
040-025-160	25	6,0	45,2	169	130	3600	800
040-025-200	25	6,0	45,2	209	160	3600	800
050-032-125.1	25	6,6	52,4	139	104	3600	800
050-032-160.1	25	5,7	52,7	170	136	4400	800
050-032-200.1	25	5,6	54,0	204	170	3800	800
050-032-160	25	8,5	60,6	174	136	3600	800
050-032-200	25	7,0	62,9	209	170	3700	800
050-032-250	25	7,5	62,6	261	209	3600	800
065-040-160	25	13,0	70,0	174	128	4400	800
065-040-200	25	9,4	69,4	209	165	3700	800
065-040-250	25	8,4	74,1	260	200	3600	800
065-040-315	35	7,5	75,3	326	260	2300	800
065-050-160	25	16,9	86,9	174	128	4400	800
065-050-200	25	13,8	83,1	219	170	3600	800
065-050-250	25	10,5	84,0	260	215	3600	800
065-050-315	35	10,0	87,0	323	265	2400	800
080-065-160	25	21,0	92,0	174	132	3900	800
080-065-200	25	17,0	99,7	219	175	3600	800
080-065-250	35	15,1	101,0	260	215	3600	800
080-065-315	35	13,7	108,2	320	260	1900	800
100-080-160	25	31,6	124,0	174	138	3600	800
100-080-200	35	24,5	115,0	219	180	3600	800
100-080-250	35	19,0	115,0	269	215	3600	800
100-080-315	35	18,7	115,6	334	269	1900	800
125-100-160	35	37,6	135,0	185	162	3600	800
125-100-200	35	32,5	142,0	219	179	3600	800
125-100-250	35	27,0	145,0	269	210	3600	800
125-100-315	35	23,0	142,0	334	270	1900	800
150-125-200	35	40,7	159,0	224	182	3600	800
150-125-250	35	37,0	162,4	269	218	2000	800
150-125-315	55	30,9	162,0	334	270	1900	800
150-125-400	55	25,9	162,4	419	330	1800	800
200-150-315	55	39,7	191,5	334	264	1800	800
200-150-400	55	33,0	191,4	419	330	1800	800

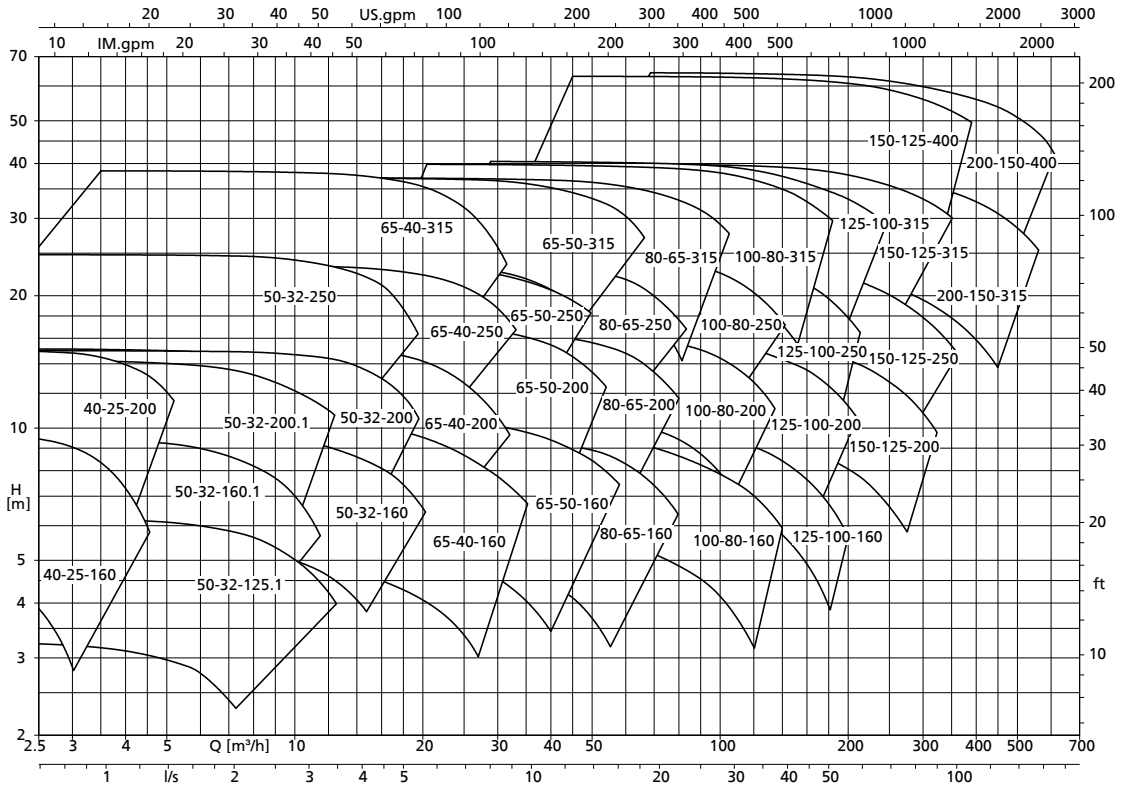
Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Selection charts

Etanorm SYT (fixed speed version), n = 2900 rpm



Etanorm SYT (fixed speed version), n = 1450 rpm



Related documents

Information/documents

Document	Reference number
Characteristic curves booklet (50 Hz) Fixed speed version	1311.45

Dimensions

Pump (Fig. 0 bare-shaft pump)

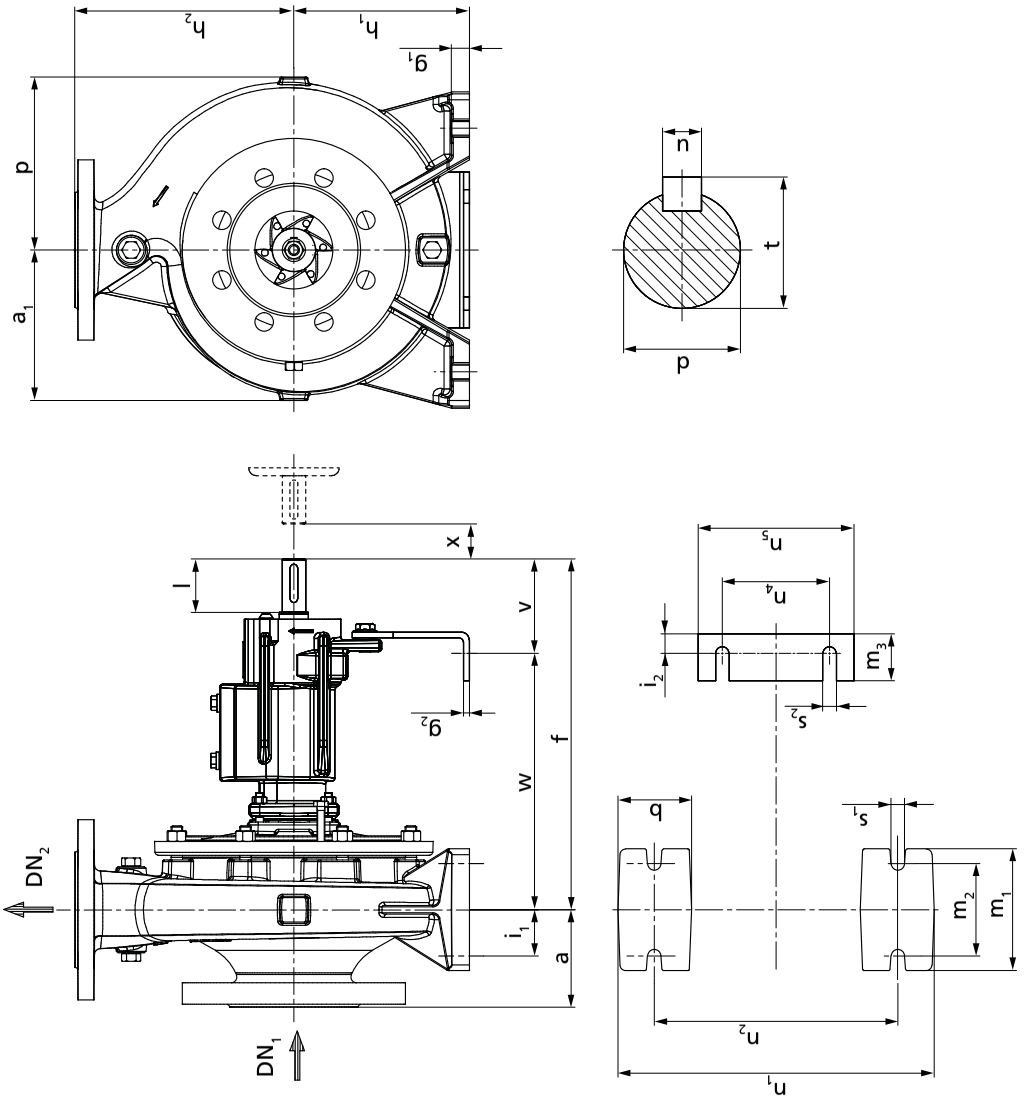


Fig. 314: Dimensions of Etanorm SYT pump (Fig. 0)

Dimensions of Etanorm SYT pump (Fig. 0)

Etanorm SYT	Bearing bracket	DN_1 [505]	DN_2 [505]	a [505]	a_1	b [505]	d [505]	f [505]	g_1	g_2	h_1 [505]	h_2 [505]	i_1	i_2	l [505]	m_1 [505]	m_2	m_3 [505]	n_1 [505]	n_2 [505]	n_4	n_5	p	s_1 [505]	s_2 [505]	t	u	v	w [505]	x [505]
		[mm]																												
040-025-160	WS_25_LS	40	25	80	118	50	24	360	15	4	132	160	35	23	50	100	70	48	240	190	110	160	118	14	14	27	8	100	260	100
040-025-200	WS_25_LS	40	25	80	142	50	24	360	15	4	160	180	35	23	50	100	70	48	240	190	110	160	142	14	14	27	8	100	260	100
050-032-125.1	WS_25_LS	50	32	80	116	50	24	360	15	4	112	140	35	23	50	100	70	48	190	140	110	160	116	14	14	27	8	100	260	100
050-032-160.1	WS_25_LS	50	32	80	116	50	24	360	15	4	132	160	35	23	50	100	70	48	240	190	110	160	121	14	14	27	8	100	260	100
050-032-200.1	WS_25_LS	50	32	80	142	50	24	360	18	4	160	180	35	23	50	100	70	48	240	190	110	160	142	14	14	27	8	100	260	100
050-032-160	WS_25_LS	50	32	80	118	50	24	360	15	4	132	160	35	23	50	100	70	48	240	190	110	160	128	14	14	27	8	100	260	100
050-032-200	WS_25_LS	50	32	80	142	50	24	360	18	4	160	180	35	23	50	100	70	48	240	190	110	160	143	14	14	27	8	100	260	100
050-032-250	WS_25_LS	50	32	100	169	65	24	360	18	6	180	225	47,5	25	50	125	95	48	320	250	110	160	178	14	14	27	8	100	260	100
065-040-160	WS_25_LS	65	40	80	119	50	24	360	15	4	132	160	35	23	50	100	70	48	240	190	110	160	134	14	14	27	8	100	260	100
065-040-200	WS_25_LS	65	40	100	142	50	24	360	18	4	160	180	35	23	50	100	70	48	265	212	110	160	155	14	14	27	8	100	260	100
065-040-250	WS_25_LS	65	40	100	169	65	24	360	18	6	180	225	47,5	25	50	125	95	48	320	250	110	160	179	14	14	27	8	100	260	100
065-040-315	WS_35_LS	65	40	125	207	65	32	470	18	6	225	250	47,5	24	80	125	95	48	345	280	110	160	207	14	14	35	10	130	340	100
065-050-160	WS_25_LS	65	50	100	128	50	24	360	18	4	160	180	35	23	50	100	70	48	265	212	110	160	149	14	14	27	8	100	260	100
065-050-200	WS_25_LS	65	50	100	144	50	24	360	18	4	160	200	35	23	50	100	70	48	265	212	110	160	163	14	14	27	8	100	260	100
065-050-250	WS_25_LS	65	50	100	170	65	24	360	18	6	180	225	47,5	25	50	125	95	48	320	250	110	160	186	14	14	27	8	100	260	100
065-050-315	WS_35_LS	65	50	125	207	65	32	470	18	6	225	280	47,5	24	80	125	95	48	345	280	110	160	215	14	14	35	10	130	340	100
080-065-160	WS_25_LS	80	65	100	132	65	24	360	18	4	160	200	47,5	23	50	125	95	48	280	212	110	160	160	14	14	27	8	100	260	100
080-065-200	WS_25_LS	80	65	100	155	65	24	360	18	6	180	225	47,5	25	50	125	95	48	320	250	110	160	178	14	14	27	8	100	260	140
080-065-250	WS_35_LS	80	65	100	179	80	32	470	20	6	200	250	60	24	80	160	120	48	360	280	110	160	199	19	14	35	10	130	340	140
080-065-315	WS_35_LS	80	65	125	209	80	32	470	20	6	225	280	60	24	80	160	120	48	400	315	110	160	229	19	14	35	10	130	340	140
100-080-160	WS_25_LS	100	80	125	138	65	24	360	18	6	180	225	47,5	25	50	125	95	48	320	250	110	160	174	14	14	27	8	100	260	140
100-080-200	WS_35_LS	100	80	125	159	65	32	470	18	4	180	250	47,5	22	80	125	95	48	345	280	110	160	188	14	14	35	10	130	340	140
100-080-250	WS_35_LS	100	80	125	183	80	32	470	18	6	200	280	60	24	80	160	120	48	400	315	110	160	209	19	14	35	10	130	340	140
100-080-315	WS_35_LS	100	80	125	218	80	32	470	20	6	250	315	60	24	80	160	120	48	400	315	110	160	242	19	14	35	10	130	340	140
125-100-160	WS_35_LS	125	100	125	178	80	32	470	18	6	200	280	60	24	80	160	120	48	360	280	110	160	225	19	14	35	10	130	340	140
125-100-200	WS_35_LS	125	100	125	173	80	32	470	18	6	200	280	60	24	80	160	120	48	360	280	110	160	212	19	14	35	10	130	340	140
125-100-250	WS_35_LS	125	100	140	188	80	32	470	18	6	225	280	60	24	80	160	120	48	400	315	110	160	219	19	14	35	10	130	340	140
125-100-315	WS_35_LS	125	100	140	225	80	32	470	18	6	250	315	60	24	80	160	120	48	400	315	110	160	255	19	14	35	10	130	340	140
150-125-200	WS_35_LS	150	125	140	189	80	32	470	20	6	250	315	60	24	80	160	120	48	400	315	110	160	242	19	14	35	10	130	340	140
150-125-250	WS_35_LS	150	125	140	226	80	32	470	20	6	250	355	60	24	80	160	120	48	400	315	110	160	275	19	14	35	10	130	340	140
150-125-315	WS_55_LS	150	125	140	243	100	42	530	20	6	280	355	75	25	110	200	150	48	500	400	110	160	280	24	14	45	12	160	370	140
150-125-400	WS_55_LS	150	125	140	277	100	42	530	20	6	315	400	75	25	110	200	150	48	500	400	110	160	309	24	14	45	12	160	370	140
200-150-315	WS_55_LS	200	150	160	255	100	42	530	20	6	280	400	75	25	110	200	150	48	550	450	110	160	304	24	14	45	12	160	370	140
200-150-400	WS_55_LS	200	150	160	289	100	42	530	20	6	315	450	75	25	110	200	150	48	550	450	110	160	331	24	14	45	12	160	370	140

505 Dimensions to EN 733

PumpDrive 2

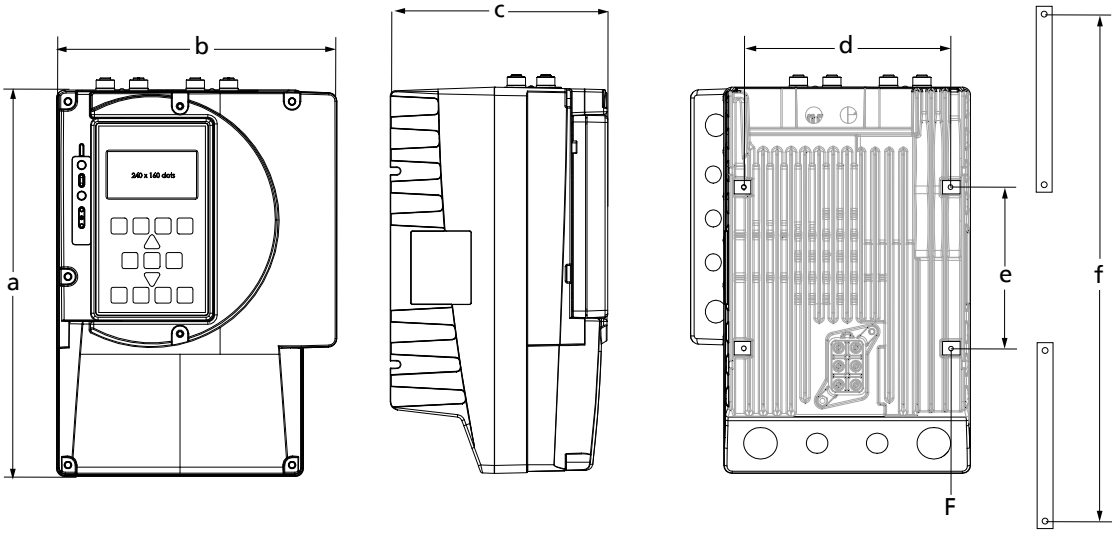


Fig. 315: PumpDrive 2 dimensions

Dimensions and weights

Housing type	P_N	Motor-mounted model					Wall-mounted/ cabinet-mounted model[506]					Fastening screws/bolts	[kg][507]
		a	b	c	d	e	a	b	c	d	f	F	
	[kW]	[mm]										-	
A	0,37	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	0,55	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	0,75	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	1,10	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	1,50	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
B	2,20	290	211	166	155	121	328	211	166	155	318	M4 × 10	6,5
B	3,00	290	211	166	155	121	328	211	166	155	318	M4 × 10	6,5
B	4,00	290	211	166	155	121	328	211	166	155	318	M4 × 10	6,5
C	5,50	330	280	210	219	205	401	280	210	219	387	M6 × 12	12,6
C	7,50	330	280	210	219	205	401	280	210	219	387	M6 × 12	12,6
C	11,00	330	280	210	219	205	401	280	210	219	387	M6 × 12	12,6
D	15,00	460	350	290	280	309	582	350	290	280	565	M8 × 14	27,6
D	18,50	460	350	290	280	309	582	350	290	280	565	M8 × 14	36
D	22,00	460	350	290	280	309	582	350	290	280	565	M8 × 14	36
D	30,00	460	350	290	280	309	582	350	290	280	565	M8 × 14	36
E	37,00	700	455	340	375	475	819	455	340	375	800	M8 × 14	57,6
E	45,00	700	455	340	375	475	819	455	340	375	800	M8 × 14	60
E	55,00	700	455	340	375	475	819	455	340	375	800	M8 × 14	60

506 The dimensions provided refer to the frequency inverter including the wall-mounting brackets.
507 Without motor adapter

Thermal Oil Pumps / Hot Water Pumps

Etabloc SYT

http://shop.ksb.com/catalog/k0/en/product/ES000791

Product benefits

- Improved efficiency and NPSHreq by experimentally verified hydraulic design of impellers (vanes)
- Operating costs reduced by trimming the nominal impeller diameter to match the specified duty point
- Little wear, low vibration levels and excellent smooth running characteristics thanks to good suction performance and virtually cavitation-free operation across a wide operating range
- Casing sealed reliably – even in varying operating conditions – by confined casing gasket
- Extended selection chart with additional pump sizes for small flow rates
- Easy to dismantle due to back pull-out design; no need to remove the pump casing from the piping

Further information

Prices on request

Selection charts 888
Dimensions 890

Further information

	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[508)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

508 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Main applications

- Heat transfer systems
- Hot water circulation

Fluids handled

- High-temperature hot water
- Thermal oil, mineral
- Thermal oil, synthetic

Operating data

Operating properties in standard applications

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q [m³/h]	≤ 280	≤ 337
Head	H [m]	≤ 68	≤ 99
Fluid temperature	T [°C]	≥ -30	≥ -30
Thermal oil (mineral / synthetic)		≤ +350	≤ +350
Fluid temperature		≤ +180	≤ +180
Hot water			
Operating pressure	p [bar]	≤ 16	≤ 16

Operating properties in marine applications, to DNV GL

Characteristic		Value		
		Class I[509]	Class II[510]	Class III[511]
				Steam
Design pressure	p [bar]	> 16	≤ 16	≤ 7
Design temperature	T [°C]	> 300	≤ 300	≤ 170
				Thermal oil
Design pressure	p [bar]	> 16	≤ 16	≤ 7
Design temperature	T [°C]	> 300	≤ 300	≤ 150
				Fuel oil, lubricating oil, combustible hydraulic oil
Design pressure	p [bar]	> 16	≤ 16	≤ 7
Design temperature	T [°C]	> 150	≤ 150	≤ 60
				Other fluids [512]
Design pressure	p [bar]	> 40	≤ 40	≤ 16
Design temperature	T [°C]	> 300	≤ 300	≤ 200

Loading pipes for flammable liquids on offshore supply vessels belong to the same piping class as the fuel. Class II piping suffices outside of category A engine rooms.

Pipes for toxic or corrosive fluids belong to piping class I.

Loading pipes for chemicals or liquefied gases are not specified in the table.

509 At least one condition must be met for class I piping (design pressure or design temperature).
510 Both conditions must be met for class II piping (design pressure and design temperature).
511 Both conditions must be met for class III piping (design pressure and design temperature).
512 Cargo oil pipes on oil tankers and open pipe outlets (drains, overflows, ventilation, boiler drain pipes, etc.), irrespective of pressure and temperature, belong to class III.

Design details

Design

- Volute casing pump
- Horizontal installation
- Vertical installation
- Back pull-out design
- Single-stage
- Ratings to EN 733
- Fixed speed version (without PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R) / variable speed version (with PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R)

Pump casing

- Radially split volute casing
- Replaceable casing wear rings
- Volute casing with integrally cast pump feet

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- II 3G Ex ec IIC T3 Gc
- II 2G Ex eb IIC T3 Gb
- II 2G Ex db (eb) IIB T4 Gb
- II 2G Ex db (eb) IIC T4 Gb

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[513)] (PumpDrive required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 0.55 kW to 45 kW
- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2 / PumpDrive 2 Eco:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types motor mounting (only for fluid temperature ≤ 110 °C), wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

Shaft seal

- KSB single mechanical seal
- To EN 12756

Impeller type

- Closed radial impeller with multiply curved vanes

Bearings

- Product-lubricated carbon plain bearings
- Grease-lubricated radial ball bearings in the motor housing

Static sealing elements

- Between volute casing and discharge cover
- Between discharge cover and bearing housing
- Between bearing housing and seal cover

513 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Designation

Designation example

Position																																		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
E	T	B	Y	0	5	0	-	0	3	2	-	1	6	0	-	S	G	S	D	B	0	8	A	2	1	1	0	0	2	-	-	B	P	D	2	E
See name plate and data sheet																									See data sheet								-			

Designation key

Position	Code	Description	
1-4	Pump type		
	ETBY	Etabloc SYT	
5-16	Size, e.g.		
	050	Nominal suction nozzle diameter [mm]	
	032	Nominal discharge nozzle diameter [mm]	
	160	Nominal impeller diameter [mm]	
17	Pump casing material		
	S	Nodular cast iron	EN-GJS-400-15
18	Impeller material		
	C	Stainless steel	1.4408 / A743CF8M
	G	Cast iron	EN-GJL-250 / A48CL35
19	Design		
	D	DNV GL (BT3)	
	S	Standard	
	X	Non-standard (BT3D, BT3)	
20	Casing cover		
	D	Casing cover for Etabloc SYT (dead-end arrangement)	
21	Shaft seal type		
	B	Dead-end arrangement, only for Etabloc SYT	
22-23	Seal code, single mechanical seal		
	08	AQ1V7GG	NU028M0-4EYS
24	Scope of supply		
	A	Pump only (Fig. 0)	
	D	Pump, motor	
	E	Back pull-out unit	
25	Shaft unit		
	2	Shaft unit 25	
26-29	Motor rating P_N [kW]		
	0075	7,50	
	...	...	
	1320	132,00	
30	Number of motor poles		
31-32	Explosion protection		
	ex	With explosion-proof motor	
	--	Without explosion-proof motor	
33	Product generation		
	B	Etabloc SYT 2014	
34-37	Design		
	-	Fixed speed version, without PumpDrive	
	PD2	Variable speed version, with PumpDrive 2	
	PD2E	Variable speed version, with PumpDrive 2 Eco	

Materials

Overview of available materials

Part No.	Description	Material
102	Volute casing	Nodular cast iron EN-GJS-400-15 / 536 Gr. 60-40-18
161	Casing cover	Nodular cast iron EN-GJS-400-15 / 536 Gr. 60-40-18
210	Shaft	Chrome steel 1.4021 + QT800
230	Impeller	Grey cast iron EN-GJL-250 / A 48 CL 35B
		Chrome steel 1.4408 / A 743 Gr. CF8M
310	Plain bearing	Carbon
341	Drive lantern	Grey cast iron EN-GJL-250 / A 48 CL 35B
350	Bearing housing	Nodular cast iron EN-GJS-400-15 / 536 Gr. 60-40-18
411.10/.15	Sealing elements	BU9593/ HDR
502.01	Casing wear ring, suction side	Grey cast iron EN-GJL-250 / CI
502.02	Casing wear ring, discharge side	Grey cast iron EN-GJL-250 / CI
902	Studs	8.8/ 5.8
903	Plug	Steel
920	Nut	8 + A2A/ 8 + B633 SC1 TP
920	Impeller nut	8
		A4/ AISI316

Overview of product features / selection tables

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

Excerpt from the overview of fluids handled with associated material variants

Fluid handled	Application limits[514]	Materials		Shaft seal
		Casing/impeller		Single mechanical seal
		Nodular cast iron/ grey cast iron	Nodular cast iron/ stainless steel	AQ1V7GG
		SG	SC	Code 08
High-temperature hot water[515]	t ≤ +180 °C	✘		✘
	p ≤ 16 bar			
Thermal oil on mineral oil basis	t ≤ -30 to +350 °C	✘		✘
	p ≤ 16 bar			
Thermal oil on synthetic basis, vaporisation pressure ≤ 1 bar at operating temperature[516]	t ≤ -30 to +350 °C	✘		✘
	p ≤ 16 bar			

514 The inlet pressure must not fall below atmospheric pressure.

515 Low-salt and fully desalinated water to VdTÜV technical instruction leaflet / AGFW technical instruction leaflet TCN 1466 (VdTÜV) 5/15 (AGFW), edition 02.89

516 For vaporisation pressure > 1 bar use an Etanorm SYT pump.

Overview of variants

Other designs on request

Overview of Etanorm SYT / Etabloc SYT / Etaline SYT variants

Design	102 / Volute casing	230 / Impeller	Mechanical seal	T [°C]	Main applications									
					Chemical industry / pharmaceutical industry	Plastic processing	Timber industry / paper industry / cardboard industry	Soap industry / laundry agent industry	Food industry	Textile industry	Mineral oil industry	Bitumen industry / tar processing industry	Metal processing industry	Aluminium industry
SG08	Nodular cast iron EN-GJS-400-15/ 536 Gr. 60-40-18	Grey cast iron EN-GJL-250/ A 48 Cl. 35B	Mech. seal AQ1V7GG	≥ -30 - ≤ +180[517] / 350[518]	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
SC08	Nodular cast iron EN-GJS-400-15/ 536 Gr. 60-40-18	Chrome steel 1.4408/ A 743 Gr. CF8M	Mech. seal AQ1V7GG	≥ -30 - ≤ +180[517] / 350[518]	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗

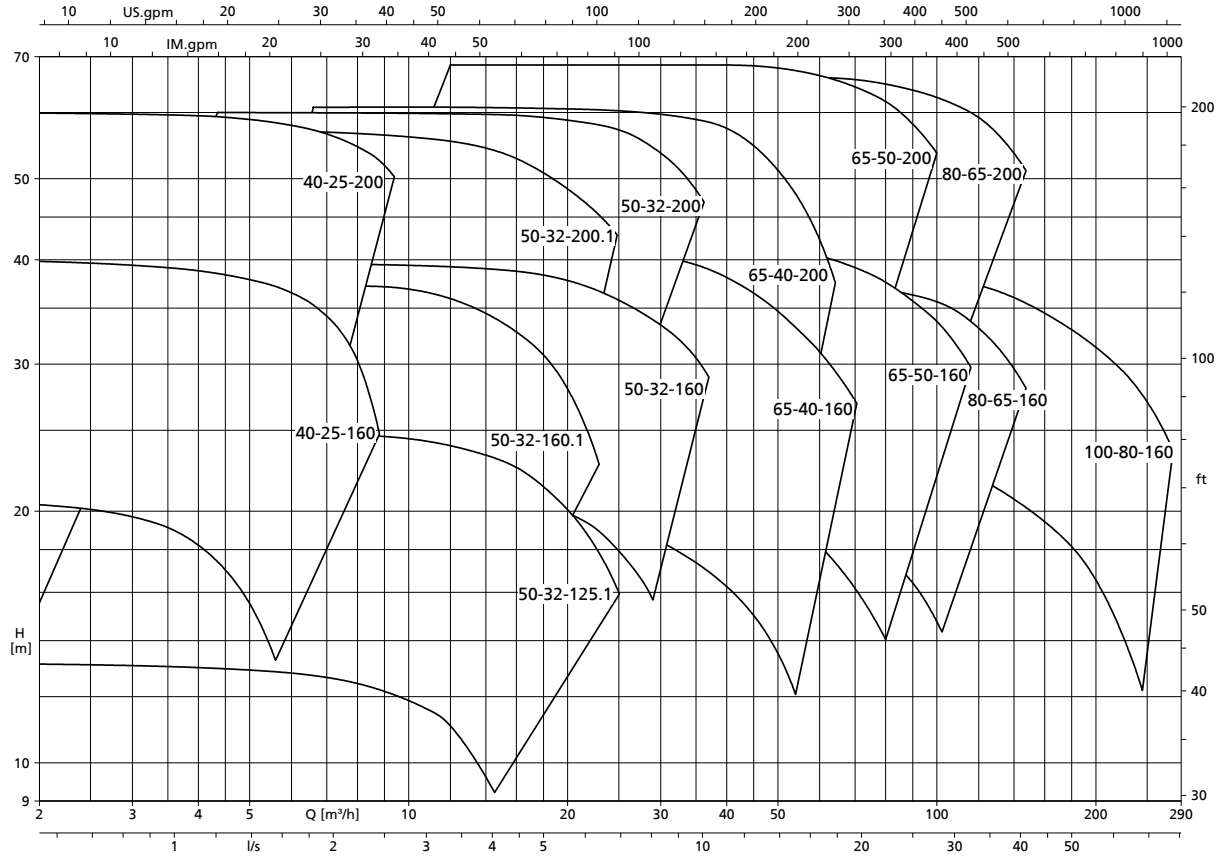
Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

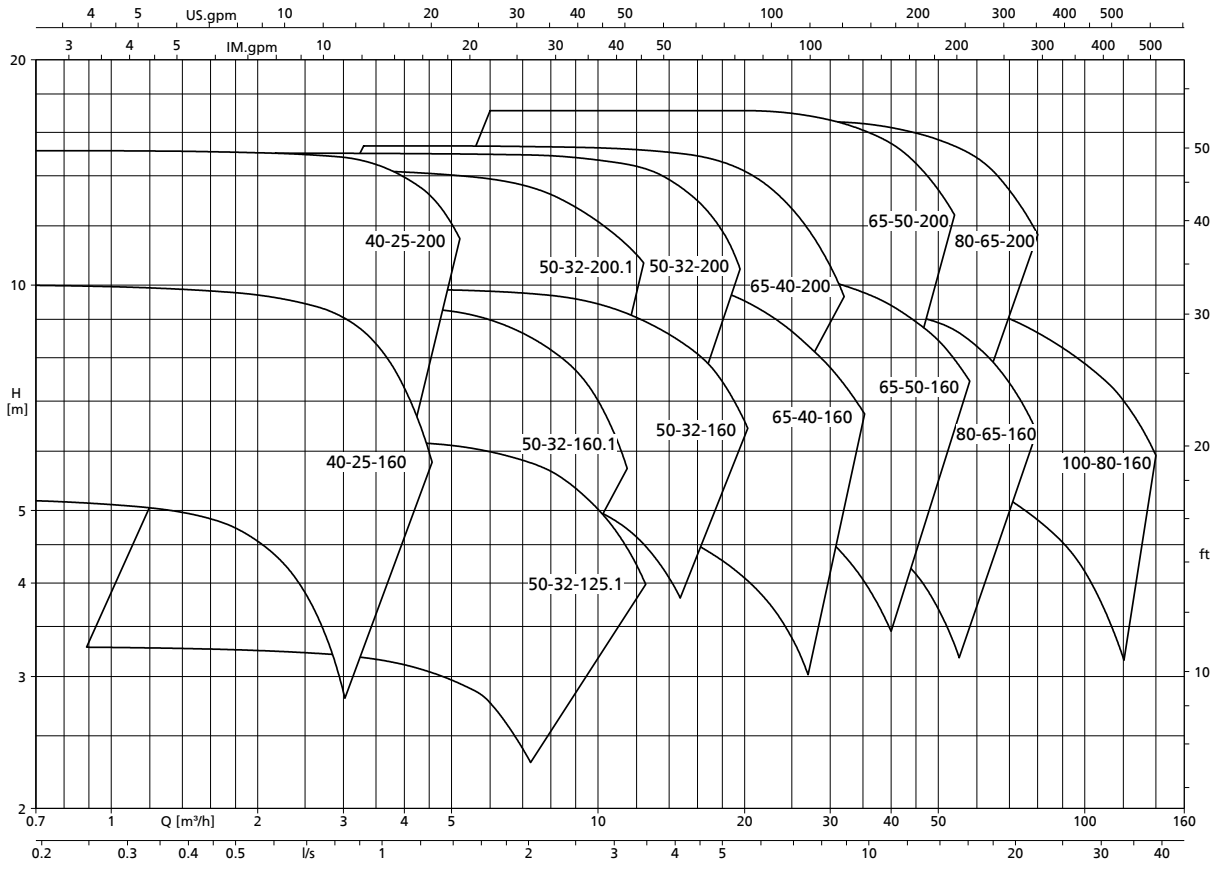
517 High-temperature hot water
518 Thermal oil

Selection charts

Etabloc SYT (fixed speed version), n = 2900 rpm



Etabloc SYT (fixed speed version), n = 1450 rpm



Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Related documents

Information/documents

Document	Reference number
Characteristic curves booklet (50 Hz) Fixed speed version	1311.45

Dimensions

Pump set (fixed speed version), n = 2900 rpm / 3500 rpm

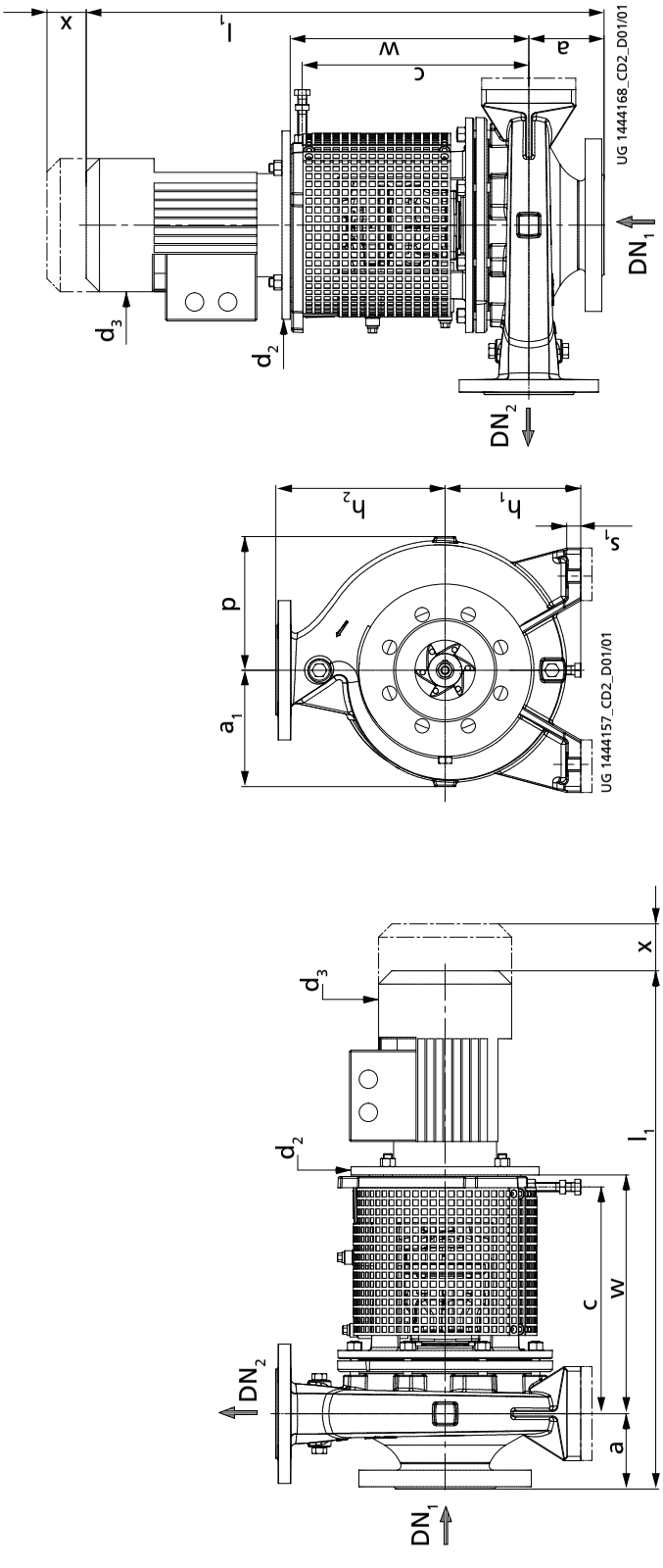


Fig. 316: Dimensions of Etabloc SYT, n = 2900 rpm / n = 3500 rpm

Dimensions

Etabloc SYT n = 2900 rpm n = 3500 rpm	Motor	P		I_N	DN_1	DN_2	a	a_1	b_1	c	d_1	d_2	d_3	h_1	h_2	l_1	m_1	m_2	n_1	n_2	p	s_1	w	x
		50 Hz	60 Hz	400 V 50 Hz																				
		[kW]	[kW]	[~A]	[mm]																			
040-025-160	80M	0,75	-	1,75	40	25	80	118	50	301	14	200	162	132	160	657	100	70	240	190	118	15	322	100
040-025-160	80M	1,10	1,27	2,41	40	25	80	118	50	301	14	200	162	132	160	671	100	70	240	190	118	15	322	100
040-025-160	90S	1,50	1,75	3,15	40	25	80	118	50	301	14	200	190	132	160	684	100	70	240	190	118	15	322	100
040-025-160	90L	2,20	2,55	4,46	40	25	80	118	50	301	14	200	190	132	160	710	100	70	240	190	118	15	322	100
040-025-160	100L	-	3,45	6,09	40	25	80	118	50	301	14	250	213	132	160	744	100	70	240	190	118	15	317	100
040-025-160	112M	-	4,55	7,82	40	25	80	118	50	301	14	250	234	132	160	768	100	70	240	190	118	15	317	100
040-025-200	90S	1,50	-	3,15	40	25	80	142	50	301	14	200	190	160	180	684	100	70	240	190	142	15	322	100
040-025-200	90L	2,20	-	4,46	40	25	80	142	50	301	14	200	190	160	180	710	100	70	240	190	142	15	322	100
040-025-200	100L	3,00	3,45	6,09	40	25	80	142	50	301	14	250	213	160	180	744	100	70	240	190	142	15	317	100
040-025-200	112M	4,00	4,55	7,82	40	25	80	142	50	301	14	250	234	160	180	768	100	70	240	190	142	15	317	100
040-025-200	132S	5,50	6,30	10,49	40	25	80	142	50	324	14	300	266	160	180	833	100	70	240	190	142	15	340	100
040-025-200	132S	-	8,60	14,12	40	25	80	142	50	324	14	300	266	160	180	833	100	70	240	190	142	15	340	100
050-032-125.1	80M	0,75	-	1,75	50	32	80	116	50	301	14	200	162	112[519)]	140	657	100	70	190	140	116	15	322	100
050-032-125.1	80M	1,10	-	2,41	50	32	80	116	50	301	14	200	162	112[519)]	140	671	100	70	190	140	116	15	322	100
050-032-125.1	90S	1,50	-	3,15	50	32	80	116	50	301	14	200	190	112[519)]	140	684	100	70	190	140	116	15	322	100
050-032-125.1	90L	2,20	-	4,46	50	32	80	116	50	301	14	200	190	112[519)]	140	710	100	70	190	140	116	15	322	100
050-032-125.1	100L	-	3,45	6,09	50	32	80	116	50	301	14	250	213	112[519)]	140	744	100	70	190	140	116	15	317	100
050-032-125.1	112M	-	4,55	7,82	50	32	80	116	50	301	14	250	234	112[519)]	140	768	100	70	190	140	116	15	317	100
050-032-125.1	132S	-	6,30	10,49	50	32	80	116	50	324	14	300	266	112[520)]	140	833	100	70	190	140	116	15	340	100
050-032-160	90L	2,20	-	4,46	50	32	80	118	50	301	14	200	190	132	160	710	100	70	240	190	128	15	322	100
050-032-160	100L	3,00	3,45	6,09	50	32	80	118	50	301	14	250	213	132	160	744	100	70	240	190	128	15	317	100
050-032-160	112M	4,00	4,55	7,82	50	32	80	118	50	301	14	250	234	132	160	768	100	70	240	190	128	15	317	100
050-032-160	132S	-	6,30	10,49	50	32	80	118	50	324	14	300	266	132[519)]	160	833	100	70	240	190	128	15	340	100
050-032-160	132S	-	8,60	14,12	50	32	80	118	50	324	14	300	266	132[519)]	160	833	100	70	240	190	128	15	340	100
050-032-160.1	90S	1,50	-	3,15	50	32	80	116	50	301	14	200	190	132	160	684	100	70	240	190	121	15	322	100
050-032-160.1	90L	2,20	2,55	4,46	50	32	80	116	50	301	14	200	190	132	160	710	100	70	240	190	121	15	322	100
050-032-160.1	100L	3,00	3,45	6,09	50	32	80	116	50	301	14	250	213	132	160	744	100	70	240	190	121	15	317	100
050-032-160.1	112M	4,00	4,55	7,82	50	32	80	116	50	301	14	250	234	132	160	768	100	70	240	190	121	15	317	100
050-032-160.1	132S	-	6,30	10,49	50	32	80	116	50	324	14	300	266	132[519)]	160	833	100	70	240	190	121	15	340	100
050-032-160.1	132S	-	8,60	14,12	50	32	80	116	50	324	14	300	266	132[519)]	160	833	100	70	240	190	121	15	340	100

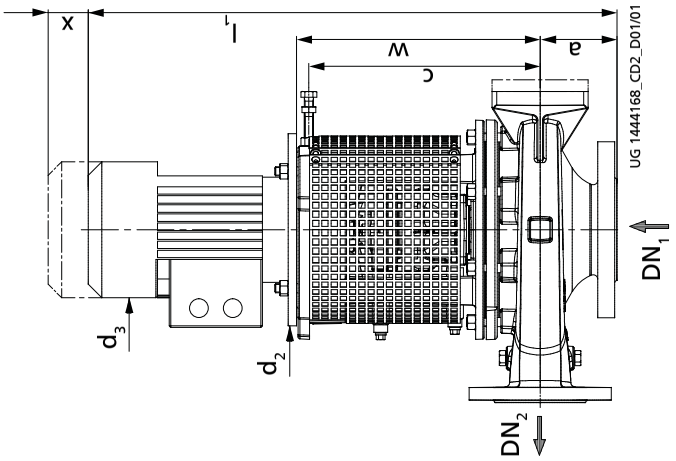
519 Pump feet shimmed 20 mm
520 Pump feet shimmed 40 mm

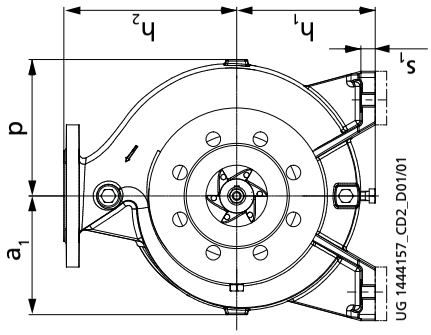
Etabloc SYT n = 2900 rpm n = 3500 rpm	Motor	P		I_N	DN_1	DN_2	a	a_1	b_1	c	d_1	d_2	d_3	h_1	h_2	l_1	m_1	m_2	n_1	n_2	p	s_1	w	x
		50 Hz	60 Hz	400 V 50 Hz																				
		[kW]	[kW]	[~A]	[mm]																			
050-032-160.1	160M	-	12,6	20,41	50	32	80	116	50	356	14	300	325	132[521)]	160	1000	100	70	240	190	121	15	374	100
050-032-200	112M	4,00	-	7,82	50	32	80	142	50	301	14	250	234	160	180	768	100	70	240	190	143	18	317	100
050-032-200	132S	5,50	-	10,49	50	32	80	142	50	324	14	300	266	160	180	833	100	70	240	190	143	18	340	100
050-032-200	132S	7,50	8,60	14,12	50	32	80	142	50	324	14	300	266	160	180	833	100	70	240	190	143	18	340	100
050-032-200	160M	11,0	12,6	20,41	50	32	80	142	50	356	14	350	325	160[519)]	180	1000	100	70	240	190	143	18	374	100
050-032-200	160M	-	17,3	27,25	50	32	80	142	50	356	14	350	325	160[519)]	180	1000	100	70	240	190	143	18	374	100
050-032-200.1	100L	3,00	-	6,09	50	32	80	142	50	301	14	250	213	160	180	744	100	70	240	190	142	18	317	100
050-032-200.1	112M	4,00	-	7,82	50	32	80	142	50	301	14	250	234	160	180	768	100	70	240	190	142	18	317	100
050-032-200.1	132S	5,50	6,30	10,49	50	32	80	142	50	324	14	300	266	160	180	833	100	70	240	190	142	18	340	100
050-032-200.1	132S	7,50	8,60	14,12	50	32	80	142	50	324	14	300	266	160	180	833	100	70	240	190	142	18	340	100
050-032-200.1	160M	-	12,6	20,41	50	32	80	142	50	356	14	350	325	160[519)]	180	1000	100	70	240	190	142	18	374	100
050-032-200.1	160M	-	17,3	27,25	50	32	80	142	50	356	14	350	325	160[519)]	180	1000	100	70	240	190	142	18	374	100
065-040-160	100L	3,00	-	6,09	65	40	80	119	50	301	14	250	213	132	160	744	100	70	240	190	134	15	317	100
065-040-160	112M	4,00	-	7,82	65	40	80	119	50	301	14	250	234	132	160	768	100	70	240	190	134	15	317	100
065-040-160	132S	5,50	6,30	10,49	65	40	80	119	50	324	14	300	266	132[519)]	160	833	100	70	240	190	134	15	340	100
065-040-160	132S	7,50	8,60	14,12	65	40	80	119	50	324	14	300	266	132[519)]	160	833	100	70	240	190	134	15	340	100
065-040-160	160M	-	12,6	20,41	65	40	80	119	50	356	14	350	325	132[522)]	160	1000	100	70	240	190	134	15	374	100
065-040-160	160M	-	17,3	27,25	65	40	80	119	50	356	14	350	325	132[522)]	160	1000	100	70	240	190	134	15	374	100
065-040-200	132S	5,50	-	10,49	65	40	100	142	50	324	14	300	266	160	180	853	100	70	265	212	155	18	340	100
065-040-200	132S	7,50	-	14,12	65	40	100	142	50	324	14	300	266	160	180	853	100	70	265	212	155	18	340	100
065-040-200	160M	11,0	12,6	20,41	65	40	100	142	50	356	14	350	325	160[519)]	180	1020	100	70	265	212	155	18	374	100
065-040-200	160M	15,0	17,3	27,25	65	40	100	142	50	356	14	350	325	160[519)]	180	1020	100	70	265	212	155	18	374	100
065-040-200	160L	18,5	21,3	33,38	65	40	100	142	50	356	14	350	325	160[519)]	180	1026	100	70	265	212	155	18	374	100
065-040-200	180M	22,0	24,5	39,52	65	40	100	142	50	356	14	350	370	160[519)]	180	1084	100	70	265	212	155	18	374	100
065-050-160	132S	5,50	-	10,49	65	50	100	128	50	324	14	300	266	160	180	853	100	70	265	212	149	18	340	100
065-050-160	132S	7,50	-	14,12	65	50	100	128	50	324	14	300	266	160	180	853	100	70	265	212	149	18	340	100
065-050-160	160M	11,0	12,6	20,41	65	50	100	128	50	356	14	350	325	160[519)]	180	1020	100	70	265	212	149	18	374	100
065-050-160	160M	-	17,3	27,25	65	50	100	128	50	356	14	350	325	160[519)]	180	1020	100	70	265	212	149	18	374	100
065-050-160	160L	-	21,3	33,38	65	50	100	128	50	356	14	350	325	160[519)]	180	1026	100	70	265	212	149	18	374	100
065-050-160	180M	-	24,5	39,52	65	50	100	128	50	356	14	350	370	160[519)]	180	1084	100	70	265	212	149	18	374	100
065-050-200	160M	11,0	-	20,41	65	50	100	144	50	356	14	350	325	160[519)]	200	1020	100	70	265	212	163	18	374	100

521 Pump feet shimmed 50 mm
522 Pump feet shimmed 30 mm

Etabloc SYT n = 2900 rpm n = 3500 rpm	Motor	P		I_N	DN_1	DN_2	a	a_1	b_1	c	d_1	d_2	d_3	h_1	h_2	l_1	m_1	m_2	n_1	n_2	p	s_1	w	x
		50 Hz	60 Hz	400 V 50 Hz																				
		[kW]	[kW]	[~A]	[mm]																			
065-050-200	160M	15,0	-	27,25	65	50	100	144	50	356	14	350	325	160[519)]	200	1020	100	70	265	212	163	18	374	100
065-050-200	160L	18,5	-	33,38	65	50	100	144	50	356	14	350	325	160[519)]	200	1026	100	70	265	212	163	18	374	100
065-050-200	180M	22,0	24,5	39,52	65	50	100	144	50	356	14	350	370	160[519)]	200	1084	100	70	265	212	163	18	374	100
080-065-160	132S	7,50	-	14,12	80	65	100	132	65	324	14	300	266	160	200	853	125	95	280	212	160	18	340	100
080-065-160	160M	11,0	-	20,41	80	65	100	132	65	356	14	350	325	160[519)]	200	1020	125	95	280	212	160	18	374	100
080-065-160	160M	15,0	17,3	27,25	80	65	100	132	65	356	14	350	325	160[519)]	200	1020	125	95	280	212	160	18	374	100
080-065-160	160L	-	21,3	33,38	80	65	100	132	65	356	14	350	325	160[519)]	200	1026	125	95	280	212	160	18	374	100
080-065-160	180M	-	24,5	39,52	80	65	100	132	65	356	14	350	370	160[519)]	200	1084	125	95	280	212	160	18	374	100
080-065-200	160M	15,0	-	27,25	80	65	100	155	65	356	14	350	325	180	225	1020	125	95	320	250	178	18	374	140
080-065-200	160L	18,5	-	33,38	80	65	100	155	65	356	14	350	325	180	225	1026	125	95	320	250	178	18	374	140
080-065-200	180M	22,0	24,5	39,52	80	65	100	155	65	356	14	350	370	180	225	1084	125	95	320	250	178	18	374	140
100-080-160	160M	15,0	-	27,25	100	80	125	138	65	356	14	350	325	180	225	1045	125	95	320	250	174	18	374	140
100-080-160	160L	18,5	-	33,38	100	80	125	138	65	356	14	350	325	180	225	1051	125	95	320	250	174	18	374	140
100-080-160	180M	22,0	24,5	39,52	100	80	125	138	65	356	14	350	370	180	225	1109	125	95	320	250	174	18	374	140

Pump set (fixed speed version), n = 1450 rpm / 1750 rpm





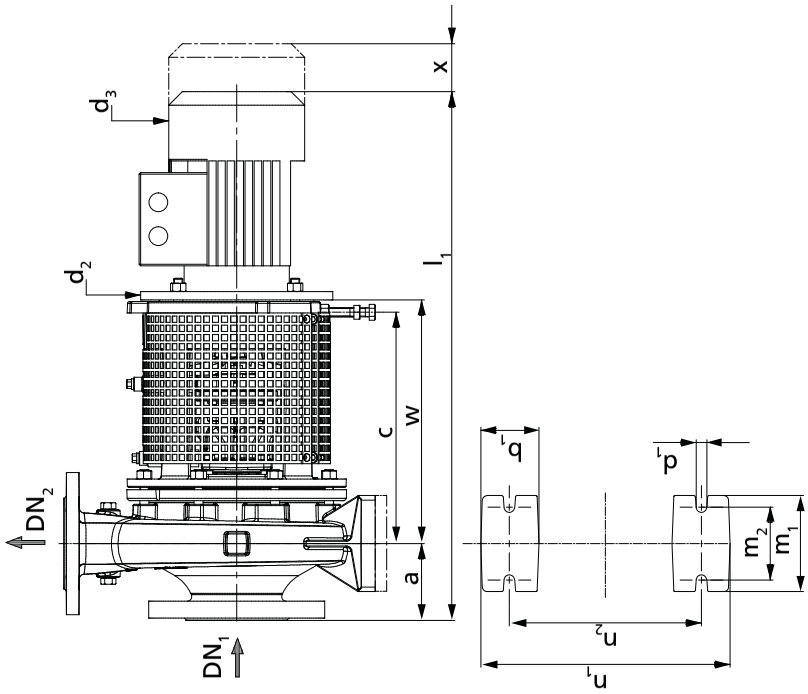


Fig. 317: Dimensions of Etabloc SYT, n = 1450 rpm / n = 1750 rpm

Dimensions

Etabloc SYT n = 1450 rpm n = 1750 rpm	Motor	P		I_N	DN_1	DN_2	a	a_1	b_1	c	d_1	d_2	d_3	h_1	h_2	l_1	m_1	m_2	n_1	n_2	p	s_1	w	x
		50 Hz	60 Hz	400 V 50 Hz																				
		[kW]	[kW]	[~A]	[mm]																			
040-025-160	80M	-	0,63	1,46	40	25	80	118	50	301	14	200	162	132	160	657	100	70	240	190	118	15	322	100
040-025-160	90S	1,10	1,27	2,51	40	25	80	118	50	301	14	200	190	132	160	684	100	70	240	190	118	15	322	100
040-025-200	80M	0,55	0,63	1,46	40	25	80	142	50	301	14	200	162	160	180	657	100	70	240	190	142	15	322	100
040-025-200	80M	-	0,86	1,67	40	25	80	142	50	301	14	200	162	160	180	657	100	70	240	190	142	15	322	100
040-025-200	90S	-	1,27	2,51	40	25	80	142	50	301	14	200	190	160	180	684	100	70	240	190	142	15	322	100
050-032-125.1	80M	0,55	0,63	1,46	50	32	80	116	50	301	14	200	162	112[523)]	140	657	100	70	190	140	116	15	322	100
050-032-125.1	90S	1,10	1,27	2,51	50	32	80	116	50	301	14	200	190	112[523)]	140	684	100	70	190	140	116	15	322	100
050-032-160	80M	0,55	0,63	1,46	50	32	80	118	50	301	14	200	162	132	160	657	100	70	240	190	128	15	322	100
050-032-160	80M	0,75	0,86	1,67	50	32	80	118	50	301	14	200	162	132	160	657	100	70	240	190	128	15	322	100
050-032-160	90S	-	1,27	2,51	50	32	80	118	50	301	14	200	190	132	160	684	100	70	240	190	128	15	322	100
050-032-160.1	80M	0,55	0,63	1,46	50	32	80	116	50	301	14	200	162	132	160	657	100	70	240	190	121	15	322	100
050-032-160.1	80M	-	0,86	1,67	50	32	80	116	50	301	14	200	162	132	160	657	100	70	240	190	121	15	322	100
050-032-200	80M	0,55	-	1,46	50	32	80	142	50	301	14	200	162	160	180	657	100	70	240	190	143	18	322	100
050-032-200	80M	0,75	-	1,67	50	32	80	142	50	301	14	200	162	160	180	657	100	70	240	190	143	18	322	100
050-032-200	90S	1,10	1,27	2,51	50	32	80	142	50	301	14	200	190	160	180	684	100	70	240	190	143	18	322	100
050-032-200	90L	-	1,75	3,32	50	32	80	142	50	301	14	200	190	160	180	710	100	70	240	190	143	18	322	100
050-032-200	100L	-	2,55	4,67	50	32	80	142	50	301	14	250	213	160	180	744	100	70	240	190	143	18	317	100
050-032-200.1	80M	0,55	0,63	1,46	50	32	80	142	50	301	14	200	162	160	180	657	100	70	240	190	142	18	322	100
050-032-200.1	80M	0,75	0,86	1,67	50	32	80	142	50	301	14	200	162	160	180	657	100	70	240	190	142	18	322	100
050-032-200.1	90S	-	1,27	2,51	50	32	80	142	50	301	14	200	190	160	180	684	100	70	240	190	142	18	322	100
050-032-200.1	90L	-	1,75	3,32	50	32	80	142	50	301	14	200	190	160	180	710	100	70	240	190	142	18	322	100
065-040-160	80M	0,55	-	1,46	65	40	80	119	50	301	14	200	162	132	160	657	100	70	240	190	134	15	322	100
065-040-160	80M	0,75	0,86	1,67	65	40	80	119	50	301	14	200	162	132	160	657	100	70	240	190	134	15	322	100
065-040-160	90S	1,10	1,27	2,51	65	40	80	119	50	301	14	200	190	132	160	684	100	70	240	190	134	15	322	100
065-040-160	90L	-	1,75	3,32	65	40	80	119	50	301	14	200	190	132	160	710	100	70	240	190	134	15	322	100
065-040-160	100L	-	2,55	4,67	65	40	80	119	50	301	14	250	213	132	160	744	100	70	240	190	134	15	317	100
065-040-200	80M	0,75	-	1,67	65	40	100	142	50	301	14	200	162	160	180	677	100	70	265	212	155	18	322	100
065-040-200	90S	1,10	-	2,51	65	40	100	142	50	301	14	200	190	160	180	704	100	70	265	212	155	18	322	100
065-040-200	90L	1,50	1,75	3,32	65	40	100	142	50	301	14	200	190	160	180	730	100	70	265	212	155	18	322	100
065-040-200	100L	-	2,55	4,67	65	40	100	142	50	301	14	250	213	160	180	764	100	70	265	212	155	18	317	100
065-040-200	100L	-	3,45	6,18	65	40	100	142	50	301	14	250	213	160	180	799	100	70	265	212	155	18	317	100
065-050-160	80M	0,75	-	1,67	65	50	100	128	50	301	14	200	162	160	180	677	100	70	265	212	149	18	322	100

523 Pump feet shimmed 20 mm

Etabloc SYT n = 1450 rpm n = 1750 rpm	Motor	P		I_N	DN_1	DN_2	a	a_1	b_1	c	d_1	d_2	d_3	h_1	h_2	l_1	m_1	m_2	n_1	n_2	p	s_1	w	x
		50 Hz	60 Hz	400 V 50 Hz																				
		[kW]	[kW]	[~A]	[mm]																			
065-050-160	90S	1,10	1,27	2,51	65	50	100	128	50	301	14	200	190	160	180	704	100	70	265	212	149	18	322	100
065-050-160	90L	1,50	1,75	3,32	65	50	100	128	50	301	14	200	190	160	180	730	100	70	265	212	149	18	322	100
065-050-160	100L	-	2,55	4,67	65	50	100	128	50	301	14	250	213	160	180	764	100	70	265	212	149	18	317	100
065-050-160	100L	-	3,45	6,18	65	50	100	128	50	301	14	250	213	160	180	799	100	70	265	212	149	18	317	100
065-050-200	90L	1,50	-	3,32	65	50	100	144	50	301	14	200	190	160	200	730	100	70	265	212	163	18	322	100
065-050-200	100L	2,20	2,55	4,67	65	50	100	144	50	301	14	250	213	160	200	764	100	70	265	212	163	18	317	100
065-050-200	100L	3,00	3,45	6,18	65	50	100	144	50	301	14	250	213	160	200	799	100	70	265	212	163	18	317	100
065-050-200	112M	-	4,55	8,23	65	50	100	144	50	301	14	250	234	160	200	788	100	70	265	212	163	18	317	100
065-050-200	132S	-	6,30	11,32	65	50	100	144	50	324	14	300	266	160	200	853	100	70	265	212	163	18	340	100
080-065-160	90S	1,10	-	2,51	80	65	100	132	65	301	14	200	190	160	200	704	125	95	280	212	160	18	322	100
080-065-160	90L	1,50	1,75	3,32	80	65	100	132	65	301	14	200	190	160	200	730	125	95	280	212	160	18	322	100
080-065-160	100L	2,20	2,55	4,67	80	65	100	132	65	301	14	250	213	160	200	764	125	95	280	212	160	18	317	100
080-065-160	100L	-	3,45	6,18	80	65	100	132	65	301	14	250	213	160	200	799	125	95	280	212	160	18	317	100
080-065-160	112M	-	4,55	8,23	80	65	100	132	65	301	14	250	234	160	200	788	125	95	280	212	160	18	317	100
080-065-160	132S	-	6,30	11,32	80	65	100	132	65	324	14	300	266	160	200	853	125	95	280	212	160	18	340	100
080-065-200	100L	2,20	-	4,67	80	65	100	155	65	301	14	250	213	180	225	764	125	95	320	250	178	18	317	140
080-065-200	100L	3,00	3,45	6,18	80	65	100	155	65	301	14	250	213	180	225	799	125	95	320	250	178	18	317	140
080-065-200	112M	4,00	4,55	8,23	80	65	100	155	65	301	14	250	234	180	225	788	125	95	320	250	178	18	317	140
080-065-200	132S	-	6,30	11,32	80	65	100	155	65	324	14	300	266	180	225	853	125	95	320	250	178	18	340	140
080-065-200	132M	-	8,60	14,70	80	65	100	155	65	324	14	300	298	180	225	881	125	95	320	250	178	18	340	140
100-080-160	90L	1,50	-	3,32	100	80	125	138	65	301	14	200	190	180	225	755	125	95	320	250	174	18	322	140
100-080-160	100L	2,20	-	4,67	100	80	125	138	65	301	14	250	213	180	225	789	125	95	320	250	174	18	317	140
100-080-160	100L	3,00	3,45	6,18	100	80	125	138	65	301	14	250	213	180	225	824	125	95	320	250	174	18	317	140
100-080-160	112M	-	4,55	8,23	100	80	125	138	65	301	14	250	234	180	225	813	125	95	320	250	174	18	317	140
100-080-160	132S	-	6,30	11,32	100	80	125	138	65	324	14	300	266	180	225	878	125	95	320	250	174	18	340	140

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

PumpDrive 2

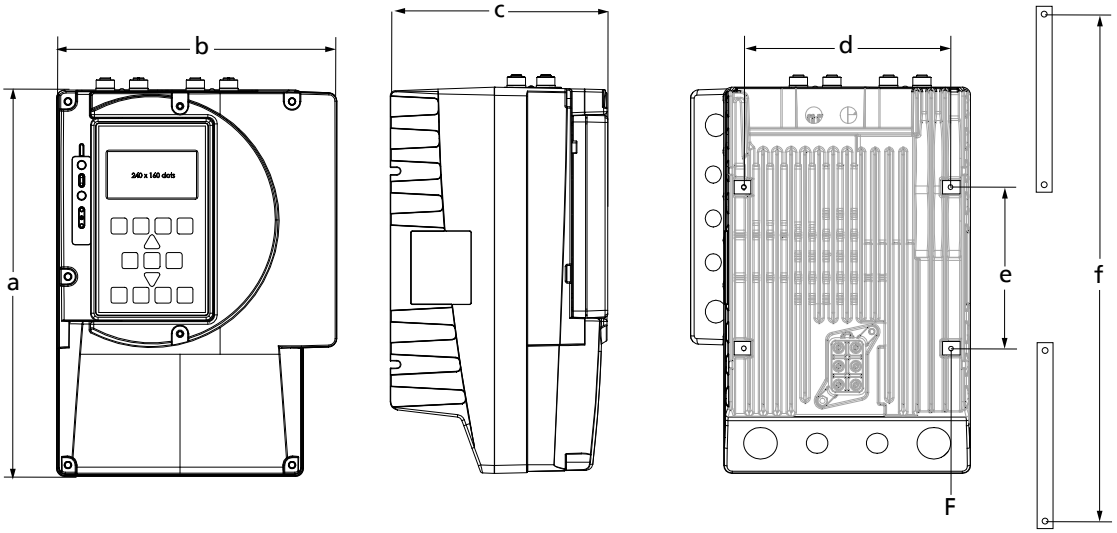


Fig. 318: PumpDrive 2 dimensions

Dimensions and weights

Housing type	P_N	Motor-mounted model					Wall-mounted/ cabinet-mounted model[524]					Fastening screws/bolts	[kg][525]
		a	b	c	d	e	a	b	c	d	f	F	
	[kW]	[mm]										-	
A	0,37	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	0,55	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	0,75	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	1,10	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	1,50	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
B	2,20	290	211	166	155	121	328	211	166	155	318	M4 × 10	6,5
B	3,00	290	211	166	155	121	328	211	166	155	318	M4 × 10	6,5
B	4,00	290	211	166	155	121	328	211	166	155	318	M4 × 10	6,5
C	5,50	330	280	210	219	205	401	280	210	219	387	M6 × 12	12,6
C	7,50	330	280	210	219	205	401	280	210	219	387	M6 × 12	12,6
C	11,00	330	280	210	219	205	401	280	210	219	387	M6 × 12	12,6
D	15,00	460	350	290	280	309	582	350	290	280	565	M8 × 14	27,6
D	18,50	460	350	290	280	309	582	350	290	280	565	M8 × 14	36
D	22,00	460	350	290	280	309	582	350	290	280	565	M8 × 14	36
D	30,00	460	350	290	280	309	582	350	290	280	565	M8 × 14	36
E	37,00	700	455	340	375	475	819	455	340	375	800	M8 × 14	57,6
E	45,00	700	455	340	375	475	819	455	340	375	800	M8 × 14	60
E	55,00	700	455	340	375	475	819	455	340	375	800	M8 × 14	60

524 The dimensions provided refer to the frequency inverter including the wall-mounting brackets.
525 Without motor adapter

Installation types

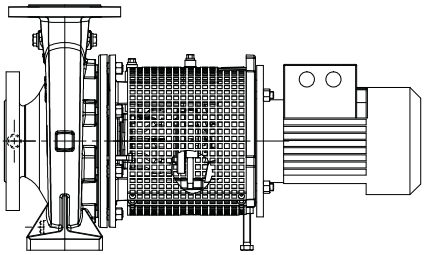


Fig. 319: Horizontal installation, Etabloc SYT

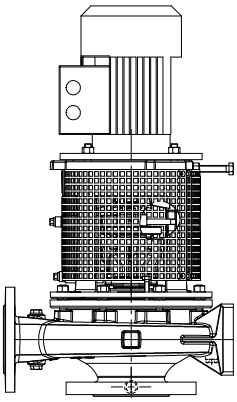


Fig. 320: Vertical installation, Etabloc SYT

Thermal Oil Pumps / Hot Water Pumps

Etaline SYT

http://shop.ksb.com/catalog/k0/en/product/ES000789

Product benefits

- Improved efficiency and NPSHreq by experimentally verified hydraulic design of impellers (vanes)
- Operating costs reduced by trimming the nominal impeller diameter to match the specified duty point
- Little wear, low vibration levels and excellent smooth running characteristics thanks to good suction performance and virtually cavitation-free operation across a wide operating range
- Casing sealed reliably – even in varying operating conditions – by confined casing gasket
- Extended selection chart with additional pump sizes for small flow rates
- Easy to dismantle due to back pull-out design; no need to remove the pump casing from the piping

Further information

Prices on request

Selection charts 905
Dimensions 907

Further information

	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[526)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

526 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Main applications

- Heat transfer systems
- Hot water circulation

Fluids handled

- High-temperature hot water
- Thermal oil, mineral
- Thermal oil, synthetic

Operating data

Operating properties in standard applications

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q [m³/h]	≤ 316	≤ 228
Head	H [m]	≤ 69	≤ 101
Fluid temperature	T [°C]	≥ -30	≥ -30
Thermal oil		≤ +350	≤ +350
Fluid temperature		≤ +180	≤ +180
Hot water			
Operating pressure	p [bar]	≤ 16	≤ 16

Operating properties in marine applications, to DNV GL

Characteristic		Value		
		Class I[527]	Class II[528]	Class III[529]
				Steam
Design pressure	p [bar]	> 16	≤ 16	≤ 7
Design temperature	T [°C]	> 300	≤ 300	≤ 170
				Thermal oil
Design pressure	p [bar]	> 16	≤ 16	≤ 7
Design temperature	T [°C]	> 300	≤ 300	≤ 150
				Fuel oil, lubricating oil, combustible hydraulic oil
Design pressure	p [bar]	> 16	≤ 16	≤ 7
Design temperature	T [°C]	> 150	≤ 150	≤ 60
				Other fluids [530]
Design pressure	p [bar]	> 40	≤ 40	≤ 16
Design temperature	T [°C]	> 300	≤ 300	≤ 200

Loading pipes for flammable liquids on offshore supply vessels belong to the same piping class as the fuel. Class II piping suffices outside of category A engine rooms.

Pipes for toxic or corrosive fluids belong to piping class I.

Loading pipes for chemicals or liquefied gases are not specified in the table.

527 At least one condition must be met for class I piping (design pressure or design temperature).
528 Both conditions must be met for class II piping (design pressure and design temperature).
529 Both conditions must be met for class III piping (design pressure and design temperature).
530 Cargo oil pipes on oil tankers and open pipe outlets (drains, overflows, ventilation, boiler drain pipes, etc.), irrespective of pressure and temperature, belong to class III.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Design details

Design

- Volute casing pump
- Horizontal installation
- Vertical installation
- Back pull-out design
- Single-stage
- Fixed speed version (without PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R) / variable speed version (with PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R)

Pump casing

- Radially split volute casing
- Replaceable casing wear rings
- In-line design

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- II 3G Ex ec IIC T3 Gc
- II 2G Ex eb IIC T3 Gb
- II 2G Ex db (eb) IIB T4 Gb
- II 2G Ex db (eb) IIC T4 Gb

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[531)] (PumpDrive required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 0.55 kW to 45 kW
- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2 / PumpDrive 2 Eco:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types motor mounting (only for fluid temperature ≤ 110 °C), wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

Shaft seal

- KSB single mechanical seal
- To EN 12756

Impeller type

- Closed radial impeller with multiply curved vanes

Bearings

- Product-lubricated carbon plain bearings
- Grease-lubricated radial ball bearings in the motor housing

Static sealing elements

- Between volute casing and discharge cover
- Between discharge cover and bearing housing
- Between bearing housing and seal cover

531 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Designation

Designation example

Position																																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
E	T	L	Y	0	3	2	-	0	3	2	-	1	6	0	-	S	G	S	D	B	0	8	A	2	1	1	0	0	2	-	-	B	P	D	2	E
See name plate and data sheet																									See data sheet										

Designation key

Position	Code	Description	
1-4	Pump type		
	ETLY	Etaline SYT	
5-16	Size, e.g.		
	032	Nominal suction nozzle diameter [mm]	
	032	Nominal discharge nozzle diameter [mm]	
	160	Nominal impeller diameter [mm]	
17	Pump casing material		
	S	Nodular cast iron	EN-GJS-400-15
18	Impeller material		
	G	Cast iron	EN-GJL-250 / A48CL35
	C	Stainless steel	1.4408 / A743CF8M
19	Design		
	D	DNV GL (BT3)	
	S	Standard	
	X	Non-standard (BT3D, BT3)	
20	Casing cover		
	D	Casing cover Etaline SYT	
21	Shaft seal type		
	B	Dead-end arrangement	
22-23	Seal code, single mechanical seal		
	08	AQ1V7GG	NU028M0-4EYS
24	Scope of supply		
	A	Pump only (Fig. 0)	
	D	Pump, motor	
	E	Back pull-out unit	
25	Shaft unit		
	2	Shaft unit 25	
26-29	Motor rating P_N [kW]		
	0075	7,50	
	...	...	
	1320	132,00	
30	Number of motor poles		
31-32	Explosion protection		
	ex	With explosion-proof motor	
	--	Without explosion-proof motor	
33	Product generation		
	B	Etaline SYT 2014	
34-37	Design		
	-	Fixed speed version, without PumpDrive	
	PD2	Variable speed version, with PumpDrive 2	
	PD2E	Variable speed version, with PumpDrive 2 Eco	

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Materials

Overview of available materials

Part No.	Description	Material
102	Volute casing	Nodular cast iron EN-GJS-400-15 / 536 Gr. 60-40-18
161	Casing cover	Nodular cast iron EN-GJS-400-15 / 536 Gr. 60-40-18
210	Shaft	Chrome steel 1.4021 + QT800
230	Impeller	Grey cast iron EN-GJL-250 / A 48 CL 35B
		Chrome steel 1.4408 / A 743 Gr. CF8M
310	Plain bearing	Carbon
341	Drive lantern	Grey cast iron EN-GJL-250 / A 48 CL 35B
350	Bearing housing	Nodular cast iron EN-GJS-400-15 / 536 Gr. 60-40-18
411.10/.15	Sealing elements	BU9593/ HDR
502.01	Casing wear ring, suction side	Grey cast iron EN-GJL-250 / CI
502.02	Casing wear ring, discharge side	Grey cast iron EN-GJL-250 / CI
902	Studs	8.8/ 5.8
903	Plug	Steel
920	Nut	8 + A2A/ 8 + B633 SC1 TP
920	Impeller nut	8
		A4/ AISI316

Overview of product features / selection tables

Overview of fluids handled

KSB EasySelect, selection software for all applications

KSB EasySelect is a comprehensive selection tool for all applications. It guides users to an optimal solution for their projects by offering a fast, easy and user-friendly way to select and configure pumps and valves. All that is required are some project-specific criteria and a few minutes' time. The tool systematically guides the user through KSB's wide range of products to the right product for the application at hand.

https://www.ksb.com/ksb-en/Select_your_pumps_and_valves/ksb-easyselect/

Other fluids upon request.

Excerpt from the overview of fluids handled with associated material variants

Fluid handled	Application limits[532]	Materials		Shaft seal
		Casing/impeller		Single mechanical seal
		Nodular cast iron/ grey cast iron	Nodular cast iron/ stainless steel	AQ1V7GG
		SG	SC	Code 08
High-temperature hot water[533]	t ≤ +180 °C	✗		✗
	p ≤ 16 bar			
Thermal oil on mineral oil basis	t ≤ -30 to +350 °C	✗		✗
	p ≤ 16 bar			
Thermal oil on synthetic basis, vaporisation pressure ≤ 1 bar at operating temperature[534]	t ≤ -30 to +350 °C	✗		✗
	p ≤ 16 bar			

Overview of variants

Other designs on request

Overview of Etanorm SYT / Etabloc SYT / Etaline SYT variants

Design	102 / Volute casing	230 / Impeller	Mechanical seal	T [°C]	Main applications									
					Chemical industry / pharmaceutical industry	Plastic processing	Timber industry / paper industry / cardboard industry	Soap industry / laundry agent industry	Food industry	Textile industry	Mineral oil industry	Bitumen industry / tar processing industry	Metal processing industry	Aluminium industry
SG08	Nodular cast iron EN-GJS-400-15/ 536 Gr. 60-40-18	Grey cast iron EN-GJL-250/ A 48 Cl. 35B	Mech. seal AQ1V7GG	≥ -30 - ≤ +180[535] / 350[536]	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
SC08	Nodular cast iron EN-GJS-400-15/ 536 Gr. 60-40-18	Chrome steel 1.4408/ A 743 Gr. CF8M	Mech. seal AQ1V7GG	≥ -30 - ≤ +180[535] / 350[536]	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

532 The inlet pressure must not fall below atmospheric pressure.

533 Low-salt and fully desalinated water to VdTÜV technical instruction leaflet / AGFW technical instruction leaflet TCN 1466 (VdTÜV) 5/15 (AGFW), edition 02.89

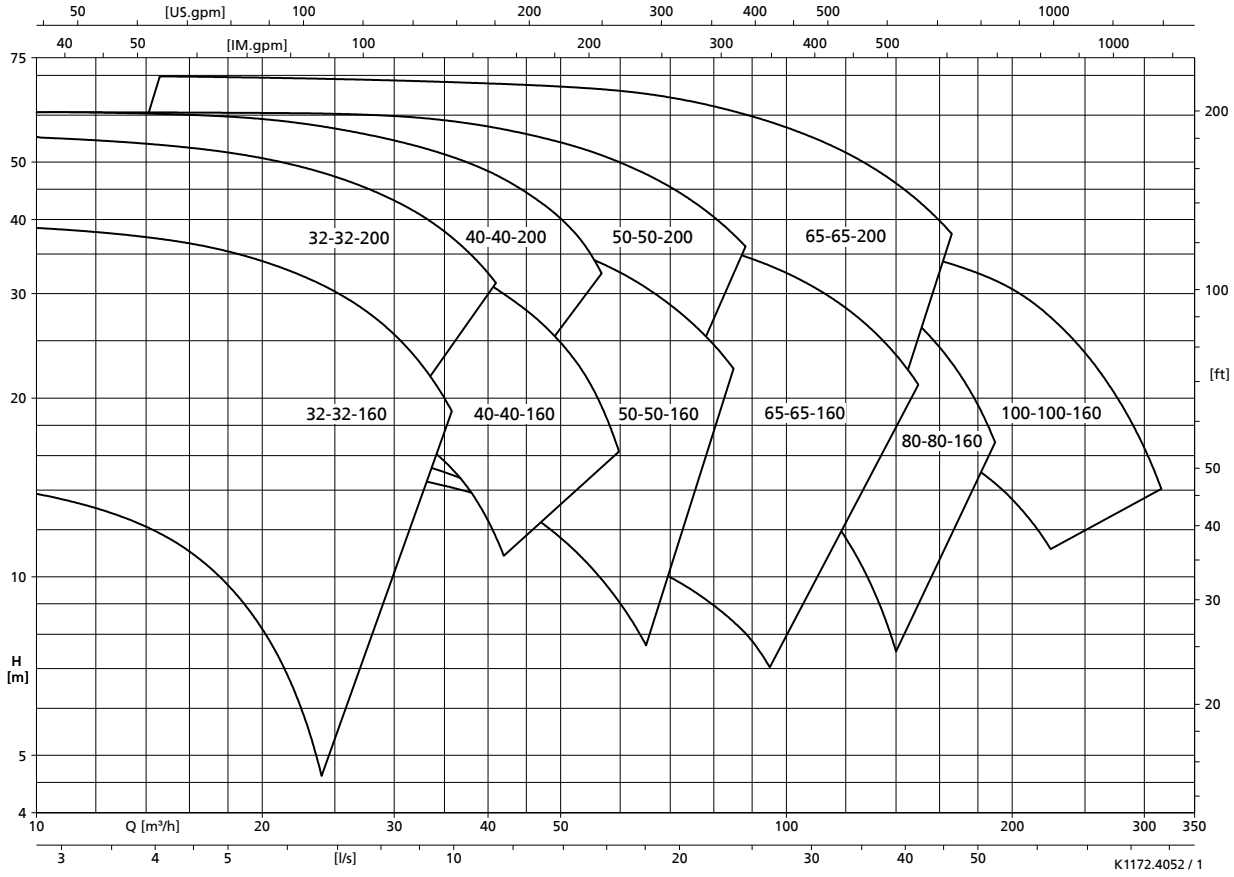
534 For vaporisation pressure > 1 bar use an Etanorm SYT pump.

535 High-temperature hot water

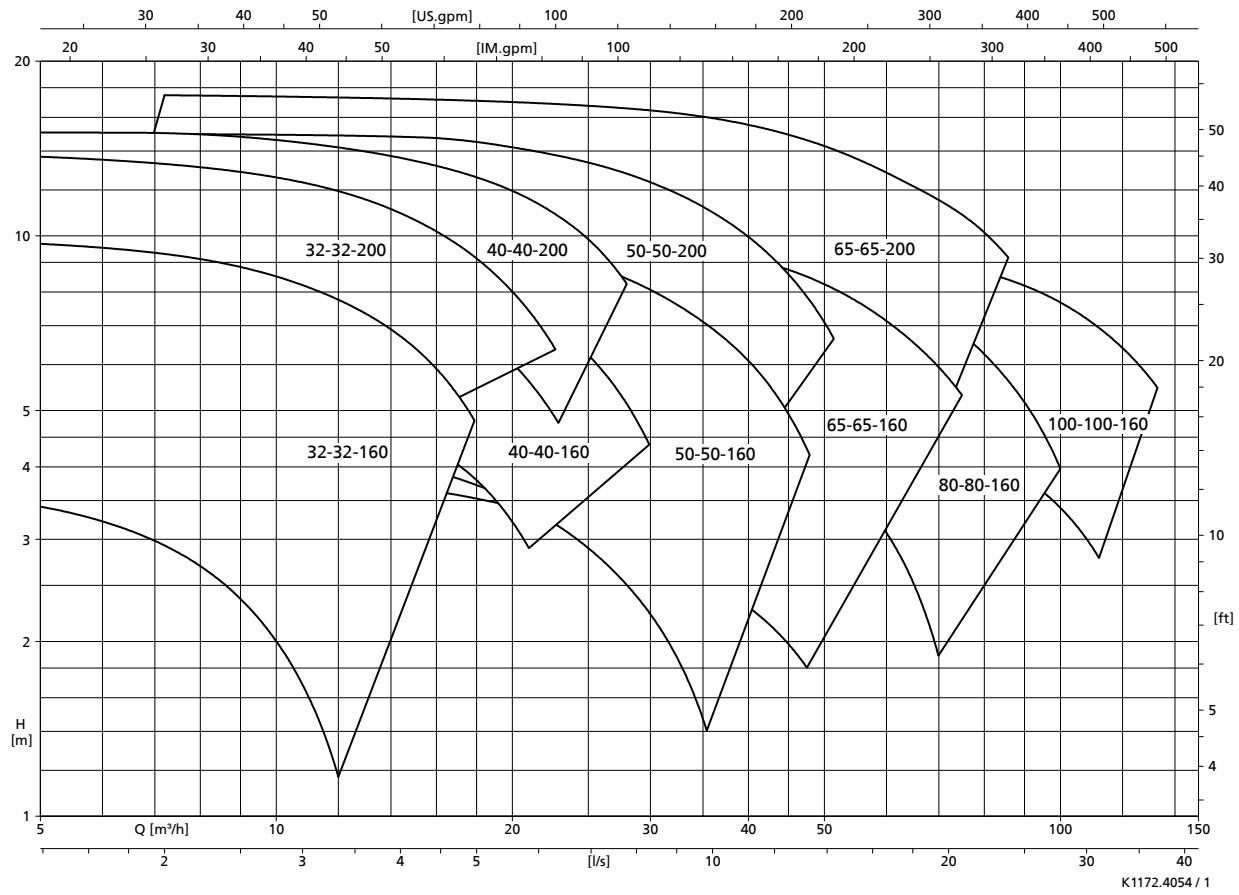
536 Thermal oil

Selection charts

Etaline SYT (fixed speed version), n = 2900 rpm



Etaline SYT (fixed speed version), n = 1450 rpm



Related documents

Information/documents

Document	Reference number
Characteristic curves booklet (50 Hz/60 Hz)	1172.4
Fixed speed version	

Dimensions

Pump set (fixed speed version), n = 2900 rpm / 3500 rpm

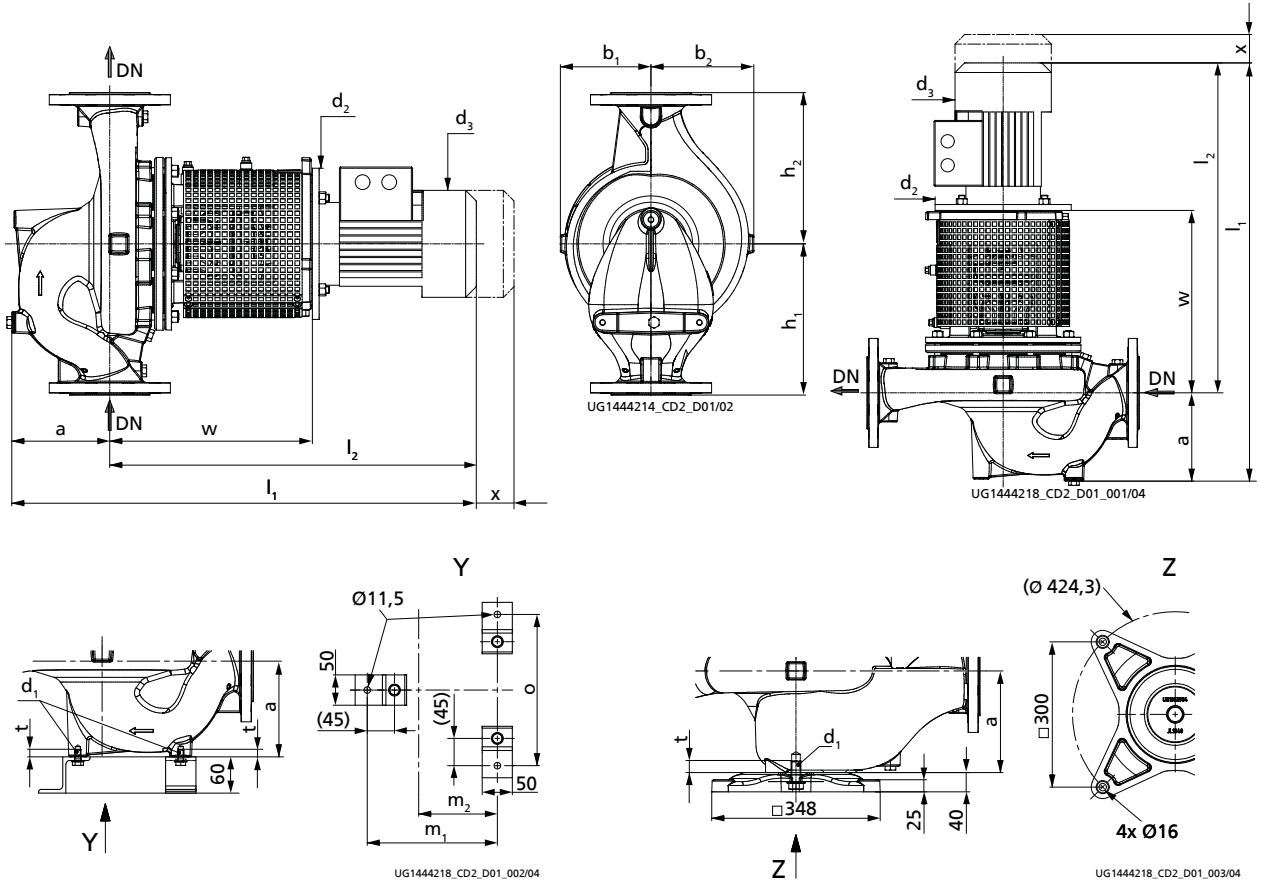


Fig. 321: Dimensions of the pump set, dimensions for fastening a vertically installed pump set to the foundation

Y	3 feet (Etaline SYT up to 080-080-160)
Z	1 foot (Etaline SYT from 100-100-160)

Dimensions

Etaline SYT n = 2900 rpm n = 3500 rpm	Motor	P		I_N	DN	a	b_1	b_2	d_1	d_2	d_3	h_1	h_2	l_1	l_2	m_1	m_2	o	t	w	x
		50 Hz	60 Hz	400 V 50 Hz																	
		[kW]	[kW]	[~A]	[mm]																
032-032-160	80M	1,10	-	2,41	32	87	119	131	M10	200	162	180	160	678	591	175	100	190	12,5	322	100
032-032-160	90S	1,50	1,75	3,15	32	87	119	131	M10	200	190	180	160	691	604	175	100	190	12,5	322	100
032-032-160	90L	2,20	2,55	4,46	32	87	119	131	M10	200	190	180	160	717	630	175	100	190	12,5	322	100
032-032-160	100L	3,00	3,45	6,09	32	87	119	131	M10	250	213	180	160	751	664	175	100	190	12,5	317	100
032-032-160	112M	4,00	4,55	7,82	32	87	119	131	M10	250	234	180	160	775	688	175	100	190	12,5	317	100
032-032-160	132S	5,50	6,30	10,49	32	87	119	131	M10	300	266	180	160	840	753	175	100	190	12,5	340	100
032-032-160	132S	-	8,60	14,12	32	87	119	131	M10	300	266	180	160	840	753	175	100	190	12,5	340	100
032-032-200	100L	3,00	-	6,09	32	100	134	146	M10	250	213	250	190	764	664	175	100	190	12,5	317	100
032-032-200	112M	4,00	4,55	7,82	32	100	134	146	M10	250	234	250	190	788	688	175	100	190	12,5	317	100
032-032-200	132S	5,50	6,30	10,49	32	100	134	146	M10	300	266	250	190	853	753	175	100	190	12,5	340	100
032-032-200	132S	7,50	8,60	14,12	32	100	134	146	M10	300	266	250	190	853	753	175	100	190	12,5	340	100
032-032-200	160M	11,00	12,60	20,41	32	100	134	146	M10	350	325	250	190	1020	920	175	100	190	12,5	374	100
032-032-200	160M	-	17,30	27,25	32	100	134	146	M10	350	325	250	190	1020	920	175	100	190	12,5	374	100
040-040-160	90L	2,20	-	4,46	40	114	118	132	M10	200	190	180	160	744	630	165	90	190	12,5	322	100
040-040-160	100L	3,00	3,45	6,09	40	114	118	132	M10	250	213	180	160	778	664	165	90	190	12,5	317	100
040-040-160	112M	4,00	4,55	7,82	40	114	118	132	M10	250	234	180	160	802	688	165	90	190	12,5	317	100
040-040-160	132S	5,50	6,30	10,49	40	114	118	132	M10	300	266	180	160	867	753	165	90	190	12,5	340	100
040-040-160	132S	7,50	8,60	14,12	40	114	118	132	M10	300	266	180	160	867	753	165	90	190	12,5	340	100
040-040-160	160M	-	12,60	20,41	40	114	118	132	M10	350	325	180	160	1034	920	165	90	190	12,5	374	100
040-040-200	100L	3,00	-	6,09	40	110	138	150	M10	250	213	215	210	774	664	175	100	190	12,5	317	100
040-040-200	112M	4,00	-	7,82	40	110	138	150	M10	250	234	215	210	798	688	175	100	190	12,5	317	100
040-040-200	132S	5,50	-	10,49	40	110	138	150	M10	300	266	215	210	863	753	175	100	190	12,5	340	100
040-040-200	132S	7,50	8,60	14,12	40	110	138	150	M10	300	266	215	210	863	753	175	100	190	12,5	340	100
040-040-200	160M	11,00	12,60	20,41	40	110	138	150	M10	350	325	215	210	1030	920	175	100	190	12,5	374	100
040-040-200	160M	15,00	17,30	27,25	40	110	138	150	M10	350	325	215	210	1030	920	175	100	190	12,5	374	100
040-040-200	160L	-	21,30	33,38	40	110	138	150	M10	350	325	215	210	1036	926	175	100	190	12,5	374	100
050-050-160	90L	2,20	-	4,46	50	134	116	135	M10	200	190	250	190	764	630	175	100	190	12,5	322	100
050-050-160	100L	3,00	3,45	6,09	50	134	116	135	M10	250	213	250	190	798	664	175	100	190	12,5	317	100
050-050-160	112M	4,00	4,55	7,82	50	134	116	135	M10	250	234	250	190	822	688	175	100	190	12,5	317	100
050-050-160	132S	5,50	6,30	10,49	50	134	116	135	M10	300	266	250	190	887	753	175	100	190	12,5	340	100
050-050-160	132S	7,50	8,60	14,12	50	134	116	135	M10	300	266	250	190	887	753	175	100	190	12,5	340	100
050-050-160	160M	11,00	12,60	20,41	50	134	116	135	M10	350	325	250	190	1054	920	175	100	190	12,5	374	100
050-050-160	160M	-	17,30	27,25	50	134	116	135	M10	350	325	250	190	1054	920	175	100	190	12,5	374	100
050-050-200	112M	4,00	-	7,82	50	128	139	158	M10	250	234	220	220	816	688	175	100	190	12,5	317	100
050-050-200	132S	5,50	-	10,49	50	128	139	158	M10	300	266	220	220	881	753	175	100	190	12,5	340	100

Etaline SYT n = 2900 rpm n = 3500 rpm	Motor	P		I_N	DN	a	b_1	b_2	d_1	d_2	d_3	h_1	h_2	l_1	l_2	m_1	m_2	o	t	w	x
		50 Hz	60 Hz	400 V 50 Hz																	
		[kW]	[kW]	[~A]	[mm]																
050-050-200	132S	7,50	8,60	14,12	50	128	139	158	M10	300	266	220	220	881	753	175	100	190	12,5	340	100
050-050-200	160M	11,00	12,60	20,41	50	128	139	158	M10	350	325	220	220	1048	920	175	100	190	12,5	374	100
050-050-200	160M	15,00	17,30	27,25	50	128	139	158	M10	350	325	220	220	1048	920	175	100	190	12,5	374	100
050-050-200	160L	18,50	21,30	33,38	50	128	139	158	M10	350	325	220	220	1054	926	175	100	190	12,5	374	100
050-050-200	180M	-	24,50	39,52	50	128	139	158	M10	350	370	220	220	1112	984	175	100	190	12,5	374	100
065-065-160	100L	3,00	-	6,09	65	150	114	135	M10	250	213	270	170	814	664	175	100	210	12,5	317	100
065-065-160	112M	4,00	-	7,82	65	150	114	135	M10	250	234	270	170	838	688	175	100	210	12,5	317	100
065-065-160	132S	5,50	6,30	10,49	65	150	114	135	M10	300	266	270	170	903	753	175	100	210	12,5	340	100
065-065-160	132S	7,50	8,60	14,12	65	150	114	135	M10	300	266	270	170	903	753	175	100	210	12,5	340	100
065-065-160	160M	11,00	12,60	20,41	65	150	114	135	M10	350	325	270	170	1070	920	175	100	210	12,5	374	100
065-065-160	160M	15,00	17,30	27,25	65	150	114	135	M10	350	325	270	170	1070	920	175	100	210	12,5	374	100
065-065-160	160L	18,50	21,30	33,38	65	150	114	135	M10	350	325	270	170	1076	926	175	100	210	12,5	374	100
065-065-160	180M	-	24,50	39,52	65	150	114	135	M10	350	370	270	170	1134	984	175	100	210	12,5	374	100
065-065-200	132S	7,50	-	14,12	65	131	145	168	M10	300	266	240	235	903	772	195	120	220	12,5	359	100
065-065-200	160M	11,00	12,60	20,41	65	131	145	168	M10	350	325	240	235	1070	939	195	120	220	12,5	393	100
065-065-200	160M	15,00	17,30	27,25	65	131	145	168	M10	350	325	240	235	1070	939	195	120	220	12,5	393	100
065-065-200	160L	18,50	21,30	33,38	65	131	145	168	M10	350	325	240	235	1076	945	195	120	220	12,5	393	100
065-065-200	180M	22,00	24,50	39,52	65	131	145	168	M10	350	370	240	235	1134	1003	195	120	220	12,5	393	100
080-080-160	132S	5,50	-	10,49	80	176	119	147	M10	300	266	260	180	929	753	175	100	230	12,5	340	100
080-080-160	132S	7,50	8,60	14,12	80	176	119	147	M10	300	266	260	180	929	753	175	100	230	12,5	340	100
080-080-160	160M	11,00	12,60	20,41	80	176	119	147	M10	350	325	260	180	1096	920	175	100	230	12,5	374	100
080-080-160	160M	15,00	17,30	27,25	80	176	119	147	M10	350	325	260	180	1096	920	175	100	230	12,5	374	100
080-080-160	160L	18,50	21,30	33,38	80	176	119	147	M10	350	325	260	180	1102	926	175	100	230	12,5	374	100
080-080-160	180M	-	24,50	39,52	80	176	119	147	M10	350	370	260	180	1160	984	175	100	230	12,5	374	100
100-100-160	160M	11,00	-	20,41	100	156	128	163	M20	350	325	245	205	1102	946	-	-	-	25,0	400	140
100-100-160	160M	15,00	-	27,25	100	156	128	163	M20	350	325	245	205	1102	946	-	-	-	25,0	400	140
100-100-160	160L	18,50	-	33,38	100	156	128	163	M20	350	325	245	205	1108	952	-	-	-	25,0	400	140
100-100-160	180M	22,00	-	39,52	100	156	128	163	M20	350	370	245	205	1166	1010	-	-	-	25,0	400	140

Pump set (fixed speed version), n = 1450 rpm / 1750 rpm

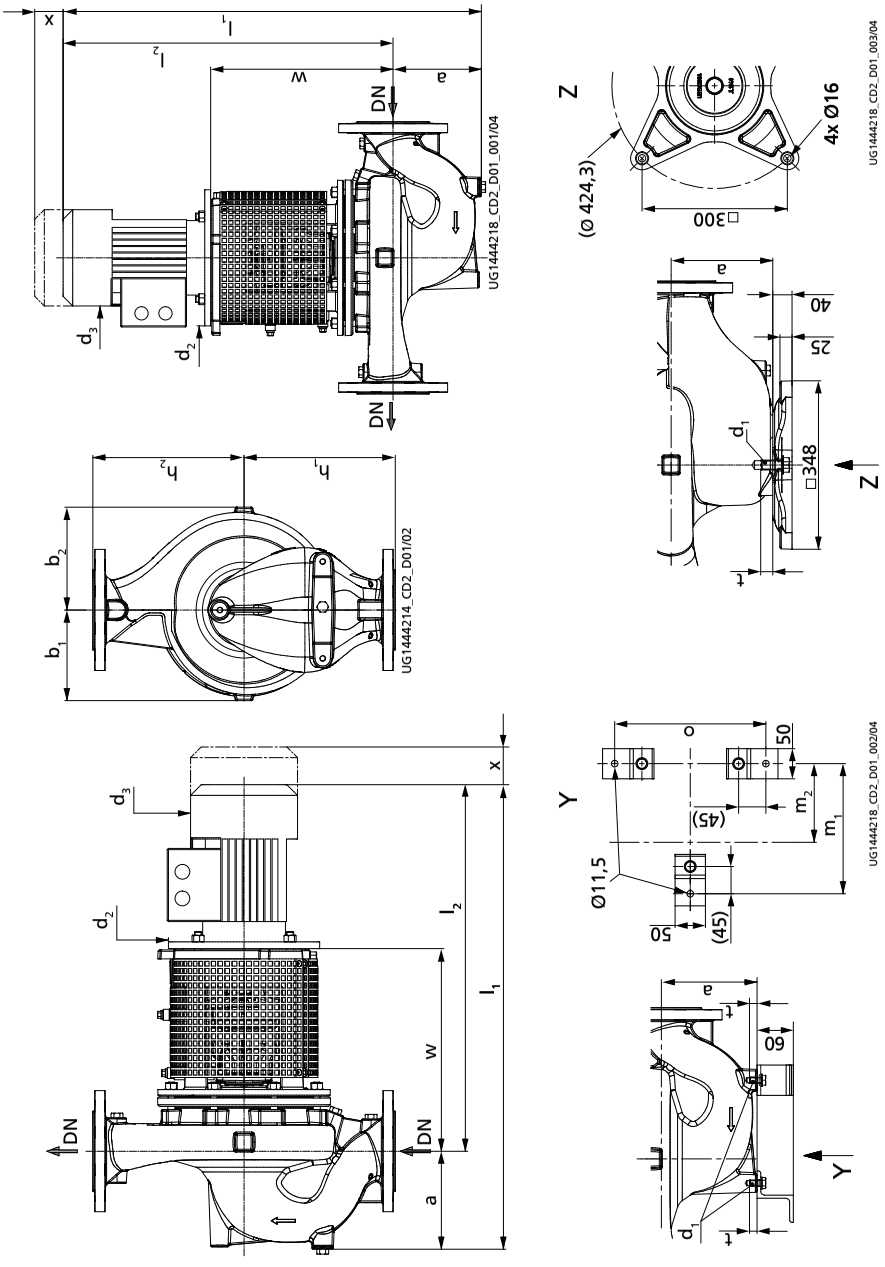


Fig. 322: Dimensions of the pump set, dimensions for fastening a vertically installed pump set to the foundation

Y	3 feet (Etaline SYT up to 080-080-160)
Z	1 foot (Etaline SYT from 100-100-160)

Dimensions

Etaline SYT n = 1450 rpm n = 1750 rpm	Motor	P		I_N	DN	a	b_1	b_2	d_1	d_2	d_3	h_1	h_2	l_1	l_2	m_1	m_2	o	t	w	x
		50 Hz	60 Hz	400 V 50 Hz																	
		[kW]	[kW]	[~A]	[mm]																
032-032-160	80M	0,55	0,63	1,46	32	87	119	131	M10	200	162	180	160	664	577	175	100	190	12,5	322	100
032-032-160	80M	0,75	0,86	1,67	32	87	119	131	M10	200	162	180	160	664	577	175	100	190	12,5	322	100
032-032-160	90S	-	1,27	2,51	32	87	119	131	M10	200	190	180	160	691	604	175	100	190	12,5	322	100
032-032-200	80M	0,55	-	1,46	32	100	134	146	M10	200	162	250	190	677	577	175	100	190	12,5	322	100
032-032-200	80M	0,75	0,86	1,67	32	100	134	146	M10	200	162	250	190	677	577	175	100	190	12,5	322	100
032-032-200	90S	1,10	1,27	2,51	32	100	134	146	M10	200	190	250	190	704	604	175	100	190	12,5	322	100
032-032-200	90L	-	1,75	3,32	32	100	134	146	M10	200	190	250	190	730	630	175	100	190	12,5	322	100
032-032-200	100L	-	2,55	4,67	32	100	134	146	M10	250	213	250	190	764	664	175	100	190	12,5	317	100
040-040-160	80M	0,55	0,63	1,46	40	114	118	132	M10	200	162	180	160	691	577	165	90	190	12,5	322	100
040-040-160	80M	0,75	0,86	1,67	40	114	118	132	M10	200	162	180	160	691	577	165	90	190	12,5	322	100
040-040-160	90S	1,10	1,27	2,51	40	114	118	132	M10	200	190	180	160	718	604	165	90	190	12,5	322	100
040-040-160	90L	-	1,75	3,32	40	114	118	132	M10	200	190	180	160	744	630	165	90	190	12,5	322	100
040-040-200	80M	0,55	-	1,46	40	110	138	150	M10	200	162	215	210	687	577	175	100	190	12,5	322	100
040-040-200	80M	0,75	0,86	1,67	40	110	138	150	M10	200	162	215	210	687	577	175	100	190	12,5	322	100
040-040-200	90S	1,10	1,27	2,51	40	110	138	150	M10	200	190	215	210	714	604	175	100	190	12,5	322	100
040-040-200	90L	1,50	1,75	3,32	40	110	138	150	M10	200	190	215	210	740	630	175	100	190	12,5	322	100
040-040-200	100L	2,20	2,55	4,67	40	110	138	150	M10	250	213	215	210	774	664	175	100	190	12,5	317	100
040-040-200	100L	-	3,45	6,18	40	110	138	150	M10	250	213	215	210	809	699	175	100	190	12,5	317	100
050-050-160	80M	0,55	0,63	1,46	50	134	116	135	M10	200	162	250	190	711	577	175	100	190	12,5	322	100
050-050-160	80M	0,75	0,86	1,67	50	134	116	135	M10	200	162	250	190	711	577	175	100	190	12,5	322	100
050-050-160	90S	1,10	1,27	2,51	50	134	116	135	M10	200	190	250	190	738	604	175	100	190	12,5	322	100
050-050-160	90L	1,50	1,75	3,32	50	134	116	135	M10	200	190	250	190	764	630	175	100	190	12,5	322	100
050-050-160	100L	-	2,55	4,67	50	134	116	135	M10	250	213	250	190	798	664	175	100	190	12,5	317	100
050-050-200	80M	0,75	-	1,67	50	128	139	158	M10	200	162	220	220	705	577	175	100	190	12,5	322	100
050-050-200	90S	1,10	1,27	2,51	50	128	139	158	M10	200	190	220	220	732	604	175	100	190	12,5	322	100
050-050-200	90L	1,50	1,75	3,32	50	128	139	158	M10	200	190	220	220	758	630	175	100	190	12,5	322	100
050-050-200	100L	2,20	2,55	4,67	50	128	139	158	M10	250	213	220	220	792	664	175	100	190	12,5	317	100
050-050-200	100L	3,00	3,45	6,18	50	128	139	158	M10	250	213	220	220	827	699	175	100	190	12,5	317	100
050-050-200	112M	-	4,55	8,23	50	128	139	158	M10	250	234	220	220	816	688	175	100	190	12,5	317	100
065-065-160	80M	0,55	0,63	1,46	65	150	114	135	M10	200	162	270	170	727	577	175	100	210	12,5	322	100
065-065-160	80M	0,75	0,86	1,67	65	150	114	135	M10	200	162	270	170	727	577	175	100	210	12,5	322	100
065-065-160	90S	1,10	1,27	2,51	65	150	114	135	M10	200	190	270	170	754	604	175	100	210	12,5	322	100
065-065-160	90L	1,50	1,75	3,32	65	150	114	135	M10	200	190	270	170	780	630	175	100	210	12,5	322	100
065-065-160	100L	2,20	2,55	4,67	65	150	114	135	M10	250	213	270	170	814	664	175	100	210	12,5	317	100
065-065-160	100L	-	3,45	6,18	65	150	114	135	M10	250	213	270	170	849	699	175	100	210	12,5	317	100

Etaline SYT n = 1450 rpm n = 1750 rpm	Motor	P		I_N	DN	a	b_1	b_2	d_1	d_2	d_3	h_1	h_2	l_1	l_2	m_1	m_2	o	t	w	x
		50 Hz	60 Hz	400 V 50 Hz																	
		[kW]	[kW]	[~A]	[mm]																
065-065-200	90S	1,10	-	2,51	65	131	145	168	M10	200	190	240	235	754	623	195	120	220	12,5	341	100
065-065-200	90L	1,50	1,75	3,32	65	131	145	168	M10	200	190	240	235	780	649	195	120	220	12,5	341	100
065-065-200	100L	2,20	2,55	4,67	65	131	145	168	M10	250	213	240	235	814	683	195	120	220	12,5	336	100
065-065-200	100L	3,00	3,45	6,18	65	131	145	168	M10	250	213	240	235	849	718	195	120	220	12,5	336	100
065-065-200	112M	4,00	4,55	8,23	65	131	145	168	M10	250	234	240	235	838	707	195	120	220	12,5	336	100
065-065-200	132S	5,50	6,30	11,32	65	131	145	168	M10	300	266	240	235	903	772	195	120	220	12,5	359	100
065-065-200	132M	-	8,60	14,70	65	131	145	168	M10	300	298	240	235	931	800	195	120	220	12,5	359	100
080-080-160	80M	0,75	-	1,67	80	176	119	147	M10	200	162	260	180	753	577	175	100	230	12,5	322	100
080-080-160	90S	1,10	1,27	2,51	80	176	119	147	M10	200	190	260	180	780	604	175	100	230	12,5	322	100
080-080-160	90L	1,50	1,75	3,32	80	176	119	147	M10	200	190	260	180	806	630	175	100	230	12,5	322	100
080-080-160	100L	2,20	2,55	4,67	80	176	119	147	M10	250	213	260	180	840	664	175	100	230	12,5	317	100
080-080-160	100L	3,00	3,45	6,18	80	176	119	147	M10	250	213	260	180	875	699	175	100	230	12,5	317	100
080-080-160	112M	-	4,55	8,23	80	176	119	147	M10	250	234	260	180	864	688	175	100	230	12,5	317	100
100-100-160	90L	1,50	-	3,32	100	156	128	163	M20	200	190	245	205	812	656	-	-	-	25	348	140
100-100-160	100L	2,20	2,55	4,67	100	156	128	163	M20	250	213	245	205	846	690	-	-	-	25	343	140
100-100-160	100L	3,00	3,45	6,18	100	156	128	163	M20	250	213	245	205	881	725	-	-	-	25	343	140
100-100-160	112M	4,00	4,55	8,23	100	156	128	163	M20	250	234	245	205	870	714	-	-	-	25	343	140
100-100-160	132S	-	6,30	11,32	100	156	128	163	M20	300	266	245	205	935	779	-	-	-	25	366	140

PumpDrive 2

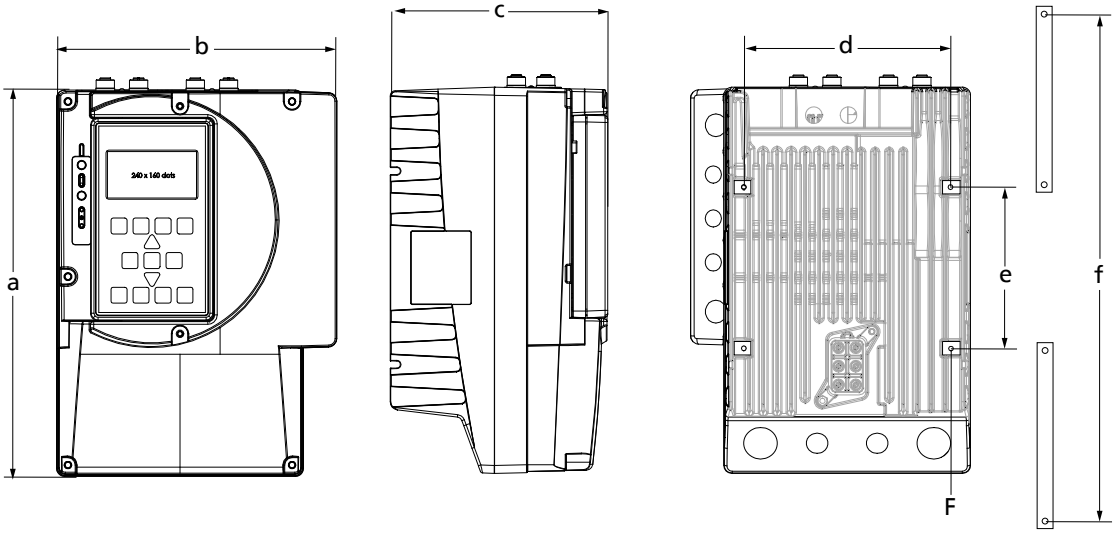


Fig. 323: PumpDrive 2 dimensions

Dimensions and weights

Housing type	P_N	Motor-mounted model					Wall-mounted/ cabinet-mounted model[537]					Fastening screws/bolts	[kg][538]
		a	b	c	d	e	a	b	c	d	f	F	
	[kW]	[mm]										-	
A	0,37	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	0,55	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	0,75	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	1,10	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	1,50	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
B	2,20	290	211	166	155	121	328	211	166	155	318	M4 × 10	6,5
B	3,00	290	211	166	155	121	328	211	166	155	318	M4 × 10	6,5
B	4,00	290	211	166	155	121	328	211	166	155	318	M4 × 10	6,5
C	5,50	330	280	210	219	205	401	280	210	219	387	M6 × 12	12,6
C	7,50	330	280	210	219	205	401	280	210	219	387	M6 × 12	12,6
C	11,00	330	280	210	219	205	401	280	210	219	387	M6 × 12	12,6
D	15,00	460	350	290	280	309	582	350	290	280	565	M8 × 14	27,6
D	18,50	460	350	290	280	309	582	350	290	280	565	M8 × 14	36
D	22,00	460	350	290	280	309	582	350	290	280	565	M8 × 14	36
D	30,00	460	350	290	280	309	582	350	290	280	565	M8 × 14	36
E	37,00	700	455	340	375	475	819	455	340	375	800	M8 × 14	57,6
E	45,00	700	455	340	375	475	819	455	340	375	800	M8 × 14	60
E	55,00	700	455	340	375	475	819	455	340	375	800	M8 × 14	60

537 The dimensions provided refer to the frequency inverter including the wall-mounting brackets.
538 Without motor adapter

Installation types

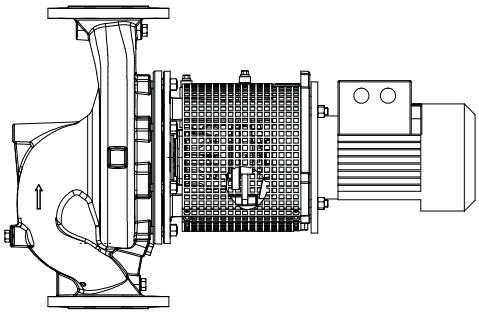


Fig. 324: Horizontal installation, Etaline SYT

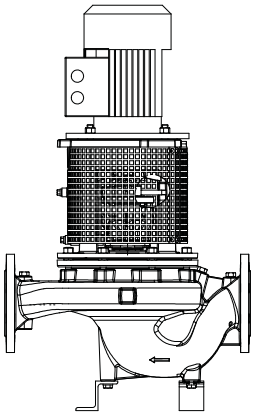


Fig. 325: Vertical installation, Etaline SYT

Thermal Oil Pumps / Hot Water Pumps

Etanorm-RSY

http://shop.ksb.com/catalog/k0/en/product/ES000516

Product benefits

- Operating costs reduced by trimming the nominal impeller diameter to match the specified duty point
- Easy to dismantle due to back pull-out design; no need to remove the pump casing from the piping
- High resistance by anti-seize product-lubricated carbon plain bearing or SIC/SIC bearing
- Operating reliability through materials selected for various intake conditions and high pressures of up to 16 bar
- Service-friendly with easy-to-replace casing wear rings

Further information

Prices on request

Further information

	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[539)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

539 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Description / design

Horizontal volute casing pump in back pull-out design, single-stage, with ratings and dimensions to EN 733, radially split volute casing with integrally cast pump feet, replaceable casing wear rings, closed radial impeller with multiply curved vanes, single mechanical seal to EN 12756, double mechanical seal to EN 12756, drive-end bearings: rolling element bearings, pump-end bearings: plain bearings, with magnetless KSB SuPremE motor (exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4/IE5 and PumpDrive variable speed system; ATEX-compliant version available.

Main applications

- Heat transfer systems
- Hot water circulation
- Chemical industry
- Petrochemical industry
- Chemical transformation processes
- Cleaning processes
- Thermal separation processes
- Timber/lumber industry
- Plastics industry
- Food industry
- Paper industry and printing industry
- Textile industry

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Recirculation Pumps

HPK-L

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000036

Product benefits

- Low temperature in the mechanical seal chamber; no cooling water required thanks to air-cooled bearing bracket with heat barrier.
- Increased operating reliability of versions for heat transfer applications by an optional two mechanical seals preventing leakage.
- Higher efficiencies than the previous HPK-L model by continued development of the flow passage within the hydraulic system.
- Optimised venting of mechanical seal chamber by patented VenJet profile.

Further information

Prices on request

Further information

	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[540)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

Horizontal radially split volute casing pump in back pull-out design to ISO 2858 / ISO 5199, single-stage, single-entry, with radial impeller. Equipped with heat barrier, seal chamber air-cooled by integrated fan impeller, no external cooling. ATEX-compliant version available.

Main applications

Pump for handling hot water and organic or synthetic heat transfer fluids in piping or tank systems.

- Heating systems
- Forced circulation boilers
- District heating
- Heat transfer systems

540 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Recirculation Pumps

HPK

http://shop.ksb.com/catalog/k0/en/product/ES000034

Product benefits

- Hydraulic system, nominal data and dimensions to ISO 2858 / EN 22858
- Continuous lubrication and oil level monitoring by constant level oiler
- Back pull-out design allows the casing to remain in the piping while the pump is dismantled.

Further information

Prices on request

Further information

	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[541)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

Horizontal radially split volute casing pump in back pull-out design, with radial impeller, single-entry, single-stage, to ISO 2858 / ISO 5199. Optional TRD type testing by TÜV. ATEX-compliant version available.

Main applications

Pump for handling hot water and organic or synthetic heat transfer fluids in piping or tank systems.

- Heating systems
- Forced circulation boilers
- District heating
- Heat transfer systems

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

541 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

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Pumps for Industrial Applications

Design / Application

Type series		Free passage	Q	H	T[542]		Waste water	Spray irrigation	General irrigation	Brackish water	Fire protection	Service water (industry)	Pressure boosting	Water containing faeces	Heating	Industry / process engineering	Air conditioning	Food processing / pharmaceutical industry	Seawater	Grey water	Swimming pools	Drinking water	Water supply
		max.	max.	max.	min.	max.																	
		[mm]	[m³/h]	[m]	[°C]	[°C]																	
Standardised Chemical Pumps																							
	MegaCPK (⇨ Page 923)	-	≤ 1160	≤ 162	≥ -40	≤ +400	-	-	-	-	-	-	-	-	-	✗	-	-	-	-	-	-	-
Hygienic Pumps																							
	Vitachrom (⇨ Page 925)	-	≤ 340	≤ 100	≥ -30	≤ +110	-	-	-	-	-	-	-	-	-	✗	-	✗	-	-	-	✗	-
	Vitacast (⇨ Page 970)	-	≤ 540	≤ 105	≥ -20	≤ +140	-	-	-	-	-	-	-	-	-	✗	-	✗	-	-	-	✗	-
	Vitacast Bloc (⇨ Page 977)	-	≤ 340	≤ 105	≥ -30	≤ +140	-	-	-	-	-	-	-	-	-	✗	-	✗	-	-	-	✗	-
	Vitaprime (⇨ Page 999)	-	≤ 58	≤ 45	≥ -20	≤ +100	-	-	-	-	-	-	-	-	-	✗	-	✗	-	-	-	✗	-
	Vitastage (⇨ Page 1014)	-	≤ 12,5	≤ 150	≥ -20	≤ +140	-	-	-	-	-	-	-	-	-	✗	-	✗	-	-	-	✗	-
	Vitalobe (⇨ Page 1017)	-	≤ 342	≤ 200	≥ -40	≤ +180	-	-	-	-	-	-	-	-	-	✗	-	✗	-	-	-	✗	-
Mag-drive Pumps																							
	Magnochem (⇨ Page 1023)	-	≤ 1160	≤ 162	≥ -90	≤ +350	-	-	-	-	-	-	-	✗	✗	✗	-	-	-	-	-	-	-
	Magnochem-Bloc (⇨ Page 1025)	-	≤ 625	≤ 162	≥ -20	≤ +200	-	-	-	-	-	-	-	✗	✗	✗	-	-	-	-	-	-	-

542 T = fluid temperature

Standardised Chemical Pumps

MegaCPK

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000861

Product benefits

- Hydraulic characteristics optimised for excellent efficiency and NPSH, ensuring energy-efficient and environmentally friendly use of resources
- Lower investment costs as duty points required can be achieved with smaller pump sizes
- Lower operating costs due to reduced energy consumption, optimised spare parts concept and hard-wearing, service-friendly design
- Flexible use due to modular design regarding hydraulic system materials, sealing elements, bearing brackets, coupling, baseplate and drive

Further information

Prices on request

Further information

	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[543)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

543 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Description / design

Horizontal radially split volute casing pump in back pull-out design, with radial impeller, single-entry, single-stage, to DIN EN ISO 2858 / ISO 5199, in a large range of material and seal variants; also available as a variant with "wet" shaft and conical seal chamber. With KSB SuPremE, a magnetless synchronous reluctance motor (exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016, for operation on a KSB PumpDrive 2 or KSB PumpDrive 2 Eco variable speed system without rotor position sensors. Motor mounting points in accordance with EN 50347, envelope dimensions in accordance with DIN V 42673 (07-2011). ATEX-compliant version available.

Main applications

- Alcohol industry
- Chemical industry (aggressive / other liquids)
- Fossil-fuelled power stations
- Food industry / beverage industry
- Seawater desalination/reverse osmosis
- Paper industry / pulp industry
- Petrochemical industry (aggressive / other liquids)
- Refinery
- Sugar industry

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Hygienic Pumps

Vitachrom

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000030

Product benefits

- Easy to clean with very little dead volume and excellent flushing capability
- Service-friendly design, easy and fast to dismantle
- Can be driven by all common standardised motors via stub shaft
- High surface quality thanks to special polishing techniques
- Corrosion-resistant design with high-quality stainless steel
- Operating costs reduced by trimming the nominal impeller diameter to match the specified duty point
- Highly suitable for CIP/SIP routines

Further information

Prices on request

Selection charts 931
Dimensions and connections 933
Accessories 969

Further information

	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[544)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

544 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Certifications

Overview

Label	Effective in:	Comment
	All countries	Certified quality management to ISO 9001
	All countries	European Hygienic Engineering & Design Group
	All countries	Elastomers certified to FDA, 3A, USP Class VI

Main applications

- Food industry / beverage industry
- Pharmaceutical industry
- Chemical industry

Fluids handled

- Fluids not chemically or mechanically aggressive to the materials

Operating data

Operating properties

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q [m³/h]	≤ 340	≤ 320
Head	H [m]	≤ 100	≤ 112
Fluid temperature	T [°C]	≥ -30	
		≤ +110	
Sterilisation temperature (SIP)	T [°C]	≤ +140	
Operating pressure	p [bar]	≤ 12	
Connection sizes	DN	50 - 125	

Design details

Design

- Centrifugal pump
- Close-coupled design
- Single-stage
- Wetted parts made of stainless steel 1.4404/1.4409 (AISI 316L/CF3M)
- CIP/SIP-compatible
- Pump version with inducer for fluids pumped from vessels under vacuum (pump sizes 65-160-IND, 80-250-IND, 80-250.1-IND only) and for low NPSH values
- Standard design with materials to Regulation (EC) No. 1935/2004
- Fixed speed version (without PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R) / variable speed version (with PumpDrive 2 / PumpDrive 2 Eco / PumpDrive R)

Pump casing

- Circular casing

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM V1 ≤ 4.00 kW
- Type of construction IM V15 ≥ 5.50 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM V1 ≤ 3.30 kW
- Type of construction IM V15 ≥ 4.60 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Type of protection EEx eb II
- Temperature class T3

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[545)] (PumpDrive required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM V1 ≤ 4.00 kW
- Type of construction IM V15 ≥ 5.50 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 0.55 kW to 45 kW

545 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:
- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:
- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2 / PumpDrive 2 Eco:
- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for motor mounting, wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:
- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

KSB Guard
- System for monitoring the pump's condition by means of temperature and vibration sensors
- Measured values and operating data may be retrieved via the KSB Guard app and the web portal at any time.

Shaft seal
- Single mechanical seal surrounded by fluid handled EN 12756
- Double mechanical seal in tandem arrangement with quench to EN 12756
- Hygienic design or sterile design

Impeller type
- Semi-open multi-vane impeller

Hygienic design:
- Inboard seal with spring surrounded by fluid handled, unidirectional

Sterile design:
- Inboard seal with covered spring, polished surface, bi-directional

Bearings
- No separate pump bearings

Connections
- Axial suction nozzle, tangential discharge nozzle
- Adjustable through 360°

Standard:
- Threaded connection to DIN 11851 (hygienic pipe union)
- Flange to EN 1092-1

Alternative:
- Flange to DIN 11864-2-NF-A
- Flange to EN 1092-1-F
- Flange to APV-FN
- Threaded connection to DIN 11864-1-GS-A
- Threaded connection to IDF (ISO 2853)
- Threaded connection to SMS standard
- Clamped connection to DIN 32676-A
- Clamped connection to ISO 2852
- Other connection types on request

Designation

Designation example

Position																																						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
V	C			0	5	0	-	0	5	0	-	1	2	5		C	C		I	0	1	M	A	1	3	0	0	2			A	P	D	2			K	S	B	I	E	3
V	C	I	1	0	5	0	-	0	5	0	-	1	6	0		C	C		I	0	2	A	B	1	1	0	0	2	e	x	A	P	D	2	E	M	S	I	E	I	E	4
See name plate and data sheet																			See data sheet																							

Designation key

Position	Code	Description	
1-3	Pump type		
	VC	Vitachrom	
	VCI	Vitachrom Inducer	
4	Inducer		
	[546]	Without inducer	
	0	Inducer 0	
	1	Inducer 1	
	2	Inducer 2	
5-16	Size, e.g.		
	050	Nominal suction nozzle diameter [mm]	
	050	Nominal discharge nozzle diameter [mm]	
	125	Nominal impeller diameter [mm]	
17	Pump casing material		
	C	Stainless steel	1.4409
18	Impeller material		
	C	Stainless steel	1.4404
19	Design		
	[546]	Standard	
	X	Non-standard (BT3D, BT3)	
20-22	Seal code, single mechanical seal		
	I01	BQ1E1-04GG	Carbon/SiC/EPDM
	I02	BQ1V26GG	Carbon/SiC/Viton
	I03	Q12Q1E1-04GG	SiC/SiC/EPDM
	I04	Q12Q1V26GG	SiC/SiC/Viton
	I06	BQ1E1-04GG	Carbon/SiC/EPDM
	I07	BQ1V26GG	Carbon/SiC/Viton
	I08	Q12Q1E1-04GG	SiC/SiC/EPDM
	I09	Q12Q1V26GG	SiC/SiC/Viton
	I10	Q22Q2E1-04GG	Si-SiC/Si-SiC/EPDM
	I21	Q12Q1M1GG	SiC/SiC/PTFE
	Seal code, double mechanical seal in tandem arrangement		
	T11	BQ1E1-04GG	Carbon/SiC/EPDM
		BQ1EGG	Carbon/SiC/EPDM
	T12	BQ1V26GG	Carbon/SiC/Viton
		BQ1EGG	Carbon/SiC/EPDM
	T13	Q12Q1E1-04GG	SiC/SiC/EPDM
		BQ1EGG	Carbon/SiC/EPDM
	T14	Q12Q1V26GG	SiC/SiC/Viton
		BQ1EGG	Carbon/SiC/EPDM
	T16	BQ1E1-04GG	Carbon/SiC/EPDM
		BQ1EGG	Carbon/SiC/EPDM
	T17	BQ1V26GG	Carbon/SiC/Viton
		BQ1EGG	Carbon/SiC/EPDM
	T18	Q12Q1E1-04GG	SiC/SiC/EPDM
		BQ1EGG	Carbon/SiC/EPDM
	T19	Q12Q1V26GG	SiC/SiC/Viton
		BQ1EGG	Carbon/SiC/EPDM

546 Blank

Position	Code	Description	
20-22	T20	Q22Q2E1-04GG	Si-SiC/Si-SiC/EPDM
		BQ1EGG	Carbon/SiC/EPDM
	T31	Q12Q1M1GG	SiC/SiC/PTFE
		BQ1EGG	Carbon/SiC/EPDM
23	Scope of supply		
	A	Angle foot	
	B	Soleplate G1 / G2	
	K	Ball feet	
	M	Motor feet	
	T	Round base feet	
24	Pipe connection		
	A	Flange	APV FN
	B	Thread	DIN 11864-1A
	C	Flange	DIN 11864-2A
	D	Clamped connection	DIN 11864-3A
	G	Flange	Varivent
	I	Thread	ISO 2853 (IDF)
	J	Small flange	Kieselmann
	L	Flange	EN 1092-1
	M	Thread	DIN 11851 (hygienic pipe union)
	N	Flange	Neumo
	R	Flange	DIN 2633 (EN 1092-1) with recess
	S	Thread	SMS
	T	Clamped connection	EN 32676-A
25	O-ring material		
	1	EPDM	
	2	Viton	
	3	PTFE	
26-28	Motor rating P_N [kW]		
	075	7,50	
	...	...	
	100	10,00	
29	Number of motor poles		
30-31	Explosion protection		
	ex	With explosion-proof motor	
	--	Without explosion-proof motor	
32	Product generation		
	A	Vitachrom	
33-36	PumpDrive		
	[546)]	Without PumpDrive	
	PD2	PumpDrive 2	
	PD2E	PumpDrive 2 Eco	
37	PumpMeter		
	[546)]	Without PumpMeter	
	M	PumpMeter	
38-40	Motor manufacturer		
	KSB	KSB	
	SIE	Siemens	
	LOH	Loher	
	HAL	Halter	
41-43	Efficiency class		

Materials

Overview of available materials

Part No.	Description	Material
103	Circular casing[547)]	1.4404/1.4409 (AISI 316L/CF3M)
163	Discharge cover[547)]	1.4409 (AISI CF3M)
230	Impeller[547)]	1.4404 (AISI 316L)
236	Inducer[547)]	1.4409 (AISI CF3M)
922	Impeller nut[547)]	1.4404 (AISI 316L)
210	Pump shaft	1.4571 (AISI 316 Ti)
341	Drive lantern	GJL with cataphoretic coating

All materials that will be in contact with the fluid handled conform with Regulation (EC) No 1935/2004 and Commission Regulation (EC) No. 2023/2006.

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Technical data

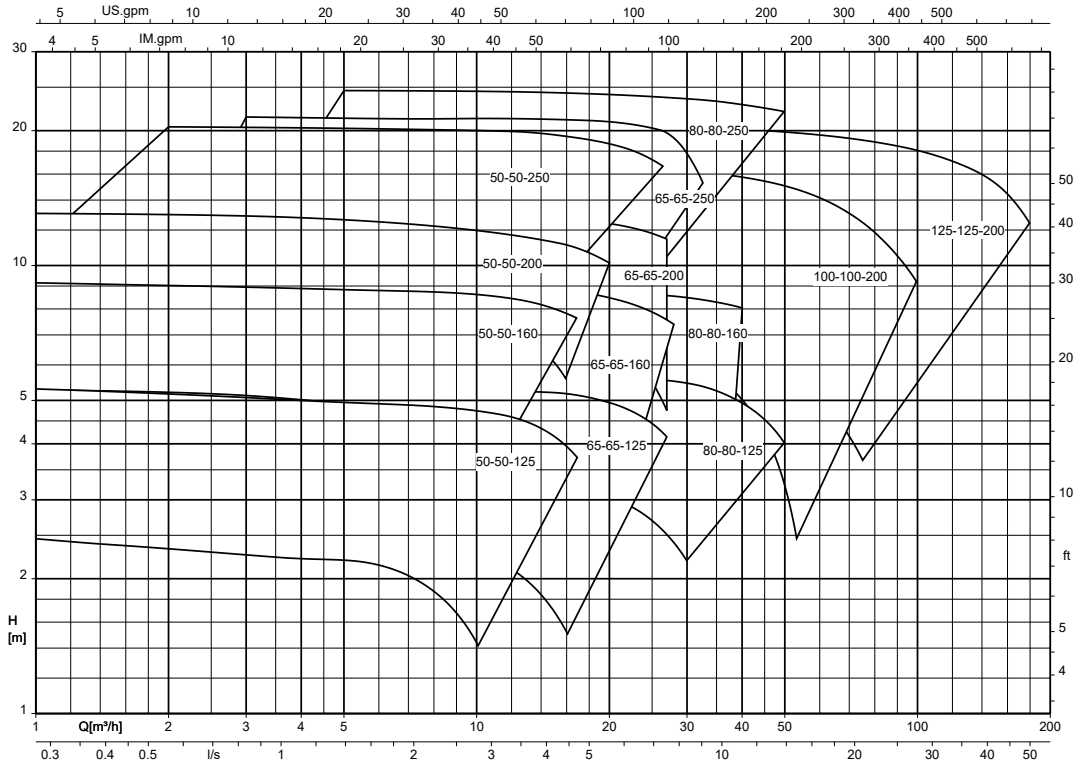
Technical data

Vitachrom	Shaft unit	Impeller			Speed limits	
		Impeller outlet width	Free passage	Nominal impeller diameter	Maximum	Minimum
		[mm]			[rpm]	
050-050-125	25.1	16	11	138 - 100	3600	500
050-050-160	25.1	14,8	11	166 - 130	3600	500
050-050-200	25.1	13,5	11	196 - 160	3600	500
050-050-250	25.2	4	4	265 - 180	3600	500
065-065-125	25.1	21,5	11	136 - 100	3600	500
065-065-160	25.1	20,3	11	166 - 130	3600	500
065-065-200	25.1	19	11	196 - 160	3600	500
065-065-250	25.2	10	10	265 - 180	3600	500
080-080-125	25.1	31,3	11	145 - 110	3600	500
080-080-160	25.1	30	11	170 - 130	3600	500
080-080-250	25.2	22	16	265 - 180	3600	500
100-100-200	25.2	20	16	220 - 150	3600	500
125-125-200	35	40	25	240 - 150	3600[548)]	500

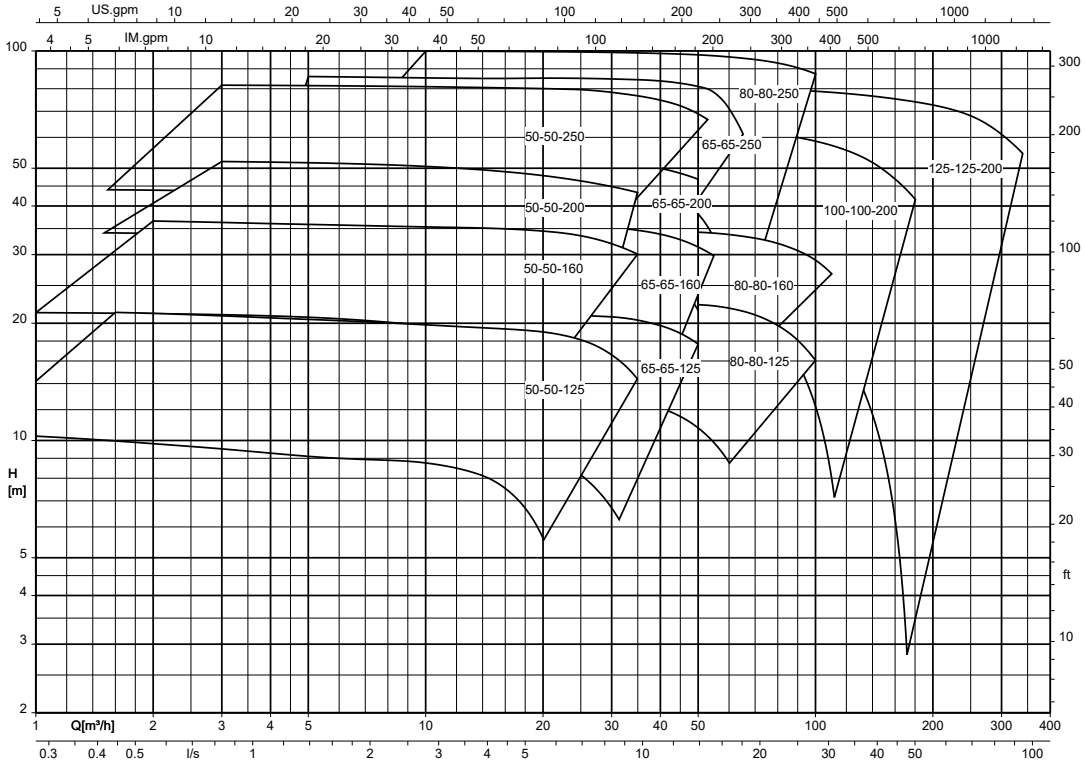
547 Wetted components
548 For impeller diameters of 220 mm and larger, the maximum speed equals 3000 rpm.

Selection charts

Vitachrom, n = 1450 rpm



Vitachrom, n = 2900 rpm



Related documents

Information/documents

Document	Reference number
Characteristic curves booklet (50 Hz/60 Hz) Fixed speed version	1966.41
Characteristic curves booklet (50 Hz) Variable speed version	1966.4

Dimensions and connections

Overview of general arrangement drawings

Overview

Size	Speed [rpm]				Installation type						See
	1450	1750	2900	3500	With inducer	With motor feet	With angle foot	With ball feet	With levelling feet	With motor shroud	
DN 50	-	-	✗	✗	-	✗	✗	-		-	(⇨ Page 935)
	-	-	✗	✗	-	-	-	✗		✗	(⇨ Page 937)
	-	-	✗	✗	-	-	-	-	✗	✗	
	✗	✗	-	-	-	✗	✗	-		-	(⇨ Page 959)
	✗	✗	-	-	-	-	-	✗		✗	(⇨ Page 960)
	✗	✗	-	-	-	-	-	-	✗	✗	
DN 65	-	-	✗	✗	-	✗	✗	-		-	(⇨ Page 939)
	-	-	✗	✗	-	-	-	✗		✗	(⇨ Page 941)
	-	-	✗	✗	-	-	-	✗	✗	✗	
	✗	✗	-	-	-	✗	✗	-		-	(⇨ Page 961)
	✗	✗	-	-	-	-	-	✗		✗	(⇨ Page 962)
	✗	✗	-	-	-	-	-	-	✗	✗	
	-	-	✗	✗	✗	✗	✗	-		-	(⇨ Page 943)
	-	-	✗	✗	✗	-	-	✗		✗	(⇨ Page 944)
	-	-	✗	✗	✗	-	-	✗	✗	✗	
DN 80	-	-	✗	✗	-	✗	✗	-		-	(⇨ Page 945)
	-	-	✗	✗	-	-	-	✗		✗	(⇨ Page 947)
	✗	✗	-	-	-	✗	✗	-		-	(⇨ Page 963)
	✗	✗	-	-	-	-	-	✗		✗	(⇨ Page 964)
	-	-	✗	-	✗	✗	-	-		-	(⇨ Page 949)
	-	-	✗	-	✗	-	-	✗		✗	(⇨ Page 951)
	-	-	-	✗	✗	✗	-	-		-	(⇨ Page 952)
	-	-	-	✗	✗	-	-	✗		✗	(⇨ Page 953)
DN 100	-	-	✗	✗	-	✗	✗	-		-	(⇨ Page 955)
	-	-	✗	✗	-	-	-	✗		✗	(⇨ Page 956)
	✗	✗	-	-	-	✗	✗	-		-	(⇨ Page 965)
	✗	✗	-	-	-	-	-	✗		✗	(⇨ Page 966)
DN 125	-	-	✗	✗	-	✗	✗	-		-	(⇨ Page 957)
	-	-	✗	✗	-	-	-	✗		✗	(⇨ Page 958)
	✗	✗	-	-	-	✗	✗	-		-	(⇨ Page 967)
	✗	✗	-	-	-	-	-	✗		✗	(⇨ Page 968)

Applies to all of the following general arrangement drawings:

- Tolerances of mating dimensions to EN 735
- Mating dimensions for pumps with different pump connections on request

Overview of motor soleplates

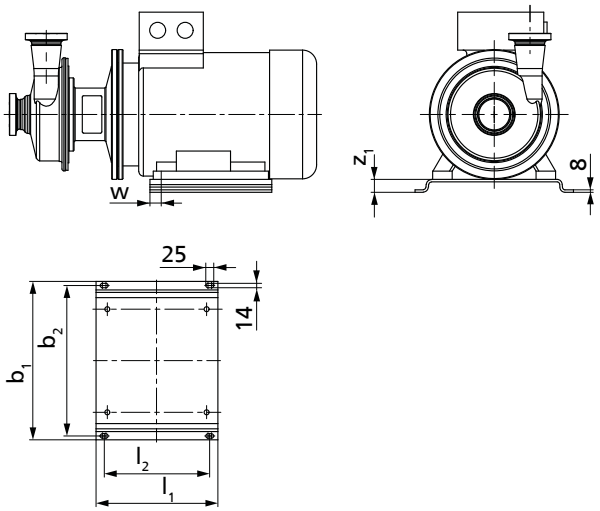
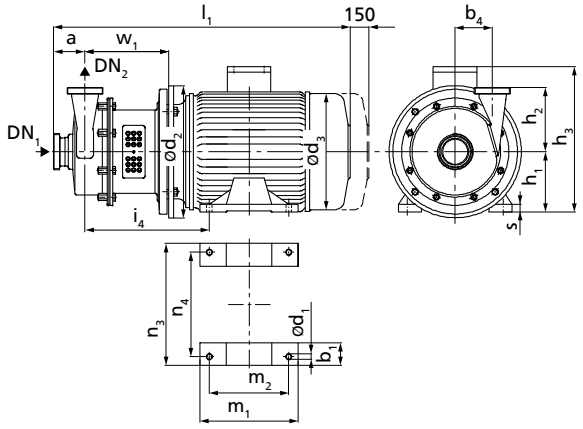


Fig. 326: Motor soleplate dimensions [mm]

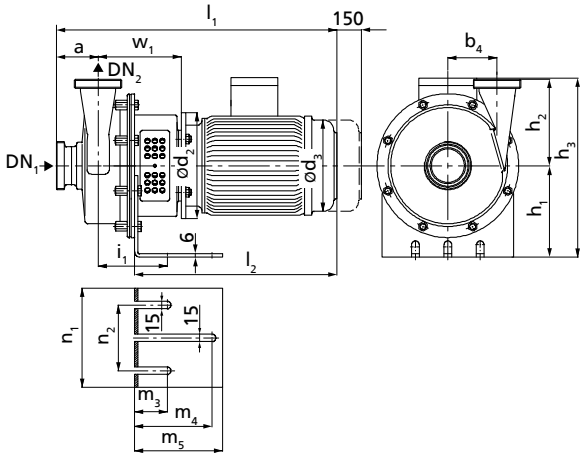
Combinations

Motor	Motor soleplate	Dimensions [mm]						Variant
		b_1	b_2	l_1	l_2	w	z_1	
90S	G1	400	375	350	300	28	70	05
90L	G1	400	375	350	300	28	70	08
100L	G1	400	375	350	300	28	70	04
112M	G1	400	375	350	300	28	70	01
132S	G1	400	375	350	300	30	70	06
132M	G1	400	375	350	300	30	70	07
160M	G2	488	463	375	325	33	40	04
160L	G2	488	463	375	325	33	40	05
180M	G2	488	463	375	325	33	40	02
180L	G2	488	463	375	325	33	40	07
200L	G2	488	463	375	325	35	40	03

Vitachrom DN 50, n ≈ 2900 rpm / 3500 rpm



Pump set with motor feet



Pump set with angle foot

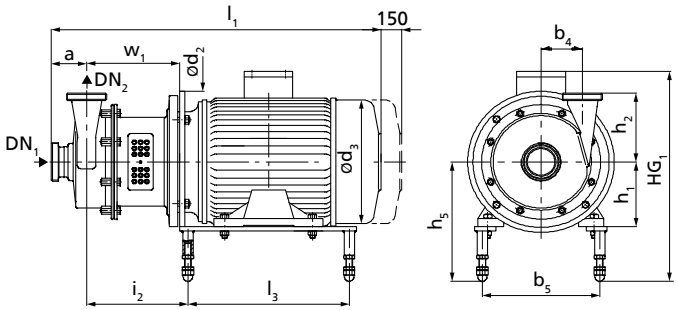
Overview of mating dimensions DN 50, pump set with motor feet or angle foot, dimensions in [mm]

Vitachrom	DN_1	DN_2	a	$\approx b_1$	b_4	d_1	d_2	$\approx d_3$	h_1	h_2 [549]	h_2 [550]	$\approx h_3$	i_1	i_4	$\approx l_1$ [549]	$\approx l_1$ [550]	$\approx l_2$	m_1	m_2	m_3	m_4	m_5	n_1	n_2	n_3	n_4	w_1	s
050-050-125 /152	50	50	70	-	70	10	200	190	160	145	160	288	140	220	516	516	371	165	140	65	155	176	225	130	143	100	164	10
050-050-125 /222	50	50	70	-	70	10	200	190	160	145	160	288	140	220	542	542	397	165	140	65	155	176	225	130	143	125	164	10
050-050-125 /302	50	50	70	-	70	12	250	213	160	145	160	295	140	237	591	591	446	196	160	65	155	176	225	130	176	140	174	12
050-050-125 /402	50	50	70	-	70	12	250	234	160	145	160	308	140	244	615	615	470	226	190	65	155	176	225	130	176	140	174	12
050-050-160 /222	50	50	70	-	85	10	200	190	160	170	185	288	140	220	542	542	397	165	140	65	155	176	236	130	143	125	164	10
050-050-160 /302	50	50	70	-	85	12	250	213	160	170	185	295	140	237	591	591	446	196	160	65	155	176	236	130	176	140	174	12
050-050-160 /402	50	50	70	-	85	12	250	234	160	170	185	308	140	244	615	615	470	226	190	65	155	176	236	130	176	140	174	12
050-050-160 /552	50	50	70	55	85	12	300	266	132	170	185	299	-	283	677	677	-	220	140	-	-	-	-	-	270	216	194	15
050-050-160 /752	50	50	70	55	85	12	300	266	132	170	185	299	-	283	677	677	-	220	140	-	-	-	-	-	270	216	194	15
050-050-160 /1102	50	50	70	70	85	15	350	325	160	170	185	357	-	332	840	840	-	300	210	-	-	-	-	-	320	254	224	21
050-050-160 /1502	50	50	70	70	85	15	350	325	160	170	185	357	-	332	840	840	-	300	210	-	-	-	-	-	320	254	224	21
050-050-200 /302	50	50	70	-	100	12	250	213	160	170	185	295	140	237	591	591	446	196	160	65	155	176	264	130	176	140	174	12
050-050-200 /402	50	50	70	-	100	12	250	234	160	170	185	308	140	244	615	615	470	226	190	65	155	176	264	130	176	140	174	12
050-050-200 /552	50	50	70	55	100	12	300	266	132	170	185	299	-	283	677	677	-	220	140	-	-	-	-	-	270	216	194	15
050-050-200 /752	50	50	70	55	100	12	300	266	132	170	185	299	-	283	677	677	-	220	140	-	-	-	-	-	270	216	194	15
050-050-200 /1102	50	50	70	70	100	15	350	325	160	170	185	357	-	332	840	840	-	300	210	-	-	-	-	-	320	254	224	21
050-050-200 /1502	50	50	70	70	100	15	350	325	160	170	185	357	-	332	840	840	-	300	210	-	-	-	-	-	320	254	224	21

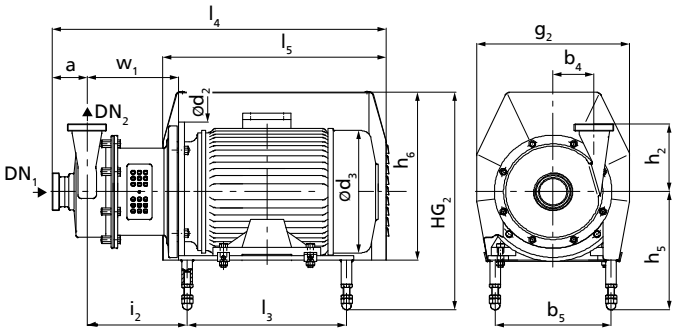
549 Applicable to connections as per DIN 11851 (hygienic pipe union)
550 Applicable to flanged connections to EN 1092-1

Vitachrom	DN_1	DN_2	a	$\approx b_1$	b_4	d_1	d_2	$\approx d_3$	h_1	h_2[549)]	h_2[550)]	$\approx h_3$	i_1	i_4	$\approx l_1$[549)]	$\approx l_1$[550)]	$\approx l_2$	m_1	m_2	m_3	m_4	m_5	n_1	n_2	n_3	n_4	w_1	s
050-050-200 /1852	50	50	70	70	100	15	350	325	160	170	185	357	-	332	846	846	-	314	254	-	-	-	-	-	320	254	224	21
050-050-200 /2202	50	50	70	80	100	15	350	370	180	170	185	442	-	345	904	904	-	320	241	-	-	-	-	-	360	279	224	23
050-050-250 /552	50	50	95[549)] (90)[550)]	55	125	12	300	266	132	185	195	299	-	285,5	711	706	-	220	140	-	-	-	-	-	270	216	196,5	15
050-050-250 /752	50	50		55	125	12	300	266	132	185	195	299	-	285,5	711	706	-	220	140	-	-	-	-	-	270	216	196,5	15
050-050-250 /1102	50	50		70	125	15	350	325	160	185	195	357	-	337,5	877	872	-	300	210	-	-	-	-	-	320	254	229,5	21
050-050-250 /1502	50	50		70	125	15	350	325	160	185	195	357	-	337,5	877	872	-	300	210	-	-	-	-	-	320	254	229,5	21
050-050-250 /1852	50	50		70	125	15	350	325	160	185	195	357	-	337,5	883	878	-	314	254	-	-	-	-	-	320	254	229,5	21
050-050-250 /2202	50	50		80	125	15	350	370	180	185	195	442	-	350,5	941	936	-	320	241	-	-	-	-	-	360	279	229,5	23
050-050-250 /3002	50	50		85	125	19	400	422	200	185	195	505	-	362,5	1000	995	-	388	305	-	-	-	-	-	400	318	229,5	30
050-050-250 /3702	50	50		85	125	19	400	422	200	185	195	505	-	362,5	1000	995	-	388	305	-	-	-	-	-	400	318	229,5	30
050-050-250 /4502	50	50		100	125	19	450	468	225	185	195	550	-	378,5	1086	1081	-	410	311	-	-	-	-	-	450	356	229,5	35
050-050-250 /5502	50	50		100	125	24	550	520	250	185	195	642	-	431,5	1182	1177	-	425	349	-	-	-	-	-	506	406	263,5	40

Vitachrom DN 50, n ≈ 2900 rpm / 3500 rpm, pump set with ball feet and motor shroud



Pump set with ball feet



Pump set with ball feet and motor shroud

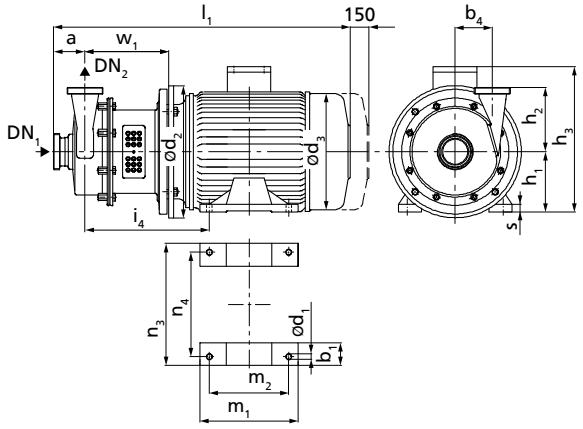
Overview of mating dimensions DN 50, pump set with ball feet and motor shroud, dimensions in [mm]

Vitachrom	DN 1	DN 2	a	b_4	b_5	d_2	d_3	g_2	h_1	h_2 [551]	h_2 [552]	h_5 Min.	h_5 Max.	h_6	≈HG_1 Max.	≈HG_2 Max.	i_2	l_1 [551]	l_1 [552]	l_3	l_4	l_5	w_1
050-050-125 /152	50	50	70	70	200	200	190	264	90	145	160	213	248	305	376	437	158	516	516	225	646,5	450	164
050-050-125 /222	50	50	70	70	200	200	190	264	90	145	160	213	248	305	376	437	170	542	542	225	646,5	450	164
050-050-125 /302	50	50	70	70	200	250	213	264	100	145	160	223	258	305	393	437	175	591	591	265	686,5	470	174
050-050-125 /402	50	50	70	70	200	250	234	264	112	145	160	222	257	305	405	437	182	615	615	265	682,5	470	174
050-050-160 /222	50	50	70	85	200	200	190	264	90	170	185	213	248	305	376	437	170	542	542	225	646,5	450	164
050-050-160 /302	50	50	70	85	200	250	213	264	100	170	185	223	258	305	393	437	175	591	591	265	686,5	470	174
050-050-160 /402	50	50	70	85	200	250	234	264	112	170	185	222	257	305	405	437	182	615	615	265	682,5	470	174
050-050-160 /552	50	50	70	85	230	300	266	314	132	170	185	242	277	350	444	482	211	677	677	285	749,5	550	194
050-050-160 /752	50	50	70	85	230	300	266	314	132	170	185	242	277	350	444	482	211	677	677	285	749,5	550	194
050-050-160 /1102	50	50	70	85	280	350	325	372	160	170	185	270	305	423	502	555	245	840	840	385	915,5	720	224
050-050-160 /1502	50	50	70	85	280	350	325	372	160	170	185	270	305	423	502	555	245	840	840	385	915,5	720	224
050-050-200 /302	50	50	70	100	200	250	213	264	100	170	185	223	258	305	393	437	175	591	591	265	686,5	470	174
050-050-200 /402	50	50	70	100	200	250	234	264	112	170	185	222	257	305	405	437	182	615	615	265	682,5	470	174
050-050-200 /552	50	50	70	100	230	300	266	314	132	170	185	242	277	350	444	482	211	677	677	285	749,5	550	194
050-050-200 /752	50	50	70	100	230	300	266	314	132	170	185	242	277	350	444	482	211	677	677	285	749,5	550	194
050-050-200 /1102	50	50	70	100	280	350	325	372	160	170	185	270	305	423	502	555	245	840	840	385	915,5	720	224
050-050-200 /1502	50	50	70	100	280	350	325	372	160	170	185	270	305	423	502	555	245	840	840	385	915,5	720	224
050-050-200 /1852	50	50	70	100	280	350	325	372	160	170	185	270	305	423	502	555	267	846	846	385	915,5	720	224
050-050-200 /2202	50	50	70	100	305	350	370	402	180	170	185	290	325	493	587	626	292	904	904	385	970,5	740	224

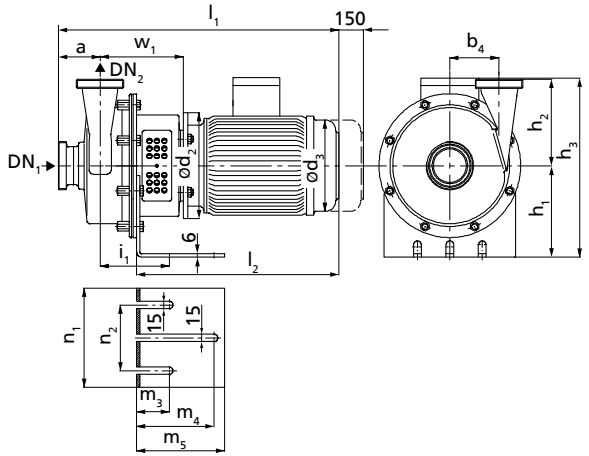
551 Applicable to connections as per DIN 11851 (hygienic pipe union)
552 Application to flanged connections to EN 1092-1

Vitachrom	DN 1	DN 2	a	b_4	b_5	d_2	d_3	g_2	h_1	h_2 [551]	h_2 [552]	h_5 Min.	h_5 Max.	h_6	≈HG_1 Max.	≈HG_2 Max.	i_2	l_1 [551]	l_1 [552]	l_3	l_4	l_5	w_1
050-050-250 /552	50	50	95 [551] (90) [552]	125	230	300	266	314	132	185	195	242	277	350	444	482	153	711	706	345	870,0	550	196,5
050-050-250 /752	50	50		125	230	300	266	314	132	185	195	242	277	350	444	482	153	711	706	345	870,0	550	196,5
050-050-250 /1102	50	50		125	280	350	325	372	160	185	195	270	305	423	502	555	250	877	872	385	991,0	720	229,5
050-050-250 1502	50	50		125	280	350	325	372	160	185	195	270	305	423	502	555	250	877	872	385	991,0	720	229,5
050-050-250 /1852	50	50		125	280	350	325	372	160	185	195	270	305	423	502	555	272	883	878	385	991,0	720	229,5
050-050-250 /2202	50	50		125	305	350	370	402	180	185	195	290	325	493	587	626	297,5	941	936	385	1075	740	229,5
050-050-250 /3002	50	50		125	345	400	422	452	200	185	195	331	353	545	658	686	307,5	1000	995	415	1144	830	229,5
050-050-250 /3702	50	50		125	345	400	422	452	200	185	195	331	353	545	658	686	307,5	1000	995	415	1144	830	229,5
050-050-250 /4502	50	50		125	390	450	468	527	225	185	195	356	378	616	703	744	306,5	1086	1081	455	1279	950	229,5
050-050-250 /5502	50	50		125	440	550	520	602	250	185	195	381	403	716	795	844	358,5	1182	1177	495	1411	1055	263,5

Vitachrom DN 65, n ≈ 2900 rpm / 3500 rpm



Pump set with motor feet



Pump set with angle foot

Overview of mating dimensions DN 65, pump set with motor feet or angle foot, dimensions in [mm]

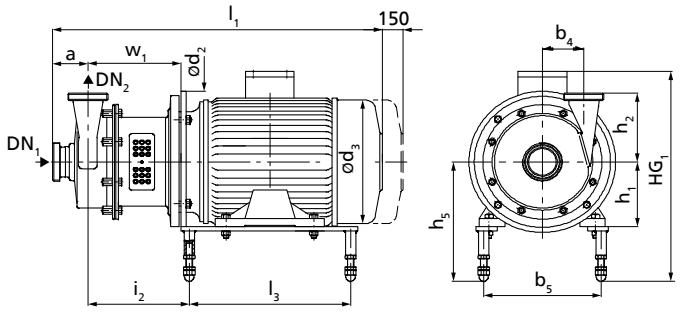
Vitachrom	DN_1	DN_2	a	$\approx b_1$	b_4	d_1	d_2	$\approx d_3$	h_1	h_2 [553]	h_2 [554]	$\approx h_3$	i_1	i_4	$\approx l_1$ [553]	$\approx l_1$ [554]	$\approx l_2$	m_1	m_2	m_3	m_4	m_5	n_1	n_2	n_3	n_4	w_1	s
065-065-125 /152	65	65	85	-	70	10	200	190	160	145	160	288	137	217	528	528	371	165	140	65	155	176	225	130	143	100	161	10
065-065-125 /222	65	65	85	-	70	10	200	190	160	145	160	288	137	217	554	554	397	165	140	65	155	176	225	130	143	125	161	10
065-065-125 /302	65	65	85	-	70	12	250	213	160	145	160	295	137	234	603	603	446	196	160	65	155	176	225	130	176	140	171	12
065-065-125 /402	65	65	85	-	70	12	250	234	160	145	160	308	137	241	627	627	470	226	190	65	155	176	225	130	176	140	171	12
065-065-160 /302	65	65	85	-	85	12	250	213	160	170	185	295	137	234	603	603	446	196	160	65	155	176	236	130	176	140	171	12
065-065-160 /402	65	65	85	-	85	12	250	234	160	170	185	308	137	241	627	627	470	226	190	65	155	176	236	130	176	140	171	12
065-065-160 /552	65	65	85	55	85	12	300	266	132	170	185	299	-	280	689	689	-	220	140	-	-	-	-	-	270	216	191	15
065-065-160 /752	65	65	85	55	85	12	300	266	132	170	185	299	-	280	689	689	-	220	140	-	-	-	-	-	270	216	191	15
065-065-160 /1102	65	65	85	70	85	15	350	325	160	170	185	357	-	329	852	852	-	300	210	-	-	-	-	-	320	254	221	21
065-065-160 /1502	65	65	85	70	85	15	350	325	160	170	185	357	-	329	852	852	-	300	210	-	-	-	-	-	320	254	221	21
065-065-160 /1852	65	65	85	70	85	15	350	325	160	170	185	357	-	329	858	858	-	314	254	-	-	-	-	-	320	254	221	21
065-065-200 /402	65	65	85	80	100	15	350	370	160	170	185	442	-	292	866	866	-	320	241	-	-	-	-	-	360	279	171	23
065-065-200 /552	65	65	85	55	100	12	300	266	132	170	185	299	-	280	689	689	-	220	140	-	-	-	-	-	270	216	191	15
065-065-200 /752	65	65	85	55	100	12	300	266	132	170	185	299	-	280	689	689	-	220	140	-	-	-	-	-	270	216	191	15
065-065-200 /1102	65	65	85	70	100	15	350	325	160	170	185	357	-	329	852	852	-	300	210	-	-	-	-	-	320	254	221	21
065-065-200 /1502	65	65	85	70	100	15	350	325	160	170	185	357	-	329	852	852	-	300	210	-	-	-	-	-	320	254	221	21
065-065-200 /1852	65	65	85	70	100	15	350	325	160	170	185	357	-	329	858	858	-	314	254	-	-	-	-	-	320	254	221	21

553 Applicable to connections as per DIN 11851 (hygienic pipe union)
554 Application to flanged connections to EN 1092-1

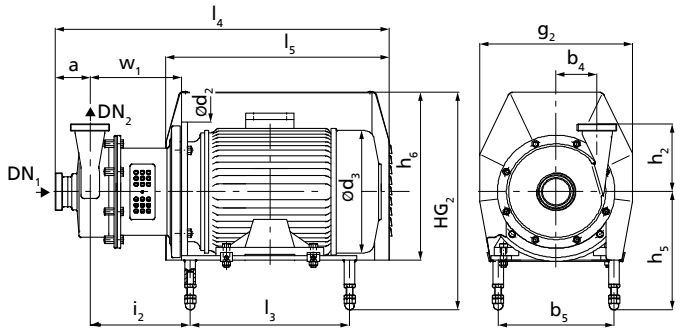
Vitachrom	DN_1	DN_2	a	$\approx b_1$	b_4	d_1	d_2	$\approx d_3$	h_1	h_2 [553]	h_2 [554]	$\approx h_3$	i_1	i_4	$\approx l_1$ [553]	$\approx l_1$ [554]	$\approx l_2$	m_1	m_2	m_3	m_4	m_5	n_1	n_2	n_3	n_4	w_1	s
065-065-200 /2202	65	65	85	80	100	15	350	370	180	170	185	442	-	342	916	916	-	320	241	-	-	-	-	-	360	279	221	23
065-065-250 /552	65	65	105[553] (90)[554]	55	130	12	300	266	132	220	205	299	-	282	717	702	-	220	140	-	-	-	-	-	270	216	193	15
065-065-250 /752	65	65		55	130	12	300	266	132	220	205	299	-	282	717	702	-	220	140	-	-	-	-	-	270	216	193	15
065-065-250 /1102	65	65		70	130	15	350	325	160	220	205	357	-	334	883	868	-	300	210	-	-	-	-	-	320	254	226	21
065-065-250 /1502	65	65		70	130	15	350	325	160	220	205	357	-	334	883	868	-	300	210	-	-	-	-	-	320	254	226	21
065-065-250 /1852	65	65		70	130	15	350	325	160	220	205	357	-	334	889	874	-	314	254	-	-	-	-	-	320	254	226	21
065-065-250 /2202	65	65		80	130	15	350	370	180	220	205	442	-	347	947	932	-	320	241	-	-	-	-	-	360	279	226	23
065-065-250 /3002	65	65		85	130	19	400	422	200	220	205	505	-	359	1006	991	-	388	305	-	-	-	-	-	400	318	226	30
065-065-250 /3702	65	65		85	130	19	400	422	200	220	205	505	-	359	1006	991	-	388	305	-	-	-	-	-	400	318	226	30
065-065-250 /4502	65	65		100	130	19	450	468	250	220	205	550	-	375	1092	1077	-	410	311	-	-	-	-	-	450	356	226	35
065-065-250 /5502	65	65		100	130	24	550	520	250	220	205	642	-	428	1188	1173	-	425	349	-	-	-	-	-	506	406	260	40

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Vitachrom DN 65, n ≈ 2900 rpm / 3500 rpm, pump set with ball feet and motor shroud



Pump set with ball feet



Pump set with ball feet and motor shroud

Overview of mating dimensions DN 65, pump set with ball feet and motor shroud, dimensions in [mm]

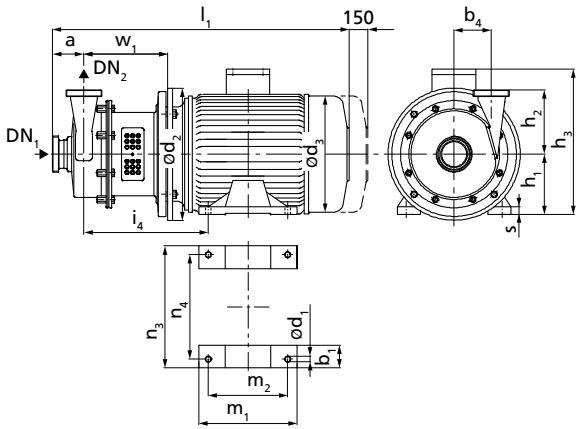
Vitachrom	DN_1	DN_2	a	b_4	b_5	d_2	d_3	g_2	h_1	h_2 [555]	h_2 [556]	h_5 Min.	h_5 Max.	h_6	≈HG_1 Max.	≈HG_2 Max.	i_2	l_1 [555]	l_1 [556]	l_3	l_4	l_5	w_1
065-065-125 /152	65	65	85	70	200	200	190	264	90	145	160	213	248	305	376	437	155	528	528	225	658,5	450	161
065-065-125 /222	65	65	85	70	200	200	190	264	90	145	160	213	248	305	376	437	167	554	554	225	658,5	450	161
065-065-125 /302	65	65	85	70	200	250	213	264	100	145	160	223	258	305	393	437	172	603	603	265	698,5	470	171
065-065-125 /402	65	65	85	70	200	250	234	264	112	145	160	222	257	305	405	437	179	627	627	265	698,5	470	171
065-065-160 /302	65	65	85	85	200	250	213	264	100	170	185	223	258	305	393	437	172	603	603	265	698,5	470	171
065-065-160 /402	65	65	85	85	200	250	234	264	112	170	185	222	257	305	405	437	179	627	627	265	694,5	470	171
065-065-160 /552	65	65	85	85	230	300	266	314	132	170	185	242	277	350	444	482	208	689	689	285	761,5	550	191
065-065-160 /752	65	65	85	85	230	300	266	314	132	170	185	242	277	350	444	482	208	689	689	285	761,5	550	191
065-065-160 /1102	65	65	85	85	280	350	325	372	160	170	185	270	305	423	502	555	242	852	852	385	927,5	720	221
065-065-160 /1502	65	65	85	85	280	350	325	372	160	170	185	270	305	423	502	555	242	852	852	385	927,5	720	221
065-065-160 /1852	65	65	85	85	280	350	325	372	160	170	185	270	305	423	502	555	264	858	858	385	927,5	720	221
065-065-200 /402	65	65	85	100	200	350	370	264	180	170	185	290	325	305	587	437	230	866	866	265	694,5	470	171
065-065-200 /552	65	65	85	100	230	300	266	314	132	170	185	242	277	350	444	482	208	689	689	285	761,5	550	191
065-065-200 /752	65	65	85	100	230	300	266	314	132	170	185	242	277	350	444	482	208	689	689	285	761,5	550	191
065-065-200 /1102	65	65	85	100	280	350	325	372	160	170	185	270	305	423	502	555	242	852	852	385	927,5	720	221
065-065-200 /1502	65	65	85	100	280	350	325	372	160	170	185	270	305	423	502	555	242	852	852	385	927,5	720	221
065-065-200 /1852	65	65	85	100	280	350	325	372	160	170	185	270	305	423	502	555	264	858	858	385	927,5	720	221
065-065-200 /2202	65	65	85	100	305	350	370	402	180	170	185	290	325	493	587	626	251	916	916	385	982,5	740	221
065-065-250 /552	65	65	105 [555] (90) [556]	130	230	300	266	314	132	220	205	242	277	350	444	482	149,5	717	702	345	876,0	550	193
065-065-250 /752	65	65		130	230	300	266	314	132	220	205	242	277	350	444	482	168,5	717	702	345	876,0	550	193

555 Applicable to connections as per DIN 11851 (hygienic pipe union)
556 Application to flanged connections to EN 1092-1

Vitachrom	DN_1	DN_2	a	b_4	b_5	d_2	d_3	g_2	h_1	h_2[555)]	h_2[556)]	h_5 Min.	h_5 Max.	h_6	≈HG_1 Max.	≈HG_2 Max.	i_2	l_1[555)]	l_1[556)]	l_3	l_4	l_5	w_1
065-065-250 /1102	65	65	105[555)] (90)[556)]	130	280	350	325	372	160	220	205	270	305	423	502	555	246,5	883	868	385	997,0	720	226
065-065-250 /1502	65	65		130	280	350	325	372	160	220	205	270	305	423	502	555	246,5	883	868	385	997,0	720	226
065-065-250 /1852	65	65		130	280	350	325	372	160	220	205	270	305	423	502	555	268,5	889	874	385	997,0	720	226
065-065-250 /2202	65	65		130	305	350	370	402	180	220	205	290	325	493	587	626	294	947	932	385	1081	740	226
065-065-250 /3002	65	65		130	345	400	422	452	200	220	205	331	353	545	658	686	304	1006	991	415	1148	830	226
065-065-250 /3702	65	65		130	345	400	422	452	200	220	205	331	353	545	658	686	304	1006	991	415	1148	830	226
065-065-250 /4502	65	65		130	390	450	468	527	225	220	205	356	378	616	703	744	303	1092	1077	455	1285	950	226
065-065-250 /5502	65	65		130	440	550	520	602	250	220	205	381	403	716	795	844	355	1188	1173	495	1417	1055	260

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Vitachrom DN 65 with inducer, n ≈ 2900 rpm / 3500 rpm



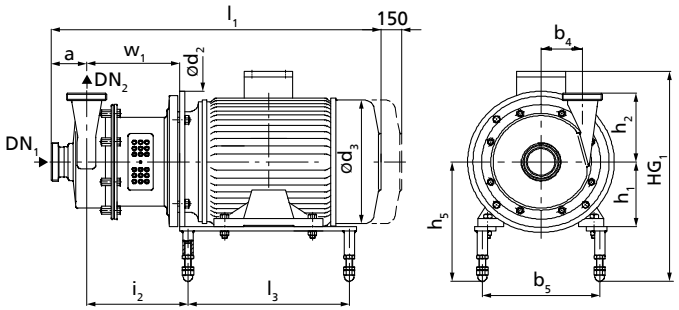
Pump set with inducer and motor feet

Overview of mating dimensions DN 65, pump set with inducer and motor feet, dimensions in [mm]

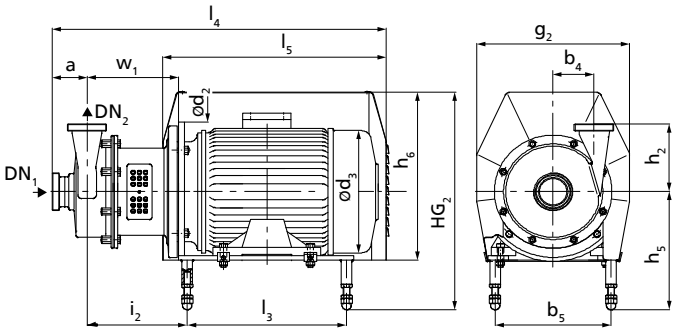
Vitachrom with inducer	Inducer	DN_1	DN_2	a	$\approx b_1$	b_4	d_1	d_2	$\approx d_3$	h_1	h_2 [557]	h_2 [558]	$\approx h_3$	i_1	i_4	$\approx l_1$	m_1	m_2	m_3	m_4	m_5	n_1	n_2	n_3	n_4	w_1	s
065-065-160 /552	0	100	65	115	55	85	12	300	266	132	170	185	299	-	280	719	220	140	-	-	-	-	-	270	216	191	15
065-065-160 /752	0	100	65	115	55	85	12	300	266	132	170	185	299	-	280	719	220	140	-	-	-	-	-	270	216	191	15
065-065-160 /1102	0	100	65	115	70	85	15	350	325	160	170	185	357	-	329	882	300	210	-	-	-	-	-	320	254	221	21
065-065-160 /1502	0	100	65	115	70	85	15	350	325	160	170	185	357	-	329	882	300	210	-	-	-	-	-	320	254	221	21
065-065-160 /1852	0	100	65	115	70	85	15	350	325	160	170	185	357	-	329	888	314	254	-	-	-	-	-	320	254	221	21
065-065-160 /2202	0	100	65	115	80	85	15	350	370	180	170	185	442	-	342	946	320	241	-	-	-	-	-	360	279	221	23
065-065-160 /552	1	100	65	115	55	85	12	300	266	132	170	185	299	-	280	719	220	140	-	-	-	-	-	270	216	191	15
065-065-160 /752	1	100	65	115	55	85	12	300	266	132	170	185	299	-	280	719	220	140	-	-	-	-	-	270	216	191	15
065-065-160 /1102	1	100	65	115	70	85	15	350	325	160	170	185	357	-	329	882	300	210	-	-	-	-	-	320	254	221	21
065-065-160 /1502	1	100	65	115	70	85	15	350	325	160	170	185	357	-	329	882	300	210	-	-	-	-	-	320	254	221	21
065-065-160 /1852	1	100	65	115	70	85	15	350	325	160	170	185	357	-	329	888	314	254	-	-	-	-	-	320	254	221	21
065-065-160 /2202	1	100	65	115	80	85	15	350	370	180	170	185	442	-	342	946	320	241	-	-	-	-	-	360	279	221	23
065-065-160 /552	2	100	65	115	55	85	12	300	266	132	170	185	299	-	280	719	220	140	-	-	-	-	-	270	216	191	15
065-065-160 /752	2	100	65	115	55	85	12	300	266	132	170	185	299	-	280	719	220	140	-	-	-	-	-	270	216	191	15
065-065-160 /1102	2	100	65	115	70	85	15	350	325	160	170	185	357	-	329	882	300	210	-	-	-	-	-	320	254	221	21
065-065-160 /1502	2	100	65	115	70	85	15	350	325	160	170	185	357	-	329	882	300	210	-	-	-	-	-	320	254	221	21
065-065-160 /1852	2	100	65	115	70	85	15	350	325	160	170	185	357	-	329	888	314	254	-	-	-	-	-	320	254	221	21
065-065-160 /2202	2	100	65	115	80	85	15	350	370	180	170	185	442	-	342	946	320	241	-	-	-	-	-	360	279	221	23

557 Applicable to connections as per DIN 11851 (hygienic pipe union)
558 Applicable to flanged connections to EN 1092-1

Vitachrom DN 65 with inducer, n ≈ 2900 rpm / 3500 rpm, pump set with ball feet and motor shroud



Pump set with inducer and ball feet



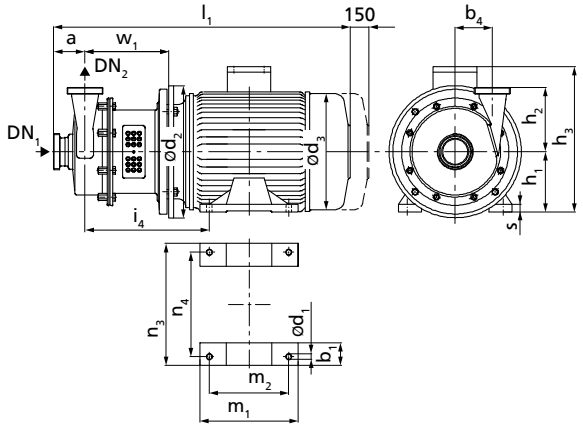
Pump set with inducer, ball feet and motor shroud

Overview of mating dimensions DN 65, pump set with inducer, ball feet and motor shroud, dimensions in [mm]

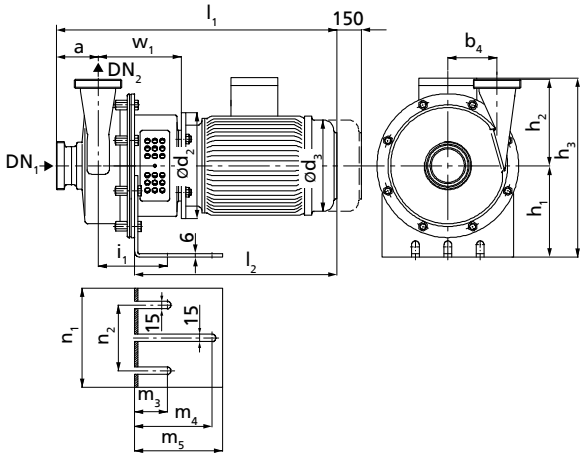
Vitachrom with inducer	Inducer	DN_1	DN_2	a	b_4	b_5	d_2	$\approx d_3$	g_2	h_1	h_2 [559]	h_2 [560]	h_5 Min.	h_5 Max.	h_6	$\approx HG_1$ Max.	$\approx HG_2$ Max.	i_2	$\approx l_1$	l_3	l_4	l_5	w_1
065-065-160 /552	0	100	65	115	85	230	300	266	314	132	170	185	242	277	350	444	482	208	719	285	762	550	191
065-065-160 /752	0	100	65	115	85	230	300	266	314	132	170	185	242	277	350	444	482	208	719	285	762	550	191
065-065-160 /1102	0	100	65	115	85	280	350	325	372	160	170	185	270	305	423	502	555	242	882	385	928	720	221
065-065-160 /1502	0	100	65	115	85	280	350	325	372	160	170	185	270	305	423	502	555	242	882	385	928	720	221
065-065-160 /1852	0	100	65	115	85	280	350	325	372	160	170	185	270	305	423	502	555	264	888	385	928	720	221
065-065-160 /2202	0	100	65	115	85	305	350	370	402	180	170	185	290	325	493	587	626	289	946	385	1013	740	221
065-065-160 /552	1	100	65	115	85	230	300	266	314	132	170	185	242	277	350	444	482	208	719	285	762	550	191
065-065-160 /752	1	100	65	115	85	230	300	266	314	132	170	185	242	277	350	444	482	208	719	285	762	550	191
065-065-160 /1102	1	100	65	115	85	280	350	325	372	160	170	185	270	305	423	502	555	242	882	385	928	720	221
065-065-160 /1502	1	100	65	115	85	280	350	325	372	160	170	185	270	305	423	502	555	242	882	385	928	720	221
065-065-160 /1852	1	100	65	115	85	280	350	325	372	160	170	185	270	305	423	502	555	264	888	385	928	720	221
065-065-160 /2202	1	100	65	115	85	305	350	370	402	180	170	185	290	325	493	587	626	289	946	385	1013	740	221
065-065-160 /552	2	100	65	115	85	230	300	266	314	132	170	185	242	277	350	444	482	208	719	285	762	550	191
065-065-160 /752	2	100	65	115	85	230	300	266	314	132	170	185	242	277	350	444	482	208	719	285	762	550	191
065-065-160 /1102	2	100	65	115	85	280	350	325	372	160	170	185	270	305	423	502	555	242	882	385	928	720	221
065-065-160 /1502	2	100	65	115	85	280	350	325	372	160	170	185	270	305	423	502	555	242	882	385	928	720	221
065-065-160 /1852	2	100	65	115	85	280	350	325	372	160	170	185	270	305	423	502	555	264	888	385	928	720	221
065-065-160 /2202	2	100	65	115	85	305	350	370	402	180	170	185	290	325	493	587	626	289	946	385	1013	740	221

559 Applicable to connections as per DIN 11851 (hygienic pipe union)
560 Applicable to flanged connections to EN 1092-1

Vitachrom DN 80, n ≈ 2900 rpm / 3500 rpm



Pump set with motor feet



Pump set with angle foot

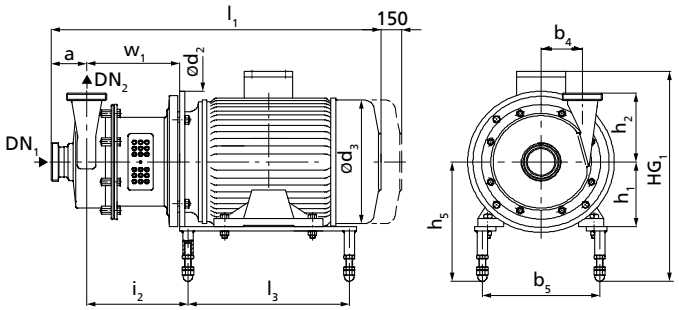
Overview of mating dimensions DN 80, pump set with motor feet or angle foot, dimensions in [mm]

Vitachrom	DN_1	DN_2	a	$\approx b_1$	b_4	d_1	d_2	$\approx d_3$	h_1	h_2 [561]	h_2 [562]	$\approx h_3$	i_1	i_4	$\approx l_1$ [561]	$\approx l_1$ [562]	$\approx l_2$	m_1	m_2	m_3	m_4	m_5	n_1	n_2	n_3	n_4	w_1	s
080-080-125 /402	80	80	100	-	85	12	250	234	160	170	185	308	144,5	248,5	650	650	470	226	190	65	155	176	236	130	176	140	178,5	12
080-080-125 /552	80	80	100	55	85	12	300	266	132	170	185	299	-	287,5	712	712	-	220	140	-	-	-	-	-	270	216	198,5	15
080-080-125 /752	80	80	100	55	85	12	300	266	132	170	185	299	-	287,5	712	712	-	220	140	-	-	-	-	-	270	216	198,5	15
080-080-125 /1102	80	80	100	70	85	15	350	325	160	170	185	357	-	336,5	875	875	-	300	210	-	-	-	-	-	320	254	228,5	21
080-080-125 /1502	80	80	100	70	85	15	350	325	160	170	185	357	-	336,5	875	875	-	300	210	-	-	-	-	-	320	254	228,5	21
080-080-125 /1852	80	80	100	70	85	15	350	325	160	170	185	357	-	336,5	881	881	-	314	254	-	-	-	-	-	320	254	228,5	21
080-080-160 /552	80	80	100	55	85	12	300	266	132	170	185	299	-	287,5	712	712	-	220	140	-	-	-	-	-	270	216	198,5	15
080-080-160 /752	80	80	100	55	85	12	300	266	132	170	185	299	-	287,5	712	712	-	220	140	-	-	-	-	-	270	216	198,5	15
080-080-160 /1102	80	80	100	70	85	15	350	325	160	170	185	357	-	336,5	875	875	-	300	210	-	-	-	-	-	320	254	228,5	21
080-080-160 /1502	80	80	100	70	85	15	350	325	160	170	185	357	-	336,5	875	875	-	300	210	-	-	-	-	-	320	254	228,5	21
080-080-160 /1852	80	80	100	70	85	15	350	325	160	170	185	357	-	336,5	881	891	-	314	254	-	-	-	-	-	320	254	228,5	21
080-080-160 /2202	80	80	100	80	85	15	350	370	180	170	185	442	-	349,5	939	939	-	320	241	-	-	-	-	-	360	279	228,5	23
080-080-250 /752	80	80	115 [561] (95) [562]	55	125	12	300	266	132	225	205	299	-	279,5	725	705	-	220	140	-	-	-	-	-	270	216	190,5	15
080-080-250 /1102	80	80		70	125	15	350	325	160	225	205	357	-	331,5	891	871	-	300	210	-	-	-	-	-	320	254	223,5	21
080-080-250 /1502	80	80		70	125	15	350	325	160	225	205	357	-	331,5	891	871	-	300	210	-	-	-	-	-	320	254	223,5	21
080-080-250 /1852	80	80		70	125	15	350	325	160	225	205	357	-	331,5	897	877	-	314	254	-	-	-	-	-	320	254	223,5	21
080-080-250 /2202	80	80		80	125	15	350	370	180	225	205	442	-	344,5	955	935	-	320	241	-	-	-	-	-	360	279	223,5	23

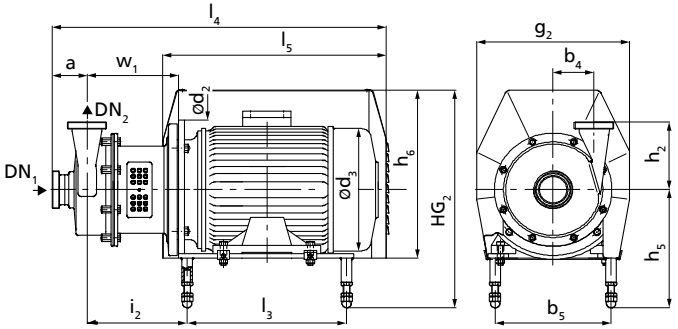
561 Applicable to connections as per DIN 11851 (hygienic pipe union)
562 Applicable to flanged connections to EN 1092-1

Vitachrom	DN_1	DN_2	a	$\approx b_1$	b_4	d_1	d_2	$\approx d_3$	h_1	h_2 [561]	h_2 [562]	$\approx h_3$	i_1	i_4	$\approx l_1$ [561]	$\approx l_1$ [562]	$\approx l_2$	m_1	m_2	m_3	m_4	m_5	n_1	n_2	n_3	n_4	w_1	s
080-080-250 /3002	80	80	115[561] (95)[562]	85	125	19	400	422	200	225	205	505	-	356,5	1014	994	-	388	305	-	-	-	-	-	400	318	223,5	30
080-080-250 /3702	80	80		85	125	19	400	422	200	225	205	505	-	356,5	1014	994	-	388	305	-	-	-	-	-	400	318	223,5	30
080-080-250 /4502	80	80		100	125	19	450	468	225	225	205	550	-	372,5	1100	1080	-	410	311	-	-	-	-	-	450	356	223,5	35
080-080-250 /5502	80	80		100	125	24	550	520	250	225	205	642	-	425,5	1196	1176	-	425	349	-	-	-	-	-	506	406	257,5	40

Vitachrom DN 80, n ≈ 2900 rpm / 3500 rpm, pump set with ball feet and motor shroud



Pump set with ball feet



Pump set with ball feet and motor shroud

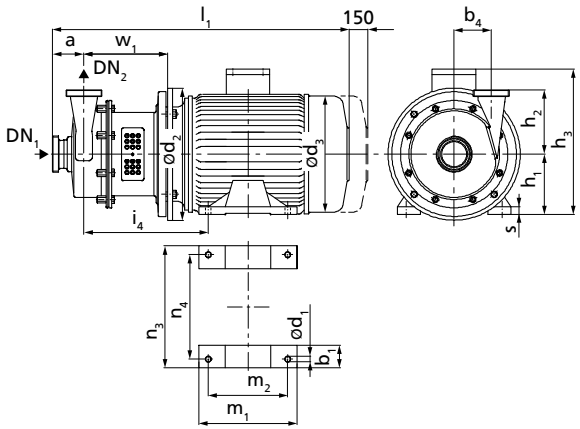
Overview of mating dimensions DN 80, pump set with ball feet and motor shroud, dimensions in [mm]

Vitachrom	DN_1	DN_2	a	b_4	b_5	d_2	d_3	g_2	h_1	h_2 [563]	h_2 [564]	h_5 Min.	h_5 Max.	h_6	≈HG_1 Max.	≈HG_2 Max.	i_2	l_1 [563]	l_1 [564]	l_3	l_4	l_5	w_1
080-080-125 /402	80	80	100	85	200	250	234	264	112	170	185	222	257	305	405	437	186	650	650	265	717	470	179
080-080-125 /552	80	80	100	85	230	300	266	314	132	170	185	242	277	350	444	482	215	712	712	285	784	550	199
080-080-125 /752	80	80	100	85	230	300	266	314	132	170	185	242	277	350	444	482	215	712	712	285	784	550	199
080-080-125 /1102	80	80	100	85	280	350	325	372	160	170	185	270	305	423	502	555	249	875	875	385	950	720	229
080-080-125 /1502	80	80	100	85	280	350	325	372	160	170	185	270	305	423	502	555	249	875	875	385	950	720	229
080-080-125 /1852	80	80	100	85	280	350	325	372	160	170	185	270	305	423	502	555	271	881	881	385	950	720	229
080-080-160 /552	80	80	100	85	230	300	266	314	132	170	185	242	277	350	444	482	215	712	712	285	784	550	199
080-080-160 /752	80	80	100	85	230	300	266	314	132	170	185	242	277	350	444	482	215	712	712	285	784	550	199
080-080-160 /1102	80	80	100	85	280	350	325	372	160	170	185	270	305	423	502	555	249	875	875	385	950	720	229
080-080-160 /1502	80	80	100	85	280	350	325	372	160	170	185	270	305	423	502	555	249	875	875	385	950	720	229
080-080-160 /1852	80	80	100	85	280	350	325	372	160	170	185	270	305	423	502	555	271	881	881	385	950	720	229
080-080-160 /2202	80	80	100	85	305	350	370	402	180	170	185	290	325	493	587	626	259	939	939	385	1005	740	229
080-080-250 /752	80	80	115 [563] (95) [564]	125	230	300	266	314	132	225	205	242	277	350	444	482	147	725	705	345	884	550	190,5
080-080-250 /1102	80	80		125	280	350	325	372	160	225	205	270	305	423	502	555	244	891	871	385	1005	720	223,5
080-080-250 /1502	80	80		125	280	350	325	372	160	225	205	270	305	423	502	555	244	891	871	385	1005	720	223,5
080-080-250 /1852	80	80		125	280	350	325	372	160	225	205	270	305	423	502	555	266	897	877	385	1005	720	223,5
080-080-250 /2202	80	80		125	305	350	370	402	180	225	205	290	325	493	587	626	291	955	935	385	1091	740	223,5
080-080-250 /3002	80	80		125	345	400	422	452	200	225	205	331	353	545	658	686	301,5	1014	994	415	1156	830	223,5
080-080-250 /3702	80	80		125	345	400	422	452	200	225	205	331	353	545	658	686	301,5	1014	994	415	1156	830	223,5
080-080-250 /4502	80	80		125	390	450	468	527	225	225	205	356	378	616	703	744	300,5	1100	1080	455	1148	950	223,5

563 Applicable to connections as per DIN 11851 (hygienic pipe union)
564 Applicable to flanged connections to EN 1092-1

Vitachrom	DN_1	DN_2	a	b_4	b_5	d_2	d_3	g_2	h_1	h_2 [563)]	h_2 [564)]	h_5 Min.	h_5 Max.	h_6	≈HG_1 Max.	≈HG_2 Max.	i_2	l_1 [563)]	l_1 [564)]	l_3	l_4	l_5	w_1
080-080-250 /5502	80	80	115[563)] (95)[564)]	125	440	550	520	602	250	225	205	381	403	716	795	844	352,5	1196	1176	495	1425	1055	257,5

Vitachrom DN 80 with inducer, n ≈ 2900 rpm



Pump set with inducer and motor feet

Overview of mating dimensions DN 80, pump set with inducer and motor feet, dimensions in [mm]

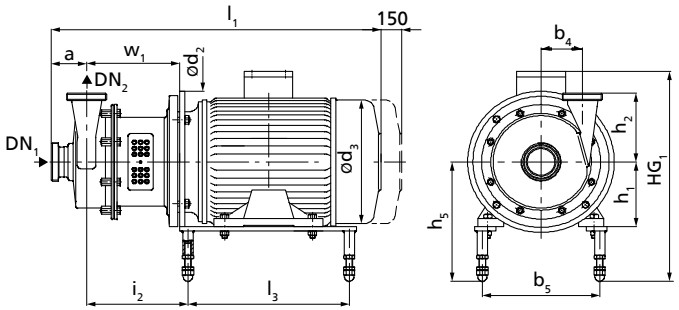
Vitachrom with inducer	Inducer	DN_1	DN_2	a	$\approx b_1$	b_4	d_1	d_2	d_3	h_1	h_2[565]	h_2[566]	$\approx h_3$	i_4	$\approx l_1$	m_1	m_2	n_3	n_4	w_1	s
080-080-250 /1502	0	100	80	115	70	125	15	350	325	160	225	205	357	331,5	891	300	210	320	254	223,5	21
080-080-250 /1852	0	100	80	115	70	125	15	350	325	160	225	205	357	331,5	897	314	254	320	254	223,5	21
080-080-250 /2202	0	100	80	115	80	125	15	350	370	180	225	205	442	344,5	955	320	241	360	279	223,5	23
080-080-250 /3002	0	100	80	115	85	125	19	400	422	200	225	205	505	356,5	1014	388	305	400	318	223,5	30
080-080-250 /3702	0	100	80	115	85	125	19	400	422	200	225	205	505	356,5	1014	388	305	400	318	223,5	30
080-080-250 /4502	0	100	80	115	100	125	19	450	468	225	225	205	550	372,5	1100	410	311	450	356	223,5	35
080-080-250 /5502	0	100	80	115	100	125	24	550	520	250	225	205	642	425,5	1196	425	349	506	406	257,5	40
080-080-250 /1502	1	100	80	115	70	125	15	350	325	160	225	205	357	331,5	891	300	210	320	254	223,5	21
080-080-250 /1852	1	100	80	115	70	125	15	350	325	160	225	205	357	331,5	897	314	254	320	254	223,5	21
080-080-250 /2202	1	100	80	115	80	125	15	350	370	180	225	205	442	344,5	955	320	241	360	279	223,5	23
080-080-250 /3002	1	100	80	115	85	125	19	400	422	200	225	205	505	356,5	1014	388	305	400	318	223,5	30
080-080-250 /3702	1	100	80	115	85	125	19	400	422	200	225	205	505	356,5	1014	388	305	400	318	223,5	30
080-080-250 /4502	1	100	80	115	100	125	19	450	468	225	225	205	550	372,5	1100	410	311	450	356	223,5	35
080-080-250 /5502	1	100	80	115	100	125	24	550	520	250	225	205	642	425,5	1196	425	349	506	406	257,5	40
080-080-250 /1502	2	100	80	115	70	125	15	350	325	160	225	205	357	331,5	891	300	210	320	254	223,5	21
080-080-250 /1852	2	100	80	115	70	125	15	350	325	160	225	205	357	331,5	897	314	254	320	254	223,5	21
080-080-250 /2202	2	100	80	115	80	125	15	350	370	180	225	205	442	344,5	955	320	241	360	279	223,5	23
080-080-250 /3002	2	100	80	115	85	125	19	400	422	200	225	205	505	356,5	1014	388	305	400	318	223,5	30

565 Applicable to connections as per DIN 11851 (hygienic pipe union)
566 Applicable to flanged connections to EN 1092-1

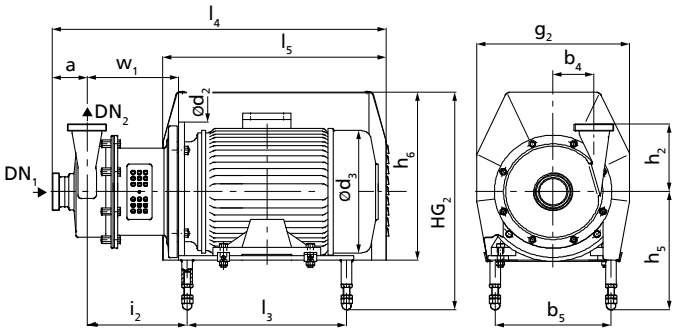
Vitachrom with inducer	Inducer	DN_1	DN_2	a	$\approx b_1$	b_4	d_1	d_2	d_3	h_1	h_2 [565)]	h_2 [566)]	$\approx h_3$	i_4	$\approx l_1$	m_1	m_2	n_3	n_4	w_1	s
080-080-250 /3702	2	100	80	115	85	125	19	400	422	200	225	205	505	356,5	1014	388	305	400	318	223,5	30
080-080-250 /4502	2	100	80	115	100	125	19	450	468	225	225	205	550	372,5	1100	410	311	450	356	223,5	35
080-080-250 /5502	2	100	80	115	100	125	24	550	520	250	225	205	642	425,5	1196	425	349	506	406	257,5	40

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Vitachrom DN 80 with inducer, n ≈ 2900 rpm, pump set with ball feet and motor shroud



Pump set with inducer and ball feet

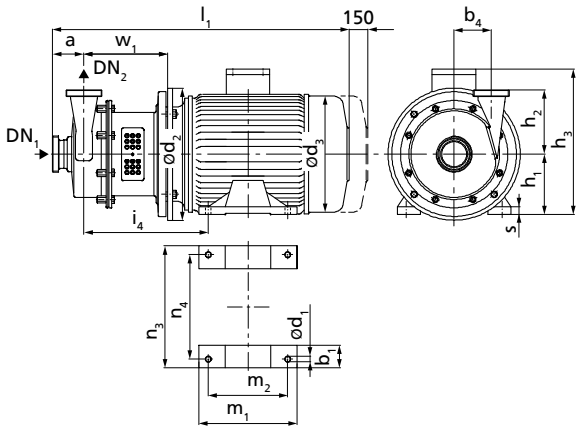


Pump set with inducer, ball feet and motor shroud

Overview of mating dimensions DN 80, pump set with inducer, ball feet and motor shroud, dimensions in [mm]

Vitachrom with inducer	Inducer	DN_1	DN_2	a	b_4	b_5	d_2	$\approx d_3$	g_2	h_1	h_2	h_2	h_5 Min.	h_5 Max.	h_6	$\approx HG_1$ Max.	$\approx HG_2$ Max.	i_2	$\approx l_1$	l_3	l_4	l_5	w_1
080-080-250 /1502	0	100	80	115	125	280	350	325	372	160	225	205	270	305	423	502	555	244	891	385	1005	720	223,5
080-080-250 /1852	0	100	80	115	125	280	350	325	372	160	225	205	270	305	423	502	555	266	897	385	1005	720	223,5
080-080-250 /2202	0	100	80	115	125	305	350	370	402	180	225	205	290	325	493	587	626	291,5	955	385	1091	740	223,5
080-080-250 /3002	0	100	80	115	125	345	400	422	452	200	225	205	331	353	545	658	686	301,5	1014	415	1155	830	223,5
080-080-250 /3702	0	100	80	115	125	345	400	422	452	200	225	205	331	353	545	658	686	301,5	1014	415	1155	830	223,5
080-080-250 /4502	0	100	80	115	125	390	450	468	527	225	225	205	356	378	616	703	744	300,5	1100	455	1148	950	223,5
080-080-250 /5502	0	100	80	115	125	440	550	520	602	250	225	205	381	403	716	795	844	352,5	1196	495	1425	1055	257,5
080-080-250 /1502	1	100	80	115	125	280	350	325	372	160	225	205	270	305	423	502	555	244	891	385	1005	720	223,5
080-080-250 /1852	1	100	80	115	125	280	350	325	372	160	225	205	270	305	423	502	555	266	897	385	1005	720	223,5
080-080-250 /2202	1	100	80	115	125	305	350	370	402	180	225	205	290	325	493	587	626	291,5	955	385	1091	740	223,5
080-080-250 /3002	1	100	80	115	125	345	400	422	452	200	225	205	331	353	545	658	686	301,5	1014	415	1155	830	223,5
080-080-250 /3702	1	100	80	115	125	345	400	422	452	200	225	205	331	353	545	658	686	301,5	1014	415	1155	830	223,5
080-080-250 /4502	1	100	80	115	125	390	450	468	527	225	225	205	356	378	616	703	744	300,5	1100	455	1148	950	223,5
080-080-250 /5502	1	100	80	115	125	440	550	520	602	250	225	205	381	403	716	795	844	352,5	1196	495	1425	1055	257,5
080-080-250 /1502	2	100	80	115	125	280	350	325	372	160	225	205	270	305	423	502	555	244	891	385	1005	720	223,5
080-080-250 /1852	2	100	80	115	125	280	350	325	372	160	225	205	270	305	423	502	555	266	897	385	1005	720	223,5
080-080-250 /2202	2	100	80	115	125	305	350	370	402	180	225	205	290	325	493	587	626	291,5	955	385	1091	740	223,5
080-080-250 /3002	2	100	80	115	125	345	400	422	452	200	225	205	331	353	545	658	686	301,5	1014	415	1155	830	223,5
080-080-250 /3702	2	100	80	115	125	345	400	422	452	200	225	205	331	353	545	658	686	301,5	1014	415	1155	830	223,5
080-080-250 /4502	2	100	80	115	125	390	450	468	527	225	225	205	356	378	616	703	744	300,5	1100	455	1148	950	223,5
080-080-250 /5502	2	100	80	115	125	440	550	520	602	250	225	205	381	403	716	795	844	352,5	1196	495	1425	1055	257,5

Vitachrom DN 80 with inducer, n ≈ 3500 rpm

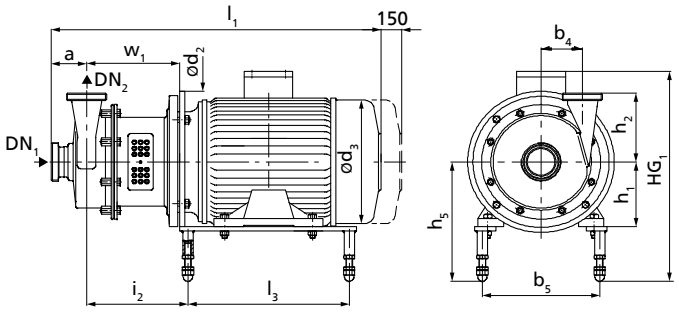


Pump set with inducer and motor feet

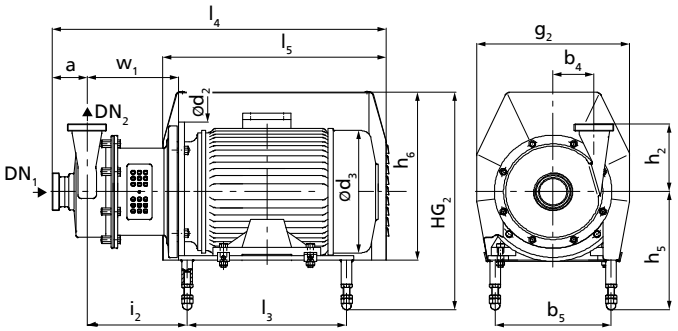
Overview of mating dimensions DN 80, pump set with inducer and motor feet, dimensions in [mm]

Vitachrom with inducer	Inducer	DN_1	DN_2	a	$\approx b_1$	b_4	d_1	d_2	$\approx d_3$	h_1	h_2	h_2	$\approx h_3$	i_4	l_1	m_1	m_2	n_3	n_4	w_1	s
080-880-250.1 /1502	0	100	80	115	70	125	15	350	325	160	225	205	357	331,5	891	300	210	320	254	223,5	21
080-880-250.1 /1852	0	100	80	115	70	125	15	350	325	160	225	205	357	331,5	897	314	254	320	254	223,5	21
080-880-250.1 /2202	0	100	80	115	80	125	15	350	370	180	225	205	442	344,5	955	320	241	360	279	223,5	23
080-880-250.1 /3002	0	100	80	115	85	125	19	400	422	200	225	205	505	356,5	1014	388	305	400	318	223,5	30
080-880-250.1 /3702	0	100	80	115	85	125	19	400	422	200	225	205	505	356,5	1014	388	305	400	318	223,5	30
080-880-250.1 /4502	0	100	80	115	100	125	19	450	468	225	225	205	550	372,5	1100	410	311	450	356	223,5	35
080-880-250.1 /5502	0	100	80	115	100	125	24	550	520	250	225	205	642	425,5	1196	425	349	506	406	257,5	40
080-880-250.1 /1502	1	100	80	115	70	125	15	350	325	160	225	205	357	331,5	891	300	210	320	254	223,5	21
080-880-250.1 /1852	1	100	80	115	70	125	15	350	325	160	225	205	357	331,5	897	314	254	320	254	223,5	21
080-880-250.1 /2202	1	100	80	115	80	125	15	350	370	180	225	205	442	344,5	955	320	241	360	279	223,5	23
080-880-250.1 /3002	1	100	80	115	85	125	19	400	422	200	225	205	505	356,5	1014	388	305	400	318	223,5	30
080-880-250.1 /3702	1	100	80	115	85	125	19	400	422	200	225	205	505	356,5	1014	388	305	400	318	223,5	30
080-880-250.1 /4502	1	100	80	115	100	125	19	450	468	225	225	205	550	372,5	1100	410	311	450	356	223,5	35
080-880-250.1 /5502	1	100	80	115	100	125	24	550	520	250	225	205	642	425,5	1196	425	349	506	406	257,5	40
080-880-250.1 /1502	2	100	80	115	70	125	15	350	325	160	225	205	357	331,5	891	300	210	320	254	223,5	21
080-880-250.1 /1852	2	100	80	115	70	125	15	350	325	160	225	205	357	331,5	897	314	254	320	254	223,5	21
080-880-250.1 /2202	2	100	80	115	80	125	15	350	370	180	225	205	442	344,5	955	320	241	360	279	223,5	23
080-880-250.1 /3002	2	100	80	115	85	125	19	400	422	200	225	205	505	356,5	1014	388	305	400	318	223,5	30
080-880-250.1 /3702	2	100	80	115	85	125	19	400	422	200	225	205	505	356,5	1014	388	305	400	318	223,5	30
080-880-250.1 /4502	2	100	80	115	100	125	19	450	468	225	225	205	550	372,5	1100	410	311	450	356	223,5	35
080-880-250.1 /5502	2	100	80	115	100	125	24	550	520	250	225	205	642	425,5	1196	425	349	506	406	257,5	40

Vitachrom DN 80 with inducer, n ≈ 3500 rpm, pump set with ball feet and motor shroud



Pump set with inducer and ball feet



Pump set with inducer, ball feet and motor shroud

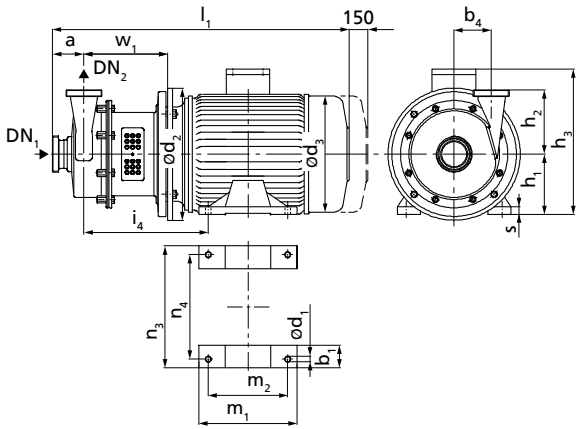
Overview of mating dimensions DN 80, pump set with inducer, ball feet and motor shroud, dimensions in [mm]

Vitachrom with inducer	Inducer	DN_1	DN_2	a	b_4	b_5	d_2	$\approx d_3$	g_2	h_1	h_2 [567]	h_2 [568]	h_5 Min.	h_5 Max.	h_6	$\approx HG_1$ Max.	$\approx HG_2$ Max.	i_2	$\approx l_1$	l_3	l_4	l_5	w_1
080-080-250.1 /1502	0	100	80	115	125	280	350	325	372	160	225	205	270	305	423	502	555	244	891	385	1005	720	223,5
080-080-250.1 /1852	0	100	80	115	125	280	350	325	372	160	225	205	270	305	423	502	555	266	897	385	1005	720	223,5
080-080-250.1 /2202	0	100	80	115	125	305	350	370	402	180	225	205	290	325	493	587	626	291,5	955	385	1091	740	223,5
080-080-250.1 /3002	0	100	80	115	125	345	400	422	452	200	225	205	331	353	545	658	686	301,5	1014	415	1155	830	223,5
080-080-250.1 /3702	0	100	80	115	125	345	400	422	452	200	225	205	331	353	545	658	686	301,5	1014	415	1155	830	223,5
080-080-250.1 /4502	0	100	80	115	125	390	450	468	527	225	225	205	356	378	616	703	744	300,5	1100	455	950	950	223,5
080-080-250.1 /5502	0	100	80	115	125	440	550	520	602	250	225	205	381	403	716	795	844	352,5	1196	495	1055	1055	257,5
080-080-250.1 /1502	1	100	80	115	125	280	350	325	372	160	225	205	270	305	423	502	555	244	891	385	1005	720	223,5
080-080-250.1 /1852	1	100	80	115	125	280	350	325	372	160	225	205	270	305	423	502	555	266	897	385	1005	720	223,5
080-080-250.1 /2202	1	100	80	115	125	305	350	370	402	180	225	205	290	325	493	587	626	291,5	955	385	1091	740	223,5
080-080-250.1 /3002	1	100	80	115	125	345	400	422	452	200	225	205	331	353	545	658	686	301,5	1014	415	1155	830	223,5
080-080-250.1 /3702	1	100	80	115	125	345	400	422	452	200	225	205	331	353	545	658	686	301,5	1014	415	1155	830	223,5
080-080-250.1 /4502	1	100	80	115	125	390	450	468	527	225	225	205	356	378	616	703	744	300,5	1100	455	950	950	223,5
080-080-250.1 /5502	1	100	80	115	125	440	550	520	602	250	225	205	381	403	716	795	844	352,5	1196	495	1055	1055	257,5
080-080-250.1 /1502	2	100	80	115	125	280	350	325	372	160	225	205	270	305	423	502	555	244	891	385	1005	720	223,5
080-080-250.1 /1852	2	100	80	115	125	280	350	325	372	160	225	205	270	305	423	502	555	266	897	385	1005	720	223,5
080-080-250.1 /2202	2	100	80	115	125	305	350	370	402	180	225	205	290	325	493	587	626	291,5	955	385	1091	740	223,5
080-080-250.1 /3002	2	100	80	115	125	345	400	422	452	200	225	205	331	353	545	658	686	301,5	1014	415	1155	830	223,5

567 Applicable to connections as per DIN 11851 (hygienic pipe union)
568 Applicable to flanged connections as per EN 1092-1

Vitachrom with inducer	Inducer	DN_1	DN_2	a	b_4	b_5	d_2	$\approx d_3$	g_2	h_1	h_2 [567)]	h_2 [568)]	h_5 Min.	h_5 Max.	h_6	$\approx HG_1$ Max.	$\approx HG_2$ Max.	i_2	$\approx l_1$	l_3	l_4	l_5	w_1
080-080-250.1 /3702	2	100	80	115	125	345	400	422	452	200	225	205	331	353	545	658	686	301,5	1014	415	1155	830	223,5
080-080-250.1 /4502	2	100	80	115	125	390	450	468	527	225	225	205	356	378	616	703	744	300,5	1100	455	950	950	223,5
080-080-250.1 /5502	2	100	80	115	125	440	550	520	602	250	225	205	381	403	716	795	844	352,5	1196	495	1055	1055	257,5

Vitachrom DN 100, n ≈ 2900 rpm / 3500 rpm



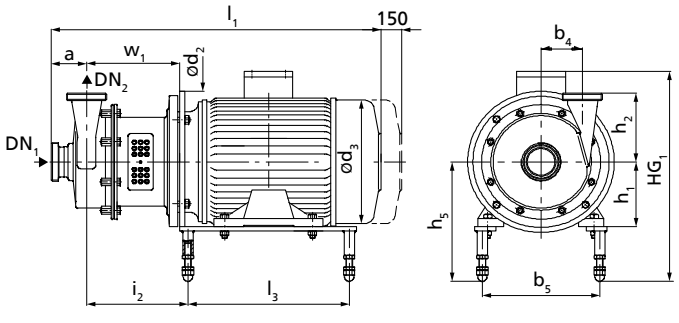
Pump set with motor feet

Overview of mating dimensions DN 100, pump set with motor feet, dimensions in [mm]

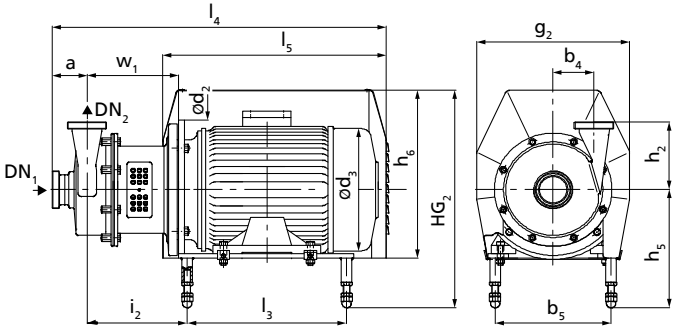
Vitachrom	DN_1	DN_2	a	≈b_1	b_4	d_1	d_2	≈d_3	h_1	h_2 [569]	h_2 [570]	≈h_3	i_4	≈l_1 [569]	≈l_1 [570]	m_1	m_2	n_3	n_4	w_1	s
100-100-200 /752	100	100	100[569] (115)[570]	55	110	12	300	266	132	250	235	299	277	707	722	220	140	270	216	188	15
100-100-200 /1102	100	100		70	110	15	350	325	160	250	235	357	329	873	888	300	210	320	254	221	21
100-100-200 /1502	100	100		70	110	15	350	325	160	250	235	357	329	873	888	300	210	320	254	221	21
100-100-200 /1852	100	100		70	110	15	350	325	160	250	235	357	329	879	894	314	254	320	254	221	21
100-100-200 /2202	100	100		80	110	15	350	370	180	250	235	442	342	937	952	320	241	360	279	221	23
100-100-200 /3002	100	100		85	110	19	400	422	200	250	235	505	354	996	1011	388	305	400	318	221	30
100-100-200 /3702	100	100		85	110	19	400	422	200	250	235	505	354	996	1011	388	305	400	318	221	30
100-100-200 /4502	100	100		100	110	19	450	468	225	250	235	550	370	1082	1097	410	311	450	356	221	35
100-100-200 /5502	100	100		100	110	24	550	520	250	250	235	642	423	1178	1193	425	349	506	406	255	40

569 Applicable to connections as per DIN 11851 (hygienic pipe union)
570 Applicable to flanged connections to EN 1092-1

Vitachrom DN 100, n ≈ 2900 rpm / 3500 rpm, pump set with ball feet and motor shroud



Pump set with ball feet



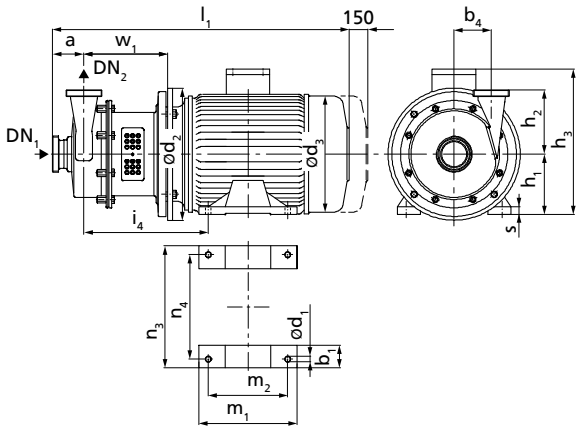
Pump set with ball feet and motor shroud

Overview of mating dimensions DN 100, pump set with ball feet and motor shroud, dimensions in [mm]

Vitachrom	DN_1	DN_2	a	b_4	b_5	d_2	$\approx d_3$	g_2	h_1	h_2 [571]	h_2 [572]	h_5 Min.	h_5 Max.	h_6	$\approx HG_1$ Max.	$\approx HG_2$ Max.	i_2	$\approx l_1$ [571]	l_1 [572]	l_3	l_4	l_5	w_1
100-100-200 /752	100	100	100 [571] (115) [572]	110	230	300	266	314	132	250	235	242	277	350	444	482	144,5	707	722	345	881	550	188
100-100-200 /1102	100	100		110	280	350	325	372	160	250	235	270	305	423	502	555	241,5	873	888	385	1002	720	221
100-100-200 /1502	100	100		110	280	350	325	372	160	250	235	270	305	423	502	555	241,5	873	888	385	1002	720	221
100-100-200 /1852	100	100		110	280	350	325	372	160	250	235	270	305	423	502	555	273,5	879	894	385	1002	720	221
100-100-200 /2202	100	100		110	305	350	370	402	180	250	235	290	325	493	587	626	289	937	952	385	1086	740	221
100-100-200 /3002	100	100		110	345	400	422	452	200	250	235	331	353	545	658	686	299	996	1011	415	1153	830	221
100-100-200 /3702	100	100		110	345	400	422	452	200	250	235	331	353	545	658	686	299	996	1011	415	1153	830	221
100-100-200 /4502	100	100		110	390	450	468	527	225	250	235	356	378	616	703	744	298	1082	1097	455	1290	950	221
100-100-200 /5502	100	100		110	440	550	520	602	250	250	235	381	403	716	795	844	350	1178	1193	495	1422	1055	255

571 Applicable to connections as per DIN 11851 (hygienic pipe union)
572 Applicable to flanged connections to EN 1092-1

Vitachrom DN 125, n ≈ 2900 rpm



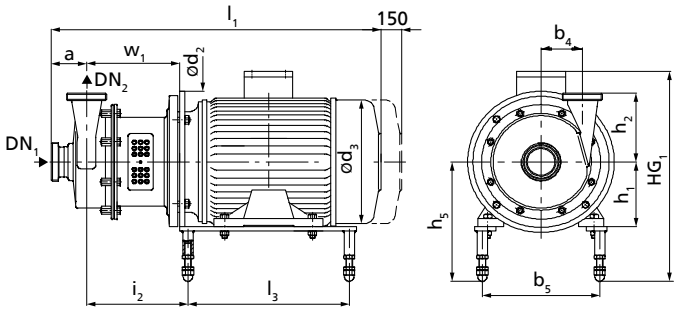
Pump set with motor feet

Overview of mating dimensions DN 125, pump set with motor feet, dimensions in [mm]

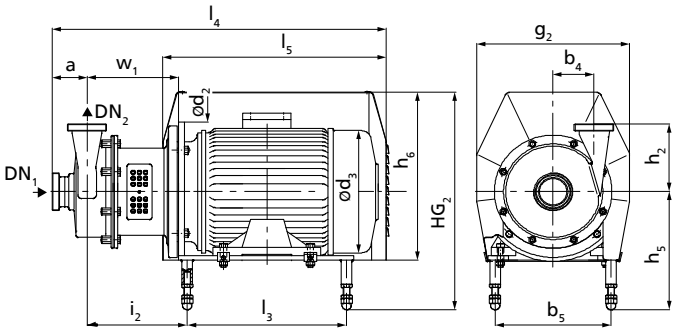
Vitachrom	DN_1	DN_2	a	≈b_1	b_4	d_1	d_2	≈d_3	h_1	h_2[573]	h_2[574]	≈h_3	i_4	≈l_1[573]	≈l_1[574]	m_1	m_2	n_3	n_4	w_1	s
125-125-200 /752	125	125	120[573] (135)[574]	55	110	12	300	266	132	250	235	299	298	748	763	220	140	270	216	209	15
125-125-200 /1102	125	125		70	110	15	350	325	160	250	235	357	350	914	929	300	210	320	254	242	21
125-125-200 /1502	125	125		70	110	15	350	325	160	250	235	357	350	914	929	300	210	320	254	242	21
125-125-200 /1852	125	125		70	110	15	350	325	160	250	235	357	350	920	935	314	254	320	254	242	21
125-125-200 /2202	125	125		80	110	15	350	370	180	250	235	442	363	978	993	320	241	360	279	242	23
125-125-200 /3002	125	125		85	110	19	400	422	200	250	235	505	375	1037	1052	388	305	400	318	242	30
125-125-200 /3702	125	125		85	110	19	400	422	200	250	235	505	375	1037	1052	388	305	400	318	242	30
125-125-200 /4502	125	125		100	110	19	450	468	225	250	235	550	391	1123	1138	410	311	450	356	242	35
125-125-200 /5502	125	125		100	110	24	550	520	250	250	235	642	444	1219	1234	425	349	506	406	276	40
125-125-200 /7502	125	125		100	110	24	550	575	280	250	235	712	466	1327	1342	480	368	557	457	276	40
125-125-200 /9002	125	125		100	110	24	550	575	280	250	235	712	466	1382	1397	530	419	557	457	276	40

573 Applicable to connections as per DIN 11851 (hygienic pipe union)
574 Applicable to flanged connections to EN 1092-1

Vitachrom DN 125, n ≈ 2900 rpm, pump set with ball feet and motor shroud



Pump set with ball feet



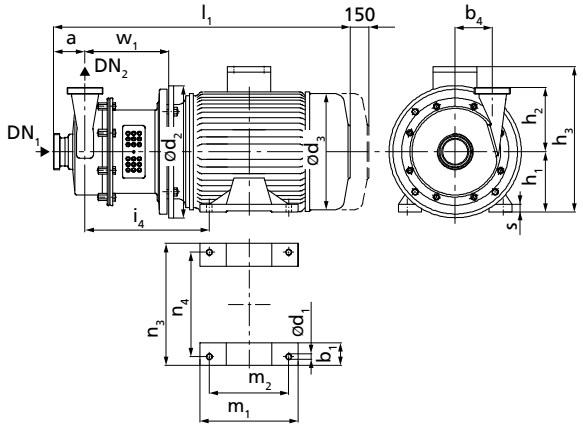
Pump set with ball feet and motor shroud

Overview of mating dimensions DN 125, pump set with ball feet and motor shroud, dimensions in [mm]

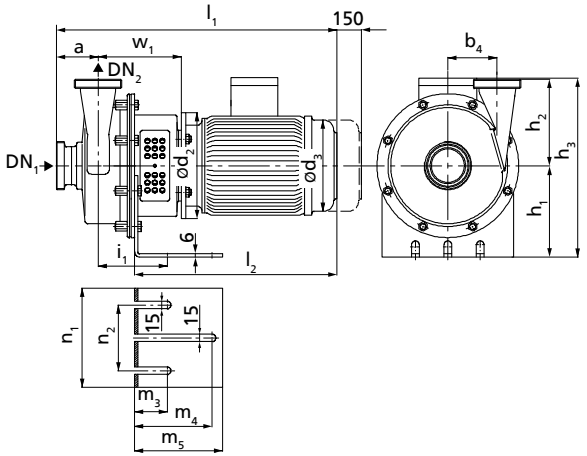
Vitachrom	DN_1	DN_2	a	b_4	b_5	d_2	$\approx d_3$	g_2	h_1	h_2[575]	h_2[576]	h_5 Min.	h_5 Max.	h_6	$\approx HG_1$ Max.	$\approx HG_2$ Max.	i_2	$\approx l_1$[575]	l_1[576]	l_3	l_4	l_5	w_1
125-125-200 /752	125	125	120[575] (135)[576]	110	230	300	266	314	132	250	235	242	277	350	444	482	165,5	748	763	345	954	550	209
125-125-200 /1102	125	125		110	280	350	325	372	160	250	235	270	305	423	502	555	262,5	914	929	385	1042	720	242
125-125-200 /1502	125	125		110	280	350	325	372	160	250	235	270	305	423	502	555	262,5	914	929	385	1042	720	242
125-125-200 /1852	125	125		110	280	350	325	372	160	250	235	270	305	423	502	555	284,5	920	935	385	1042	720	242
125-125-200 /2202	125	125		110	305	350	370	402	180	250	235	290	325	493	587	626	310	978	993	385	1126	740	242
125-125-200 /3002	125	125		110	345	400	422	452	200	250	235	331	353	545	658	686	320	1037	1052	415	1193	830	242
125-125-200 /3702	125	125		110	345	400	422	452	200	250	235	331	353	545	658	686	320	1037	1052	415	1193	830	242
125-125-200 /4502	125	125		110	390	450	468	527	225	250	235	356	378	616	703	744	319	1123	1138	455	1330	950	242
125-125-200 /5502	125	125		110	440	550	520	602	250	250	235	381	403	716	795	844	371	1219	1234	495	1471	1055	276
125-125-200 /7502	125	125		110	490	550	575	672	280	250	235	411	433	786	865	914	393	1327	1342	565	1669	1250	276
125-125-200 /9002	125	125		110	490	550	575	672	280	250	235	411	433	786	865	914	393	1382	1397	565	1669	1250	276

575 Applicable to connections as per DIN 11851 (hygienic pipe union)
576 Applicable to flanged connections to EN 1092-1

Vitachrom DN 50, n ≈ 1450 rpm / 1750 rpm



Pump set with motor feet



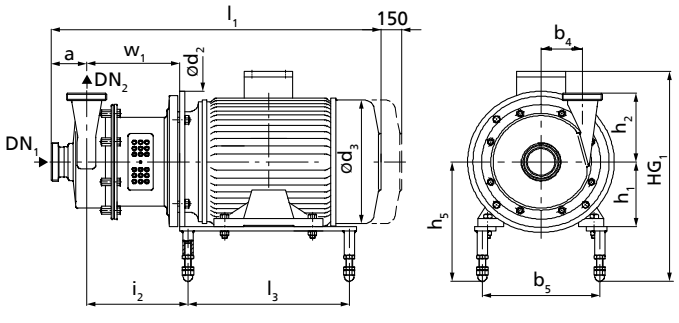
Pump set with angle foot

Overview of mating dimensions DN 50, pump set with motor feet or angle foot, dimensions in [mm]

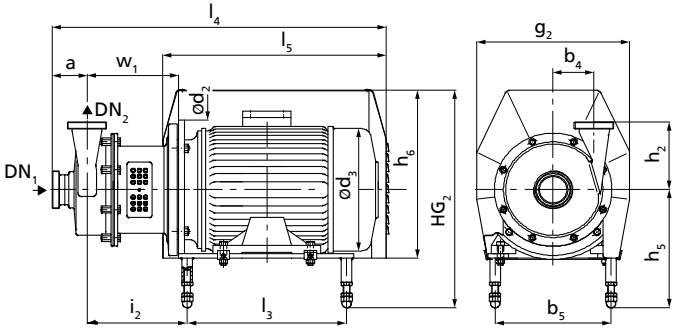
Vitachrom	DN_1	DN_2	a	≈b_1	b_4	d_1	d_2	≈d_3	h_1	h_2 [577]	h_2 [578]	≈h_3	i_1	i_4	≈l_1 [577]	≈l_1 [578]	≈l_2	m_1	m_2	m_3	m_4	m_5	n_1	n_2	n_3	n_4	w_1	s
050-050-125 /154	50	50	70	-	70	10	200	190	160	145	160	288	138,5	220	542	542	397	165	140	65	155	176	225	130	143	125	164	10
050-050-160 /154	50	50	70	-	85	10	200	190	160	170	185	288	138,5	220	542	542	397	165	140	65	155	176	236	130	143	125	164	10
050-050-160 /224	50	50	70	-	85	12	250	213	160	170	185	295	138,5	237	591	591	446	196	160	65	155	176	236	130	176	140	174	12
050-050-200 /154	50	50	70	-	100	10	200	190	160	170	185	288	138,5	220	542	542	397	165	140	65	155	176	264	130	143	125	164	10
050-050-200 /224	50	50	70	-	100	12	250	213	160	170	185	295	138,5	237	591	591	446	196	160	65	155	176	264	130	176	140	174	12
050-050-200 /304	50	50	70	-	100	12	250	213	160	170	185	295	138,5	237	626	626	481	196	160	65	155	176	264	130	176	140	174	12
050-050-250 /154	50	50	95 [577] (90) [578]	-	125	10	200	190	180	185	195	308	121,5	215,5	569	564	399	165	140	30	120	160	225	130	143	125	159,5	10
050-050-250 /224	50	50		-	125	12	250	213	180	185	195	315	121,5	236,5	622	617	452	196	160	30	120	160	225	130	176	140	173,5	12
050-050-250 /304	50	50		-	125	12	250	213	180	185	195	315	121,5	236,5	657	652	487	196	160	30	120	160	225	130	176	140	173,5	12
050-050-250 /404	50	50		-	125	12	250	234	180	185	195	328	121,5	243,5	646	641	476	226	190	30	120	160	225	130	176	140	173,5	12
050-050-250 /554	50	50		55	125	12	300	266	132	185	195	299	-	285,5	711	706	-	220	140	-	-	-	-	-	270	216	196,5	15
050-050-250 /754	50	50		59	125	12	300	298	132	185	195	299	-	285,5	739	734	-	240	178	-	-	-	-	-	270	216	196,5	15
050-050-250 /1104	50	50		70	125	15	350	325	160	185	195	357	-	337,5	877	872	-	300	210	-	-	-	-	-	320	254	229,5	21
050-050-250 /1504	50	70		70	125	15	350	325	160	185	195	357	-	337,5	883	878	-	314	254	-	-	-	-	-	320	254	229,5	21

577 Applicable to connections as per DIN 11851 (hygienic pipe union)
578 Applicable to flanged connections to EN 1092-1

Vitachrom DN 50, n ≈ 1450 rpm / 1750 rpm, pump set with ball feet and motor shroud



Pump set with ball feet



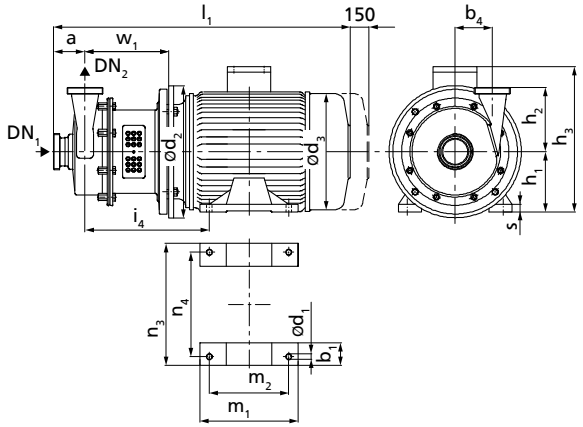
Pump set with ball feet and motor shroud

Overview of mating dimensions DN 50, pump set with ball feet and motor shroud, dimensions in [mm]

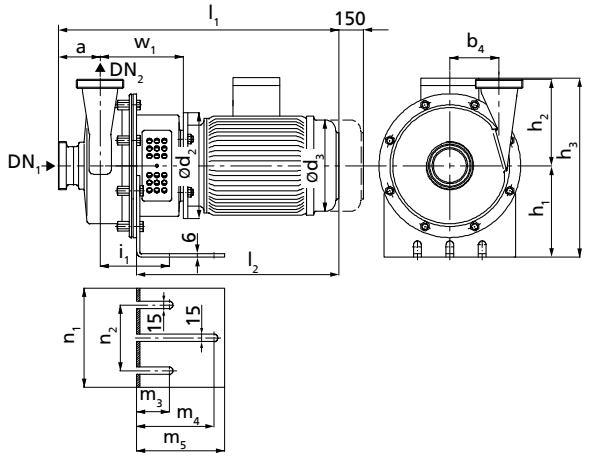
Vitachrom	DN_1	DN_2	a	b_4	b_5	d_2	d_3	g_2	h_1	h_2 [579]	h_2 [580]	h_5 Min.	h_5 Max.	h_6	≈HG_1 Max.	≈HG_2 Max.	i_2	l_1 [579]	l_1 [580]	l_3	l_4	l_5	w_1
050-050-125 /154	50	50	70	70	200	200	190	264	90	145	160	213	247,5	304,7	376	437	150	542	542	225	646,5	450	164
050-050-160 /154	50	50	70	85	200	200	190	264	90	170	185	213	247,5	304,7	376	437	150	542	542	225	646,5	450	164
050-050-160 /224	50	50	70	85	200	250	213	264	100	170	185	223	257,5	304,7	393	437	174,5	591	591	265	686,5	470	174
050-050-200 /154	50	50	70	100	200	200	190	264	90	170	185	213	247,5	304,7	376	437	150	542	542	225	646,5	450	164
050-050-200 /224	50	50	70	100	200	250	213	264	100	170	185	223	257,5	304,7	393	437	174,5	591	591	265	686,5	470	174
050-050-200 /304	50	50	70	100	200	250	213	264	100	170	185	223	257,5	304,7	393	437	174,5	626	626	265	686,5	470	174
050-050-250 /154	50	50	95 [579] (90) [580]	125	200	200	190	264	90	185	195	213	247,5	304,7	376	437	105,5	568,5	563,5	285	722	450	159,5
050-050-250 /224	50	50		125	200	250	213	264	100	185	195	223	257,5	304,7	393	437	129	621,5	616,5	310	751	470	173,5
050-050-250 /304	50	50		125	200	250	213	264	100	185	195	223	257,5	304,7	393	437	129	656,5	651,5	310	751	470	173,5
050-050-250 /404	50	50		125	200	250	234	264	112	185	195	222	256,5	304,7	405	437	116	645,5	640,5	330	757	470	173,5
050-050-250 /554	50	50		125	230	300	266	314	132	185	195	242	276,5	349,7	444	482	153	710,5	705,5	345	814	550	196,5
050-050-250 /754	50	50		125	230	300	298	314	132	185	195	242	276,5	349,7	444	482	172	738,5	733,5	345	814	550	196,5
050-050-250 /1104	50	50		125	280	350	325	372	160	185	195	270	304,5	422,7	502	555	250	876,5	871,5	385	986	720	229,5
050-050-250 /1504	50	50		125	280	350	325	372	160	185	195	270	304,5	422,7	502	555	272	882,5	877,5	385	986	720	229,5

579 Applicable to connections as per DIN 11851 (hygienic pipe union)
580 Applicable to flanged connections as per EN 1092-1

Vitachrom DN 65, n ≈ 1450 rpm / 1750 rpm



Pump set with motor feet



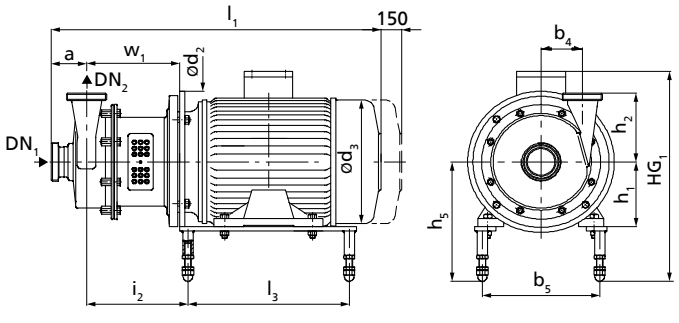
Pump set with angle foot

Overview of mating dimensions DN 65, pump set with motor feet or angle foot, dimensions in [mm]

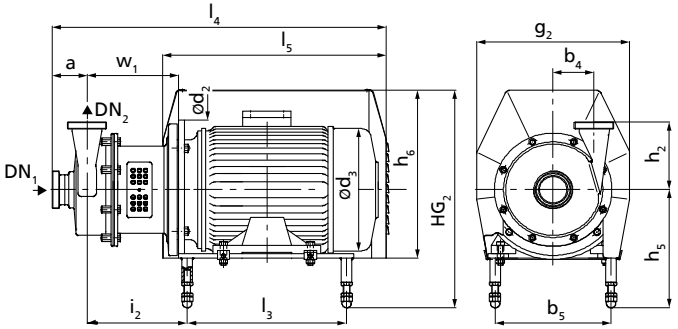
Vitachrom	DN_1	DN_2	a	$\approx b_1$	b_4	d_1	d_2	$\approx d_3$	h_1	h_2 [581]	h_2 [582]	$\approx h_3$	i_1	i_4	$\approx l_1$ [581]	$\approx l_1$ [582]	$\approx l_2$	m_1	m_2	m_3	m_4	m_5	n_1	n_2	n_3	n_4	w_1	s
065-065-125 /154	65	65	85	-	70	10	200	190	160	145	160	288	135,5	217	554	554	397	165	140	65	155	176	225	130	143	125	161	10
065-065-125 /224	65	65	85	-	70	12	250	213	160	145	160	295	135,5	234	603	603	446	196	160	65	155	176	225	130	176	140	171	12
065-065-160 /154	65	65	85	-	85	10	200	190	160	170	185	288	135,5	217	554	554	397	165	140	65	155	176	236	130	143	125	161	10
065-065-160 /224	65	65	85	-	85	12	250	213	160	170	185	295	135,5	234	603	603	446	196	160	65	155	176	236	130	176	140	171	12
065-065-160 /304	65	65	85	-	85	12	250	213	160	170	185	295	135,5	234	638	638	481	196	160	65	155	176	236	130	176	140	171	12
065-065-200 /154	65	65	85	-	100	10	200	190	160	170	185	288	135,5	217	554	554	397	165	140	65	155	176	264	130	143	125	161	10
065-065-200 /224	65	65	85	-	100	12	250	213	160	170	185	295	135,5	234	603	603	446	196	160	65	155	176	264	130	176	140	171	12
065-065-200 /304	65	65	85	-	100	12	250	213	160	170	185	295	135,5	234	638	638	481	196	160	65	155	176	264	130	176	140	171	12
065-065-200 /404	65	65	85	-	100	12	250	234	160	170	185	308	135,5	241	627	627	470	226	190	65	155	176	264	130	176	140	171	12
065-065-250 /154	65	65	90 [582] (105) [581]	-	130	10	200	190	180	220	205	308	118	212	575	560	399	165	140	30	120	160	225	130	143	125	156	10
065-065-250 /224	65	65		-	130	12	250	213	180	220	205	315	118	233	628	613	452	196	160	30	120	160	225	130	176	140	170	12
065-065-250 /304	65	65		-	130	12	250	213	180	220	205	315	118	233	663	648	487	196	160	30	120	160	225	130	176	140	170	12
065-065-250 /404	65	65		-	130	12	250	234	180	220	205	328	118	240	652	637	476	226	190	30	120	160	225	130	176	140	170	12
065-065-250 /554	65	65		55	130	12	300	266	132	220	205	299	-	282	717	702	-	220	140	-	-	-	-	-	270	216	193	15
065-065-250 /754	65	65		59	130	12	300	298	132	220	205	299	-	282	745	730	-	240	178	-	-	-	-	-	270	216	193	15
065-065-250 /1104	65	65		70	130	15	350	325	160	220	205	357	-	334	883	868	-	300	210	-	-	-	-	-	320	254	226	21
065-065-250 /1504	65	65		70	130	15	350	325	160	220	205	357	-	334	889	874	-	314	254	-	-	-	-	-	320	254	226	21

581 Applicable to connections as per DIN 11851 (hygienic pipe union)
582 Applicable to flanged connections as per EN 1092-1

Vitachrom DN 65, n ≈ 1450 rpm / 1750 rpm, pump set with ball feet and motor shroud



Pump set with ball feet



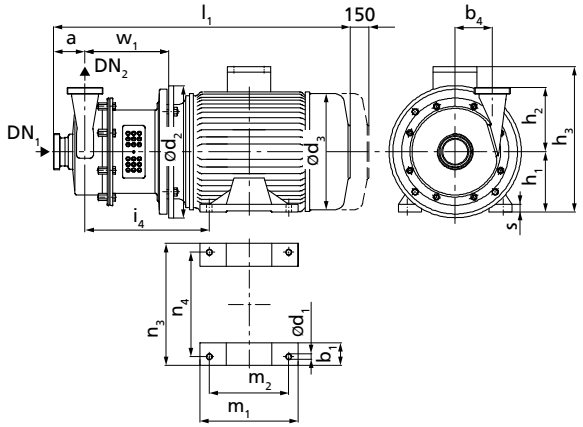
Pump set with ball feet and motor shroud

Overview of mating dimensions DN 65, pump set with ball feet and motor shroud, dimensions in [mm]

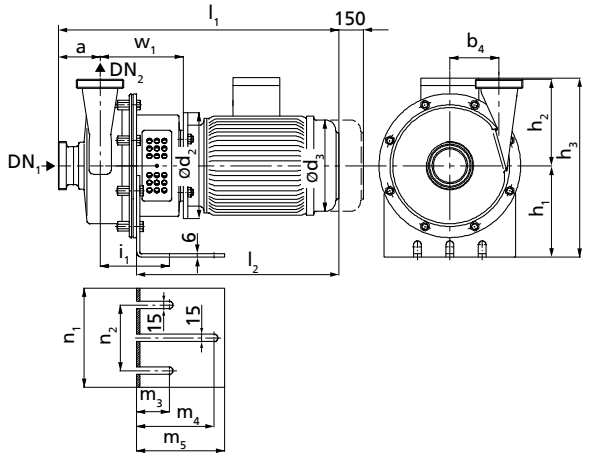
Vitachrom	DN_1	DN_2	a	b_4	b_5	d_2	d_3	g_2	h_1	h_2 [583]	h_2 [584]	h_5 Min.	h_5 Max.	h_6	≈HG_1 Max.	≈HG_2 Max.	i_2	l_1 [583]	l_1 [584]	l_3	l_4	l_5	w_1
065-065-125 /154	65	65	85	70	200	200	190	264	90	145	160	213	247,5	304,7	376	437	147	554	554	225	658,5	450	161
065-065-125 /224	65	65	85	70	200	250	213	264	100	145	160	223	257,5	304,7	393	437	171,5	603	603	265	698,5	470	171
065-065-160 /154	65	65	85	85	200	200	190	264	90	170	185	213	247,5	304,7	376	437	147	554	554	225	658,5	450	161
065-065-160 /224	65	65	85	85	200	250	213	264	100	170	185	223	257,5	304,7	393	437	171,5	603	603	265	698,5	470	171
065-065-160 /304	65	65	85	85	200	250	213	264	100	170	185	223	257,5	304,7	393	437	171,5	638	638	265	698,5	470	171
065-065-200 /154	65	65	85	100	200	200	190	264	90	170	185	213	247,5	304,7	376	437	147	554	554	225	658,5	450	161
065-065-200 /224	65	65	85	100	200	250	213	264	100	170	185	223	257,5	304,7	393	437	171,5	603	603	265	698,5	470	171
065-065-200 /304	65	65	85	100	200	250	213	264	100	170	185	223	257,5	304,7	393	437	171,5	638	638	265	698,5	470	171
065-065-200 /404	65	65	85	100	200	250	234	264	112	170	185	222	256,5	304,7	405	437	178,5	627	627	265	694,5	470	171
065-065-250 /154	65	65	90 [584] (105) [583]	130	200	200	190	264	90	220	205	213	247,5	304,7	376	437	102	575	560	285	733	450	156
065-065-250 /224	65	65		130	200	250	213	264	100	220	205	223	257,5	304,7	393	437	125,5	628	613	310	762	470	170
065-065-250 /304	65	65		130	200	250	213	264	100	220	205	223	257,5	304,7	393	437	125,5	663	648	310	762	470	170
065-065-250 /404	65	65		130	200	250	234	264	112	220	205	222	256,5	304,7	405	437	112,5	652	637	330	778	470	170
065-065-250 /554	65	65		130	230	300	266	314	132	220	205	242	276,5	349,7	444	482	149,5	717	702	345	876	550	193
065-065-250 /754	65	65		130	230	300	298	314	132	220	205	242	276,5	349,7	444	482	168,5	745	730	345	876	550	193
065-065-250 /1104	65	65		130	280	350	325	372	160	220	205	270	304,5	422,7	502	555	246,5	883	868	385	997	720	226
065-065-250 /1504	65	65		130	280	350	325	372	160	220	205	270	304,5	422,7	502	555	268,5	889	874	385	997	720	226

583 Applicable to connections as per DIN 11851 (hygienic pipe union)
584 Applicable to flanged connections to EN 1092-1

Vitachrom DN 80, n ≈ 1450 rpm / 1750 rpm



Pump set with motor feet



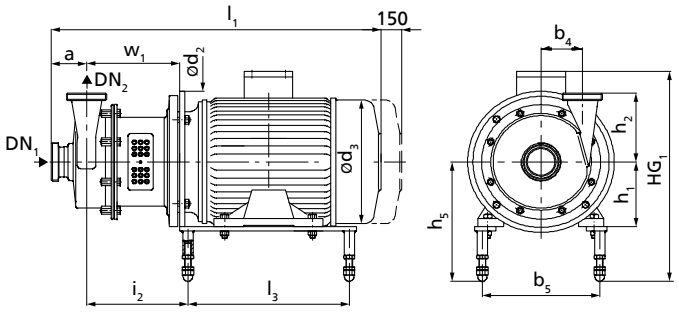
Pump set with angle foot

Overview of mating dimensions DN 80, pump set with motor feet or angle foot, dimensions in [mm]

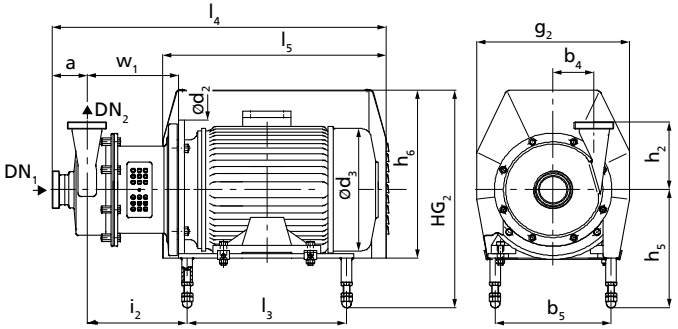
Vitachrom	DN_1	DN_2	a	$\approx b_1$	b_4	d_1	d_2	$\approx d_3$	h_1	h_2 [585]	h_2 [586]	$\approx h_3$	i_1	i_4	$\approx l_1$ [585]	$\approx l_1$ [586]	$\approx l_2$	m_1	m_2	m_3	m_4	m_5	n_1	n_2	n_3	n_4	w_1	s
080-080-125 /154	80	80	100	-	85	10	200	190	160	170	185	288	143	224,5	577	577	397	165	140	65	155	176	236	130	143	125	168,5	10
080-080-125 /224	80	80	100	-	85	12	250	213	160	170	185	295	143	241,5	626	626	446	196	160	65	155	176	236	130	176	140	178,5	12
080-080-125 /304	80	80	100	-	85	12	250	213	160	170	185	295	143	241,5	661	661	481	196	160	65	155	176	236	130	176	140	178,5	12
080-080-160 /154	80	80	100	-	85	10	200	190	160	170	185	288	143	224,5	577	577	397	165	140	65	155	176	236	130	143	125	168,5	10
080-080-160 /224	80	80	100	-	85	12	250	213	160	170	185	295	143	241,5	626	626	446	196	160	65	155	176	236	130	176	140	178,5	12
080-080-160 /304	80	80	100	-	85	12	250	213	160	170	185	295	143	241,5	661	661	481	196	160	65	155	176	236	130	176	140	178,5	12
080-080-160 /404	80	80	100	-	85	12	250	234	160	170	185	308	143	248,5	650	650	470	226	190	65	155	176	236	130	176	140	178,5	12
080-080-160 /554	80	80	100	55	85	12	300	266	132	170	185	299	-	287,5	712	712	-	220	140	-	-	-	-	-	270	216	198,5	15
080-080-250 /154	80	80	95 [586] (115) [585]	-	125	10	200	190	180	225	205	308	115,5	209,5	583	563	399	165	140	30	120	160	225	130	143	125	153,5	10
080-080-250 /224	80	80		-	125	12	250	213	180	225	205	315	115,5	230,5	636	616	452	196	160	30	120	160	225	130	176	140	167,5	12
080-080-250 /304	80	80		-	125	12	250	213	180	225	205	315	115,5	230,5	671	651	487	196	160	30	120	160	225	130	176	140	167,5	12
080-080-250 /404	80	80		-	125	12	250	234	180	225	205	328	115,5	237,5	660	640	476	226	190	30	120	160	225	130	176	140	167,5	12
080-080-250 /554	80	80		55	125	12	300	266	132	225	205	299	-	279,5	725	705	-	220	140	-	-	-	-	-	270	216	190,5	15
080-080-250 /754	80	80		59	125	12	300	298	132	225	205	299	-	279,5	753	733	-	240	178	-	-	-	-	-	270	216	190,5	15
080-080-250 /1104	80	80		70	125	15	350	325	160	225	205	357	-	331,5	891	871	-	300	210	-	-	-	-	-	320	254	223,5	21
080-080-250 /1504	80	80		70	125	15	350	325	160	225	205	357	-	331,5	897	877	-	314	254	-	-	-	-	-	320	254	223,5	21

585 Applicable to connections as per DIN 11851 (hygienic pipe union)
586 Applicable to flanged connections to EN 1092-1

Vitachrom DN 80, n ≈ 1450 rpm / 1750 rpm, pump set with ball feet and motor shroud



Pump set with ball feet



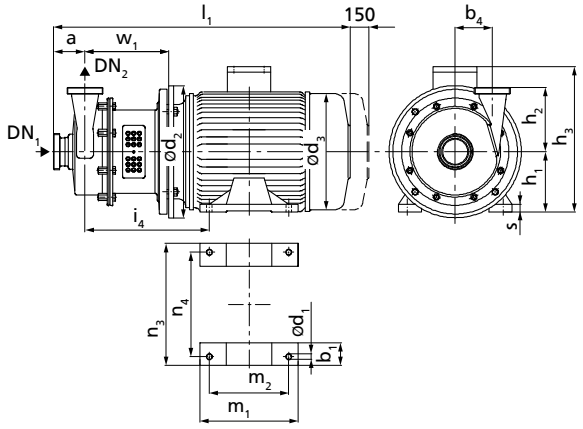
Pump set with ball feet and motor shroud

Mating dimensions DN 80, pump set with ball feet and motor shroud, dimensions in [mm]

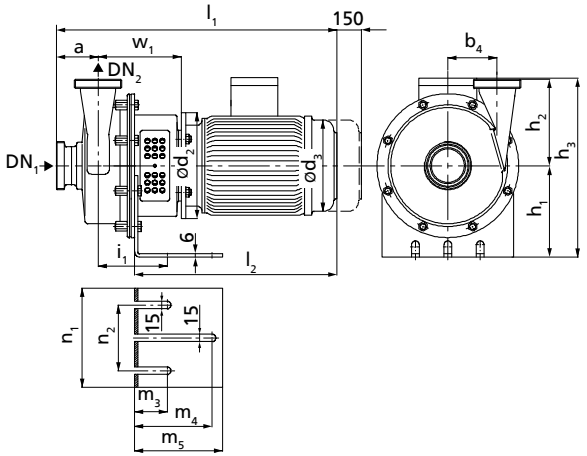
Vitachrom	DN_1	DN_2	a	b_4	b_5	d_2	d_3	g_2	h_1	h_2 [587]	h_2 [588]	h_5 Min.	h_5 Max.	h_6	≈HG_1 Max.	≈HG_2 Max.	i_2	l_1 [587]	l_1 [588]	l_3	l_4	l_5	w_1
080-080-125 /154	80	80	100	85	200	200	190	264	90	170	185	213	248	305	376	437	154,5	577	577	225	681	450	168,5
080-080-125 /224	80	80	100	85	200	250	213	264	100	170	185	223	258	305	393	437	179	626	626	265	721	470	178,5
080-080-125 /304	80	80	100	85	200	250	213	264	100	170	185	223	258	305	393	437	179	661	661	265	721	470	178,5
080-080-160 /154	80	80	100	85	200	200	190	264	90	170	185	213	248	305	376	437	154,5	577	577	225	681	450	168,5
080-080-160 /224	80	80	100	85	200	250	213	264	100	170	185	223	258	305	393	437	179	626	626	265	721	470	178,5
080-080-160 /304	80	80	100	85	200	250	213	264	100	170	185	223	258	305	393	437	179	661	661	265	721	470	178,5
080-080-160 /404	80	80	100	85	200	250	234	264	112	170	185	222	257	305	405	437	186	650	650	265	628	470	178,5
080-080-160 /554	80	80	100	85	230	300	266	314	132	170	185	242	277	350	444	482	215	712	712	285	784	550	198,5
080-080-250 /154	80	80	95 [588] (115) [587]	125	200	200	190	264	90	225	205	213	248	305	376	437	99,5	583	562,5	285	628	450	153,5
080-080-250 /224	80	80		125	200	250	213	264	100	225	205	223	258	305	393	437	123	636	615,5	310	681	470	167,5
080-080-250 /304	80	80		125	200	250	213	264	100	225	205	223	258	305	393	437	123	671	650,5	310	681	470	167,5
080-080-250 /404	80	80		125	200	250	234	264	112	225	205	222	257	305	405	437	110	660	639,5	330	786	470	167,5
080-080-250 /554	80	80		125	230	300	266	314	132	225	205	242	277	350	444	482	147	725	704,5	345	884	550	190,5
080-080-250 /754	80	80		125	230	300	298	314	132	225	205	242	277	350	444	482	166	753	732,5	345	884	550	190,5
080-080-250 /1104	80	80		125	280	350	325	372	160	225	205	270	305	423	502	555	244	891	870,5	385	1005	720	223,5
080-080-250 /1504	80	80		125	280	350	325	372	160	225	205	270	305	423	502	555	266	897	876,5	385	1005	720	223,5

587 Applicable to connections as per DIN 11851 (hygienic pipe union)
588 Applicable to flanged connections to EN 1092-1

Vitachrom DN 100, n ≈ 1450 rpm / 1750 rpm



Pump set with motor feet



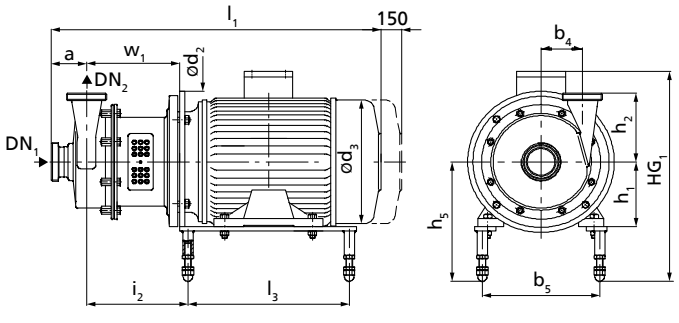
Pump set with angle foot

Overview of mating dimensions DN 100, pump set with motor feet or angle foot, dimensions in [mm]

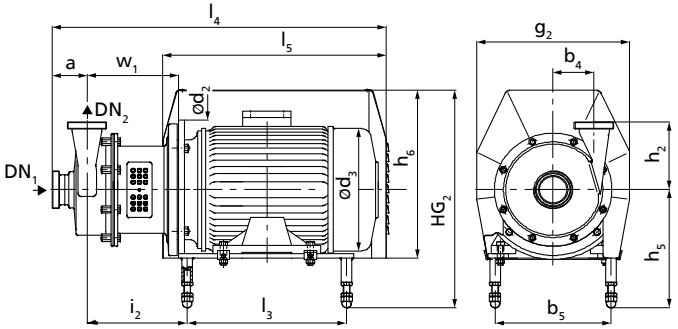
Vitachrom	DN_1	DN_2	a	≈b_1	b_4	d_1	d_2	≈d_3	h_1	h_2[589]	h_2[590]	≈h_3	i_1	i_4	≈l_1[589]	≈l_1[590]	≈l_2	m_1	m_2	m_3	m_4	m_5	n_1	n_2	n_3	n_4	w_1	s
100-100-200 /154	100	100	100[590] (115)[589]	-	110	10	200	190	180	250	235	308	113	207	565	580	399	165	140	30	120	160	225	130	143	125	151	10
100-100-200 /224	100	100		-	110	12	250	213	180	250	235	315	113	228	618	633	452	196	160	30	120	160	225	130	176	140	165	12
100-100-200 /304	100	100		-	110	12	250	213	180	250	235	315	113	228	653	668	487	196	160	30	120	160	225	130	176	140	165	12
100-100-200 /404	100	100		-	110	12	250	234	180	250	235	328	113	235	642	657	476	226	190	30	120	160	225	130	176	140	165	12
100-100-200 /554	100	100		55	110	12	300	266	132	250	235	299	-	277	707	722	-	220	140	-	-	-	-	-	270	216	188	15
100-100-200 /754	100	100		59	110	12	300	298	132	250	235	299	-	277	735	750	-	240	178	-	-	-	-	-	270	216	188	15
100-100-200 /1104	100	100		70	110	15	350	325	160	250	235	357	-	329	873	888	-	300	210	-	-	-	-	-	320	254	221	21
100-100-200 /1504	100	100		70	110	15	350	325	160	250	235	357	-	329	879	894	-	314	254	-	-	-	-	-	320	254	221	21

589 Applicable to connections as per DIN 11851 (hygienic pipe union)
590 Applicable to flanged connections to EN 1092-1

Vitachrom DN 100, n ≈ 1450 rpm / 1750 rpm, pump set with ball feet and motor shroud



Pump set with ball feet



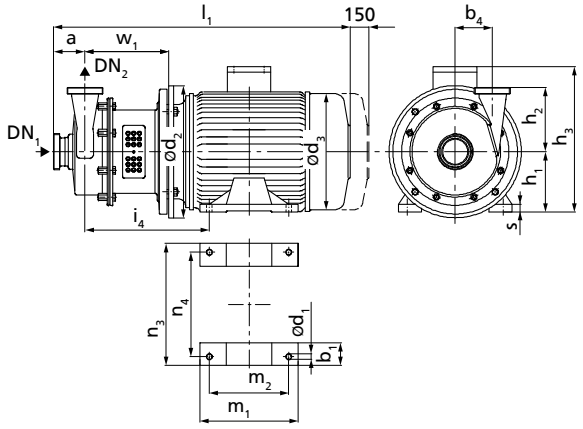
Pump set with ball feet and motor shroud

Overview of mating dimensions DN 100, pump set with ball feet and motor shroud, dimensions in [mm]

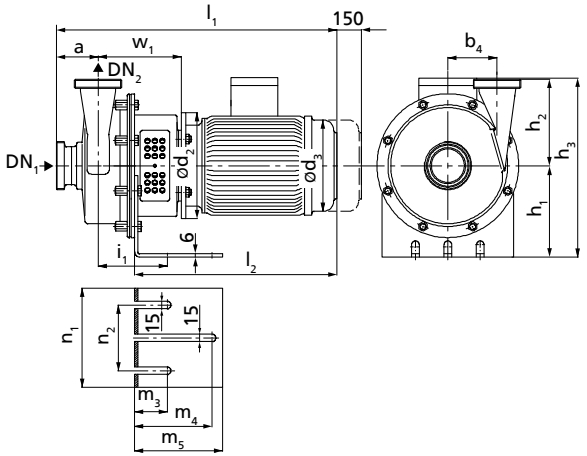
Vitachrom	DN_1	DN_2	a	b_4	b_5	d_2	d_3	g_2	h_1	h_2 [591]	h_2 [592]	h_5 Min.	h_5 Max.	h_6	≈HG_1 Max.	≈HG_2 Max.	i_2	l_1 [591]	l_1 [592]	l_3	l_4	l_5	w_1
100-100-200 /154	100	100	100[591] (115)[592]	200	110	200	190	264	90	250	235	213	247,5	304,7	376	437	97	565	580	285	676	450	151
100-100-200 /224	100	100		200	110	250	213	264	100	250	235	223	257,5	304,7	393	437	120,5	618	633	310	720	470	165
100-100-200 /304	100	100		200	110	250	213	264	100	250	235	223	257,5	304,7	393	437	120,5	653	668	310	720	470	165
100-100-200 /404	100	100		200	110	250	234	264	112	250	235	222	256,5	304,7	405	437	107,5	642	657	330	716	470	165
100-100-200 /554	100	100		230	110	300	266	314	132	250	235	242	276,5	349,7	444	482	144,5	707	722	345	819	550	188
100-100-200 /754	100	100		230	110	300	298	314	132	250	235	242	276,5	349,7	444	482	163,5	735	750	345	819	550	188
100-100-200 /1104	100	100		280	110	350	325	372	160	250	235	270	304,5	422,7	502	555	241,5	873	888	385	1000	720	221
100-100-200 /1504	100	100		280	110	350	325	372	160	250	235	270	304,5	422,7	502	555	263,5	879	894	385	1000	720	221

591 Applicable to connections as per DIN 11851 (hygienic pipe union)
592 Applicable to flanged connections to EN 1092-1

Vitachrom DN 125, n ≈ 1450 rpm / 1750 rpm



Pump set with motor feet



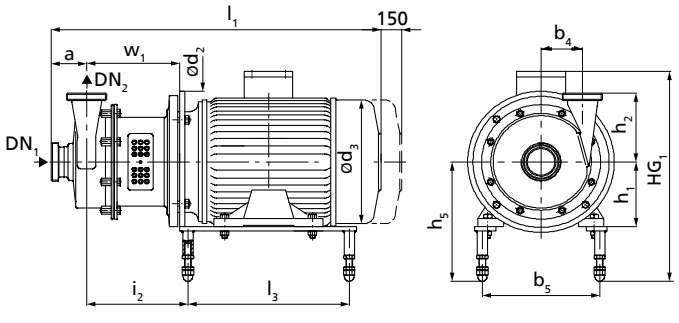
Pump set with angle foot

Overview of mating dimensions DN 125, pump set with motor feet or angle foot, dimensions in [mm]

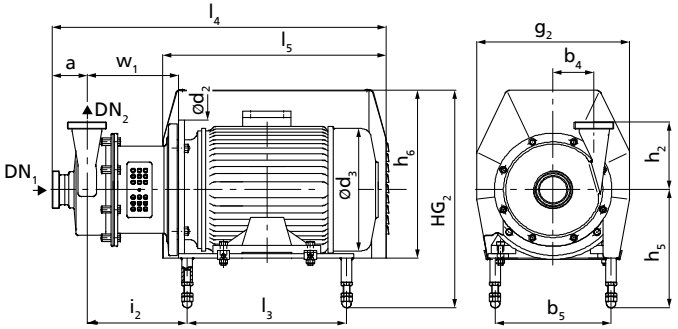
Vitachrom	DN_1	DN_2	a	≈b_1	b_4	d_1	d_2	≈d_3	h_1	h_2 [593]	h_2 [594]	≈h_3	i_1	i_4	≈l_1 [593]	≈l_1 [594]	≈l_2	m_1	m_2	m_3	m_4	m_5	n_1	n_2	n_3	n_4	w_1	s
125-125-200 /224	125	125	120 [593] (135) [594]	-	110	12	250	213	180	250	235	315	138	249	659	674	377	196	160	30	120	160	260	180	176	140	186	12
125-125-200 /304	125	125		-	110	12	250	213	180	250	235	315	138	249	694	709	412	196	160	30	120	160	260	180	176	140	186	12
125-125-200 /404	125	125		-	110	12	250	234	180	250	235	328	138	256	683	698	401	226	190	30	120	160	260	180	176	140	186	12
125-125-200 /554	125	125		55	110	12	300	266	132	250	235	299	-	298	748	763	-	220	140	-	-	-	-	-	270	216	209	15
125-125-200 /754	125	125		59	110	12	300	298	132	250	235	299	-	298	776	791	-	240	178	-	-	-	-	-	270	216	209	15
125-125-200 /1104	125	125		70	110	15	350	325	160	250	235	357	-	350	914	929	-	300	210	-	-	-	-	-	320	254	242	21
125-125-200 /1504	125	125		70	110	15	350	325	160	250	235	357	-	350	920	935	-	314	254	-	-	-	-	-	320	254	242	21
125-125-200 /1854	125	125		70	110	15	350	325	160	250	235	357	-	350	920	935	-	314	254	-	-	-	-	-	320	254	242	21
125-125-200 /2204	125	125		80	110	15	350	370	160	250	235	442	-	363	978	993	-	320	241	-	-	-	-	-	360	279	242	23
125-125-200 /3004	125	125		85	110	19	400	422	200	250	235	505	-	375	1037	1052	-	388	305	-	-	-	-	-	400	318	242	30

593 Applicable to connections as per DIN 11851 (hygienic pipe union)
594 Applicable to flanged connections to EN 1092-1

Vitachrom DN 125, n ≈ 1450 rpm / 1750 rpm, pump set with ball feet and motor shroud



Pump set with ball feet



Pump set with ball feet and motor shroud

Overview of mating dimensions DN 125, pump set with ball feet and motor shroud, dimensions in [mm]

Vitachrom	DN_1	DN_2	a	b_4	b_5	d_2	d_3	g_2	h_1	h_2 [595]	h_2 [596]	h_5 min	h_5 max	h_6	≈HG_1 max	≈HG_2 max	i_2	l_1 [595]	l_1 [596]	l_3	l_4	l_5	w_1
125-125-200 /224	125	125	120[595] (135)[596]	200	110	250	213	264	100	250	235	223	257,5	304,7	393	437	141,5	659	674	310	807	470	186
125-125-200 /304	125	125		200	110	250	213	264	100	250	235	223	257,5	304,7	393	437	141,5	694	709	310	807	470	186
125-125-200 /404	125	125		200	110	250	234	264	112	250	235	222	256,5	304,7	405	437	128,5	683	698	330	823	470	186
125-125-200 /554	125	125		230	110	300	266	314	132	250	235	242	276,5	349,7	444	482	165,5	748	763	345	921	550	209
125-125-200 /754	125	125		230	110	300	298	314	132	250	235	242	276,5	349,7	444	482	184,5	776	791	345	921	550	209
125-125-200 /1104	125	125		280	110	350	325	372	160	250	235	270	304,5	422,7	502	555	262,5	914	929	385	1042	720	242
125-125-200 /1504	125	125		280	110	350	325	372	160	250	235	270	304,5	422,7	502	555	284,5	920	935	385	1042	720	242
125-125-200 /1854	125	125		280	110	350	325	372	160	250	235	270	304,5	422,7	502	555	284,5	920	935	385	1042	720	242
125-125-200 /2204	125	125		305	110	350	370	402	180	250	235	290	325	493	587	626	310	978	993	385	1126	740	242
125-125-200 /3004	125	125		345	110	400	422	452	200	250	235	331	353	545	658	686	320	1037	1052	415	1193	830	242

595 Applicable to connections as per DIN 11851 (hygienic pipe union)
596 Applicable to flanged connections to EN 1092-1

Installation information

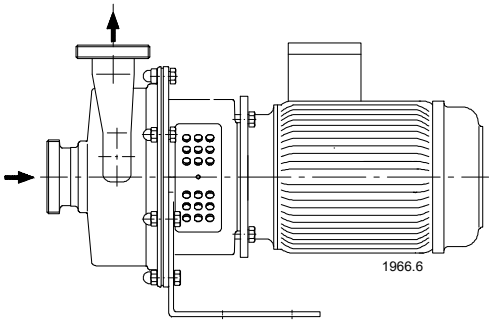


Fig. 327: Pump with angle foot

As-delivered condition for horizontal installation, fastened below

For any other installation positions, contact KSB.

NOTE!
Vertical installation with the motor below is impermissible.

Accessories

Pump accessories

- Design with inducer for sizes 065-065-160 and 080-080-250
- Standard pump foot (angle foot)
- Vertically adjustable ball feet / levelling feet
- Motor shroud made of stainless steel
- System for supplying the mechanical seal
- Motor soleplate
- Residual drainage of pump casing

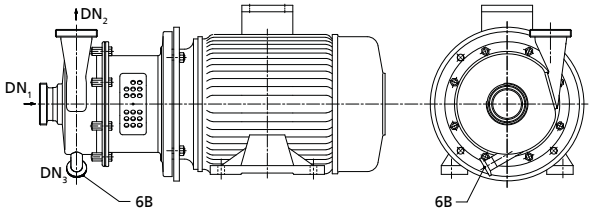


Fig. 328: Connection for residual drainage

Hygienic Pumps

Vitacast

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000785

Product benefits

- Easy to clean with very little dead volume and excellent flushing capability
- Service-friendly design, easy and fast to dismantle
- High surface quality thanks to special polishing techniques
- Corrosion-resistant design with high-quality stainless steel
- Operating costs reduced by trimming the nominal impeller diameter to match the specified duty point
- A large variety of materials, sealing elements and connections are available to optimally match the pump to its application.
- Highly suitable for CIP/SIP routines
- Excellent hydraulic efficiency and low NPSH values

Further information

Prices on request

Selection charts 976

Further information

	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[597)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

597 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Certifications

Overview

Label	Effective in:	Comment
	All countries	Certified quality management to ISO 9001
	All countries	European Hygienic Engineering & Design Group
	All countries	Elastomers certified to FDA, 3A, USP Class VI

Main applications

- Food industry / beverage industry
- Pharmaceutical industry
- Biotechnology
- Chemical industry/Fine chemicals
- Water treatment
- Further industrial applications

Fluids handled

- Fluids not chemically or mechanically aggressive to the materials

Operating data

Operating properties

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q [m³/h]	≤ 540	≤ 650
Head	H [m]	≤ 105	
Operating pressure	p [bar]	≤ 10 [598)]	
Fluid temperature	T [°C]	≥ -20	
		≤ +140 [598)]	
Connection sizes	DN	32 - 200	

Design details

Design

- Hygienic centrifugal pump
- Single-stage
- Close-coupled design and long-coupled design
- Non-self-priming
- Wetted parts made of stainless steel 1.4404/1.4409 (AISI 316L/CF3M)
- Standard design with materials to Regulation (EC) No. 1935/2004
- Fixed speed version (without PumpDrive) / variable speed version (with PumpDrive)

Pump casing

- Volute casing

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM V1 ≤ 4.00 kW
- Type of construction IM V15 ≥ 5.50 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM V1 ≤ 3.30 kW
- Type of construction IM V15 ≥ 4.60 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Type of protection EEx eb II
- Temperature class T3

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[599)] (PumpDrive required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM V1 ≤ 4.00 kW
- Type of construction IM V15 ≥ 5.50 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm

598 Higher values on request for individual sizes

599 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

- Rated power 0.55 kW to 45 kW
- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for motor mounting, wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

KSB Guard

- System for monitoring the pump's condition by means of temperature and vibration sensors
- Measured values and operating data may be retrieved via the KSB Guard app and the web portal at any time.

Shaft seal

- Single mechanical seal to EN 12756
  - Seal type T[600)]: pump-end seal with non-encapsulated spring surrounded by fluid handled, uni-directional
  - Seal type H[601)]: pump-end seal with encapsulated spring, polished surface, bi-directional
  - Seal type Y: external seal
- Double mechanical seal to EN 12756
  - Seal type Q: back-to-back arrangement (pressurised barrier fluid)

Impeller type

- Open multi-vane impeller

Bearings

- Grease-packed deep groove ball bearing

Connections

- Axial suction nozzle, tangential discharge nozzle
- Adjustable through 360°

Types of connection:

- Threaded connection to DIN 11851 (hygienic pipe union)
- Threaded connection to DIN 11853
- Threaded connection to DIN 11864-1-GS-A
- Threaded connection to SMS standard
- Threaded connection to ISO 2853 (IDF)
- Threaded connection to RJT standard
- Clamped connection to DIN 32676-C (Tri-Clamp/Tri-Clover fitting)
- Clamped connection to DIN 11864-3-NKS-A
- Clamped connection to DIN 32676-A
- Clamped connection to ISO 2852
- Flange to EN 1092-1
- Flange to DIN 11864-2-NF-A
- Flange to ANSI B16.5 Class 150
- APV flange
- Varivent flange
- Other connection types on request

600 Hygienic design
601 Sterile design

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Designation

Designation example

Position																															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
V	A		I	0	4	0	-	0	3	2	-	1	4	5		0	4	0	2	G	B		T	8	1	A	E	C	C	S	X	O	A
See name plate and data sheet																												See data sheet					

Designation key

Position	Code	Description
1-4	Pump type	
	VA	Vitacast
	VAI	Vitacast Inducer
5-16	Size, e.g.	
	040	Nominal suction nozzle diameter [mm]
	032	Nominal discharge nozzle diameter [mm]
	145	Impeller diameter [mm]
17-19	Motor rating P_N [kW]	
	007	0,70
	...	...
	550	55,00
20	Number of motor poles	
21	Scope of supply	
	G	Baseplate
22-23	Shaft seal type	
	B	Single mechanical seal, internal, dead-end arrangement, without flushing
	BQ	Single mechanical seal, internal, dead-end arrangement, external flushing (quench)
	DB	Double mechanical seal in back-to-back arrangement
	I	Single mechanical seal, internal, dead-end arrangement, internal circulation
	J	Single mechanical seal, external, without flushing
24-26	Seal code, single mechanical seal, internal	
	T00	GCEGG
	T18	U3U3VGG
	T19	U3U3EGG
	T64	U3Q1EGG
	T66	Q1Q1M3GG
	T68	U3Q1VGG
	T69	BQ1M3GG
	T80	BQ1VGG
	T81	Q1Q1VGG
	T82	BQ1EGG
	T83	Q1Q1EGG
	T84	Q1U3EGG
	T85	Q1U3VGG
	Seal code, single mechanical seal, internal, with encapsulated spring	
	H0D	GCVGG
	H1	Q1CEGG
	H1D	Q1CVGG
	H2	Q1U3EGG
	H2D	Q1U3VGG
	H3	Q1Q1EGG
	H3D	Q1Q1VGG
	H4	U3U3EGG
	H5	Q2Q2EGG**
	H7	U2U2VGG*
	H8	U3U3VGG
	H9	BQ1VGG*
	HA	U3U3EGG
	Seal code, single mechanical seal, external	

Position	Code	Description	
24-26	Y06	U3U3EGG	
	Y07	BU3EGG	
	Seal code, double mechanical seal in back-to-back arrangement		
	Q80	BQ1VGG	
		BGVGG	
	Q81	Q1Q1VGG	
		BGVGG	
	Q82	BQ1EGG	
		BGEGG	
	Q83	Q1Q1EGG	
		BGEGG	
	Q84	Q1U3EGG	
		BGEGG	
	Q85	Q1U3VGG	
		BGVGG	
27	Pipe connection		
	A	Flange	APV
	B	Threaded connection	DIN 11864-1A
	C	Flange	DIN 11864-2A
	D	Clamped connection	DIN 11864-3A
	E	Threaded connection	DIN 11853
	F	Threaded connection	RJT
	G	Flange	Varivent
	I	Threaded connection	ISO 2853 (IDF)
	L	Flange	EN 1092-1
	M	Threaded connection	DIN 11851 (hygienic pipe union)
	S	Threaded connection	SMS
	T	Clamped connection	DIN 32676-A
	U	Clamped connection	DIN 32676-C (Tri-Clamp)
	V	Clamped connection	ISO 2852
	Z	Flange	ANSI B16.5 Class 150
28	O-ring material (casing/impeller)		
	E	EPDM	
	K	Kalrez	
	M	FEP (encapsulated)	
	T	PTFE	
	V	FPM	
29	Pump casing material		
	C	Stainless steel	1.4409
	D	Super duplex stainless steel	1.4469 / 1.4410
	X	Hastelloy C276	2.4819
30	Impeller material		
	C	Stainless steel	1.4409
	D	Super duplex stainless steel	1.4469 / 1.4410
	X	Hastelloy C276	2.4819
31	Motor shroud		
	O	Without shroud	
	S	With shroud	
32	Design		
	[602]	Standard	
	X	Non-standard (BT3D, BT3), including ATEX	
33	Draining facility		
	D	Casing drain with plug	
	O	No drain	
	P	Casing drain via piping	
	V	Casing drain via valve	
34	Generation		

602 Blank

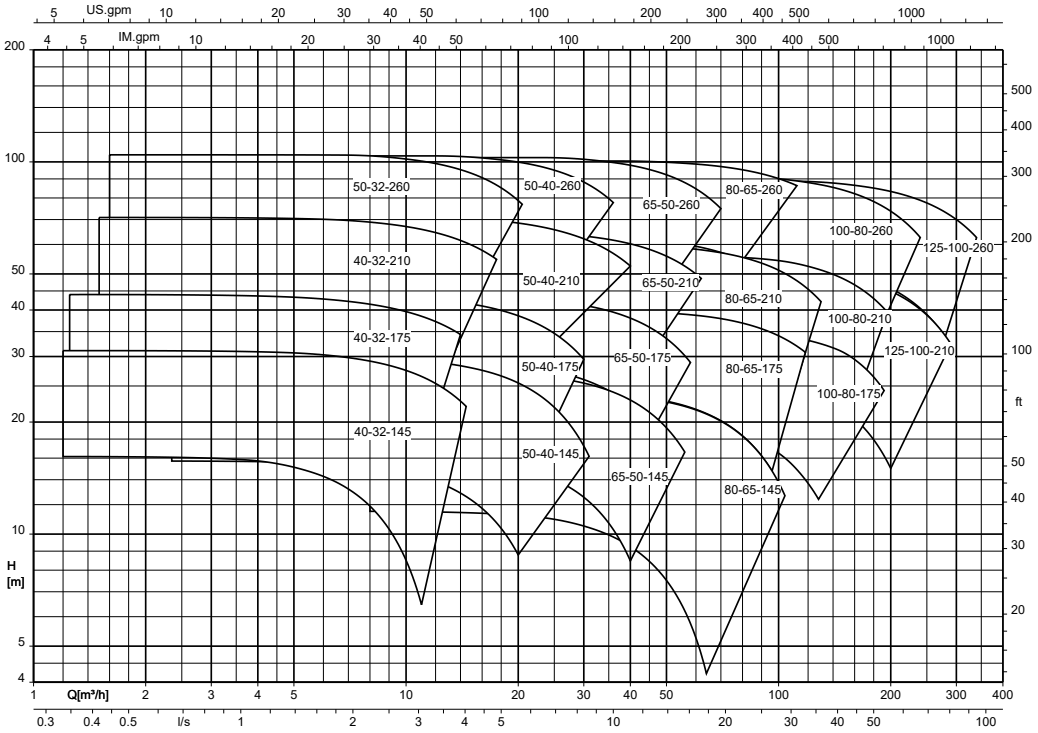
Position	Code	Description
34	A	Vitacast

Prices on request

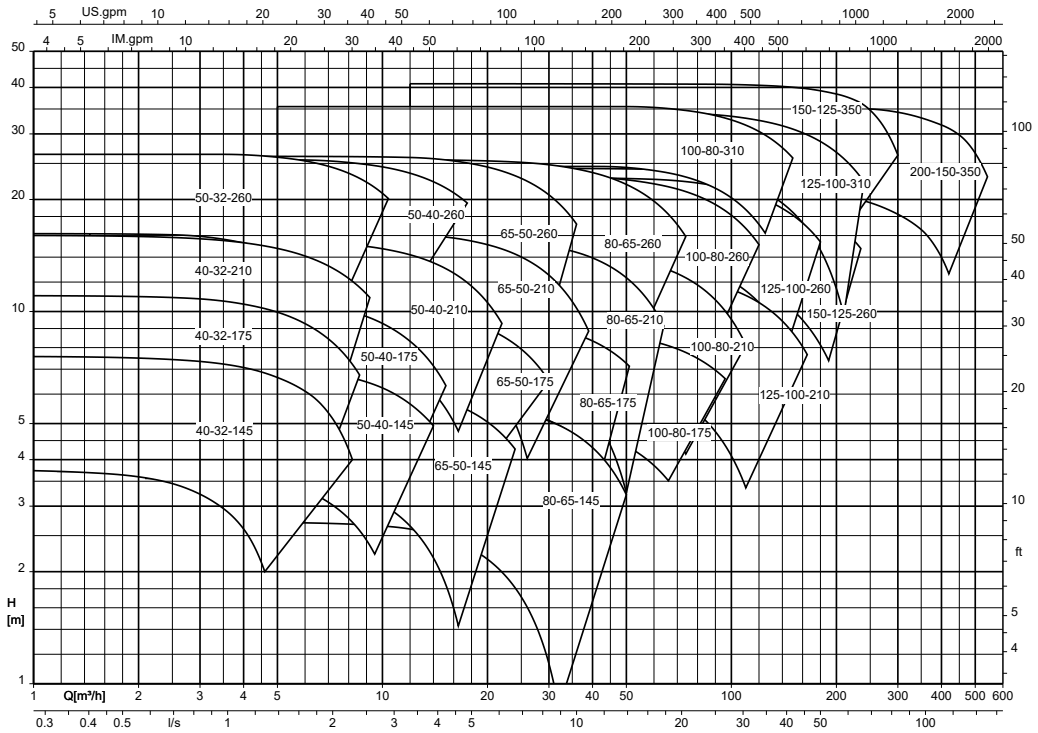
Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Selection charts

Vitacast, n = 2900 rpm



Vitacast, n = 1450 rpm



Hygienic Pumps

Vitacast Bloc

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000785

Product benefits

- Easy to clean with very little dead volume and excellent flushing capability
- Service-friendly design, easy and fast to dismantle
- Can be driven by all common standardised motors via stub shaft
- High surface quality thanks to special polishing techniques
- Corrosion-resistant design with high-quality stainless steel
- Operating costs reduced by trimming the nominal impeller diameter to match the specified duty point
- A large variety of materials, sealing elements and connections are available to optimally match the pump to its application.
- Highly suitable for CIP/SIP routines
- Excellent hydraulic efficiency and low NPSH values

Further information

Prices on request

Selection charts 984
Dimensions 986
Accessories 998

Further information

	KSB Guard (⇨ Page 1073)	System for condition monitoring of pumps
	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[603)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

603 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Certifications

Overview

Label	Effective in:	Comment
	All countries	Certified quality management to ISO 9001
	All countries	European Hygienic Engineering & Design Group
	All countries	Elastomers certified to FDA, 3A, USP Class VI

Main applications

- Food industry / beverage industry
- Pharmaceutical industry
- Chemical industry

Fluids handled

- Fluids not chemically or mechanically aggressive to the materials

Operating data

Operating properties

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q [m³/h]	≤ 340	≤ 350
Head	H [m]	≤ 105	
Operating pressure	p [bar]	≤ 10 [604)]	
Fluid temperature	T [°C]	≤ +140 [604)]	
Connection sizes	DN	25 - 150	

Design details

Design

- Hygienic centrifugal pump
- Single-stage
- Close-coupled design and long-coupled design
- Non-self-priming
- Wetted parts made of stainless steel 1.4404/1.4409 (AISI 316L/CF3M)
- Standard design with materials to Regulation (EC) No. 1935/2004
- Fixed speed version (without PumpDrive) / variable speed version (with PumpDrive)

Pump casing

- Volute casing

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM V1 ≤ 4.00 kW
- Type of construction IM V15 ≥ 5.50 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM V1 ≤ 3.30 kW
- Type of construction IM V15 ≥ 4.60 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Type of protection EEx eb II
- Temperature class T3

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[605)] (PumpDrive required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM V1 ≤ 4.00 kW
- Type of construction IM V15 ≥ 5.50 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 0.55 kW to 45 kW
- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:

604 Higher values on request for individual sizes
605 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

PumpDrive 2:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for motor mounting, wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

KSB Guard

- System for monitoring the pump's condition by means of temperature and vibration sensors
- Measured values and operating data may be retrieved via the KSB Guard app and the web portal at any time.

Shaft seal

- Single mechanical seal to EN 12756
  - Seal type T[606]: pump-end seal with non-encapsulated spring surrounded by fluid handled, uni-directional
  - Seal type H[607]: pump-end seal with encapsulated spring, polished surface, bi-directional
  - Seal type Y: external seal
- Double mechanical seal to EN 12756
  - Seal type Q: back-to-back arrangement (pressurised barrier fluid)

Impeller type

- Open multi-vane impeller

Bearings

- Grease-packed deep groove ball bearing

Connections

- Axial suction nozzle, tangential discharge nozzle
- Adjustable through 360°

Types of connection:

- Threaded connection to DIN 11851 (hygienic pipe union)
- Threaded connection to DIN 11853
- Threaded connection to DIN 11864-1-GS-A
- Threaded connection to SMS standard
- Threaded connection to ISO 2853 (IDF)
- Threaded connection to RJT standard
- Clamped connection to DIN 32676-C (Tri-Clamp/Tri-Clover fitting)
- Clamped connection to DIN 11864-3-NKS-A
- Clamped connection to DIN 32676-A
- Clamped connection to ISO 2852
- Flange to EN 1092-1
- Flange to DIN 11864-2-NF-A
- Flange to ANSI B16.5 Class 150
- APV flange
- Varivent flange
- Other connection types on request

606 Hygienic design
607 Sterile design

Designation

Designation example

Position																														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
V	A	B		0	3	2	-	0	2	5	-	1	4	5		0	4	0	2	K	B		T	8	1	M	E	C	C	S	X	O	A
See name plate and data sheet																											See data sheet						

Designation key

Position	Code	Description
1-4	Pump type	
	VAB	Vitacast Bloc
	VABI	Vitacast Bloc Inducer
5-16	Size, e.g.	
	040	Nominal suction nozzle diameter [mm]
	025	Nominal discharge nozzle diameter [mm]
	200	Nominal impeller diameter [mm]
17-19	Motor rating P_N [kW]	
	007	0,7
	...	...
	550	55,00
20	Number of motor poles	
21	Scope of supply	
	K	Ball feet
	L	Bearing bracket
	M	Motor foot
	T	Round base feet
	V	Trolley
22-23	Shaft seal type	
	B	Single mechanical seal, internal, dead-end arrangement, without flushing
	BQ	Single mechanical seal, internal, dead-end arrangement, external flushing (quench)
	DB	Double mechanical seal, external, in back-to-back arrangement
	I	Single mechanical seal, internal, dead-end arrangement, internal circulation
	J	Single mechanical seal, external, without flushing
24-26	Seal code, single mechanical seal, internal	
	T00	GCEGG
	T18	U3U3VGG
	T19	U3U3EGG
	T64	U3Q1EGG
	T66	Q1Q1M3GG
	T68	U3Q1VGG
	T69	BQ1M3GG
	T80	BQ1VGG
	T81	Q1Q1VGG
	T82	BQ1EGG
	T83	Q1Q1EGG
	T84	Q1U3EGG
	T85	Q1U3VGG
	Seal code, single mechanical seal, internal, with encapsulated spring	
	H0D	GCVGG
	H1	Q1CEGG
	H1D	Q1CVGG
	H2	Q1U3EGG
	H2D	Q1U3VGG
	H3	Q1Q1EGG
	H3D	Q1Q1VGG
	H4	U3U3EGG
	H5	Q2Q2EGG**
	HA	U3U3EGG

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Position	Code	Description	
24-26	H7	U2U2VGG*	
	H8	U3U3VGG	
	H9	BQ1VGG*	
	Seal code, single mechanical seal, external		
	Y06	U3U3EGG	
	Y07	BU3EGG	
	Seal code, double mechanical seal, external, back-to-back arrangement		
	Q70	GCEGG	
		GBEGG	
	Q71	U3CEGG	
		GCEGG	
	Q72	U3U3EGG	
		U3BGG	
	Q74	U3U3VGG	
		BU3VGG	
	Q78	U3U3VGG	
		U3U3VGG	
	Q79	U3U3TGG	
		U3CTGG	
27	Pipe connection		
	A	Flange	APV
	B	Threaded connection	DIN 11864-1A
	C	Flange	DIN 11864-2A
	D	Clamped connection	DIN 11864-3A
	E	Threaded connection	DIN 11853
	F	Threaded connection	RJT
	G	Flange	Varivent
	I	Threaded connection	ISO 2853 (IDF)
	L	Flange	EN 1092-1
	M	Threaded connection	DIN 11851 (hygienic pipe union)
	S	Threaded connection	SMS
	T	Clamped connection	DIN 32676-A
	U	Clamped connection	DIN 32676-C (Tri Clamp)
	V	Clamped connection	ISO 2852
	Z	Flange	ANSI B16.5 Class 150
28	O-ring material (casing/impeller)		
	E	EPDM	
	K	Kalrez	
	M	FEP (encapsulated)	
	P	PTFE	
	V	FPM	
29	Pump casing material		
	C	Stainless steel	1.4409
	D	Super duplex stainless steel	1.4469 / 1.4410
	X	Hastelloy C276	2.4819
30	Impeller material		
	C	Stainless steel	1.4409
	D	Super duplex stainless steel	1.4469 / 1.4410
	X	Hastelloy C276	2.4819
31	Motor shroud		
	O	Without shroud	
	S	With shroud	
32	Design		
	[608]	Standard	
	X	Non-standard (BT3D, BT3), including ATEX	
33	Drain		
	D	Casing drain with plug	

608 Blank

Position	Code	Description
33	O	No drain
	P	Casing drain via pipeline
	V	Casing drain via valve
34	Generation	
	A	Vitacast Bloc

Materials

Overview of available materials

Part No.	Description	Material
103	Volute casing[609)]	1.4409 (AISI CF3M)
163	Discharge cover[609)]	1.4409 (AISI CF3M)
230	Impeller[609)]	1.4409 (AISI CF3M)
922	Impeller nut[609)]	1.4404 (AISI 316L)
236	Inducer[609)]	1.4409 (AISI CF3M)
210	Pump shaft[609)]	1.4404 (AISI 316L)
341	Drive lantern	1.4308 (AISI CF8)
-	O-rings, moulded gaskets	EPDM, FPM, FEP, FFKM

Optional materials for wetted components:

- 1.4469/1.4410
- Hastelloy C276

All materials that will be in contact with the fluid handled conform with Regulation (EC) No 1935/2004 and Commission Regulation (EC) No. 2023/2006.

609 Wetted component

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

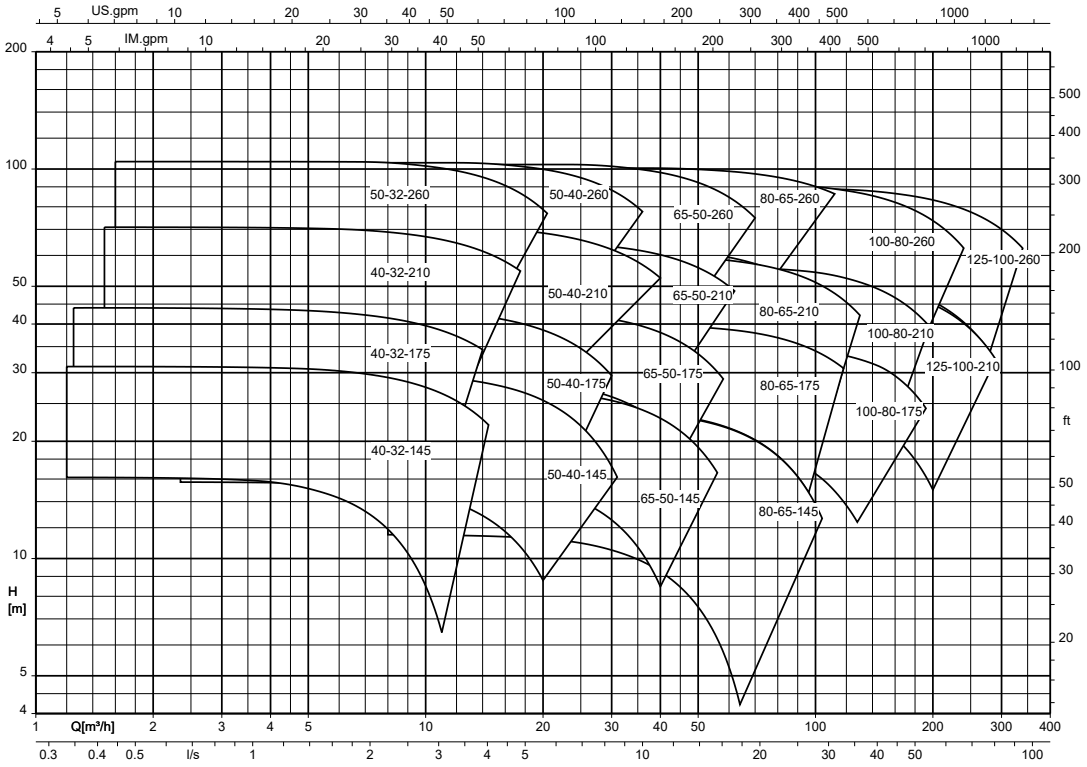
Technical data

Technical data

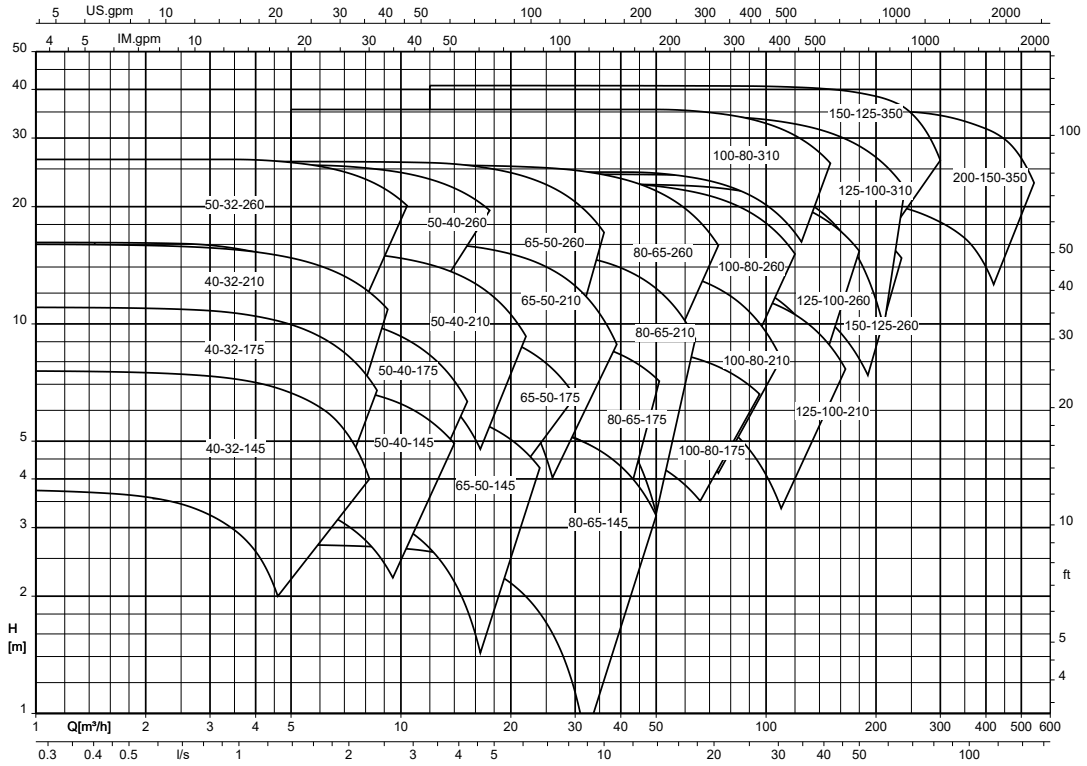
Size	Inducer	Shaft unit	Free passage		Minimum impeller diameter	Maximum impeller diameter	Speed limit
			4 poles	2 poles			
			[mm]	[mm]	[mm]	[mm]	[rpm]
032-025-145	-	1	3,5	3,5	115	145	500 - 3600
032-025-175	-	1	3,5	3,5	145	175	500 - 3600
040-032-110	-	1	-	4	95	110	500 - 3600
040-032-145	✘	2	5	5	115	145	500 - 3600
040-032-175	✘	2	4	4	145	175	500 - 3600
040-032-210	✘	2	4	4	165	210	500 - 3600
050-032-260	-	2	3,5	3,5	210	260	500 - 3000
050-040-145	-	2	6	11	115	145	500 - 3600
050-040-175	-	2	6,5	11	145	175	500 - 3600
050-040-210	✘	2	6	6	165	210	500 - 3600
050-040-260	-	3	5	5	210	260	500 - 3000
065-050-145	✘	2	10	16	115	145	500 - 3600
065-050-175	✘	2	8	13	145	175	500 - 3600
065-050-210	✘	2	8	8	165	210	500 - 3600
065-050-260	✘	3	6	6	210	260	500 - 3000
080-065-145	✘	2	18	23	115	145	500 - 3600
080-065-175	✘	2	16	16	145	175	500 - 3600
080-065-210	-	3	12	12	165	210	500 - 3600
080-065-260	✘	3	10,5	10,5	210	260	500 - 3000
100-080-175	-	3	22	22	150	177	500 - 3600
100-080-210	✘	3	18	15	165	210	500 - 3600
100-080-260	✘	3	14	14	200	260	500 - 3000
100-080-310	-	3	23	-	265	310	500 - 1800
125-100-210	-	3	15	28	165	210	500 - 3600
125-100-260	✘	3	25	25	210	260	500 - 3000
125-100-310	✘	3	30	-	265	310	500 - 1800
150-125-260	-	3	32	-	210	260	500 - 3000

Selection charts

Vitacast, Vitacast Bloc, n = 2900 rpm



Vitacast, Vitacast Bloc, n = 1450 rpm



Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Related documents

Information/documents

Document	Reference number
Characteristic curves booklet (50 Hz) Fixed speed version	1969.450

Dimensions

Pump set dimensions

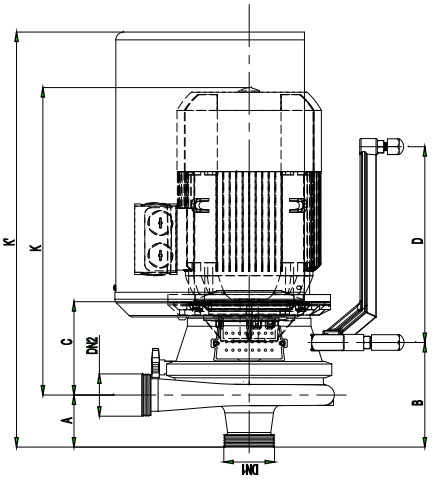


Figure 1,
Pump set with 3-point ball feet

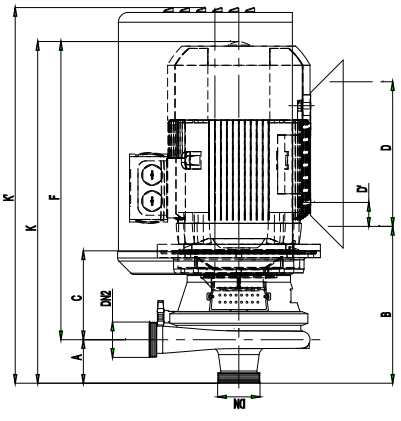


Figure 2,
Pump set with 4-point ball feet

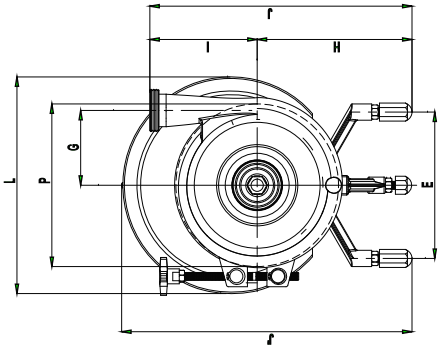


Figure 3,
Pump set with motor feet

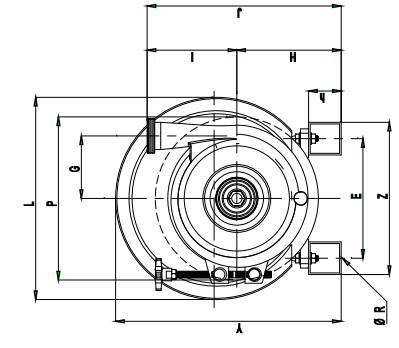


Figure 4,
Pump set with bearing pedestal

Pump set dimensions, 50 Hz, 60 Hz [mm]

Vitacast Bloc	Motor	P[610] [kW]		Figure 1	Figure 2	Figure 3	Figure 4	A	B	C	D	D'	E	E'	F_{max} [61] 1)	G	H	h	K_{max} [61] 1)	K'_{max} [6] 11)	I	J	J'_{max} [61] 1)	L_{max} [61] 1)	Y[611]	Ø P	Ø R	Z
		2 poles	4 poles																									
032-025-145	71M	0,37	0,25	✘	-	-	-	75	144	117	190	-	178	-	327	81	158	-	402	537	145	303	301	239	-	175	-	-
032-025-145	80M	0,75	0,55	✘	-	-	-	75	144	123	190	-	178	-	410	81	158	-	485	537	145	303	301	239	-	200	-	-
032-025-145	90S	1,5	1,1	✘	-	-	-	75	144	123	190	-	178	-	460	81	158	-	535	543	145	303	342	302	-	200	-	-
032-025-145	90L	2,2	1,5	✘	-	-	-	75	144	123	190	-	178	-	460	81	158	-	535	543	145	303	342	302	-	200	-	-
032-025-145	80M	0,75	0,55	-	✘	✘	-	75	212,5	123	170	35	125	-	410	81	120	40	485	537	145	265	-	239	263	200	9	165
032-025-145	90S	1,5	1,1	-	✘	✘	-	75	216,5	123	200	37,5	140	-	460	81	130	40	535	543	145	275	-	302	314	200	10	180
032-025-145	90L	2,2	1,5	-	✘	✘	-	75	216,5	123	200	37,5	140	-	460	81	130	40	535	543	145	275	-	302	314	200	10	180
032-025-175	71M	0,37	0,25	✘	-	-	-	65	134	117	190	-	178	-	327	96	164	-	392	527	149	313	307	239	-	175	-	-
032-025-175	80M	0,75	0,55	✘	-	-	-	65	134	123	190	-	178	-	410	96	164	-	475	527	149	313	307	239	-	200	-	-
032-025-175	90S	1,5	1,1	✘	-	-	-	65	134	123	190	-	178	-	460	96	164	-	525	533	149	313	348	302	-	200	-	-
032-025-175	90L	2,2	1,5	✘	-	-	-	65	134	123	190	-	178	-	460	96	164	-	525	533	149	313	348	302	-	200	-	-
032-025-175	100L	3,0	2,2	✘	-	-	-	65	134	138	301	-	225	-	508,5	96	210	-	573,5	600	149	359	416,5	333	-	250	-	-
032-025-175	112M	4,0	4,0	✘	-	-	-	65	134	138	301	-	225	-	492	96	210	-	557	600	149	359	416,5	333	-	250	-	-
032-025-175	112M	4,0	4,0	✘	-	-	-	65	134	138	279	-	225	190	492	96	210	-	557	600	149	359	416,5	333	-	250	-	-
032-025-175	80M	0,75	0,55	-	✘	✘	-	65	203	123	170	35	225	-	410	96	120	40	475	527	149	269	-	239	263	200	9	165
032-025-175	90S	1,5	1,1	-	✘	✘	-	65	206,5	123	200	37,5	140	-	460	96	130	40	525	533	149	279	-	302	314	200	10	180
032-025-175	90L	2,2	1,5	-	✘	✘	-	65	206,5	123	200	37,5	140	-	460	96	130	40	525	533	149	279	-	302	314	200	10	180
032-025-175	100L	3,0	2,2	-	✘	✘	-	65	221	138	230	45	160	-	508,5	96	150	50	573,5	600	149	299	-	333	356,5	250	12	210
032-025-175	112M	4,0	4,0	-	✘	✘		65	228	138	230	45	190	-	492	96	162	50	557	600	149	311	-	333	368,5	250	12	240
040-032-110	71M	0,37	0,25	✘	-	-	-	70	137	117	190	-	178	-	327	65	149	-	397	532	110	259	292	239	-	175	-	-
040-032-110	80M	0,75	0,55	✘	-	-	-	70	137	123	190	-	178	-	410	65	149	-	480	532	110	259	292	239	-	200	-	-
040-032-110	90S	1,5	1,1	✘	-	-	-	70	137	123	190	-	178	-	460	65	149	-	530	538	110	259	330	302	-	200	-	-
040-032-110	90L	2,2	1,5	✘	-	-	-	70	137	123	190	-	178	-	460	65	149	-	530	538	110	259	330	302	-	200	-	-
040-032-110	80M	0,75	0,55	-	✘	✘	-	70	208	123	170	35	125	-	410	65	120	40	480	532	110	230	-	239	263	200	9	165
040-032-110	90S	1,5	1,1	-	✘	✘	-	70	211,5	123	200	37,5	140	-	460	65	130	40	530	538	110	240	-	302	311	200	10	180
040-032-110	90L	2,2	1,5	-	✘	✘	-	70	211,5	123	200	37,5	140	-	460	65	130	40	530	538	110	240	-	302	311	200	10	180
040-032-145	80M	0,75	0,55	✘	-	-	-	80	167	138	231	-	225	-	425	85	208	-	505	568	145	353	374	302	-	220	-	-
040-032-145	90S	1,5	1,1	✘	-	-	-	80	167	138	231	-	225	-	475	85	208	-	555	568	145	353	374	302	-	220	-	-
040-032-145	90L	2,2	1,5	✘	-	-	-	80	167	138	231	-	225	-	475	85	208	-	555	568	145	353	374	302	-	220	-	-
040-032-145	100L	3	2,2	✘	-	-	-	80	167	139	301	-	225	-	509,5	85	225	-	589,5	635	145	370	431,5	333	-	250	-	-
040-032-145	112M	4	4	✘	-	-	-	80	167	139	301	-	225	-	493	85	225	-	573	635	145	370	431,5	333	-	250	-	-
040-032-145	112M	4	4	✘	-	-	-	80	167	139	262	-	225	190	493	85	225	-	573	635	145	370	431,5	333	-	250	-	-
040-032-145	80M	0,75	0,55	-	✘	✘	-	80	233	138	170	35	125	-	425	85	120	40	505	568	145	265	-	302	286	250	9	165

610 For 50 Hz

611 Dimensions with Siemens motor IE3 1LE1. Dimensions of other motors may vary slightly.

Vitacast Bloc	Motor	P[610] [kW]		Figure 1	Figure 2	Figure 3	Figure 4	A	B	C	D	D'	E	E'	F_{max} [61] 1)	G	H	h	K_{max} [61] 1)	K'_{max} [6] 11)	I	J	J'_{max} [61] 1)	L_{max} [61] 1)	Y[611)]	Ø P	Ø R	Z
		2 poles	4 poles																									
040-032-145	90S	1,5	1,1	-	✗	✗	-	80	236,5	138	200	37,5	140	-	475	85	130	40	555	568	145	275	-	302	296	250	10	180
040-032-145	90L	2,2	1,5	-	✗	✗	-	80	236,5	138	200	37,5	140	-	475	85	130	40	555	568	145	275	-	302	296	250	10	180
040-032-145	100L	3	2,2	-	✗	✗	-	80	237	139	230	45	160	-	509,5	85	150	50	589,5	635	145	295	-	333	356,5	250	12	210
040-032-145	112M	4	4	-	✗	✗	-	80	244	139	230	45	190	-	493	85	162	50	573	635	145	307	-	333	368,5	250	12	240
040-032-175	80M	0,75	0,55	✗	-	-	-	80	167	139	231	-	225	-	426	95	213	-	506	569	150	363	379	302	-	220	-	-
040-032-175	90S	1,5	1,1	✗	-	-	-	80	167	139	231	-	225	-	476	95	213	-	556	569	150	363	379	302	-	220	-	-
040-032-175	90L	2,2	1,5	✗	-	-	-	80	167	139	231	-	225	-	476	95	213	-	556	569	150	363	379	302	-	220	-	-
040-032-175	100L	3	2,2	✗	-	-	-	80	167	140	301	-	225	-	510,5	95	230	-	590,5	636	150	380	436,5	333	-	250	-	-
040-032-175	112M	4	4	✗	-	-	-	80	167	140	301	-	225	-	494	95	230	-	574	636	150	380	436,5	333	-	250	-	-
040-032-175	112M	4	4	✗	-	-	-	80	167	140	263	-	225	190	494	95	230	-	574	636	150	380	436,5	333	-	250	-	-
040-032-175	80M	0,75	0,55	-	✗	✗	-	80	234	139	170	35	125	-	426	95	120	40	506	569	150	270	-	302	286	220	9	165
040-032-175	90S	1,5	1,1	-	✗	✗	-	80	237,5	139	200	37,5	140	-	476	95	130	40	556	569	150	280	-	302	296	220	10	180
040-032-175	90L	2,2	1,5	-	✗	✗	-	80	237,5	139	200	37,5	140	-	476	95	130	40	556	569	150	280	-	302	296	220	10	180
040-032-175	100L	3	2,2	-	✗	✗	-	80	238	140	230	45	160	-	510,5	95	150	50	590,5	636	150	300	-	333	356,5	250	12	210
040-032-175	112M	4	4	-	✗	✗	-	80	245	140	230	45	190	-	494	95	162	50	574	636	150	312	-	333	368,5	250	12	240
040-032-210	80M	0,75	0,55	✗	-	-	-	80	158	139	231	-	225	-	426	110	221	-	506	569	165	386	387	302	-	220	-	-
040-032-210	90S	1,5	1,1	✗	-	-	-	80	158	139	231	-	225	-	476	110	221	-	556	569	165	386	387	302	-	220	-	-
040-032-210	90L	2,2	1,5	✗	-	-	-	80	158	139	231	-	225	-	476	110	221	-	556	569	165	386	387	302	-	220	-	-
040-032-210	100L	3	2,2	✗	-	-	-	80	158	140	301	-	225	-	510,5	110	238	-	590,5	636	165	403	444,5	333	-	250	-	-
040-032-210	112M	4	4	✗	-	-	-	80	158	140	301	-	225	-	494	110	238	-	574	636	165	403	444,5	333	-	250	-	-
040-032-210	112M	4	4	✗	-	-	-	80	158	140	272	-	225	190	494	110	238	-	574	636	165	403	444,5	333	-	250	-	-
040-032-210	132S	5,5	5,5	✗	✗	-	-	80	158	161	312	-	225	216	596	110	238	-	676	681,5	165	403	461	372	-	300	-	-
040-032-210	132M	-	7,5	✗	✗	-	-	80	158	161	350	-	225	216	596	110	238	-	676	681,5	165	403	461	372	-	300	-	-
040-032-210	160M	11	11	✗	✗	-	-	80	158	206	446	-	225	254	760	110	238	-	840	947	165	403	502	480	-	350	-	-
040-032-210	160L	18,5	15	✗	✗	-	-	80	158	206	490	-	225	254	760	110	238	-	840	947	165	403	502	480	-	350	-	-
040-032-210	80M	0,75	0,55	-	✗	✗	-	80	234	139	170	35	125	-	426	110	120	40	506	569	165	285	-	302	286	220	9	165
040-032-210	90S	1,5	1,1	-	✗	✗	-	80	237,5	139	200	37,5	140	-	476	110	130	40	556	569	165	295	-	302	296	220	10	180
040-032-210	90L	2,2	1,5	-	✗	✗	-	80	237,5	139	200	37,5	140	-	476	110	130	40	556	569	165	295	-	302	296	220	10	180
040-032-210	100L	3	2,2	-	✗	✗	-	80	238	140	230	45	160	-	510,5	110	150	50	590,5	636	165	315	-	333	356,5	250	12	210
040-032-210	112M	4	4	-	✗	✗	-	80	245	140	230	45	190	-	494	110	162	50	574	636	165	327	-	333	368,5	250	12	240
040-032-210	132S	5,5	5,5	-	✗	✗	-	80	286	161	266	44	216	-	596	110	192	60	676	681,5	165	357	-	372	415	300	12	276
040-032-210	132M	-	7,5	-	✗	✗	-	80	286	161	266	44	216	-	596	110	192	60	676	681,5	165	357	-	372	415	300	12	276
040-032-210	160M	11	11	-	✗	✗	-	80	349	206	330	45	254	-	760	110	220	60	840	947	165	385	-	432	484	350	15	314
040-032-210	160L	18,5	15	-	✗	✗	-	80	349	206	330	45	254	-	760	110	220	60	840	947	165	385	-	432	484	350	15	314
050-032-260	90S	1,5	1,1	✗	-	-	-	90	184	163	231	-	225	-	500	140	221	-	590	603	172	393	387	302	-	220	-	-
050-032-260	90L	2,2	1,5	✗	-	-	-	90	184	163	231	-	225	-	500	140	221	-	590	603	172	393	387	302	-	220	-	-
050-032-260	100L	3	2,2	✗	-	-	-	90	184	164	301	-	225	-	534,5	140	238	-	624,5	670	172	410	444,5	333	-	250	-	-
050-032-260	112M	4	4	✗	-	-	-	90	184	164	301	-	225	-	518	140	238	-	608	670	172	410	444,5	333	-	250	-	-

Vitacast Bloc	Motor	P[610] [kW]		Figure 1	Figure 2	Figure 3	Figure 4	A	B	C	D	D'	E	E'	F_{max} [61] 1)	G	H	h	K_{max} [61] 1)	K'_{max} [6] 11)	I	J	J'_{max} [61] 1)	L_{max} [61] 1)	Y[611)]	Ø P	Ø R	Z
		2 poles	4 poles																									
050-032-260	112M	4	4	✘	-	-	-	90	184	164	280	-	225	190	518	140	238	-	608	670	172	410	444,5	333	-	250	-	-
050-032-260	132S	5,5	5,5	✘	✘	-	-	90	184	185	320	-	225	216	620	140	238	-	710	715,5	172	410	461	372	-	-	-	-
050-032-260	132M	-	7,5	✘	✘	-	-	90	184	185	358	-	225	216	620	140	238	-	710	715,5	172	410	461	372	-	-	-	-
050-032-260	160M	11	11	✘	✘	-	-	90	184	225	449	-	225	254	779	140	247	-	869	970	172	419	511	432	-	350	-	-
050-032-260	160L	18,5	15	✘	✘	-	-	90	184	225	493	-	225	254	779	140	247	-	869	970	172	419	511	432	-	350	-	-
050-032-260	90S	1,5	1,1	-	✘	✘	-	90	271,5	163	200	37,5	140	-	500	140	130	40	590	603	172	302	-	302	296	200	10	180
050-032-260	90L	2,2	1,5	-	✘	✘	-	90	271,5	163	200	37,5	140	-	500	140	130	40	590	603	172	302	-	302	296	200	10	180
050-032-260	100L	3	2,2	-	✘	✘	-	90	272	164	230	45	160	-	534,5	140	150	50	624,5	670	172	322	-	333	356,5	250	12	210
050-032-260	112M	4	4	-	✘	✘	-	90	279	164	230	45	190	-	518	140	162	50	608	670	172	334	-	333	368,5	250	12	240
050-032-260	132S	5,5	5,5	-	✘	✘	-	90	320	185	266	44	216	-	620	140	192	60	710	715,5	172	364	-	372	415	300	12	276
050-032-260	132M	-	7,5	-	✘	✘	-	90	320	185	266	44	216	-	620	140	192	60	710	715,5	172	364	-	372	415	300	12	276
050-032-260	160M	11	11	-	✘	✘	-	90	378	225	330	45	254	-	779	140	220	60	869	970	172	392	-	432	484	350	15	314
050-032-260	160L	18,5	15	-	✘	✘	-	90	378	225	330	45	254	-	779	140	220	60	869	970	172	392	-	432	484	350	15	314
050-040-145	80M	0,75	0,55	✘	-	-	-	80	168	139	231	-	225	-	426	90	208	-	506	569	133	341	374	302	-	220	-	-
050-040-145	90S	1,5	1,1	✘	-	-	-	80	168	139	231	-	225	-	476	90	208	-	556	569	133	341	374	302	-	220	-	-
050-040-145	90L	2,2	1,5	✘	-	-	-	80	168	139	231	-	225	-	476	90	208	-	556	569	133	341	374	302	-	220	-	-
050-040-145	100L	3	2,2	✘	-	-	-	80	168	140	301	-	225	-	510,5	90	225	-	590,5	636	133	358	431,5	333	-	250	-	-
050-040-145	112M	4	4	✘	-	-	-	80	168	140	301	-	225	-	494	90	225	-	574	636	133	358	431,5	333	-	250	-	-
050-040-145	112M	4	4	✘	-	-	-	80	168	140	262	-	225	190	494	90	225	-	574	636	133	358	431,5	333	-	250	-	-
050-040-145	80M	0,75	0,55	-	✘	✘	-	80	234	139	170	35	125	-	426	90	120	40	506	569	133	253	-	302	286	220	9	165
050-040-145	90S	1,5	1,1	-	✘	✘	-	80	237,5	139	200	37,5	140	-	476	90	130	40	556	569	133	263	-	302	296	220	10	180
050-040-145	90L	2,2	1,5	-	✘	✘	-	80	237,5	139	200	37,5	140	-	476	90	130	40	556	569	133	263	-	302	296	220	10	180
050-040-145	100L	3	2,2	-	✘	✘	-	80	238	140	230	45	160	-	510,5	90	150	50	590,5	636	133	283	-	333	356,5	250	12	210
050-040-145	112M	4	4	-	✘	✘	-	80	245	140	230	45	190	-	494	90	162	50	574	636	133	295	-	333	368,5	250	12	240
050-040-175	80M	0,75	0,55	✘	-	-	-	80	169	141	231	-	225	-	428	95	213	-	508	571	150	363	379	302	-	220	-	-
050-040-175	90S	1,5	1,1	✘	-	-	-	80	169	141	231	-	225	-	478	95	213	-	558	571	150	363	379	302	-	220	-	-
050-040-175	90L	2,2	1,5	✘	-	-	-	80	169	141	231	-	225	-	478	95	213	-	558	571	150	363	379	302	-	220	-	-
050-040-175	100L	3	2,2	✘	-	-	-	80	169	142	301	-	225	-	512,5	95	230	-	592,5	638	150	380	436,5	333	-	250	-	-
050-040-175	112M	4	4	✘	-	-	-	80	169	142	301	-	225	-	496	95	230	-	576	638	150	380	436,5	333	-	250	-	-
050-040-175	112M	4	4	✘	-	-	-	80	169	142	263	-	225	190	496	95	230	-	576	638	150	380	436,5	333	-	250	-	-
050-040-175	132S	5,5	5,5	✘	✘	-	-	80	169	164	304	-	225	216	599	95	230	-	679	684,5	150	380	453	372	-	300	-	-
050-040-175	132M	-	7,5	✘	✘	-	-	80	169	164	342	-	225	216	599	95	230	-	679	684,5	150	380	453	372	-	300	-	-
050-040-175	160M	11	11	✘	✘	-	-	80	169	208	437	-	225	254	762	115	238	-	842	949	165	403	502	432	-	350	-	-
050-040-175	80M	0,75	0,55	-	✘	✘	-	80	236	141	170	35	125	-	428	95	120	40	508	571	150	270	-	302	286	220	9	165
050-040-175	90S	1,5	1,1	-	✘	✘	-	80	239,5	141	200	37,5	140	-	478	95	130	40	558	571	150	280	-	302	296	220	10	180
050-040-175	90L	2,2	1,5	-	✘	✘	-	80	239,5	141	225	37,5	140	-	478	95	130	40	558	571	150	280	-	302	296	220	10	180
050-040-175	100L	3	2,2	-	✘	✘	-	80	240	142	230	45	160	-	512,5	95	150	50	592,5	638	150	300	-	333	356,5	250	12	210
050-040-175	112M	4	4	-	✘	✘	-	80	247	142	230	45	190	-	496	95	162	50	576	638	150	312	-	333	368,5	250	12	240

Vitacast Bloc	Motor	P[610] [kW]		Figure 1	Figure 2	Figure 3	Figure 4	A	B	C	D	D'	E	E'	F_{max} [61] 1)	G	H	h	K_{max} [61] 1)	K'_{max} [6] 11)	I	J	J'_{max} [61] 1)	L_{max} [61] 1)	Y[611)]	Ø P	Ø R	Z
		2 poles	4 poles																									
050-040-175	132S	5,5	5,5	-	✘	✘	-	80	289	164	266	44	216	-	599	95	192	60	679	684,5	150	342	-	372	415	300	12	276
050-040-175	132M	-	7,5	-	✘	✘	-	80	289	164	266	44	216	-	599	95	192	60	679	684,5	150	342	-	372	415	300	12	276
050-040-175	160M	11	11	-	✘	✘	-	80	351	208	330	45	254	-	762	95	220	60	842	949	150	370	-	432	484	350	15	314
050-040-210	80M	0,75	0,55	✘	-	-	-	80	161	141	231	-	225	-	428	115	221	-	508	571	165	386	387	302	-	220	-	-
050-040-210	90S	1,5	1,1	✘	-	-	-	80	161	141	231	-	225	-	478	115	221	-	558	571	165	386	387	302	-	220	-	-
050-040-210	90L	2,2	1,5	✘	-	-	-	80	161	141	231	-	225	-	478	115	221	-	558	571	165	386	387	302	-	220	-	-
050-040-210	100L	3	2,2	✘	-	-	-	80	161	142	301	-	225	-	512,5	115	238	-	592,5	638	165	403	444,5	333	-	250	-	-
050-040-210	112M	4	4	✘	-	-	-	80	161	142	301	-	225	-	496	115	238	-	576	638	165	403	444,5	333	-	250	-	-
050-040-210	112M	4	4	✘	-	-	-	80	161	142	271	-	225	190	496	115	238	-	576	638	165	403	444,5	333	-	250	-	-
050-040-210	132S	5,5	5,5	✘	✘	-	-	80	161	164	312	-	225	216	599	115	238	-	679	684,5	165	403	461	372	-	300	-	-
050-040-210	132M	-	7,5	✘	✘	-	-	80	161	164	350	-	225	216	599	115	238	-	679	684,5	165	403	461	372	-	300	-	-
050-040-210	160M	11	11	✘	✘	-	-	80	161	208	445	-	225	254	762	115	238	-	842	949	165	403	502	432	-	350	-	-
050-040-210	80M	0,75	0,55	-	✘	✘	-	80	236	141	170	35	125	-	428	115	120	40	508	571	165	285	-	302	286	220	9	165
050-040-210	90S	1,5	1,1	-	✘	✘	-	80	239,5	141	200	37,5	140	-	478	115	130	40	558	571	165	295	-	302	296	220	10	180
050-040-210	90L	2,2	1,5	-	✘	✘	-	80	239,5	141	200	37,5	140	-	478	115	130	40	558	571	165	295	-	302	296	220	10	180
050-040-210	100L	3	2,2	-	✘	✘	-	80	240	142	230	45	160	-	512,5	115	150	50	592,5	638	165	315	-	333	356,5	250	12	210
050-040-210	112M	4	4	-	✘	✘	-	80	247	142	230	45	190	-	496	115	162	50	576	638	165	327	-	333	368,5	250	12	240
050-040-210	132S	5,5	5,5	-	✘	✘	-	80	289	164	266	44	216	-	599	115	192	60	679	684,5	165	357	-	372	415	300	12	276
050-040-210	132M	-	7,5	-	✘	✘	-	80	289	164	266	44	216	-	599	115	192	60	679	684,5	165	357	-	372	415	300	12	276
050-040-210	160M	11	11	-	✘	✘	-	80	351	208	330	45	254	-	762	115	220	60	842	949	165	385	-	432	484	350	15	314
050-040-260	90S	1,5	1,1	✘	-	-	-	100	194	163	231	-	225	-	500	145	221	-	600	613	172	393	387	302	-	220	-	-
050-040-260	90L	2,2	1,5	✘	-	-	-	100	194	163	231	-	225	-	500	145	221	-	600	613	172	393	387	302	-	220	-	-
050-040-260	100L	3	2,2	✘	-	-	-	100	194	164	301	-	225	-	534,5	145	238	-	634,5	680	172	410	444,5	333	-	250	-	-
050-040-260	112M	4	4	✘	-	-	-	100	194	164	301	-	225	-	518	145	238	-	618	680	172	410	444,5	333	-	250	-	-
050-040-260	112M	4	4	✘	-	-	-	100	194	164	280	-	225	190	518	145	238	-	618	680	172	410	444,5	333	-	250	-	-
050-040-260	132S	5,5	5,5	✘	✘	-	-	100	194	185	320	-	225	216	620	145	238	-	720	725,5	172	410	461	372	-	300	-	-
050-040-260	132M	-	7,5	✘	✘	-	-	100	194	185	358	-	225	216	620	145	238	-	720	725,5	172	410	461	372	-	300	-	-
050-040-260	160M	11	11	✘	✘	-	-	100	194	225	449	-	225	254	779	145	247	-	879	980	172	419	511	432	-	350	-	-
050-040-260	160L	18,5	15	✘	✘	-	-	100	194	225	493	-	225	254	779	145	247	-	879	980	172	419	511	432	-	350	-	-
050-040-260	180M	22	18,5	✘	✘	-	-	100	194	225	493	-	225	279	813	145	250	-	913	1111	172	422	562	480	-	350	-	-
050-040-260	90S	1,5	1,1	-	✘	✘	-	100	281,5	163	200	37,5	140	-	500	145	130	40	600	613	172	302	-	302	296	220	10	180
050-040-260	90L	2,2	1,5	-	✘	✘	-	100	281,5	163	200	37,5	140	-	500	145	130	40	600	613	172	302	-	302	296	220	10	180
050-040-260	100L	3	2,2	-	✘	✘	-	100	282	164	230	45	160	-	534,5	145	150	50	634,5	680	172	322	-	333	356,5	250	12	210
050-040-260	112M	4	4	-	✘	✘	-	100	289	164	230	45	190	-	518	145	162	50	618	680	172	334	-	333	368,5	250	12	240
050-040-260	132S	5,5	5,5	-	✘	✘	-	100	330	185	266	44	216	-	620	145	192	60	720	725,5	172	364	-	372	415	300	12	276
050-040-260	132M	-	7,5	-	✘	✘	-	100	330	185	266	44	216	-	620	145	192	60	720	725,5	172	364	-	372	415	300	12	276
050-040-260	160M	11	11	-	✘	✘	-	100	389	226	330	45	254	-	780	145	220	60	880	981	172	392	-	432	484	350	15	314
050-040-260	160L	18,5	15	-	✘	✘	-	100	389	226	330	45	254	-	780	145	220	60	880	981	172	3932	-	432	484	350	15	314

Vitacast Bloc	Motor	P[610] [kW]		Figure 1	Figure 2	Figure 3	Figure 4	A	B	C	D	D'	E	E'	F_{max} [61] 1)	G	H	h	K_{max} [61] 1)	K'_{max} [6] 11)	I	J	J'_{max} [61] 1)	L_{max} [61] 1)	Y[611)]	Ø P	Ø R	Z
		2 poles	4 poles																									
050-040-260	180M	22	18,5	-	✘	✘	-	100	392,5	226	387	54,5	279	-	814	145	283,5	103,5	914	1112	172	455,5	-	480	595,5	350	15	382,5
065-050-145	80M	0,75	0,55	✘	-	-	-	80	170	141	231	-	225	-	428	95	208	-	508	571	145	353	374	302	-	220	-	-
065-050-145	90S	1,5	1,1	✘	-	-	-	80	170	141	231	-	225	-	478	95	208	-	558	571	145	353	374	302	-	220	-	-
065-050-145	90L	2,2	1,5	✘	-	-	-	80	170	141	231	-	225	-	478	95	208	-	558	571	145	353	374	302	-	220	-	-
065-050-145	100L	3	2,2	✘	-	-	-	80	170	142	301	-	225	-	512,5	95	225	-	592,5	638	145	370	431,5	333	-	250	-	-
065-050-145	112M	4	4	✘	-	-	-	80	170	142	301	-	225	-	496	95	225	-	576	638	145	370	431,5	333	-	250	-	-
065-050-145	112M	4	4	✘	-	-	-	80	170	142	262	-	225	190	496	95	225	-	576	638	145	370	431,5	333	-	250	-	-
065-050-145	132S	5,5	5,5	✘	✘	-	-	80	170	164	303	-	225	216	599	95	225	-	679	684,5	145	370	448	372	-	300	-	-
065-050-145	80M	0,75	0,55	-	✘	✘	-	80	236	141	170	35	125	-	428	95	120	40	508	571	145	265	-	302	286	220	9	165
065-050-145	90S	1,5	1,1	-	✘	✘	-	80	239,5	141	200	37,5	140	-	478	95	130	40	558	571	145	275	-	302	296	220	10	180
065-050-145	90L	2,2	1,5	-	✘	✘	-	80	239,5	141	200	37,5	140	-	478	95	130	40	558	571	145	275	-	302	296	220	10	180
065-050-145	100L	3	2,2	-	✘	✘	-	80	240	142	230	45	160	-	512,5	95	150	50	592,5	638	145	295	-	333	356,5	250	12	210
065-050-145	112M	4	4	-	✘	✘	-	80	247	142	230	45	190	-	496	95	162	50	576	638	145	307	-	333	368,5	250	12	240
065-050-145	132S	5,5	5,5	-	✘	✘	-	80	289	164	266	44	216	-	599	95	192	60	679	684,5	145	337	-	372	415	300	12	276
065-050-175	80M	0,75	0,55	✘	-	-	-	80	169	141	231	-	225	-	428	100	213	-	508	571	150	363	379	302	-	220	-	-
065-050-175	90S	1,5	1,1	✘	-	-	-	80	169	141	231	-	225	-	478	100	213	-	558	571	150	363	379	302	-	220	-	-
065-050-175	90L	2,2	1,5	✘	-	-	-	80	169	141	231	-	225	-	478	100	213	-	558	571	150	363	379	302	-	220	-	-
065-050-175	100L	3	2,2	✘	-	-	-	80	169	142	301	-	225	-	512,5	100	230	-	592,5	638	150	380	436,5	333	-	250	-	-
065-050-175	112M	4	4	✘	-	-	-	80	169	142	301	-	225	-	496	100	230	-	576	638	150	380	436,5	333	-	250	-	-
065-050-175	112M	4	4	✘	-	-	-	80	169	142	263	-	225	190	496	100	230	-	576	638	150	380	436,5	333	-	250	-	-
065-050-175	132S	5,5	5,5	✘	✘	-	-	80	169	164	304	-	225	216	599	100	230	-	679	684,5	150	380	453	372	-	300	-	-
065-050-175	132M	-	7,5	✘	✘	-	-	80	169	164	342	-	225	216	599	100	230	-	679	684,5	150	380	453	372	-	300	-	-
065-050-175	160M	11	11	✘	✘	-	-	80	169	208	437	-	225	254	762	100	230	-	842	949	150	380	494	432	-	350	-	-
065-050-175	80M	0,75	0,55	-	✘	✘	-	80	236	141	170	35	125	-	428	100	120	40	508	571	150	270	-	302	286	220	9	165
065-050-175	90S	1,5	1,1	-	✘	✘	-	80	239,5	141	200	37,5	140	-	478	100	130	40	558	571	150	280	-	302	296	220	10	180
065-050-175	90L	2,2	1,5	-	✘	✘	-	80	239,5	141	200	37,5	140	-	478	100	130	40	558	571	150	280	-	302	296	220	10	180
065-050-175	100L	3	2,2	-	✘	✘	-	80	240	142	230	45	160	-	512,5	100	150	50	592,5	638	150	300	-	333	356,5	250	12	210
065-050-175	112M	4	4	-	✘	✘	-	80	247	142	230	45	190	-	496	100	162	50	576	638	150	312	-	333	368,5	250	12	240
065-050-175	132S	5,5	5,5	-	✘	✘	-	80	289	164	266	44	216	-	599	100	192	60	679	684,5	150	342	-	372	415	300	12	276
065-050-175	132M	-	7,5	-	✘	✘	-	80	289	164	266	44	216	-	599	100	192	60	679	684,5	150	342	-	372	415	300	12	276
065-050-175	160M	11	11	-	✘	✘	-	80	351	208	230	45	254	-	762	100	220	60	842	949	150	370	-	432	484	350	15	314
065-050-210	90S	1,5	1,1	✘	-	-	-	80	161	141	231	-	225	-	478	120	221	-	558	571	165	386	387	302	-	220	-	-
065-050-210	90L	2,2	1,5	✘	-	-	-	80	161	141	231	-	225	-	478	120	221	-	558	571	165	386	387	302	-	220	-	-
065-050-210	100L	3	2,2	✘	-	-	-	80	161	142	301	-	225	-	512,5	120	238	-	592,5	638	165	403	444,5	333	-	250	-	-
065-050-210	112M	4	4	✘	-	-	-	80	161	142	301	-	225	-	496	120	238	-	576	638	165	403	444,5	333	-	250	-	-
065-050-210	112M	4	4	✘	-	-	-	80	161	142	271	-	225	190	496	120	238	-	576	638	165	403	444,5	333	-	250	-	-
065-050-210	132S	5,5	5,5	✘	✘	-	-	80	161	164	312	-	225	216	599	120	238	-	679	684,5	165	403	461	372	-	300	-	-
065-050-210	132M	-	7,5	✘	✘	-	-	80	161	164	350	-	225	216	599	120	238	-	679	684,5	165	403	461	372	-	300	-	-

Vitacast Bloc	Motor	P[610] [kW]		Figure 1	Figure 2	Figure 3	Figure 4	A	B	C	D	D'	E	E'	F_{max} [61] 1)	G	H	h	K_{max} [61] 1)	K'_{max} [6] 11)	I	J	J'_{max} [61] 1)	L_{max} [61] 1)	Y[611)]	Ø P	Ø R	Z
		2 poles	4 poles																									
065-050-210	160M	11	11	✘	✘	-	-	80	161	208	445	-	225	254	762	120	238	-	842	949	165	403	502	432	-	350	-	-
065-050-210	160L	18,5	15	✘	✘	-	-	80	161	208	489	-	225	254	762	120	238	-	842	949	165	403	502	432	-	350	-	-
065-050-210	180M	22	18,5	✘	✘	-	-	80	171	223	494	-	225	279	811	120	248	-	891	1089	165	413	560	480	-	350	-	-
065-050-210	90S	1,5	1,1	-	✘	✘	-	80	239,5	141	200	37,5	140	-	478	120	130	40	558	571	165	295	-	302	296	220	10	180
065-050-210	90L	2,2	1,5	-	✘	✘	-	80	239,5	141	200	37,5	140	-	478	120	130	40	558	571	165	295	-	302	296	220	10	180
065-050-210	100L	3	2,2	-	✘	✘	-	80	240	142	230	45	160	-	512,5	120	150	50	592,5	638	165	315	-	333	356,5	250	12	210
065-050-210	112M	4	4	-	✘	✘	-	80	247	142	230	45	190	-	496	120	162	50	576	638	165	327	-	333	368,5	250	12	240
065-050-210	132S	5,5	5,5	-	✘	✘	-	80	289	164	266	44	216	-	599	120	192	60	679	684,5	165	357	-	372	415	300	12	276
065-050-210	132M	-	7,5	-	✘	✘	-	80	289	164	266	44	216	-	599	120	192	60	679	684,5	165	357	-	372	415	300	12	276
065-050-210	160M	11	11	-	✘	✘	-	80	351	208	330	45	254	-	762	120	220	60	842	949	165	385	-	432	484	350	15	314
065-050-210	160L	18,5	15	-	✘	✘	-	80	351	208	330	45	254	-	762	120	220	60	842	949	165	385	-	432	484	350	15	314
065-050-210	180M	22	18,5	-	✘	✘	-	80	369,5	223	387	54,5	279	-	811	120	240	60	891	1089	165	405	-	480	552	350	15	339
065-050-260	100L	3	2,2	✘	-	-	-	90	185	165	301	-	225	-	535,5	145	238	-	625,5	671	175	413	444,5	333	-	250	-	-
065-050-260	112M	4	4	✘	-	-	-	90	185	165	301	-	225	-	519	145	238	-	609	671	175	413	444,5	333	-	250	-	-
065-050-260	112M	4	4	✘	-	-	-	90	185	165	280	-	225	190	519	145	238	-	609	671	175	413	444,5	333	-	250	-	-
065-050-260	132S	5,5	5,5	✘	✘	-	-	90	185	187	321	-	225	216	622	145	238	-	712	717,5	175	413	461	372	-	300	-	-
065-050-260	132M	-	7,5	✘	✘	-	-	90	185	187	359	-	225	216	622	145	238	-	712	717,5	175	413	461	372	-	300	-	-
065-050-260	160M	11	11	✘	✘	-	-	90	186	228	450	-	225	254	782	145	247	-	872	973	175	422	511	432	-	350	-	-
065-050-260	160L	18,5	15	✘	✘	-	-	90	186	228	494	-	225	254	782	145	247	-	872	973	175	422	511	432	-	350	-	-
065-050-260	180M	22	18,5	✘	✘	-	-	90	186	228	494	-	225	279	816	145	247	-	906	1104	175	422	559	480	-	350	-	-
065-050-260	180L	-	22	✘	✘	-	-	90	186	228	532	-	225	279	816	145	247	-	906	1104	175	422	559	480	-	350	-	-
065-050-260	100L	3	2,2	-	✘	✘	-	90	273	165	230	45	160	-	535,5	145	150	50	625,5	671	175	325	-	333	356,5	250	12	210
065-050-260	112M	4	4	-	✘	✘	-	90	280	165	230	45	190	-	519	145	162	50	609	671	175	337	-	333	368,5	250	12	240
065-050-260	132S	5,5	5,5	-	✘	✘	-	90	322	187	266	44	216	-	622	145	192	60	712	717,5	175	367	-	372	415	300	12	276
065-050-260	132M	-	7,5	-	✘	✘	-	90	322	187	266	44	216	-	622	145	192	60	712	717,5	175	367	-	372	415	300	12	276
065-050-260	160M	11	11	-	✘	✘	-	90	381	228	330	45	254	-	782	145	220	60	872	973	175	395	-	432	484	350	15	314
065-050-260	160L	18,5	15	-	✘	✘	-	90	381	228	330	45	254	-	782	145	220	60	872	973	175	395	-	432	484	350	15	314
065-050-260	180M	22	18,5	-	✘	✘	-	90	384,5	228	387	54,5	279	-	816	145	240	60	906	1104	175	415	-	480	552	350	15	339
065-050-260	180L	-	22	-	✘	✘	-	90	384,5	228	387	54,5	279	-	816	145	240	60	906	1104	175	415	-	480	552	350	15	339
065-050-260	200L	30	30	-	✘	✘	-	90	201	296	335	-	284	360	932	145	258	-	1022	1144	175	433	-	529	612,5	-	21	360
080-065-145	80M	0,75	0,55	✘	-	-	-	79	173	145	231	-	225	-	432	112	208	-	511	574	145	353	374	302	-	220	-	-
080-065-145	90S	1,5	1,1	✘	-	-	-	79	173	145	231	-	225	-	482	112	208	-	561	574	145	353	374	302	-	220	-	-
080-065-145	90L	2,2	1,5	✘	-	-	-	79	173	145	231	-	225	-	482	112	208	-	561	574	145	353	374	302	-	220	-	-
080-065-145	100L	3	2,2	✘	-	-	-	79	173	146	301	-	225	-	516,5	112	225	-	595,5	641	145	370	431,5	333	-	250	-	-
080-065-145	112M	4	4	✘	-	-	-	79	173	146	301	-	225	-	500	112	225	-	579	641	145	370	431,5	333	-	250	-	-
080-065-145	112M	4	4	✘	-	-	-	79	173	146	262	-	225	190	500	112	225	-	579	641	145	370	431,5	333	-	250	-	-
080-065-145	132S	5,5	5,5	✘	✘	-	-	79	173	168	303	-	225	216	603	112	225	-	682	687,5	145	370	448	372	-	300	-	-
080-065-145	132M	-	7,5	✘	✘	-	-	79	173	168	341	-	225	216	603	112	225	-	682	687,5	145	370	448	372	-	300	-	-

Vitacast Bloc	Motor	P[610] [kW]		Figure 1	Figure 2	Figure 3	Figure 4	A	B	C	D	D'	E	E'	F_{max} [61] 1)	G	H	h	K_{max} [61] 1)	K'_{max} [6] 11)	I	J	J'_{max} [61] 1)	L_{max} [61] 1)	Y[611)]	Ø P	Ø R	Z
		2 poles	4 poles																									
080-065-145	160M	11	11	✘	✘	-	-	79	173	212	436	-	225	254	766	112	225	-	845	952	145	370	489	432	-	350	-	-
080-065-145	80M	0,75	0,55	-	✘	✘	-	79	239	145	170	35	125	-	432	112	120	40	511	574	145	265	-	302	286	220	9	165
080-065-145	90S	1,5	1,1	-	✘	✘	-	79	242,5	145	200	37,5	140	-	482	112	130	40	561	574	145	275	-	302	296	220	10	180
080-065-145	90L	2,2	1,5	-	✘	✘	-	79	242,5	145	200	37,5	140	-	482	112	130	40	561	574	145	275	-	302	296	220	10	180
080-065-145	100L	3	2,2	-	✘	✘	-	79	243	146	230	45	160	-	516,5	112	150	50	595,5	641	145	295	-	333	356,5	250	12	210
080-065-145	112M	4	4	-	✘	✘	-	79	250	146	230	45	190	-	500	112	162	50	579	641	145	307	-	333	368,5	250	12	240
080-065-145	132S	5,5	5,5	-	✘	✘	-	79	292	168	266	44	216	-	603	112	192	60	682	687,5	145	337	-	372	415	300	12	276
080-065-145	132M	-	7,5	-	✘	✘	-	79	292	168	266	44	216	-	603	112	192	60	682	687,5	145	337	-	372	415	300	12	276
080-065-145	160M	11	11	-	✘	✘	-	79	354	212	330	45	254	-	766	112	255	95	845	952	145	400	-	432	519	350	15	349
080-065-175	90S	1,5	1,1	✘	-	-	-	80	172	144	231	-	225	-	481	120	213	-	561	574	150	363	379	302	-	220	-	-
080-065-175	90L	2,2	1,5	✘	-	-	-	80	172	144	231	-	225	-	481	120	213	-	561	574	150	363	379	302	-	220	-	-
080-065-175	100L	3	2,2	✘	-	-	-	80	172	145	301	-	225	-	515,5	120	230	-	595,5	641	150	380	436,5	333	-	250	-	-
080-065-175	112M	4	4	✘	-	-	-	80	172	145	301	-	225	-	499	120	230	-	579	641	150	380	436,5	333	-	250	-	-
080-065-175	112M	4	4	✘	-	-	-	80	172	145	263	-	225	190	499	120	230	-	579	641	150	380	436,5	333	-	250	-	-
080-065-175	132S	5,5	5,5	✘	✘	-	-	80	172	167	304	-	225	216	602	120	230	-	682	687,5	150	380	453	372	-	300	-	-
080-065-175	132M	-	7,5	✘	✘	-	-	80	172	167	342	-	225	216	602	120	230	-	682	687,5	150	380	453	372	-	300	-	-
080-065-175	160M	11	11	✘	✘	-	-	80	172	211	437	-	225	254	765	120	230	-	845	952	150	380	494	432	-	350	-	-
080-065-175	160L	18,5	15	✘	✘	-	-	80	172	211	481	-	225	254	765	120	230	-	845	952	150	380	494	432	-	350	-	-
080-065-175	180M	22	18,5	✘	✘	-	-	80	173	224	493	-	225	279	812	120	241	-	892	1090	150	391	553	480	-	350	-	-
080-065-175	90S	1,5	1,1	-	✘	✘	-	80	242,5	144	200	37,5	140	-	481	120	130	40	561	574	150	280	-	302	296	220	10	180
080-065-175	90L	2,2	1,5	-	✘	✘	-	80	242,5	144	200	37,5	140	-	481	120	130	40	561	574	150	280	-	302	296	220	10	180
080-065-175	100L	3	2,2	-	✘	✘	-	80	243	145	230	45	160	-	515,5	120	150	50	595,5	641	150	300	-	333	356,5	250	12	210
080-065-175	112M	4	4	-	✘	✘	-	80	250	145	230	45	190	-	499	120	162	50	579	641	150	312	-	333	368,5	250	12	240
080-065-175	132S	5,5	5,5	-	✘	✘	-	80	292	167	266	44	216	-	602	120	192	60	682	687,5	150	342	-	372	415	300	12	276
080-065-175	132M	-	7,5	-	✘	✘	-	80	292	167	266	44	216	-	602	120	192	60	682	687,5	150	342	-	372	415	300	12	276
080-065-175	160M	11	11	-	✘	✘	-	80	354	211	330	45	254	-	765	120	220	60	845	952	150	370	-	432	484	350	15	314
080-065-175	160L	18,5	15	-	✘	✘	-	80	354	211	330	45	254	-	765	120	220	60	845	952	150	370	-	432	484	350	15	314
080-065-175	180M	22	18,5	-	✘	✘	-	80	370,5	224	387	54,5	279	-	812	120	180	-	892	1090	150	330	-	480	492	350	15	279
080-065-210	90S	1,5	1,1	✘	-	-	-	90	189	168	231	-	225	-	505	135	221	-	595	608	165	386	387	302	-	220	-	-
080-065-210	90L	2,2	1,5	✘	-	-	-	90	189	168	231	-	225	-	505	135	221	-	595	608	165	386	387	302	-	220	-	-
080-065-210	100L	3	2,2	✘	-	-	-	90	189	169	301	-	225	-	539,5	135	238	-	629,5	675	165	403	444,5	333	-	250	-	-
080-065-210	112M	4	4	✘	-	-	-	90	189	169	301	-	225	-	523	135	238	-	613	675	165	403	444,5	333	-	250	-	-
080-065-210	112M	4	4	✘	-	-	-	90	189	169	280	-	225	190	523	135	238	-	613	675	165	403	444,5	333	-	250	-	-
080-065-210	132M							90	189	191	321	-	225	216	626	135	238	-	716	721,5	165	403	461	372		300		
080-065-210	132S							90	189	191	359	-	225	216	626	135	238	-	716	721,5	165	403	461	372		300		
080-065-210	160M	11	11	✘	✘	-	-	90	189	231	450	-	225	254	785	135	247	-	875	976	165	412	511	432	-	350	-	-
080-065-210	160L	18,5	15	✘	✘	-	-	90	189	231	494	-	225	254	785	135	247	-	875	976	165	412	511	432	-	350	-	-
080-065-210	180M	22	18,5	✘	✘	-	-	90	189	231	494	-	225	279	819	135	247	-	909	1107	165	412	559	480	-	350	-	-

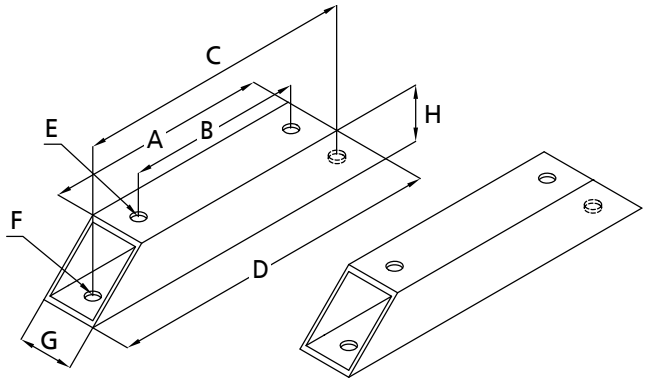
Vitacast Bloc	Motor	P[610] [kW]		Figure 1	Figure 2	Figure 3	Figure 4	A	B	C	D	D'	E	E'	F_{max} [61] 1)	G	H	h	K_{max} [61] 1)	K'_{max} [6] 11)	I	J	J'_{max} [61] 1)	L_{max} [61] 1)	Y[611)]	Ø P	Ø R	Z
		2 poles	4 poles																									
080-065-210	90S	1,5	1,1	-	✗	✗	-	90	276,5	168	200	37,5	140	-	505	135	130	40	595	608	165	295	-	302	296	220	10	180
080-065-210	90L	2,2	1,5	-	✗	✗	-	90	276,5	168	200	37,5	140	-	505	135	130	40	595	608	165	295	-	302	296	220	10	180
080-065-210	100L	3	2,2	-	✗	✗	-	90	277	169	230	45	160	-	539,5	135	150	50	629,5	675	165	315	-	333	356,5	250	12	210
080-065-210	112M	4	4	-	✗	✗	-	90	284	169	230	45	190	-	523	135	162	50	613	675	165	327	-	333	368,5	250	12	240
080-065-210	132M							90	326	191	266	44	216	-	626	135	192	60	716	721,5	165	357	-	372	415	300	12	276
080-065-210	132S							90	326	191	266	44	216	-	626	135	192	60	716	721,5	165	357	-	372	415	300	12	276
080-065-210	160M	11	11	-	✗	✗	-	90	384	231	330	45	254	-	785	135	220	60	875	976	165	385	-	432	484	350	14	314
080-065-210	160L	18,5	15	-	✗	✗	-	90	384	231	330	45	254	-	785	135	220	60	875	976	165	385	-	432	484	350	14	314
080-065-210	180M	22	18,5	-	✗	✗	-	90	387,5	231	387	54,5	279	-	819	135	240	60	909	1107	165	405	-	480	552	350	15	339
080-065-260	100L	3	2,2	✗	-	-	-	100	198	168	301	-	225	-	538,5	155	238	-	638,5	684	205	443	444,5	333	-	250	-	-
080-065-260	112M	4	4	✗	-	-	-	100	198	168	301	-	225	-	522	155	238	-	622	684	205	443	444,5	333	-	250	-	-
080-065-260	112M	4	4	✗	-	-	-	100	198	168	280	-	225	190	522	155	238	-	622	684	205	443	444,5	333	-	250	-	-
080-065-260	132S	5,5	5,5	✗	✗	-	-	100	198	190	321	-	225	216	625	155	238	-	725	730,5	205	443	461	372	-	300	-	-
080-065-260	132M	-	7,5	✗	✗	-	-	100	198	190	359	-	225	216	625	155	238	-	725	730,5	205	443	461	372	-	300	-	-
080-065-260	160M	11	11	✗	✗	-	-	100	198	230	450	-	225	254	784	155	247	-	884	985	205	452	511	432	-	350	-	-
080-065-260	160L	18,5	15	✗	✗	-	-	100	198	230	494	-	225	254	784	155	247	-	884	985	205	452	511	432	-	350	-	-
080-065-260	180M	22	18,5	✗	✗	-	-	100	198	230	494	-	225	279	818	155	247	-	918	1116	205	452	559	480	-	350	-	-
080-065-260	100L	3	2,2	-	✗	✗	-	100	286	168	230	45	160	-	538,5	155	150	50	638,5	684	205	355	-	333	356,5	250	12	210
080-065-260	112M	4	4	-	✗	✗	-	100	293	168	230	45	190	-	522	155	162	50	622	684	205	367	-	333	368,5	250	12	240
080-065-260	132S	5,5	5,5	-	✗	✗	-	100	335	190	266	44	216	-	625	155	192	60	725	730,5	205	397	-	372	415	300	12	276
080-065-260	132M	-	7,5	-	✗	✗	-	100	335	190	266	44	216	-	625	155	192	60	725	730,5	205	397	-	372	415	300	12	276
080-065-260	160M	11	11	-	✗	✗	-	100	393	230	330	45	254	-	784	155	220	60	884	985	205	425	-	432	484	350	14	314
080-065-260	160L	18,5	15	-	✗	✗	-	100	393	230	330	45	254	-	784	155	220	60	884	985	205	425	-	432	484	350	14	314
080-065-260	180M	22	18,5	-	✗	✗	-	100	396,5	230	387	54,5	279	-	818	155	240	60	918	1116	205	445	-	480	552	350	15	339
080-065-260	200L	30	30	-	-	-	✗	100	213	298	335	-	284	360	934	155	258	-	1034	1156	205	463	-	529	612,5	400	21	360
100-080-175	100L	3	2,2	✗	-	-	-	100	204	174	301	-	225	-	544,5	139	230	-	644,5	690	164	394	436,5	333	-	250	-	-
100-080-175	112M	4	4	✗	-	-	-	100	204	174	301	-	225	-	528	139	230	-	628	690	164	394	436,5	333	-	250	-	-
100-080-175	112M	4	4	✗	-	-	-	100	204	174	280	-	225	190	528	139	230	-	628	690	164	394	436,5	333	-	250	-	-
100-080-175	132S	5,5	5,5	✗	✗	-	-	100	204	195	320	-	225	216	630	139	230	-	730	735,5	164	394	453	372	-	300	-	-
100-080-175	132M	-	7,5	✗	✗	-	-	100	204	195	358	-	225	216	630	139	230	-	730	735,5	164	394	453	372	-	300	-	-
100-080-175	160M	11	11	✗	✗	-	-	100	205	236	449	-	225	254	790	139	241	-	890	991	164	405	505	432	-	350	-	-
100-080-175	160L	18,5	15	✗	✗	-	-	100	205	236	493	-	225	254	790	139	241	-	890	991	164	405	505	432	-	350	-	-
100-080-175	180M	22	18,5	✗	✗	-	-	100	205	236	493	-	225	279	824	139	241	-	924	1122	164	405	553	480	-	350	-	-
100-080-175	100L	3	2,2	-	✗	✗	-	100	292	174	230	45	160	-	544,5	139	150	50	644,5	690	164	314	-	333	356,5	250	12	210
100-080-175	112M	4	4	-	✗	✗	-	100	299	174	230	45	190	-	528	139	162	50	628	690	164	326	-	333	368,5	250	12	240
100-080-175	132S	5,5	5,5	-	✗	✗	-	100	340	195	266	44	216	-	630	139	192	60	730	735,5	164	356	-	372	415	300	12	276
100-080-175	132M	-	7,5	-	✗	✗	-	100	340	195	266	44	216	-	630	139	192	60	730	735,5	164	356	-	372	415	300	12	276
100-080-175	160M	11	11	-	✗	✗	-	100	398	235	330	45	254	-	789	139	220	60	889	990	164	384	-	432	484	350	14	314

Vitacast Bloc	Motor	P[610] [kW]		Figure 1	Figure 2	Figure 3	Figure 4	A	B	C	D	D'	E	E'	F_{max} [61] 1)	G	H	h	K_{max} [61] 1)	K'$_{max}$ [6] 11)	I	J	J'$_{max}$ [61] 1)	L_{max} [61] 1)	Y[611)]	Ø P	Ø R	Z
		2 poles	4 poles																									
100-080-175	160L	18,5	15	-	✗	✗	-	100	398	235	330	45	254	-	789	139	220	60	889	990	164	384	-	432	484	350	14	314
100-080-175	180M	22	18,5	-	✗	✗	-	100	401,5	235	387	54,5	279	-	823	139	240	60	923	1121	164	404	-	480	552	350	15	339
100-080-175	200L	30	30	-	-	-	✗	100	219	304	335	-	284	360	940	139	258	-	1040	1162	164	422	-	529	612,5	-	21	360
100-080-210	100L	3	2,2	✗	-	-	-	100	201	171	301	-	225	-	541,5	145	238	-	641,5	687	165	403	444,5	333	-	250	-	-
100-080-210	112M	4	4	✗	-	-	-	100	201	171	301	-	225	-	525	145	238	-	625	687	165	403	444,5	333	-	250	-	-
100-080-210	112M	4	4	✗	-	-	-	100	201	171	280	-	225	190	525	145	238	-	625	687	165	403	444,5	333	-	250	-	-
100-080-210	132S	5,5	5,5	✗	✗	-	-	100	201	193	321	-	225	216	628	145	238	-	728	733,5	165	403	461	372	-	300	-	-
100-080-210	132M	-	7,5	✗	✗	-	-	100	201	193	359	-	225	216	628	145	238	-	728	733,5	165	403	461	372	-	300	-	-
100-080-210	160M	11	11	✗	✗	-	-	100	201	233	450	-	225	254	787	145	247	-	887	988	164	411	511	432	-	350	-	-
100-080-210	160L	18,5	15	✗	✗	-	-	100	201	233	494	-	225	254	787	145	247	-	887	988	164	411	511	432	-	350	-	-
100-080-210	180M	22	18,5	✗	✗	-	-	100	201	233	494	-	225	279	821	145	247	-	921	1119	164	411	559	480	-	350	-	-
100-080-210	100L	3	2,2	-	✗	✗	-	100	289	171	230	45	160	-	541,5	145	150	50	641,5	687	165	315	-	333	356,5	250	12	210
100-080-210	112M	4	4	-	✗	✗	-	100	296	171	230	45	190	-	525	145	162	50	625	687	165	327	-	333	368,5	250	12	240
100-080-210	132S	5,5	5,5	-	✗	✗	-	100	338	193	266	44	216	-	628	145	192	60	728	733,5	165	357	-	372	415	300	12	276
100-080-210	132M	-	7,5	-	✗	✗	-	100	338	193	266	44	216	-	628	145	192	60	728	733,5	165	357	-	372	415	300	12	276
100-080-210	160M	11	11	-	✗	✗	-	100	396	233	330	45	254	-	787	145	220	60	887	988	164	384	-	432	484	350	14	314
100-080-210	160L	18,5	15	-	✗	✗	-	100	396	233	330	45	254	-	787	145	220	60	887	988	164	384	-	432	484	350	14	314
100-080-210	180M	22	18,5	-	✗	✗	-	100	399,5	233	387	54,5	279	-	821	145	240	60	921	1119	164	404	-	480	552	350	15	339
100-080-210	200L	30	30	-	-	-	✗	100	217,5	301	335	-	284	360	937	145	258	-	1037	1159	164	422	-	529	612,5	400	21	360
100-080-260	100L	3	2,2	✗	-	-	-	100	201	171	301	-	225	-	541,5	165	238	-	641,5	687	209	447	444,5	333	-	250	-	-
100-080-260	112M	4	4	✗	-	-	-	100	201	171	301	-	225	-	525	165	238	-	625	687	209	447	444,5	333	-	250	-	-
100-080-260	112M	4	4	✗	-	-	-	100	201	171	280	-	225	190	525	165	238	-	625	687	209	447	444,5	333	-	250	-	-
100-080-260	132S	5,5	5,5	✗	✗	-	-	100	201	193	321	-	225	216	628	165	238	-	728	733,5	209	447	461	372	-	300	-	-
100-080-260	132M	-	7,5	✗	✗	-	-	100	201	193	359	-	225	216	628	165	238	-	728	733,5	209	447	461	372	-	300	-	-
100-080-260	160M	11	11	✗	✗	-	-	100	201	233	450	-	225	254	787	165	247	-	887	988	209	456	511	432	-	350	-	-
100-080-260	160L	18,5	15	✗	✗	-	-	100	201	233	494	-	225	254	787	165	247	-	887	988	209	456	511	432	-	350	-	-
100-080-260	100L	3	2,2	-	✗	✗	-	100	289	171	230	45	160	-	541,5	165	150	50	641,5	687	209	359	-	333	356,5	250	12	210
100-080-260	112M	4	4	-	✗	✗	-	100	296	171	230	45	190	-	525	165	162	50	625	687	209	371	-	333	368,5	250	12	240
100-080-260	132S	5,5	5,5	-	✗	✗	-	100	338	193	266	44	216	-	628	165	192	60	728	733,5	209	413	-	372	427	300	12	276
100-080-260	132M	-	7,5	-	✗	✗	-	100	338	193	266	44	216	-	628	165	192	60	728	733,5	209	413	-	372	427	300	12	276
100-080-260	160M	11	11	-	✗	✗	-	100	396	233	330	45	254	-	787	165	220	60	887	988	209	429	-	432	484	350	15	314
100-080-260	160L	18,5	15	-	✗	✗	-	100	396	233	330	45	254	-	787	165	220	60	887	988	209	429	-	432	484	350	15	314
100-080-260	200L	30	30	-	-	-	✗	100	216,5	301	335	-	284	360	937	165	258	-	1037	1159	209	467	-	529	612,5	400	21	360
100-080-310	160M	11	11	✗	✗	-	-	100	202	235	451	-	225	254	789	200	250	-	889	990	250	500	514	432	-	350	-	-
100-080-310	160L	18,5	15	✗	✗	-	-	100	202	235	495	-	225	254	789	200	250	-	889	990	250	500	514	432	-	350	-	-
100-080-310	180M	22	18,5	✗	✗	-	-	100	202	235	495	-	225	279	823	200	250	-	923	1121	250	500	562	480	-	350	-	-
100-080-310	180L	-	22	✗	✗	-	-	100	202	235	533	-	225	279	823	200	250	-	923	1121	250	500	562	480	-	350	-	-
100-080-310	160M	11	11	-	✗	✗	-	100	368	235	400	75	254	-	789	200	240	80	889	990	250	520	-	432	534	350	14	334

Vitacast Bloc	Motor	P[610] [kW]		Figure 1	Figure 2	Figure 3	Figure 4	A	B	C	D	D'	E	E'	F_{max} [61] 1)	G	H	h	K_{max} [61] 1)	K'_{max} [6] 11)	I	J	J'_{max} [61] 1)	L_{max} [61] 1)	Y[611)]	Ø P	Ø R	Z
		2 poles	4 poles																									
100-080-310	160L	18,5	15	-	✗	✗	-	100	368	235	400	75	254	-	789	200	240	80	889	990	250	520	-	432	534	350	14	334
100-080-310	180M	22	18,5	-	✗	✗	-	100	401,5	235	387	54,5	279	-	823	200	250	70	923	1121	250	520	-	480	582	350	14	349
100-080-310	180L	-	22	-	✗	✗	-	100	401,5	235	387	54,5	279	-	823	200	250	70	923	1121	250	520	-	480	582	350	14	349
100-080-310	200L	30	30	-	-	-	✗	100	218	303	335	-	284	360	939	200	200	-	1039	1161	250	450	-	529	554,5	400	21	360
125-100-210	132S	5,5	5,5	✗	✗	-	-	111	219	200	321	-	225	216	635	161	238	-	746	751,5	214	452	461	372	-	300	-	-
125-100-210	132M	-	7,5	✗	✗	-	-	111	219	200	359	-	225	216	635	161	238	-	746	751,5	214	452	461	372	-	300	-	-
125-100-210	160M	11	11	✗	✗	-	-	111	219	240	450	-	225	254	794	161	247	-	905	1006	214	461	511	432	-	350	-	-
125-100-210	160L	18,5	15	✗	✗	-	-	111	219	240	494	-	225	254	794	161	247	-	905	1006	214	461	511	432	-	350	-	-
125-100-210	180M	22	18,5	✗	✗	-	-	111	219	240	494	-	225	279	828	161	247	-	939	1137	214	461	559	480	-	350	-	-
125-100-210	132S	5,5	5,5	-	✗	✗	-	111	356	200	266	44	216	-	635	161	192	60	746	751,5	214	418	-	372	427	300	12	276
125-100-210	132M	-	7,5	-	✗	✗	-	111	356	200	266	44	216	-	635	161	192	60	746	751,5	214	418	-	372	427	300	12	276
125-100-210	160M	11	11	-	✗	✗	-	111	414	240	330	45	254	-	794	161	220	60	905	1006	214	434	-	432	484	350	14	314
125-100-210	160L	18,5	15	-	✗	✗	-	111	414	240	330	45	254	-	794	161	220	60	905	1006	214	434	-	432	484	350	14	314
125-100-210	180M	22	18,5	-	✗	✗	-	110	416,5	240	387	54,5	279	-	828	161	240	60	938	1136	214	454	-	480	552	350	15	339
125-100-210	200L	30	30	-	-	-	✗	111	234,5	308	335	-	284	360	944	161	258	-	1055	1177	214	472	-	529	612,5	400	21	360
125-100-260	160M	11	11	✗	✗	-	-	115	218	235	450	-	225	254	789	186	247	-	904	1005	216	463	511	432	-	350	-	-
125-100-260	160L	18,5	15	✗	✗	-	-	115	218	235	494	-	225	254	789	186	247	-	904	1005	216	463	511	432	-	350	-	-
125-100-260	180M	22	18,5	✗	✗	-	-	115	218	235	494	-	225	279	823	186	247	-	938	1136	216	463	559	480	-	350	-	-
125-100-260	160M	11	11	-	✗	✗	-	115	393	235	380	65	254	-	789	186	230	70	904	1005	216	446	-	432	494	350	15	324
125-100-260	160L	18,5	15	-	✗	✗	-	115	393	235	380	65	254	-	789	186	230	70	904	1005	216	446	-	432	494	350	15	324
125-100-260	180M	22	18,5	-	✗	✗	-	115	416,5	235	387	54,5	279	-	823	186	240	60	938	1136	216	456	-	480	552	350	15	339
125-100-260	180L	-	22	-	✗	✗	-	115	416,5	235	387	54,5	279	-	823	186	240	60	938	1136	216	456	-	480	552	350	15	339
125-100-260	200L	30	30	-	-	-	✗	115	233,5	303	335	-	284	360	939	186	258	-	1054	1176	216	474	-	529	612,5	400	21	360
125-100-310	160M	11	11	✗	✗	-	-	115	221	239	451	-	225	254	793	214	250	-	908	1009	259	509	514	432	-	350	-	-
125-100-310	160L	18,5	15	✗	✗	-	-	115	221	239	495	-	225	254	793	214	250	-	908	1009	259	509	514	432	-	350	-	-
125-100-310	180M	22	18,5	✗	✗	-	-	115	221	239	495	-	225	279	827	214	250	-	942	1140	259	509	562	480	-	350	-	-
125-100-310	180L	-	22	✗	✗	-	-	115	221	239	533	-	225	279	827	214	250	-	942	1140	259	509	562	480	-	350	-	-
125-100-310	160M	11	11	-	✗	✗	-	115	387	239	400	75	254	-	793	214	240	80	908	1009	259	529	-	432	534	350	14	334
125-100-310	160L	18,5	15	-	✗	✗	-	115	387	239	400	75	254	-	793	214	240	80	908	1009	259	529	-	432	534	350	14	334
125-100-310	180M	22	18,5	-	✗	✗	-	115	400	239	387	75	279	-	827	214	250	70	942	1140	259	529	-	480	582	350	14	349
125-100-310	180L	-	22	-	✗	✗	-	115	400	239	387	75	279	-	827	214	250	70	942	1140	259	529	-	480	582	350	14	349
125-100-310	200L	30	30	-	-	-	✗	115	237	307	335	-	284	360	943	215	258	-	1058	1180	259	517	-	529	612,5	400	21	360
150-125-260	160M	11	11	✗	✗	-	-	110	223	244	449	-	225	254	798	206	247	-	908	1009	216	463	511	432	-	350	-	-
150-125-260	160L	18,5	15	✗	✗	-	-	110	223	244	493	-	225	254	798	206	247	-	908	1009	216	463	511	432	-	350	-	-
150-125-260	180M	22	18,5	✗	✗	-	-	110	223	244	493	-	225	279	832	206	247	-	942	1140	216	463	559	480	-	350	-	-
150-125-260	180L	-	22	✗	✗	-	-	110	223	244	531	-	225	279	832	206	247	-	942	1140	216	463	559	480	-	350	-	-
150-125-260	160M	11	11	-	✗	✗	-	110	397	244	380	65	254	-	798	206	230	70	908	1009	216	466	-	432	514	350	15	324

Vitacast Bloc	Motor	P[610] [kW]		Figure 1	Figure 2	Figure 3	Figure 4	A	B	C	D	D'	E	E'	F_{max} [61] 1)	G	H	h	K_{max} [61] 1)	K'_{max} [6] 11)	I	J	J'_{max} [61] 1)	L_{max} [61] 1)	Y[611)]	Ø P	Ø R	Z
		2 poles	4 poles																									
150-125-260	160L	18,5	15	-	✗	✗	-	110	397	244	380	65	254	-	798	206	230	70	908	1009	216	466	-	432	514	350	15	324
150-125-260	180M	22	18,5	-	✗	✗	-	110	420,5	244	387	54,5	279	-	832	206	240	60	942	1140	216	456	-	480	552	350	15	339
150-125-260	180L	-	22	-	✗	✗	-	110	420,5	244	387	54,5	279	-	832	206	240	60	942	1140	216	456	-	480	552	350	15	339
150-125-260	200L	30	30	-	-	-	✗	110	237,5	312	335	-	284	360	948	206	258	-	1058	1180	216	474	-	529	612,5	400	-	360

Motor feet



Motor foot dimensions [mm]

Motor (IEC-DIN)	p [kW]		A	B	C	D	E	F	G	H
	2-pole	4-pole								
71	0,37 0,55	0,25 0,37	110	90	150	190	10	10	40	40
80	0,75 1,10	0,55 0,75	130	100	170	210	10	10	40	40
90 S	1,50	1,10	160	100	200	240	10	10	40	40
90 L	2,20	1,50	160	125	200	240	10	10	40	40
100 L	3,00	3,00	180	140	230	280	12	12	50	50
112 M	4,00	4,00	180	140	230	280	12	12	50	50
132 S	5,50 7,50	5,50	226	140	266	346	12	12	60	60
132 M	-	7,50	226	178	266	346	12	12	60	60
160 M	11,00 15,00	11,00	310	210	330	400	14	14	50	50
160 L	18,50	15,00	310	254	330	400	14	14	50	50
180 M	22,00	18,50	328	241	387	448	15	15	60	60
180 L	-	22,00	328	279	387	448	15	15	60	60

Accessories

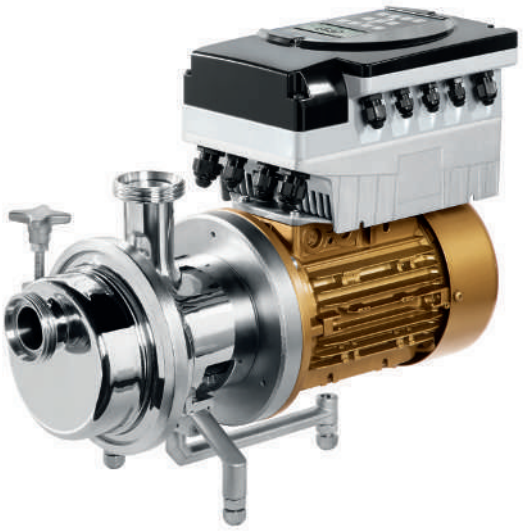
Accessories

- Version with inducer for sizes 040-032-145 to 150-125-260
- Motor shroud made of stainless steel
- Vertically adjustable ball feet or motor feet
- Heatable casing/discharge cover
- Residual drainage of pump casing
- Mounted on a trolley, with switch and power cable
- System for supplying the mechanical seal

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Hygienic Pumps

Vitaprime



The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000787

Product benefits

- Side channel pump for good and fast self-priming and for transporting fluids containing gas
- Easy to clean with very little dead volume and excellent flushing capability
- Service-friendly design, easy and fast to dismantle
- Can be driven by all common standardised motors via stub shaft
- Corrosion-resistant design with high-quality stainless steel
- A large variety of materials, sealing elements and connections are available to optimally match the pump to its application.
- Highly suitable for CIP/SIP routines

Further information

Prices on request

Selection charts 1004
Characteristic curves 1005
Dimensions 1007
Accessories 1013

Further information

	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	PumpMeter LSA (⇨ Page 1068)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[612)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

612 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Certifications

Overview

Label	Effective in:	Comment
	All countries	Certified quality management to ISO 9001
	All countries	Elastomers certified to FDA, 3A, USP Class VI

Main applications

- Food industry / beverage industry
- Chemical industry/Fine chemicals
- Pharmaceutical industry
- Further industrial applications

Fluids handled

- Pure liquids not mechanically or chemically aggressive to the pump
- Liquids containing gas or vapour

Operating data

Operating properties

Characteristic		Value	
		50 Hz	60 Hz
Flow rate	Q [m³/h]	≤ 58	≤ 60
Head	H [m]	≤ 45	≤ 65
Operating pressure	p [bar]	≤ 10	
Inlet pressure	p [bar]	≤ 3	
Fluid temperature	T [°C]	≥ -20	
		≤ +100	
Sterilisation temperature	T [°C]	≤ +140	
Connection sizes	DN	40 - 80	

Design details

Design

- Side channel pump
- Horizontal installation
- One or two stages
- Self-priming
- Standard design with materials to Regulation (EC) No. 1935/2004
- Fixed speed version (without PumpDrive) / variable speed version (with PumpDrive)

Pump casing

- Casing with transfer passages

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM V1 ≤ 4.00 kW
- Type of construction IM V15 ≥ 5.50 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM V1 ≤ 3.30 kW
- Type of construction IM V15 ≥ 4.60 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Type of protection EEx eb II
- Temperature class T3

Drive (variable speed version)

KSB SuPremE motor:

- Surface-cooled KSB SuPremE motor, IEC-compatible, magnetless synchronous reluctance motor[613)] (PumpDrive required)
- Efficiency class IE4/IE5 to IEC TS 60034-30-2:2016
- Mounting points to EN 50347:2001
- Envelope dimensions to DIN VDE 42673-4:2011-07
- Type of construction IM V1 ≤ 4.00 kW
- Type of construction IM V15 ≥ 5.50 kW
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 3 PTC thermistors
- Shaft centreline height 71 to 225 mm
- Rated power 0.55 kW to 45 kW
- Rated speed 1500 rpm or 3000 rpm
- Frequency 50 Hz / 60 Hz (PumpDrive input)
- Voltage 380 V to 480 V (PumpDrive input)

KSB SuPremE X1:

- With terminal box for connecting to PumpDrive 2 or PumpDrive R for mounting on walls and in control cabinets

KSB SuPremE X2:

- Equipped for being fitted with a motor-mounted PumpDrive 2

613 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

PumpDrive 2:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for motor mounting, wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Mains frequency 50 Hz to 60 Hz ± 2 %

PumpDrive R:

- Self-cooling frequency inverter of modular design for the continuously variable speed control of asynchronous motors and synchronous reluctance motors, such as KSB SupremE motors or permanent magnet synchronous motors, by means of analog standard signals, a field bus or the control panel
- Identical design of frequency inverter for the mounting types wall mounting and cabinet mounting
- Mains voltage 3~ 380 V AC -10 % to 480 V AC +10 %
- Extended mains voltage range (on request)
- Mains frequency 50 Hz to 60 Hz ± 2 %
- Extended power range with a nominal power of 110 kW (standard) or 1400 kW (on request)

PumpMeter LSA:

- Intelligent pressure transmitter for pumps, with on-site display of measured values and operating data
- For recording the load profile of the pump
- Supplied completely assembled and parameterised for the individual pump

Shaft seal

- Single mechanical seal to EN 12756
  - Seal type T[614]: pump-end seal with non-encapsulated spring surrounded by fluid handled, uni-directional
- Double mechanical seal to EN 12756
  - Seal type Q: back-to-back arrangement (pressurised barrier fluid)

Impeller type

- Open star impeller

Bearings

- Grease-packed deep groove ball bearing

Connections

- Axial suction nozzle, tangential discharge nozzle

Types of connection:

- Threaded connection to DIN 11851 (hygienic pipe union)
- Threaded connection to DIN 11853
- Threaded connection to DIN 11864-1-GS-A
- Threaded connection to SMS standard
- Threaded connection to ISO 2853 (IDF)
- Threaded connection to RJT standard
- Clamped connection to DIN 32676-C (Tri-Clamp/Tri-Clover fitting)
- Clamped connection to DIN 11864-3-NKS-A
- Clamped connection to DIN 32676-A
- Clamped connection to ISO 2852
- Flange to EN 1092-1
- Flange to DIN 11864-2-NF-A
- Flange to ANSI B16.5 Class 150
- APV flange
- Varivent flange
- Other connection types on request

Designation

Designation example

Position																													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
V	P			8	0	-	2	4	0	-	1	1	0	4	0	4	K	B	Q	T	8	2	M	E	C	C	O		O	A
See name plate and data sheet																												See data sheet		

Designation key

Position	Code	Description
1-4	Pump type	
	VP	Vitaprime
5-13	Size, e.g.	
	80	Nominal nozzle diameter [mm]
	240	Nominal impeller diameter [mm]
	11	Load range
14-16	Motor rating P_N [kW]	
	007	0,70
	040	4,00
	185	18,50
17	Number of motor poles	
18	Scope of supply	
	K	Ball feet
	M	Motor foot
	T	Round base feet

614 Hygienic design

Position	Code	Description	
18	V	Trolley	
19-20	Shaft seal type		
	B	Single mechanical seal, dead-end arrangement, without flushing	
	BQ	Single mechanical seal, dead-end arrangement, external flushing (quench)	
	DB	Double mechanical seal in back-to-back arrangement	
21-23	Seal code, single mechanical seal		
	T00	BGEGG	
	T18	U2U2VGG	
	T19	U2U2EGG	
	T64	U2Q1EGG	
	T66	Q1Q1M3GG	
	T68	U2Q1VGG	
	T69	BQ1M3GG	
	T80	BQ1VGG	
	T81	Q1Q1VGG	
	T82	BQ1EGG	
	T83	Q1Q1EGG	
	T84	Q1U2EGG	
	T85	Q1U2VGG	
	Seal code, double mechanical seal in back-to-back arrangement		
	Q70	BGEGG	
		BGEGG	
	Q71	BU2EGG	
		BGEGG	
	Q72	U2U2EGG	
		BU2EGG	
	Q74	U2U2VGG	
		BU2VGG	
	Q78	U2U2VGG	
		U2U2EGG	
	Q79	U2U2M3GG	
		BU2EGG	
24	Pipe connection		
	A	Flange	APV
	B	Threaded connection	DIN 11864-1A
	C	Flange	DIN 11864-2A
	D	Clamped connection	DIN 11864-3A
	E	Threaded connection	DIN 11853
	F	Threaded connection	RJT
	G	Flange	Varivent
	I	Threaded connection	ISO 2853 (IDF)
	L	Flange	EN 1092-1
	M	Threaded connection	DIN 11851 (hygienic pipe union)
	S	Threaded connection	SMS
	T	Clamped connection	DIN 32676-A
	U	Clamped connection	DIN 32676-C (Tri-Clamp)
	V	Clamped connection	ISO 2852
	Z	Flange	ANSI B16.5 Class 150
25	O-ring material (casing/impeller)		
	E	EPDM	
	F	FFKM (Kaflon)	
	K	FFKM (Kalrez)	
	M	FEP (encapsulated)	
	P	PTFE	
	V	FPM	
26	Pump casing material		
	C	Stainless steel	1.4409
27	Impeller material		
	C	Stainless steel	1.4409

Position	Code	Description
28	Motor shroud	
	S	With shroud
	O	Without shroud
29	Design	
	[615]	Standard
	X	Non-standard (BT3D, BT3), including ATEX
30	Drain	
	O	No drain
	P	Casing drain via pipeline
	V	Casing drain via valve
	D	Casing drain with plug
31	Product generation	
	A	Vitaprime

Materials

Overview of available materials

Description	Material
Pump casing[616]	1.4409 (AISI CF3M)
Impeller [616]	1.4409 (AISI CF3M)
Impeller nut[616]	1.4404 (AISI 316L)
Shaft[616]	1.4404 (AISI 316L)
Drive lantern	1.4308 (AISI 304)
Bearing assembly	Cast iron, nickel-plated or painted
Motor housing	Motor size ≤ 160 aluminium Motor size ≥ 180 grey cast iron
Motor shroud	1.4301 (AISI 304)
Ball feet	1.4308 (AISI 304)
Elastomers[616]	EPDM, FPM, FFP, FFKM

All materials that will be in contact with the fluid handled conform with Regulation (EC) No. 1935/2004.

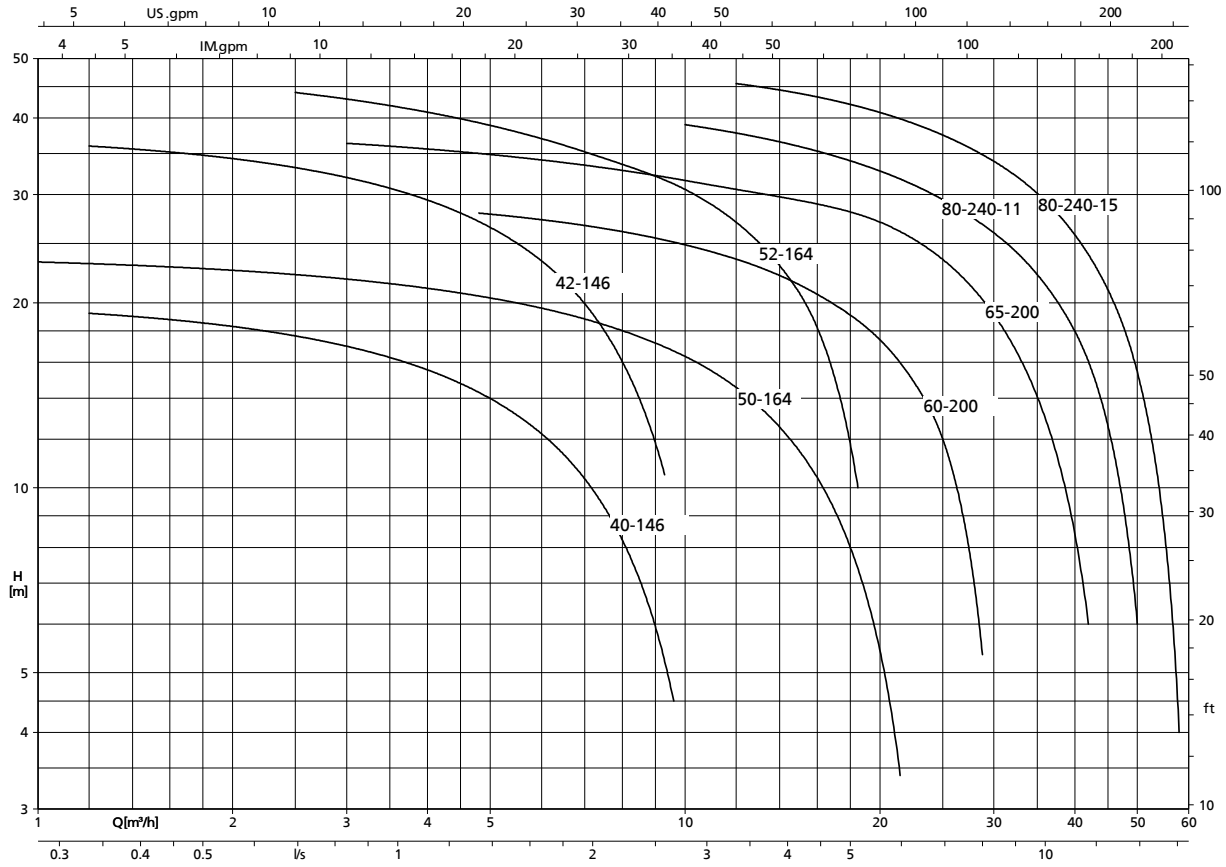
Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

615 Blank
616 Wetted component

Selection charts

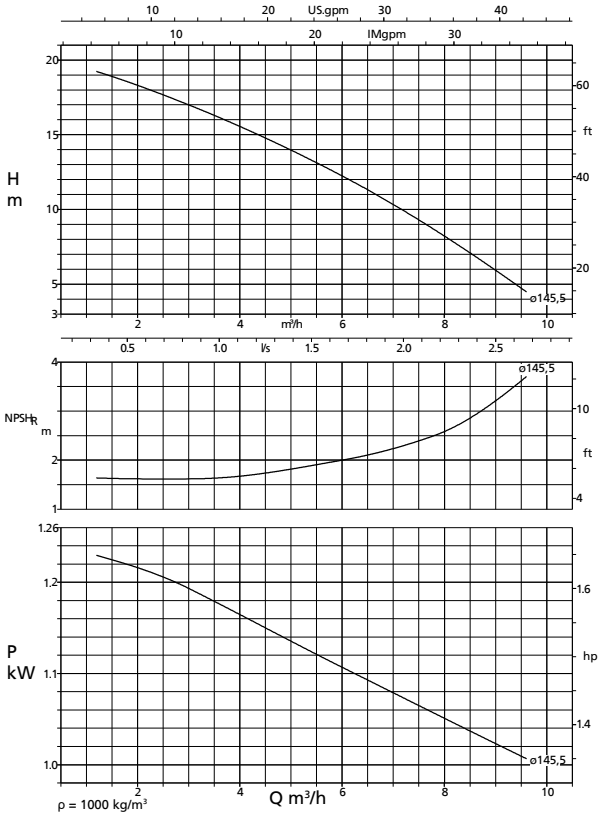
Vitaprime, n = 1450 rpm



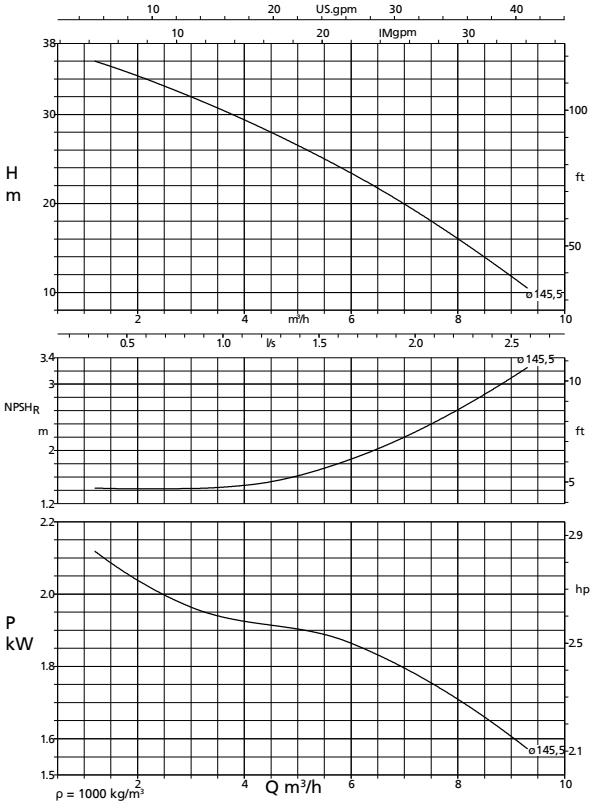
Characteristic curves

Vitaprime, n = 1450 rpm

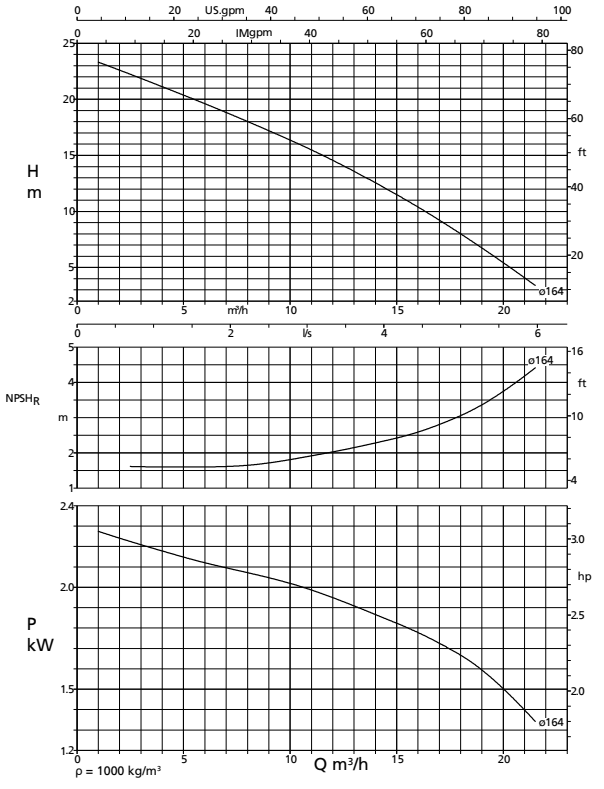
Vitaprime 40-146



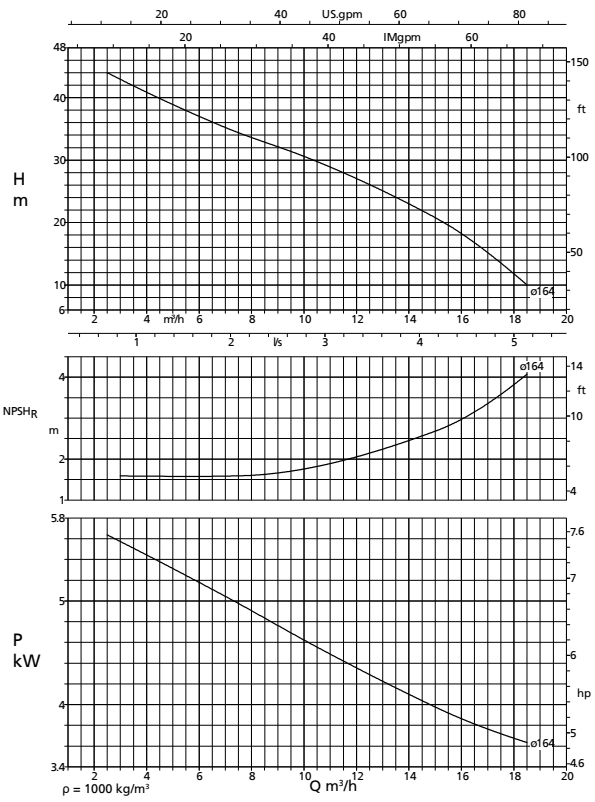
Vitaprime 42-146



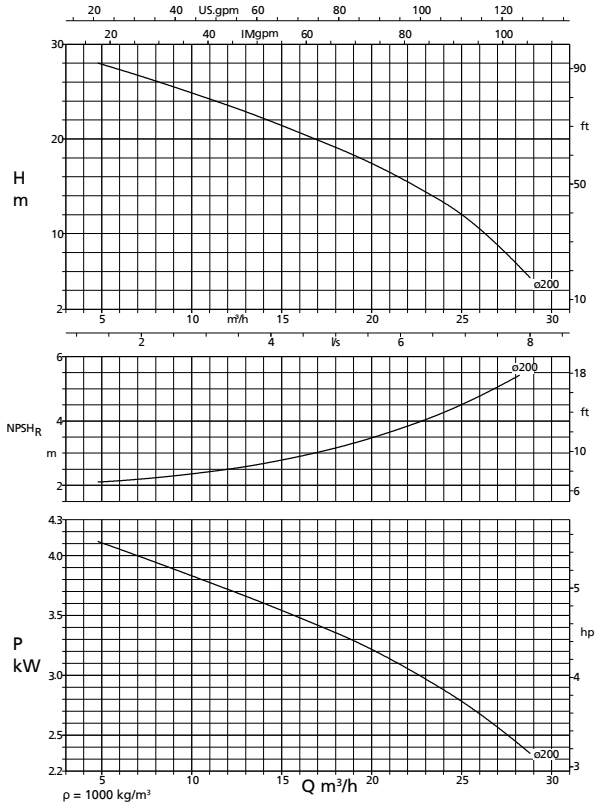
Vitaprime 50-164



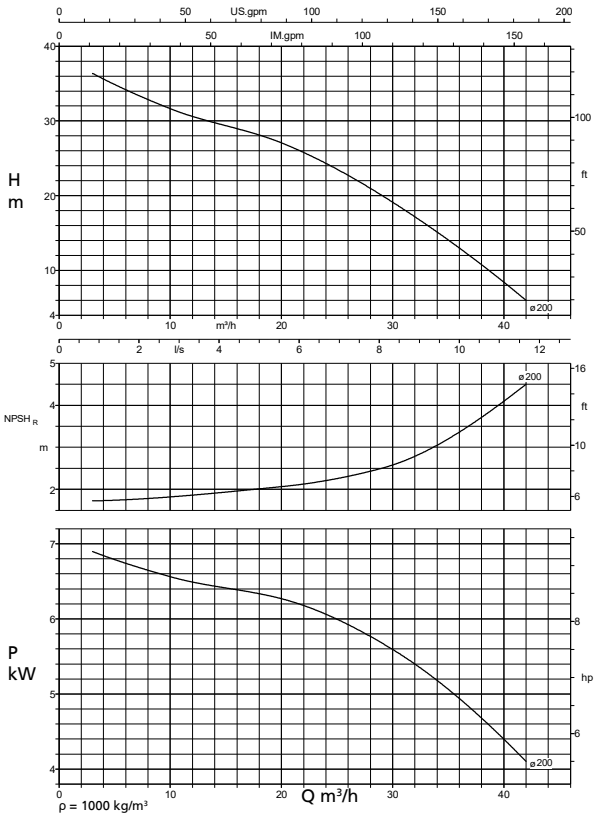
Vitaprime 52-164



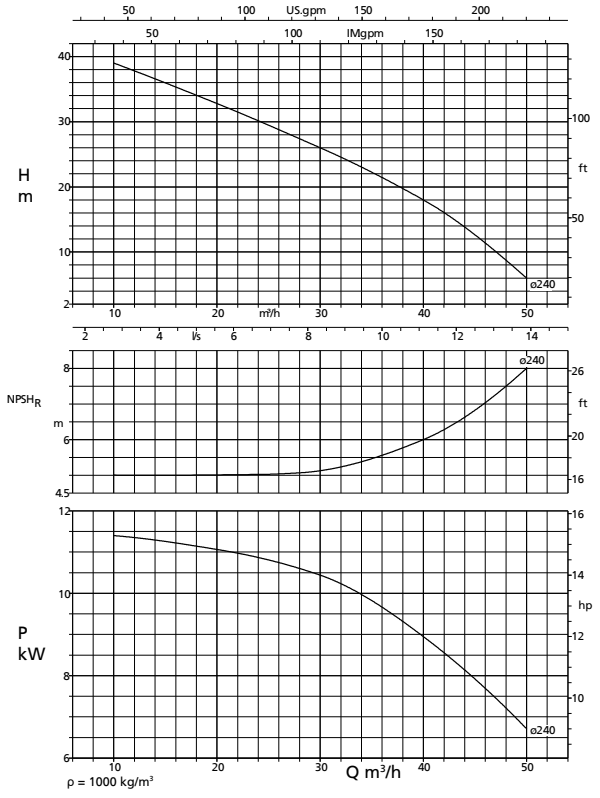
Vitaprime 60-200



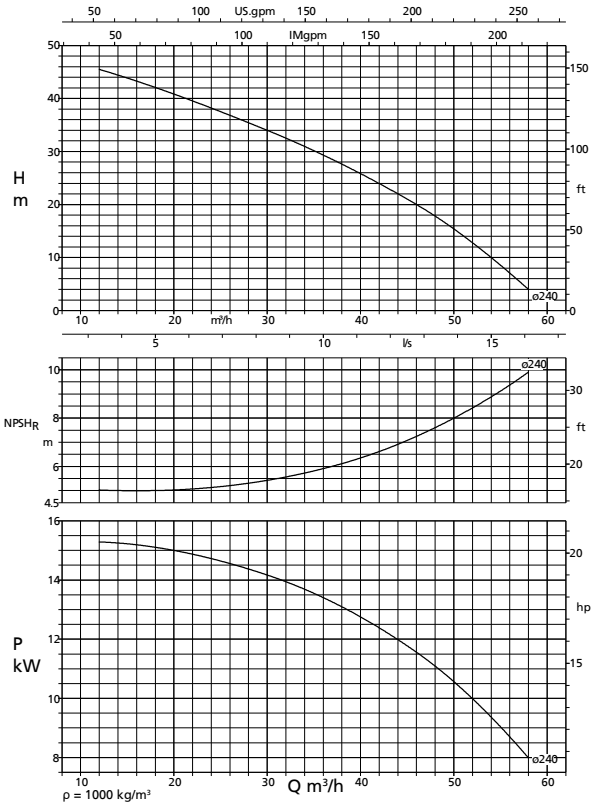
Vitaprime 65-200



Vitaprime 80-240-11



Vitaprime 80-240-15



Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Dimensions

Single-stage pumps

Pump set with motor shroud, with 3-point ball feet

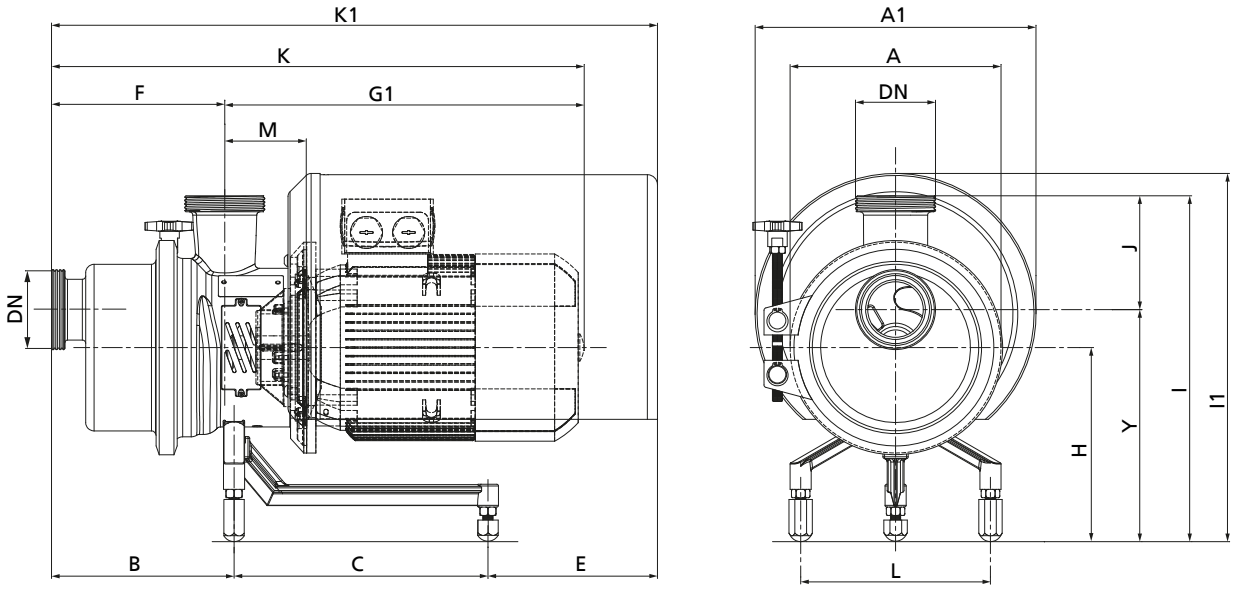


Fig. 329: Pump set with motor shroud, with 3-point ball feet

Dimensions

Vitaprime	Motor	P	DN	A	A1	B	C	E	F	G1	K1	K	H	J	I	I1	Y	L	M
		[kW]		[mm]															
40-146	90S	1,1	40	200	302	176	190	224	150	394,5	590	544,5	162	110	307	346	197	178	97,5
40-146	90L	1,5	40	200	302	176	190	224	150	434,5	590	584,5	162	110	307	346	197	178	97,5
40-146	100L	2,2	40	250	330	176	301	183	150	474,0	670	624	190	110	335	335	225	225	103,5
40-146	100L	3,0	40	250	330	176	301	183	150	474,0	670	624	190	110	335	335	225	225	103,5
42-146	100L	2,2	40	250	330	234	301	183	208	474,0	728	682	190	110	335	335	225	225	103,5
42-146	100L	3,0	40	250	330	234	301	183	208	474,0	728	682	190	110	335	335	225	225	103,5
42-146	112M	4,0	40	250	330	234	301	183	208	457,5	728	665,5	190	110	335	335	225	225	103,5
50-164	100L	2,2	50	250	330	196	301	202	175	477,0	698	652	228	114	378	433	264	225	106,5
50-164	100L	3,0	50	250	330	196	301	202	175	477,0	698	652	228	114	378	433	264	225	106,5
50-164	112M	4,0	50	250	330	196	301	202	175	460,5	698	635,5	228	114	378	433	264	225	106,5
60-200	112M	4,0	65	250	330	215	301	202	211	451,0	718	662	228	135	408	433	273	225	97

Pump set with motor shroud, with 4-point ball feet

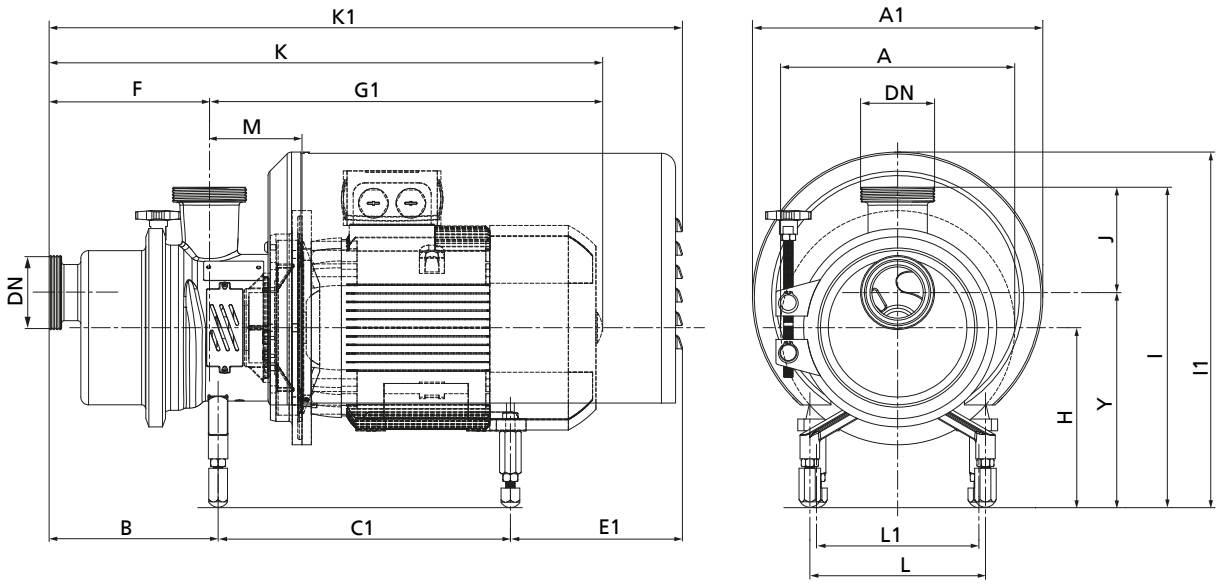


Fig. 330: Pump set with motor shroud, with 4-point ball feet

Dimensions

Vitaprime	Motor	P	DN	A	A1	B	C1	E1	F	G1	K1	K	H	J	I	I1	Y	L	L1	M
		[kW]		[mm]																
50-164	132S	5,5	50	300	370	196	336	227	175	513	797	688	228	114	378	450	264	225	216	128
50-164	132M	7,5	50	300	370	196	374	265	175	563	797	738	228	114	378	450	264	225	216	128
52-164	132S	5,5	50	300	370	258	336	227	237	513	859	750	228	114	378	450	264	225	216	128
52-164	132M	7,5	50	300	370	258	374	265	237	553,5	859	800	228	114	378	450	264	225	216	128
60-200	132S	5,5	65	300	370	215	337	226	211	503,5	816	714,5	228	135	408	450	273	225	216	118,5
60-200	132M	7,5	65	300	370	215	375	264	211	657	816	764,5	228	135	408	450	273	225	216	118,5
60-200	160M	11	65	350	480	215	470	337	211	717	1022	868	228	135	408	523	273	225	254	163
60-200	160L	15	65	350	480	215	514	293	211	553,5	1022	928	228	135	408	523	273	225	254	163
65-200	132S	5,5	65	300	370	215	337	226	211	503,5	816	714,5	228	135	408	450	273	225	216	118,5
65-200	132M	7,5	65	300	370	215	375	264	211	657	816	764,5	228	135	408	450	273	225	216	118,5
65-200	160M	11	65	350	480	215	470	337	211	717	1022	868	228	135	408	523	273	225	254	163
65-200	160L	15	65	350	480	215	514	293	211	692,5	1022	928	228	135	408	523	273	225	254	163
80-240-11	160M	11	80	350	480	267	498	334	245	752,5	1099	937,5	228	160	446	523	286	225	254	198,5
80-240-11	160L	15	80	350	480	267	542	290	245	752,5	1099	997,5	228	160	446	523	286	225	254	198,5
80-240-15	160L	15	80	350	480	267	542	290	245	782,5	1099	997,5	228	160	446	523	286	225	254	198,5
80-240-15	180M	18,5	80	350	400	267	576	254	245	752,5	1097	1027,5	230	160	448	588	288	225	279	194,5
80-240-15	180L	22	80	350	400	267	576	254	245	752,5	1097	997,5	230	160	448	588	288	225	279	194,5

Pump set with motor shroud, on motor feet

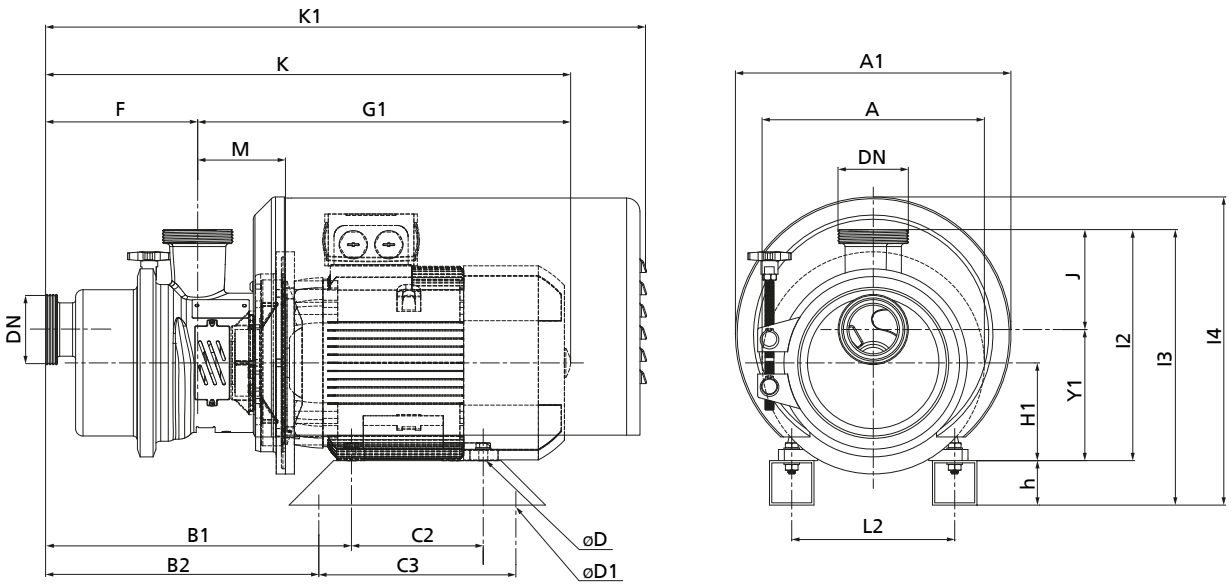


Fig. 331: Pump set with motor shroud, on motor feet

Dimensions

Vitaprime	Motor	P	DN	A	A1	B1	B2	C2	C3	D	D1	F	G1	K1	K	h	H1	J	I2	I3	I4	Y1	L2	M
		[kW]		[mm]																				
40-146	90S	1,1	40	200	302	306	269	100	200	10	10	150	394,5	590	544,5	40	90	110	235	275	314	125	140	97,5
40-146	90L	1,5	40	200	302	306	269	125	200	10	10	150	434,5	590	584,5	40	90	110	235	275	314	125	140	97,5
40-146	100L	2,2	40	250	330	313	268	140	230	12	12	150	474	670	624	50	100	110	245	295	355	135	160	103,5
40-146	100L	3	40	250	330	313	268	140	230	12	12	150	474	670	624	50	100	110	245	295	355	135	160	103,5
42-146	100L	2,2	40	250	330	371	326	140	230	12	12	208	474	728	682	50	100	110	245	295	355	135	160	103,5
42-146	100L	3	40	250	330	371	326	140	230	12	12	208	474	728	682	50	100	110	245	295	355	135	160	103,5
42-146	112M	4	40	250	330	378	333	140	230	12	12	208	457,5	728	665,5	50	112	110	257	307	367	147	160	103,5
50-164	100L	2,2	50	250	330	344	299	140	230	12	12	175	477	698	652	50	100	114	250	300	355	136	160	106,5
50-164	100L	3	50	250	330	344	299	140	230	12	12	175	477	698	652	50	100	114	250	300	355	136	160	106,5
50-164	112M	4	50	250	330	351	306	140	230	12	12	175	460,5	698	635,5	50	112	114	262	312	367	148	190	106,5
50-164	132S	5,5	50	300	370	392	346	140	266	12	12	175	513	797	688	60	132	114	282	342	414	168	216	128
50-164	132M	7,5	50	300	370	392	346	178	266	12	12	175	563	797	738	60	132	114	282	342	414	168	216	128
52-164	132S	5,5	50	300	370	454	408	140	266	12	12	237	513	859	750	60	132	114	282	342	414	168	216	128
52-164	132M	7,5	50	300	370	454	408	178	266	12	12	237	563	859	800	60	132	114	282	342	414	168	216	128
60-200	112M	4	65	250	330	371	326	140	230	12	12	211	451	718	662	50	112	135	292	342	367	157	190	97
60-200	132S	5,5	65	300	370	412	368	140	266	12	12	211	503,5	816	714,5	60	132	135	312	372	414	177	216	118,5
60-200	132M	7,5	65	300	370	412	368	178	266	12	12	211	553,5	816	764,5	60	132	135	312	372	414	177	216	118,5
60-200	160M	11	65	350	480	475	430	210	330	15	14	211	657	1022	868	60	160	135	340	400	483	205	254	163
60-200	160L	15	65	350	480	475	430	254	330	15	14	211	717	1022	928	60	160	135	340	400	483	205	254	163
65-200	132S	5,5	65	300	370	412	368	140	266	12	12	211	503,5	816	714,5	60	132	135	312	372	414	177	216	118,5
65-200	132M	7,5	65	300	370	412	368	178	266	12	12	211	553,5	816	764,5	60	132	135	312	372	414	177	216	118,5
65-200	160M	11	65	350	480	475	430	210	330	15	14	211	657	1022	868	60	160	135	340	400	483	205	254	163
65-200	160L	15	65	350	480	475	430	254	330	15	14	211	717	1022	928	60	160	135	340	400	483	205	254	163
80-240-11	160M	11	80	350	480	552	507	210	330	15	14	245	692,5	1099	937,5	60	160	160	378	438	483	218	254	198,5
80-240-11	160L	15	80	350	480	552	507	254	330	15	14	245	752,5	1099	997,5	60	160	160	378	438	483	218	254	198,5
80-240-15	160L	15	80	350	480	552	507	254	330	15	14	245	752,5	1099	997,5	60	160	160	378	438	483	218	254	198,5
80-240-15	180M	18,5	80	350	400	561	506	241	387	15	15	245	782,5	1097	1027,5	60	180	160	398	458	585	218	279	194,5
80-240-15	180L	22	80	350	400	561	506	241	387	15	15	245	752,5	1097	997,5	60	180	160	398	458	585	218	279	194,5

Two-stage pumps

Pump set with motor shroud, on 3-point ball feet

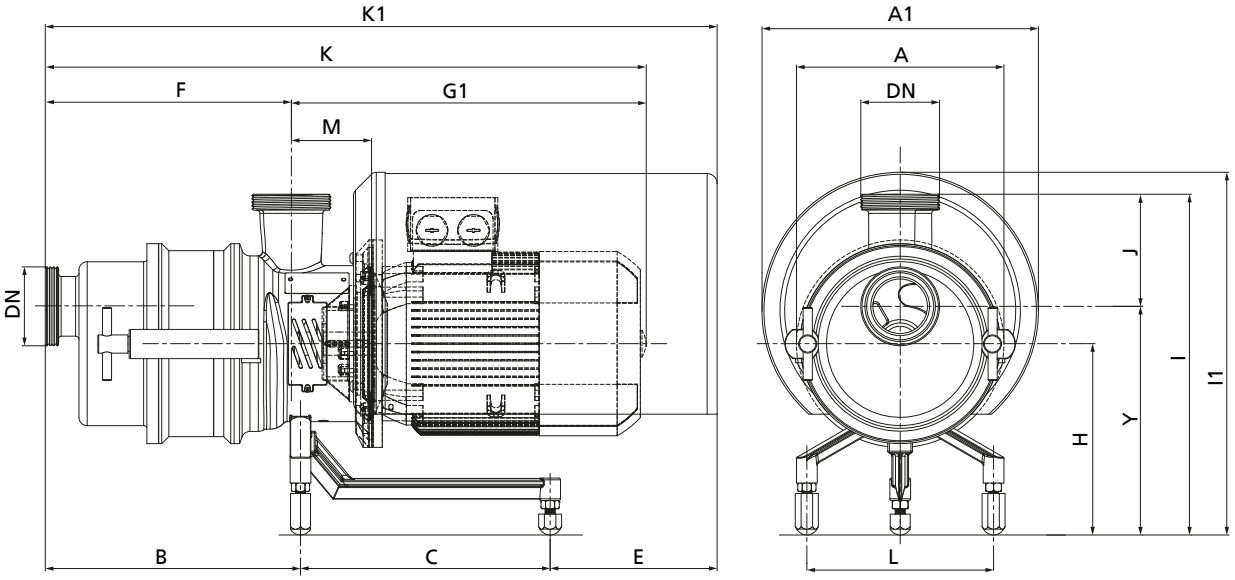


Fig. 332: Pump set with motor shroud, on 3-point ball feet

Dimensions

Vitaprime	Motor	P	DN	A	A1	B	C	E	F	G1	K1	K	H	J	I	I1	Y	L	M
		[kW]		[mm]															
42-146	100L	2,2	40	250	330	234	301	183	208	474	728	682	190	110	335	335	225	225	103,5
42-146	100L	3,0	40	250	330	234	301	183	208	474	728	682	190	110	335	335	225	225	103,5
42-146	112M	4,0	40	250	330	234	301	183	208	457,5	728	665,5	190	110	335	335	225	225	103,5

Pump set with motor shroud, on 4-point ball feet

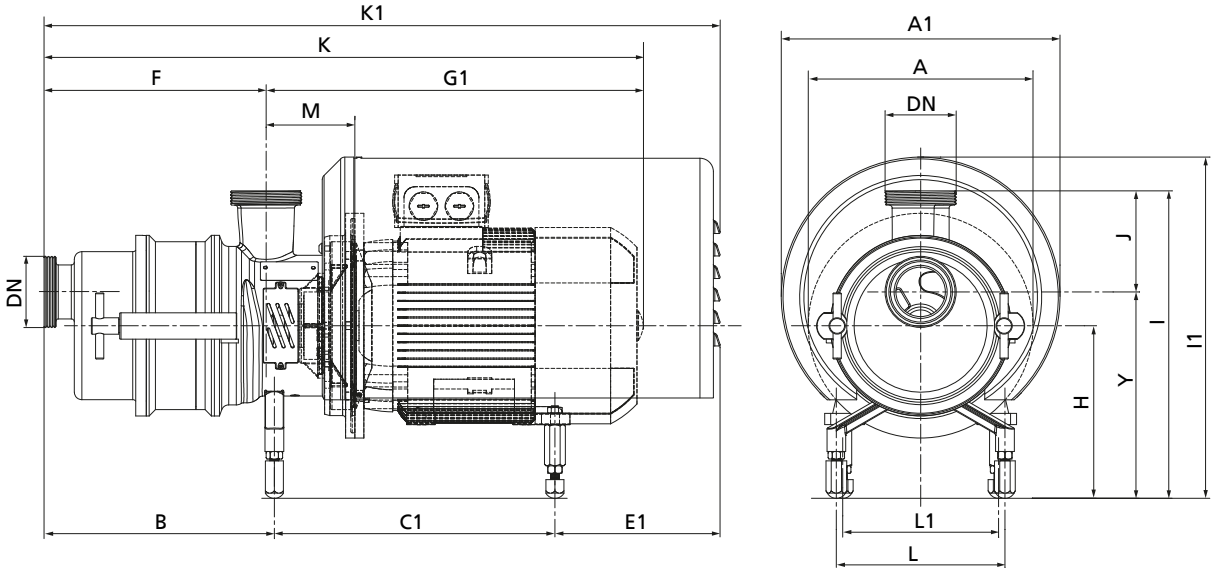


Fig. 333: Pump set with motor shroud, on 4-point ball feet

Dimensions

Vitaprime	Motor	P	DN	A	A1	B	C1	E1	F	G1	K1	K	H	J	I	I1	Y	L	L1	M
		[kW]		[mm]																
52-164	132S	5,5	50	300	370	258	336	227	237	513	859	750	228	114	378	450	264	225	216	128
52-164	132M	7,5	50	300	370	258	374	265	237	563	859	800	228	114	378	450	264	225	216	128

Pump set with motor shroud, on motor feet

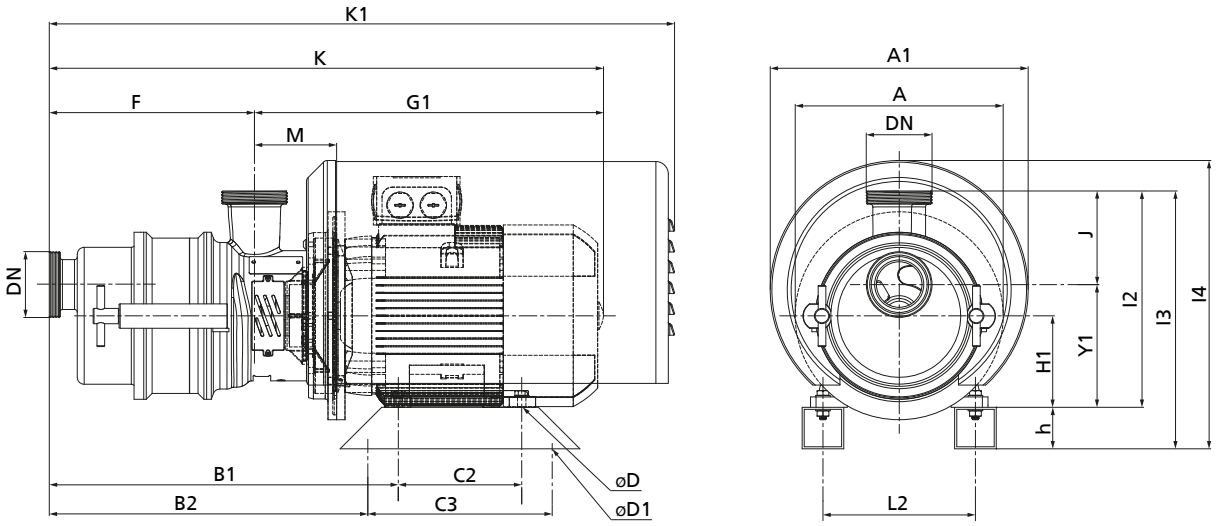
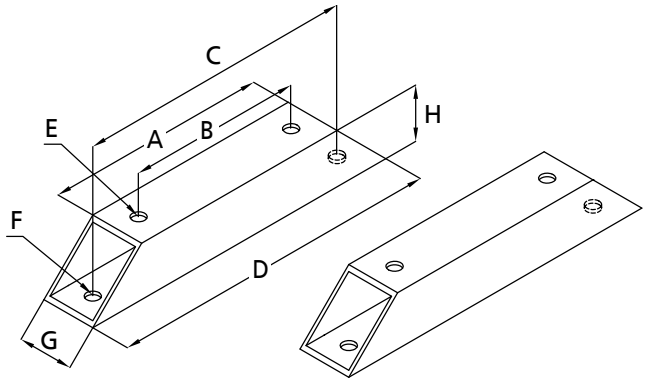


Fig. 334: Pump set with motor shroud, on motor feet

Dimensions

Vitaprime	Motor	P	DN	A	A1	B1	B2	C2	C3	D	D1	F	G1	K1	K	h	H1	J	I2	I3	I4	Y1	L2	M
		[kW]		[mm]																				
42-146	100L	2,2	40	250	330	371	326	140	230	12	12	208	474	728	682	50	100	110	245	295	355	135	160	103,5
42-146	100L	3,0	40	250	330	371	326	140	230	12	12	208	474	728	682	50	100	110	245	295	355	135	160	103,5
42-146	112M	4,0	40	250	330	378	333	140	230	12	12	208	457,5	728	665,5	50	112	110	257	307	367	147	160	103,5
52-164	132S	5,5	50	300	370	454	408	140	266	12	12	237	513	859	750	60	132	114	282	342	414	168	216	128
52-164	132M	7,5	50	300	370	454	408	178	266	12	12	237	563	859	800	60	132	114	282	342	414	168	216	128

Motor feet



Motor foot dimensions [mm]

Motor (IEC-DIN)	p [kW]		A	B	C	D	E	F	G	H
	2-pole	4-pole								
71	0,37 0,55	0,25 0,37	110	90	150	190	10	10	40	40
80	0,75 1,10	0,55 0,75	130	100	170	210	10	10	40	40
90 S	1,50	1,10	160	100	200	240	10	10	40	40
90 L	2,20	1,50	160	125	200	240	10	10	40	40
100 L	3,00	3,00	180	140	230	280	12	12	50	50
112 M	4,00	4,00	180	140	230	280	12	12	50	50
132 S	5,50 7,50	5,50	226	140	266	346	12	12	60	60
132 M	-	7,50	226	178	266	346	12	12	60	60
160 M	11,00 15,00	11,00	310	210	330	400	14	14	50	50
160 L	18,50	15,00	310	254	330	400	14	14	50	50
180 M	22,00	18,50	328	241	387	448	15	15	60	60
180 L	-	22,00	328	279	387	448	15	15	60	60

Accessories

Pump accessories

- Motor shroud made of stainless steel
- Vertically adjustable ball feet or machine mounts
- Residual drainage of pump casing
- Noise reduction valve
- Mounted on a trolley, with switch and power cable
- System for supplying the mechanical seal

Hygienic Pumps

Vitastage

http://shop.ksb.com/catalog/k0/en/product/ES000788

Product benefits

- Cast iron casing makes for robustness
- Robust design for a long service life and reliable operation
- Versatile with large range of connection options, mechanical seals, materials
- Flexible with horizontal and vertical installation types and motors to a variety of standards, also available with variable speed system
- Hygienic zero dead volume design with electropolished surface, suitable for CIP/SIP

Further information

Prices on request

Characteristic curves 1016

Main applications

- Food industry / beverage industry
- Chemical industry
- Industrial applications with hygienic requirements

Fluids handled

- Pure liquids not mechanically or chemically aggressive to the pump

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certifications

Overview

Label	Effective in:	Comment
	All countries	Certified quality management to ISO 9001
	All countries	Elastomers certified to FDA, 3A, USP Class VI

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 12,5
Head	H [m]	≤ 150
Operating pressure	p [bar]	≤ 16
Fluid temperature	T [°C]	≥ -20
		≤ +140 [617)]

Design details

Design

- High-pressure centrifugal pump
- Ring-section design
- Multistage
- Standard design with materials to Regulation (EC) No. 1935/2004

Installation

- Horizontal installation / vertical installation

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM B5
- Type of construction IM B35
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Shaft seal

- Standardised mechanical seal to EN 12756

Impeller type

- Closed radial impeller with multiply curved vanes

Designation

Example: Vitastage 10/3/75 2 B T

Designation key

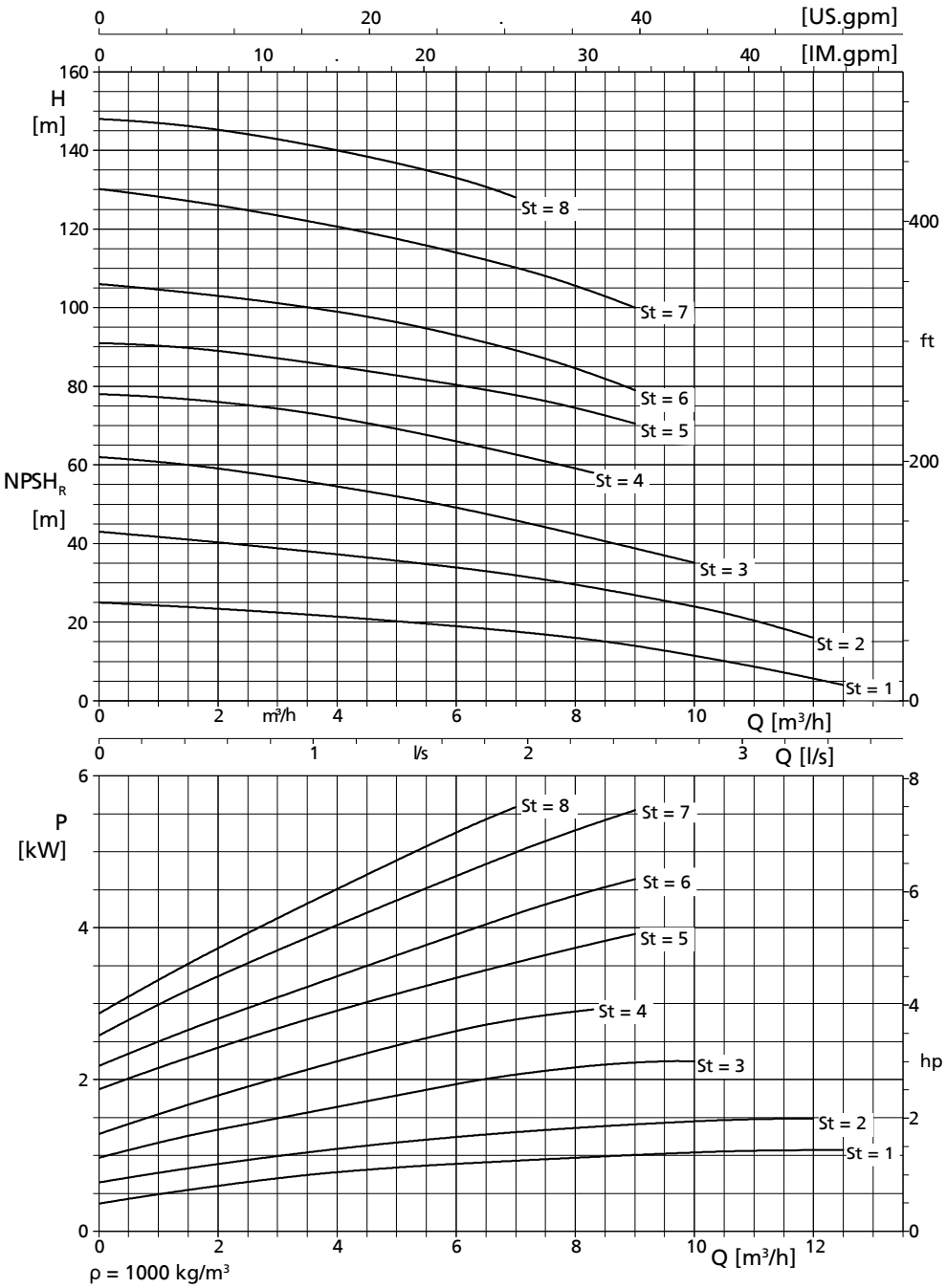
Code	Description	
Vitastage	Type series	
10	Size	
3	Number of stages	
75	Motor rating	
	75	(7,5 kW × 10)
2	Number of poles	
B	Installation type	
T	Seal design	

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

617 Higher values on request

Characteristic curves



Hygienic Pumps

Vitalobe

http://shop.ksb.com/catalog/k0/en/product/ES000847

Product benefits

- Hygienic zero dead volume design for residue-free and fast CIP/SIP
- Flexible with horizontal in-line or vertical in-line connections
- Flexible with different types and materials of rotary lobes, matched to the specific application
- Reliable with solid design of pressure-retaining and rotating parts and shafts supported on two double tapered roller bearings
- Reliable with integrated pressure relief valve

Further information

Prices on request

Selection chart 1022

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Certifications

Overview

Label	Effective in:	Comment
	All countries	Certified quality management to ISO 9001
	All countries	European Hygienic Engineering & Design Group
	Worldwide	Elastomeric parts meet FDA standards.

Main applications

- Food industry / beverage industry
- Pharmaceutical industry
- Cosmetics industry
- General industry
- Chemical industry

Fluids handled

Liquid and viscous fluids:

- Food and beverages
- Cosmetics
- Pharmaceuticals
- Chemical products

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m³/h]	≤ 342
	Q [l/min]	≤ 5700
Head	H [m]	≤ 200
Operating pressure	p [bar]	≤ 20
Differential pressure	p_D [bar]	≤ 20
Fluid temperature	T [°C]	≥ -40
		≤ +180
Viscosity	v [mPas]	≤ 200000
Volume displaced	V_v [litre/ revolution]	≤ 10,5

Design details

Design

- Hygienic rotary lobe pump
- Long-coupled design
- In-line design
- Wetted parts made of stainless steel 1.4404/1.4409 (AISI 316L/CF3M)
- Standard design with materials to Regulation (EC) No. 1935/2004
- Cleanability levels 1 + 2 to EN 13951 for Vitalobe design B
- Cleanability levels 3 + 4 to EN 13951 for Vitalobe design BB

Pump casing

- Rotor casing

Drive (fixed speed version)

Standard design:

- KSB/Siemens surface-cooled IEC frame three-phase squirrel-cage motor
- Efficiency class IE1 (size 71/80) / IE3 (from size 90) to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.20 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.00 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.20 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.00 kW
- Type of construction IM B5
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Thermal class F with temperature sensor, 1 PTC thermistor (size 80/90) / 3 PTC thermistors (from size 100)

Explosion-proof design:

- KSB surface-cooled IEC three-phase current squirrel-cage motor
- Efficiency class IE2 / IE3 to IEC 60034-30
- Rated voltage (50 Hz) 230 V / 400 V ≤ 2.50 kW
- Rated voltage (50 Hz) 400 V / 690 V ≥ 3.30 kW
- Rated voltage (60 Hz) - / 460 V ≤ 2.50 kW
- Rated voltage (60 Hz) 460 V / - ≥ 3.30 kW
- Type of construction IM B5
- Type of construction IM V1
- Enclosure IP55
- Duty type: continuous duty S1
- Type of protection EEx eb II
- Temperature class T3

Shaft seal

- Single mechanical seal to EN 12756
  - Seal type Y: external seal
  - Seal type L: shaft seal ring
- Double mechanical seal to EN 12756
  - Seal type Q: back-to-back arrangement (pressurised barrier fluid)
  - Seal type L: shaft seal ring

Clearance

- The rotors rotate in the casing without touching each other.

The clearances depend on the application.

- Standard clearance for minimum leakage flow and best hydraulic efficiency
- Enlarged clearance for high pressures or high temperatures

Impeller type

- Tri-lobe, bi-lobe, gear-shaped or bi-wing rotor

Bearings

- Size 100: deep groove ball bearing and needle bearing
- Sizes 105 to 115: tapered roller bearings
- Sizes 215 to 490: double tapered roller bearings
- Sizes 550 to 680: cylindrical roller bearing and two-row deep groove ball bearings

Connections

- Axial suction nozzle, tangential discharge nozzle
- Adjustable through 360°

Types of connection:

- Threaded connection to DIN 11851 (hygienic pipe union)
- Threaded connection to DIN 11853
- Threaded connection to DIN 11864-1-GS-A
- Threaded connection to SMS standard
- Threaded connection to ISO 2853 (IDF)
- Threaded connection to RJT standard
- Clamped connection to DIN 32676-C (Tri-Clamp/Tri-Clover fitting)
- Clamped connection to DIN 11864-3-NKS-A
- Clamped connection to DIN 32676-A
- Clamped connection to ISO 2852
- Flange to EN 1092-1
- Flange to DIN 11864-2-NF-A
- Flange to ANSI B16.5 Class 150
- APV flange
- Varivent flange
- Other connection types on request

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Designation

Designation example

Position																										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
V	L	B		1	0	0	/	0	4	0	2	G	D	B	Y	3	1	A	E	C	C	S	P	P	H	S	A
See name plate and data sheet																											

Designation key

Position	Code	Description	
1-4	Pump type		
	VLB	Vitalobe B	
	VLBB	Vitalobe BB	
5-8	Size, e.g.		
	100/	Rotor diameter [mm]	
	...	...	
	550/	Rotor diameter [mm]	Vitalobe B
	660/	Rotor diameter [mm]	Vitalobe B
	680/	Rotor diameter [mm]	Vitalobe B
9-11	Motor rating P_N [kW]		
	007	0,70	
	...	...	
	550	55,00	
12	Number of motor poles		
13	Scope of supply		
	G	Baseplate	
	V	Trolley	
14-15	Shaft seal type		
	DB	Double mechanical seal, external, in back-to-back arrangement	
	J	Single mechanical seal, external	
	JY	Single mechanical seal, external flushing system (quench)	
	L	Lip seal	
16-18	Seal code, single mechanical seal		
	Y31	BGEFG	
	Y32	BGVFG	
	Y34	BGMFG	
	Y41	BU3EFG	
	Y42	BU3VFG	
	Y44	BU3MFG	
	Y51	U3U3EFG	
	Y52	U3U3VFG	
	Y54	U3U3MFG	
	Seal code, double mechanical seal in back-to-back arrangement		
	Q31	GBEFG	Vitalobe B
		GBEFG	Vitalobe B
	Q32	GBVFG	Vitalobe B
		GBVFG	Vitalobe B
	Q34	GBMFG	Vitalobe B
		GBMFG	Vitalobe B
	Q41	U3BEFG	Vitalobe B
		U3BEFG	Vitalobe B
	Q42	U3BVFG	Vitalobe B
		U3BVFG	Vitalobe B
	Q44	U3BMFG	Vitalobe B
		U3BMFG	Vitalobe B
	Q51	U3U3EFG	Vitalobe B
		U3U3EFG	Vitalobe B
	Q52	U3U3VFG	Vitalobe B
		U3U3VFG	Vitalobe B
	Q54	U3U3MFG	Vitalobe B

Position	Code	Description	
16-18	Q54	U3U3MFG	Vitalobe B
	Seal code, lip seal		
	HN	S.S./PTFE	Vitalobe B / Vitalobe BB
	S1	H-ECOPUR FDA	Vitalobe B
	S16	H-ECOPUR FDA	Vitalobe BB
	UM	FKM	Vitalobe B
19	Pipe connection		
	A	Flange	APV
	B	Thread	DIN 11864-1A
	C	Flange	DIN 11864-2A
	D	Clamped connection	DIN 11864-3A
	E	Thread	DIN 11853
	F	Thread	RJT
	G	Flange	Varivent
	I	Thread	ISO 2853 (IDF)
	L	Flange	EN 1092-1
	M	Thread	DIN 11851 (hygienic pipe union)
	S	Thread	SMS
	T	Clamped connection	DIN 32676-A
	U	Clamped connection	DIN 32676-C (Tri-Clamp)
	V	Clamped connection	ISO 2852
	Z	Flange	ANSI B16.5 Class 150
20	O-ring material (casing/impeller)		
	E	EPDM	
	F	FFKM (Kaflon)	
	K	FFKM (Kalrez)	
	M	FEP (encapsulated)	
	T	PTFE (Viton core)	
	V	FKM	
21	Pump casing material		
	C	Stainless steel	1.4409
	D	Super duplex stainless steel	1.4469 / 1.4410
	M	Monel 400	2.4360
	T	Titanium	B348 GR5
	X	Hastelloy C276	2.4819
22	Rotor material		
	C	Stainless steel	1.4409
	D	Super duplex stainless steel	1.4469 / 1.4410
	E	EPDM-coated (core 1.4404)	-
	F	Stainless steel sliding alloy	ASTM A494 CY5SNBIM
	M	Monel 400	2.4360
	N	NBR	-
	T	Titanium	B348 GR5
	X	Hastelloy C276	2.4819
23	Motor shroud		
	S	With shroud	
	O	Without shroud	
24	Drain		
	P	Casing drain via piping	
	V	Casing drain via valve	
	D	Casing drain with plug	
	O	No drain	
25	Safety valve		
	B	By-pass	
	O	Without safety valve	
	P	Pneumatic safety valve	
	V	Mechanical safety valve	
26	Position of nozzles		
	H	Horizontal	

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

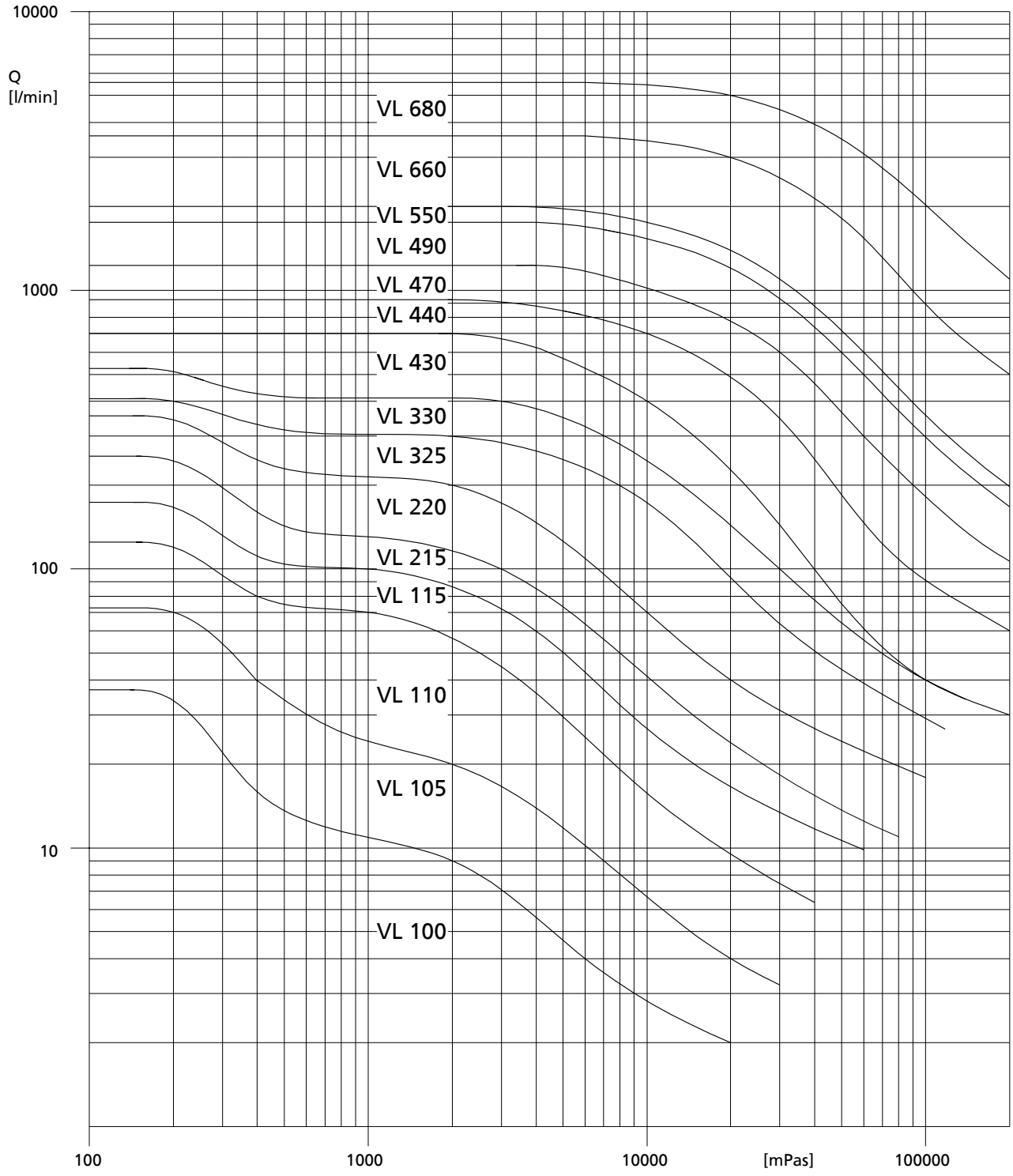
Position	Code	Description
26	V	Vertical
27	Design	
	S	Standard
	X	Non-standard (BT3D, BT3)
28	Product generation	
	A	Vitalobe

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Selection chart

Vitalobe



Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Mag-drive Pumps

Magnochem

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000046

Product benefits

- High operating reliability:
  - Only static seals are required.
  - Optional leakage barrier
  - Containment shroud protected by anti-rub feature on outer rotor and inner rotor
  - Self-draining facility of containment shroud
  - Pump does not need to be drained before drive unit is fitted/removed.
- Broad application range:
  - Product-lubricated plain bearings made of silicon carbide (DLC coating optionally available)
  - Modular design principle for hydraulic system and magnetic coupling
  - Large number of operating modes
  - Temperature maintenance and heating facility for casing and casing cover
- Low-maintenance design:
  - Product-lubricated plain bearings made of silicon carbide (wear-free)
  - Grease-packed rolling element bearings sealed for life (30,000 hours at operating temperatures under 80 °C) or oil-lubricated rolling element bearings (35,000 hours)

Further information

Prices on request

Further information

	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[618)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

618 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Description / design

Horizontal seal-less volute casing pump in back pull-out design, with magnetic drive, to DIN EN ISO 2858 / ISO 5199, with radial impeller, single-entry, single-stage. ATEX-compliant version available.

Main applications

- Chemical industry
- District heating
- Industrial recirculation systems
- Air-conditioning systems
- Condensate transport
- Cooling circuits
- Petrochemical industry
- Pipelines and tank farms
- Refinery
- Process engineering
- Hot-water heating systems
- Sugar industry

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Mag-drive Pumps

Magnochem-Bloc

http://shop.ksb.com/catalog/k0/en/product/ES000045

Product benefits

- High operating reliability:
  - Only static seals are required.
  - Optional leakage barrier
  - Containment shroud protected by anti-rub feature on outer rotor and inner rotor
  - Self-draining facility of containment shroud
  - Pump does not need to be drained before drive unit is fitted/removed.
- Broad application range:
  - Product-lubricated plain bearings made of silicon carbide (DLC coating optionally available)
  - Modular design principle for hydraulic system and magnetic coupling
  - Large number of operating modes
  - Temperature maintenance and heating facility for casing and casing cover

Further information

Prices on request

Further information

	PumpDrive 2 / PumpDrive 2 Eco (⇨ Page 1046)	Self-cooling frequency inverter
	PumpDrive R (⇨ Page 1060)	Self-cooling frequency inverter
	PumpMeter (⇨ Page 1065)	Intelligent pressure sensor
	KSB SuPremE motor (⇨ Page 1076)	Magnetless synchronous reluctance motor[619)] of efficiency class IE4/IE5 to IEC TS 60034-30-2:2016 for operation with KSB PumpDrive without rotor position sensors

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

619 Motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets.

Description / design

Horizontal or vertical seal-less volute casing pump in close-coupled design, with magnetic drive, to DIN EN ISO 2858 / ISO 5199, with radial impeller, single-entry, single-stage. ATEX-compliant version available.

Main applications

- Chemical industry
- District heating
- Industrial recirculation systems
- Air-conditioning systems
- Condensate transport
- Cooling circuits
- Petrochemical industry
- Pipelines and tank farms
- Refinery
- Process engineering
- Hot-water heating systems
- Sugar industry

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Contents

Automation / Drive 1028

Testing and Inspection / Service / General 1078

Automation / Drive

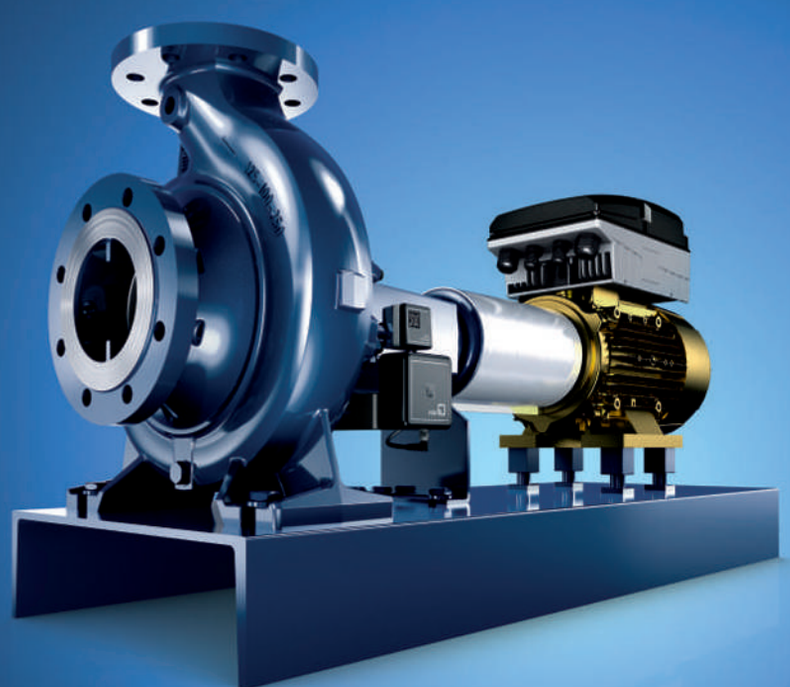
Design / Application

Type series		Number of pumps	P	U	Waste water	Spray irrigation	General irrigation	Brackish water	Fire fighting	Service water (industry)	Pressure boosting	Water containing faeces	Heating	Industry / process engineering	Air-conditioning	Food processing / pharmaceutical industry	Seawater	Grey water	Swimming pools	Drinking water	Water supply
		Max.	Max.																		
		-	[kW]	[V]																	
Alarm Switchgear, Non-ATEX compliant																					
	AS 0, 2, 4 alarm switchgear (⇨ Page 1031)	-	-	-	✗	✗	✗	✗	-	-	✗	✗	-	-	-	-	-	✗	✗	-	✗
	AS 1 alarm switchgear (⇨ Page 1031)	-	-	-	✗	✗	✗	✗	-	-	✗	✗	-	-	-	-	-	✗	✗	-	✗
	AS 5 alarm switchgear (⇨ Page 1031)	-	-	-	✗	✗	✗	✗	-	-	✗	✗	-	-	-	-	-	✗	✗	-	✗
Single-pump Control Unit, Pressure-dependent, Non-ATEX-compliant																					
	Controlmatic E (⇨ Page 1032)	1	-	1~230	-	✗	✗	-	-	-	✗	-	-	-	-	-	-	-	✗	✗	✗
	Controlmatic E.2 (⇨ Page 1033)	1	-	1~230	-	✗	✗	-	-	-	✗	-	-	-	-	-	-	-	✗	✗	✗
	Cervomatic EDP.2 (⇨ Page 1034)	1	-	1~230 3~400	-	✗	✗	-	-	-	✗	-	-	-	-	-	-	-	✗	✗	✗
Single-pump Switchgear, Level-dependent, Non-ATEX-compliant																					
	MSD (⇨ Page 1035)	1	-	3~400	✗	-	-	-	-	-	-	-	-	-	-	-	-	✗	-	-	-
	MSE (⇨ Page 1035)	1	-	1~230	✗	-	-	-	-	-	-	-	-	-	-	-	-	✗	-	-	-
	Hyper, multi-functional plug (⇨ Page 1036)	1	-	3~400	✗	-	-	-	-	-	-	-	-	-	-	-	-	✗	-	-	-
Control Units, Non-ATEX-compliant																					
	UPA Control (⇨ Page 1037)	1	7,50	1~230 3~400	-	-	✗	-	-	-	-	-	-	-	-	-	-	-	-	✗	✗
Control Units, ATEX-compliant and Non-ATEX-compliant																					
	LevelControl Basic 2 (⇨ Page 1038)	2	22,00	1~230 3~400	✗	✗	✗	✗	-	✗	-	✗	-	-	-	-	✗	✗	-	-	✗
Variable Speed Systems																					

Type series		Number of pumps	P	U	Waste water	Spray irrigation	General irrigation	Brackish water	Fire fighting	Service water (industry)	Pressure boosting	Water containing faeces	Heating	Industry / process engineering	Air-conditioning	Food processing / pharmaceutical industry	Seawater	Grey water	Swimming pools	Drinking water	Water supply
		Max.	Max.																		
		-	[kW]	[V]																	
	PumpDrive 2 (⇨ Page 1046)	6	55,00	3~400	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
	PumpDrive 2 Eco (⇨ Page 1046)	6	11,00	3~400	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
	PumpDrive R (⇨ Page 1060)	1	110,00	3~400	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Intelligent Pressure Sensors																					
	PumpMeter (⇨ Page 1065)	1	-	24 [V DC]	-	✗	✗	✗	✗	✗	✗	-	✗	✗	✗	-	-	✗	✗	✗	✗
	PumpMeter LSA (⇨ Page 1068)	1	-	24 [V DC]	-	-	-	-	-	-	-	-	-	-	-	✗	-	-	-	-	-
Cloud-based Data Provision																					
	KSB Guard (⇨ Page 1073)	≤ 40[620]	-	110-240 [V AC][621] 2×1,5 [V DC][622]	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
Intelligent Leakage Monitor for Pumps with Mechanical Seal																					
	KSB Leakage Sensor (⇨ Page 1074)	1	-	-	-	-	-	-	-	-	-	-	-	✗	-	-	-	-	-	-	-
Protection Module for Water and Waste Water Products																					
	Amacontrol III (⇨ Page 1075)	≤ 1	-	AC 230	✗	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
High-efficiency Drives																					
	KSB SuPremE (⇨ Page 1076)	1	45,00	-[623]	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗

620 Sensor units per gateway
621 Gateway
622 Sensor
623 Power supply via PumpDrive only

MORE MONITORING. LESS TROUBLE-SHOOTING.



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Alarm Switchgear, Non-ATEX-compliant

AS0, AS1, AS2, AS4, AS5

Product benefits

- Straightforward reliable alarm switchgear
- Simple to install and commission
- Versatile use thanks to variants with different features

Further information

Prices on request

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

AS0, AS2, AS4: KSB switchgear types AS0, AS2 and AS4 are monitoring units with acoustic alarm transmitters (85 dB (A)). AS2 and AS4 are fitted with a volt-free contact for transmitting an alarm to a control station or similar. AS4 features a maintenance-free nickel-cadmium rechargeable battery for up to 5 hours' operation of the alarm switchgear in the event of a power failure.

IP20 enclosure, dimensions 140 × 80 × 57 mm (H × W × D)

AS1: The KSB switchgear is a monitoring unit with acoustic signal transmitter (85 dB (A)). It features a maintenance-free nickel-cadmium rechargeable battery for up to 5 hours' operation of the alarm switchgear in the event of a power failure. The KSB switchgear responds at a water level of 1 mm.

IP20 enclosure, dimensions 120 × 65 × 40 mm (H × W × D)

AS5: The KSB switchgear is a monitoring unit for signalling a limit value. It is fitted with a an alarm transmitter with integrated red indicator lamp and a volt-free contact for transmitting an alarm message to a control station or similar. For acoustic signalling, a horn or alarm combination can be connected. The KSB switchgear features a maintenance-free nickel-cadmium rechargeable battery for up to 5 hours' operation of the alarm switchgear in the event of a power failure.

IP41 enclosure, dimensions 170 × 190 × 75 mm (H × W × D)

Main applications

- Heating systems
- Water supply systems
- Drainage systems

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Single-pump Control Unit, Pressure-dependent, Non-ATEX-compliant

Controlmatic E

http://shop.ksb.com/catalog/k0/en/product/ES000276

Product benefits

- Easily connected to power supply by shockproof plug
- The pump is started and stopped automatically by simultaneous monitoring of pressure and flow rate.
- Dry-running protection by stopping the motor
- User-friendly indication of operating pressure

Further information

Prices on request

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

Automatic control unit for pressure-controlled starting, flow-controlled stopping and monitoring of a single pump

Main applications

- Water supply systems

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Single-pump Control Unit, Pressure-dependent, Non-ATEX-compliant

Controlmatic E.2

http://shop.ksb.com/catalog/k0/en/product/ES000276

Product benefits

- Easily connected to power supply by shockproof plug
- The pump is started and stopped automatically by simultaneous monitoring of pressure and flow rate.
- Variety of use due to user-definable start-up pressure (1.5 - 2.6 bar)
- Dry-running protection by stopping the motor
- User-friendly indication of operating pressure

Further information

Prices on request

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

Automatic control unit for pressure-controlled starting, flow-controlled stopping and monitoring of a single pump

Main applications

- Water supply systems

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Single-pump Control Unit, Pressure-dependent, Non-ATEX-compliant

Cervomatic EDP.2

http://shop.ksb.com/catalog/k0/en/product/ES000275

Product benefits

- The pump is started and stopped automatically by simultaneous monitoring of pressure and flow rate.
- Constant pressure depending on the flow rate by simultaneous monitoring of pressure and flow rate
- Dry-running protection by stopping the motor
- Digital indication of pressure (actual value and set value)
- Easy to operate with menu-controlled setting of parameters
- Pressure-dependent pump start
- Pressure-dependent or flow-dependent stop of the pump

Further information

Prices on request

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

Automatic control unit for pressure-controlled starting and either pressure-controlled or flow-controlled stopping and monitoring of a single pump.

Main applications

- Spray irrigation systems
- General irrigation systems
- Rainwater harvesting
- Water supply systems

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Single-pump Switchgear, Level-dependent, Non-ATEX-compliant

MSE / MSD

Product benefits

- Simple compact control unit for controlling one pump as a function of the fill level
- Comprehensive protection of the pump by existing thermal circuit breaker and motor protection relay
- Extensive information provided by pump “in operation” and fault display
- Straightforward installation, commissioning and operation

Further information

Prices on request

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

MSE: Compact switchgear for level-dependent control and protection of one single-phase AC motor (230 V / 50 Hz). The motor is started DOL.

IP54 enclosure, dimensions: 120 x 100 x 112 mm (H x W x D)

MSD: Compact switchgear for level-dependent control and protection of one three-phase motor (400 V / 50 Hz). The motor is started DOL.

IP54 enclosure, dimensions: 120 x 100 x 112 mm (H x W x D)

Main applications

- Single-pump switchgear, level-dependent, non-ATEX irrigation/drainage applications

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Single-pump Switchgear, Level-dependent, Non-ATEX-compliant

Hyper, multi-functional plug

Product benefits

- Simple compact plug-type control unit for controlling one pump with a three-phase motor as a function of the fill level
- Comprehensive protection of the pump by existing thermal circuit breaker of the pump and motor protection relay
- Extensive monitoring and information provided by direction of rotation, pump “in operation” and fault display
- Straightforward installation, commissioning and operation

Further information

Prices on request

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

Compact switchgear for level-dependent control and protection of one three-phase motor (400 V / 50 Hz). The motor is started DOL.

IP54 enclosure

Main applications

- Single-pump switchgear, level-dependent, non-ATEX for drainage applications

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Control Units, Non-ATEX-compliant

UPA Control

http://shop.ksb.com/catalog/k0/en/product/ES000006

Product benefits

- Space-saving design with a combination of functions including dry running protection and fully automatic operation in one device

Further information

Prices on request

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

The KSB switchgear is suitable for level control and protection of submersible borehole pumps, submersible motor pumps and dry-installed pumps with single-phase AC motors 1~ 230 V or three-phase motors 3~ 230 / 400 V / 50 Hz. The motor is started DOL. Enclosure: IP56, dimensions: 205 × 255 × 170 mm (H × W × D).

Main applications

- Switching of submersible borehole pumps
- Switching of dry-installed pumps
- Switching of systems with pressure switch or float switch
- Dry running protection
- Water level control

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Control Units, ATEX-compliant and Non-ATEX-compliant

LevelControl Basic 2

BS BC

http://shop.ksb.com/catalog/k0/en/product/ES000603

Product benefits

- Ample connection space allows straightforward connection of pumps and sensors
- Reliability provided by detailed information on the display, including key measurement values and parameters as well as "in operation" and general fault indication per pump
- Comprehensive functionality for high system availability

Further information

Prices on request

Dimensions 1042
Accessories 1043

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

General description

Level-dependent pump control and monitoring unit with display for either 1 or 2 pumps.

LevelControl Basic 2 can be used for tank drainage and tank filling.[624)].

The ATEX-compliant version of the control unit can be used for pumps in potentially explosive atmospheres. The control unit is installed outside the potentially explosive atmosphere.

Main applications

Used for:

- Grey water
- Waste water
- Service water supply
- Waste water lifting units / pump stations

Applications:

- Draining of pits, shafts, etc.
- Dewatering
- Drainage
- Water extraction
- Transport
- Disposal

Compatible pumps:

- Ama-Drainer
- Ama-Drainer-Box (LevelControl Basic 2 included in the scope of supply)
- MK
- Ama-Porter
- Amarex
- Amarex KRT
- CK pump stations (LevelControl Basic 2 included in the scope of supply in some cases)
- mini-Compacta / Compacta (LevelControl Basic 2 included in the scope of supply)
- Sewatec / Sewabloc
- Etaline
- Etanorm / Etabloc
- Other pumps on request

624 Using float switches, digital level switches or 4-20 mA analog sensors

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Fluids handled

- Waste water with/without faeces
- Service water
- Waste water
- Wash water
- River water, lake water and groundwater

Designation

Example: BC 2 400 D F N O 100

Designation key

Code	Description	
LevelControl	Type series	
BC	Type	
	BC	Basic Compact (plastic housing)
	BS	Basic control cabinet (sheet steel housing)
2	Number of pumps	
	1	Single-pump station
	2	Dual-pump station
400	Voltage, number of wires	
	230	230 V, 3-wire connection
	400	400 V, 4-wire connection / 5-wire connection
D	Starting method	
	D	DOL starting up to 4 kW[625)]
	S	Star-delta starting up to 22 kW[625)]
	W	Soft start
	X	3-wire connection capacitor motor 25 µF
	Y	3-wire connection capacitor motor 40 µF
	Z	3-wire connection capacitor motor 40 µF, start capacitor 66 µF
F	Sensors	
	F	Float switch
	P	Pneumatic level measurement 3.5 m
	M	Pneumatic level measurement 10.5 m
	L	Bubbler control 2 m
	H	Bubbler control 3 m
	U	Analog input 4 - 20 mA
	V	Voltage input 0.5 - 4.5 V
	D	Digital level switch
N	ATEX	
	N	Without ATEX functions
	E	With ATEX functions
O	Installation variants	
	O	Standard
	A	With rechargeable battery
	M	With motor protection switch (if not included in standard version)
	N	With rechargeable battery and motor protection switch (if not included in standard version)
	P	With PTC relay (if not included in standard version; standard for 5.5 kW and above)
	Q	With rechargeable battery and PTC relay (if not included in standard version)
100	Nominal current	
	010	1,0 A
	016	1,6 A
	025	2,5 A
	040	4,0 A
	063	6,3 A
	100	10 A
	140	14 A
	180	18 A
	230	23 A

625 Higher ratings on request.

Code	Description	
100	250	25 A
	400	40 A
	630	63 A
	>63 A available on request	

Variants

LevelControl Basic 2 is available in 2 variants:

- Type Basic Compact (plastic housing)
- Type Basic Control Cabinet (sheet steel housing)

Type Basic Compact (BC)

Pump control and monitoring unit with display in compact housing for 1 or 2 pumps with power ratings of up to 4 kW each. Level detection performed using at least one float switch, an analog sensor 4-20 mA or an integrated pressure sensor (pneumatic or bubbler control up to 2 mwc[626]), for motors with DOL starting.

Type Basic Control Cabinet (BS)

Pump control and monitoring unit with display in steel housing for 1 or 2 pumps. Level detection performed using at least one float switch, an analog sensor 4-20 mA or an integrated pressure sensor (pneumatic or bubbler control) for motors with DOL starting or star-delta starting.

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

626 For bubbler control in BC housing, option O1 (master switch in BC housing) cannot be used.

Technical data

Level Control Basic 2

The control unit is selected on the basis of the nominal current of the pump. Higher currents and power ratings are available on request.

The standard variant of LevelControl Basic 2 is not suitable for use in IT mains. Variants for IT mains are available on request.

For the following special voltages (3~ only) LevelControl Basic 2 can be configured via KSB EasySelect:

- 208 V, 220 V, 230 V, 380 V, 415 V, 440 V, 460 V, 480 V, 500 V

Technical data

Characteristic		Value	
		Type Basic Compact (BC)	Type Basic Control Cabinet (BS)
Nominal operating voltage	U [V AC]	3~400: +10 %-15 % 1~230: +10 %-15 %	
Mains frequency	F [Hz]	50 / 60 Hz ± 2 %	
Nominal insulation voltage	U [V AC]	500	
Nominal current per motor	I [A]	1 to max. 10	1 to max. 63
Rated power per motor	P [kW]	DOL starting: up to max. 4	DOL starting / star-delta starting: 0.35 to 30
Enclosure		IP54	
Material		Plastic (polycarbonate) Colour: RAL 7035, light grey	Sheet steel Colour: RAL 7035, light grey
Operating temperature	T [°C]	-10 to +50	
Bearing temperature	T [°C]	-10 to +70	

Level Control Basic 2 sensors

4 float switches/digital level switches, 12-25.2 V DC or 230 V AC

For ATEX with float switches:

- ATEX-compliant versions in BS housing
- Single-pump station: 2 intrinsic safety barriers, type Stahl 9002/13-280-093-001
- Dual-pump station: 3 intrinsic safety barriers, type Stahl 9002/13-280-093-001

For ATEX with digital level switches (selected via KSB EasySelect):

- ATEX-compliant versions in BS housing
- Single-pump station: incl. 3 intrinsic safety barriers, type Stahl 9002/13-280-093-001
- Dual-pump station: incl. 4 intrinsic safety barriers, type Stahl 9002/13-280-093-001

4-20 mA

- 2-wire connection and 3-wire connection
- Input resistance ≤ 300 Ω
- ATEX-compliant versions in BS housing
- For ATEX-compliant version incl. 1 analog intrinsic safety barrier, type Stahl 9002/13-280-110-001

Integrated pneumatic pressure sensor

- For open pressure bell or closed pressure bell
- Up to 3 metres of water
- Optional: up to 10 metres of water

Integrated pressure sensor with compressor for bubbler control

- For open pressure bell
- Compressor up to 2 metres of water
- Optional: up to 3 metres of water

Motor protection sensors

- Maximum of two (thermal circuit breaker) bimetal switches for each pump, 24 V, motor monitoring
- From 5.5 kW star-delta starting: PTC thermistor for motor monitoring for each pump (optionally available for < 5.5 kW)
- Max. 1 moisture monitor for each Amarex / Amarex KRT pump

Process inputs

- 1 external alarm input, 24 V
- 1 remote acknowledgement, 24 V

Process outputs

- Volt-free signalling output changeover contact (250 V, 1 A, NO/NC contact)
- Signalling output (12.6 to 13.2 V, max. 200 mA), e.g. for connecting a horn, alarm combination or alarm strobe light (12 V)

Rechargeable battery

Connection for rechargeable battery, for mains-independent power supply of:

- Electronics
- Sensors
- Alarm equipment

Battery life:

- Approx. 10 hours when supplying the integrated piezo buzzer 85 dB(A), electronics, and sensors
- Approx. 4 hours when supplying external alarm equipment (e.g. horn, alarm combination, or alarm strobe light)

Charging time:

- Approx. 11 hours (if battery is fully discharged)

Dimensions

LevelControl Basic 2

Dimensions and weights

Type	Nominal current per pump max. [A]	H × W × D [mm]	[kg]
BC	10	400 × 281 × 135	4,5 - 4,7
BS1	10	400 × 300 × 155	12
BS1[627)]	10	600 × 400 × 200	12
BS1	14	600 × 400 × 200	20
BS1	18	600 × 400 × 200	20
BS1	23	600 × 400 × 200	20
BS1	25	600 × 400 × 200	20
BS1	40	800 × 600 × 200	30
BS1	63	800 × 600 × 200	30
BS2	10	400 × 300 × 155	13
BS2[627)]	10	600 × 400 × 200	13
BS2	14	800 × 600 × 200	30
BS2	18	800 × 600 × 200	30
BS2	23	800 × 600 × 200	30
BS2	25	800 × 600 × 200	30
BS2	40	800 × 600 × 200	33
BS2	63	800 × 600 × 200	33

627 ATEX-compliant version with float switch or digital switch

Accessories

Optional Components

LevelControl Basic 2 can be configured via KSB EasySelect for the following special voltages (3~ only):

- 208 V, 220 V, 230 V, 380 V, 415 V, 440 V, 460 V, 480 V, 500 V

LevelControl Basic 2 optional components[628)]

Item		Description	Mat. No.	[kg]
	O1	Master switch for LevelControl Basic 2 BC, fitted	01143084	0,2
	O2	Control cabinet heating for type BS, fitted	19074269	0,3
	O7	Intrinsic safety barrier for additional float switch in potentially explosive atmospheres, for example, high water float switch for pneumatic measurement or bubbler control in potentially explosive atmospheres Only in combination with type BS: Stahl 9002/13-280-093-001	01085568	0,2
	O9	Intrinsic safety barrier for 4-20 mA in potentially explosive atmospheres Only in combination with type BS: Stahl 9002/13-280-110-001	01110746	0,1
	O10	Outdoor cabinet type 142 with base, for type BC External dimensions H × W × D [mm]: 1420 × 320 × 225 Internal dimensions H × W × D [mm]: 600 × 276 × 165 IP 44, glass fibre reinforced polyester, colour: RAL 7035, locking device: profile half cylinder, can be buried	19071911	15
	O11	Outdoor cabinet type 0/845 for types BS1 (up to 25 A) and BS2 (up to 10 A) Control unit housing dimensions H × W × D [mm]: 400 × 300 × 155 and 600 × 400 × 200 Dimensions of upper section H × W × D [mm]: 845 × 585 × 315 Dimensions of base H × W × D [mm]: 900 × 585 × 315 IP44, glass fibre reinforced polyester, colour: RAL 7035, DIN 43 629, locking device: profile half cylinder, can be buried, including metal frame for setting in concrete	19071440	40
	O12	Outdoor cabinet type 1/1005 for types BS1 (from 40 A) and BS2 (from 14 A) Dimensions of control unit housing H × W × D [mm]: 800 × 600 × 200 Dimensions of upper section H × W × D [mm]: 1005 × 780 × 315 Dimensions of base H × W × D [mm]: 900 × 780 × 315 IP44, glass fibre reinforced polyester, colour: RAL 7035, locking device: profile half cylinder, suitable for buried installation, including metal frame for setting in concrete	19071960	57
	O14	Plastic wall-mounted cabinet for type BC Additional housing for LevelControl Basic 2 type BC, single-pump / dual-pump station, up to 10 A Enclosure: IP66, Wall-mounted model, lock: double-bit key, colour: RAL 7035 Dimensions H × W × D [mm]: 530 × 430 × 200 Material: impact-resistant, glass fibre reinforced, unsaturated polyester, self-extinguishing to ASTM D 635 and UL 94 VO, temperature-resistant between -30 °C and 80 °C	01822669	10
-	O15	Outdoor cabinet for type BS Dimensions of housing H × W × D [mm]: 1200 × 800 × 300 Complete with rain canopy, base suitable for buried installation, and locking system Dimensions of upper section H × W × D [mm]: 1500 × 1000 × 420 Dimensions of base H × W × D [mm]: 900 × 1000 × 420 Enclosure: IP54 to IEC 60529, weather-proof design Material: glass fibre reinforced polyester, colour: RAL 7035 Locking system with handle, profile half cylinder and 3 keys Base suitable for buried installation	19066405	99,5
	O200	Signalling module for LevelControl Basic 2 BC	19075182	0,2
	O201	Signalling module for type BC, with pressure sensor 3 mWC for redundant pneumatic level measurement or redundant bubbler system	19075183	1,1
	O202	Signalling module for type BC, with pressure sensor 10 mWC for redundant pneumatic level measurement	19075184	1,4
	O203	Signalling module for type BS[629)]	19075185	1,1
	O204	Signalling module for type BS, with pressure sensor 3 mWC for redundant pneumatic level measurement or redundant bubbler system[629)]	19075186	0,8
	O205	Signalling module for type BS, with pressure sensor 10 mWC for redundant pneumatic level measurement[629)]	19075187	0,8

628 Processed via KSB EasySelect, to avoid supply as unmounted item.

629 The initial scope of supply is configured via KSB EasySelect; when retrofitting check beforehand whether there is sufficient space in the control cabinet.

Item		Description		Mat. No.	[kg]
	O210	Pump current measuring module Can only be used in combination with signalling module	Measuring range: 0.5 - 10 A (15 A)	19075188	0,15
	O211		Measuring range: 10 - 20 A (30 A)	19075189	0,15
	O212		Measuring range: 20 - 40 A (60 A)	19075190	0,15
	O213		Measuring range: 40 - 75 A (110 A)	19075191	0,15

Control unit/switchgear accessories

Control unit / switchgear accessories

Item		Description	Cable length / tube length [m]	Mat. No.	[kg]
	E60	Float switch with free cable end Function: circuit closed in upper float position (NO contact) Float switch housing: polypropylene Fluid temperature: 70 °C max. Power cable: H07RN-F3G1	3	11037742	0,5
			5	11037743	0,8
			10	11037744	1,3
			15	11037745	1,8
			20	11037746	2,4
			25	11037747	2,9
			30	11037748	3,4
			40	01888522	5,2
			50	01888523	6,1
	E61	Float switch with free cable end, oil-resistant Function: circuit closed in upper float position (normally open contact) Float switch housing: polypropylene Fluid temperature: 70 °C max. Power cable: PUR 3×1.0 mm²	5	11037753	0,8
			10	11037754	1,2
			20	11037755	2
	E63	Float switch with free cable end(NO contact) With declaration of compliance with explosion protection standards Function: Circuit closed in upper float position Power cable: (H07RN-F 3G1)	5	01148226	0,7
			10	01148247	1
			20	01148248	2
	E64	F1 leakage sensor contactor for alarm switchgears AS 0, AS 2, AS 4 or as alarm transmitter for LevelControl Basic 2 Alarm transmission options: High water alert by suspending the sensor in a (pump) sump above the pump start-up point. Warning at a water level of 1 mm in areas with a flooding or leakage risk (e.g. in the cellar or next to the washing machine in the kitchen or bathroom) Dimensions [mm]: 52 × 21 × 20 (H × W × D)	3 m	19072366	0,2
	E65	Open pressure bell set, pneumatic and bubbler control with polyamide tube 8 x 1 mm	10	19071721	1,2
			20	19071837	2
			50	19074200	2,5
	E66	Closed pressure bell set, pneumatic with polyamide tube 8 x 3 mm	10	19071722	3,5
			> 10	On request	-
	E70	Horn, 12 V DC, 105 dB, 150 mA, IP54 suitable for indoor installation and outdoor installation. Protect against moisture.	-	01086547	0,1
	E71	Alarm combination (yellow lamp and piezo buzzer 92 dB), 12 V DC, 120 mA, IP65	-	01139930	0,1
	E72	Yellow alarm strobe light, 12 V DC, 195 mA, IP65	-	01056355	0,3
	E73	KSB ServiceTool for Windows XP, RS 232 interface	-	47121210	0,2
	E90	Rechargeable battery retrofit kit for LevelControl Basic 2, type BC Scope of supply: 2 rechargeable batteries (6 V, 1.3 Ah) and charge controller	-	19074194	0,8

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Item		Description	Cable length / tube length [m]	Mat. No.	[kg]
	E91	Rechargeable battery retrofit kit for LevelControl Basic 2, type BS Scope of supply: 1 rechargeable battery (12 V, 1.2 Ah) and charge controller[630)]	-	19074199	1
	E95	Plastic handle with safety cylinder insert for KS wall-mounted cabinet (O14) Order 2 pieces for KS cabinet.	-	01855128	0,086
-	E100	Operating manual in German[631)]	-	01148254	0,155
		Operating manual in English[631)]	-	01148255	0,155
		Operating manual in French[631)]	-	01148256	0,155
		Operating manual in Dutch[631)]	-	01148337	0,155
		Operating manual in Spanish[631)]	-	01148338	0,155
		Operating manual in Swedish[631)]	-	01148339	0,155
		Operating manual in Finnish[631)]	-	01148340	0,155
		Operating manual in Polish[631)]	-	01148341	0,155
		Operating manual in Italian[631)]	-	01148342	0,155
		Operating manual in Czech[631)]	-	01148343	0,155
		Operating manual in Russian[631)]	-	01149725	0,155
		Operating manual in Hungarian[631)]	-	01148344	0,155
		Operating manual in Turkish[631)]	-	01235989	0,155
		Operating manual in Bulgarian[631)]	-	01350442	0,155
		Operating manual in Slovakian[631)]	-	01350443	0,155
		Operating manual in Romanian[631)]	-	01372504	0,155
		Operating manual in Danish[631)]	-	01425519	0,155
		Operating manual in Croatian[631)]	-	01434132	0,155
		Operating manual in Serbian[631)]	-	01434131	0,155
		Operating manual in Slovenian[631)]	-	01427735	0,155
		Operating manual in Norwegian[631)]	-	01470719	0,155
		Operating manual in Estonian[631)]	-	01623524	0,155
		Operating manual in Portuguese[631)]	-	01802910	0,155

630 The initial scope of supply is configured via KSB EasySelect; when retrofitting check beforehand whether there is sufficient space in the control cabinet.

631 For additional copies. The operating manual and the parameter label are enclosed with the device. The operating manual can be downloaded free of charge from the KSB website (www.ksb.com).

Variable Speed Systems

PumpDrive 2 / PumpDrive 2 Eco

http://shop.ksb.com/catalog/k0/en/product/ES000911

Product benefits

- Additional energy savings by compensation of flow rate dependent pipe friction losses by dynamic pressure compensation
- Increased operating reliability and largest possible efficiency for any operating conditions by integrated multiple pump operation
- High availability as well as safe and quick commissioning of the pump through characteristic curve monitoring and operating point estimation
- Process reliability by flow rate estimation based on power or differential pressure measurement and characteristic curve function (characteristic curve included in factory default configuration)

Further information

Prices on request

Dimensions 1058

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

PumpDrive 2

- Air-conditioning systems
- Heat generation / heat distribution
- Water supply systems
- Water extraction / water withdrawal
- Water treatment / water conditioning
- Water distribution / water transport
- Refrigeration / cooling distribution
- Heat generation / heat distribution
- Fluid transport
- Cooling lubricant distribution
- Service water supply
- Tank drainage
- Waste water transport

PumpDrive 2 Eco

- Air-conditioning systems
- Heat generation / heat distribution
- Water supply systems

General description

Modular self-cooling frequency inverter that enables continuously variable speed control of asynchronous and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel. As PumpDrive is self-cooling, it can be mounted on a motor, on the wall or in a control cabinet. Up to six pumps can be controlled without needing an additional controller.

Mounting options

The frequency inverter is identical in design and configuration for all 3 mounting options. PumpDrive 2 can be motor-mounted for the entire power range from 0.37 kW to 55 kW.

Motor mounting: The frequency inverter is mounted to the motor with an adapter or to the pump for the Movitec configuration. Adapters for subsequent conversion to the motor mounting configuration for existing pump systems are available as accessories.

Wall / control cabinet mounting: Installation kits for subsequent conversion to the wall / control cabinet mounting configuration for existing pump systems are available as accessories.

Designation

Designation example

Position																												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
P	D	R	V	2	I	-	0	1	1	K	0	0	M	_	K	S	U	P	B	E	5	P	2	_	O	O	O	O	O

Designation key

Position	Code	Description	MyFlow Drive	PumpDrive 2 Eco	PumpDrive 2
1-5	Product generation				
	PDRV2	PumpDrive 2	✗	✗	✗
6	Design				
	E	PumpDrive 2 Eco	-	✗	-
	I	MyFlow Drive	✗	-	-
	-	PumpDrive 2	-	-	✗
7	Product certifications				
	-	CE	✗[632)]	✗	-
	R	UR and CE	✗[633)]	-	✗
	L	UL and CE	-	-	✗[634)]
8-13	Power				
	A	000K37 = 0,37 kW	-	✗	✗
		000K55 = 0,55 kW	✗	✗	✗
		000K75 = 0,75 kW	✗	✗	✗
		001K10 = 1,1 kW	✗	✗	✗
		001K50 = 1,5 kW	✗	✗	✗
	B	002K20 = 2,2 kW	✗	✗	✗
		003K00 = 3 kW	✗	✗	✗
		004K00 = 4 kW	✗	✗	✗

632 Available only for sizes ≤ 11 kW
633 Available only for sizes 15 kW to 45 kW
634 Available on request only

Position	Code	Description	MyFlow Drive	PumpDrive 2 Eco	PumpDrive 2
8-13	C	005K50 = 5,5 kW	✗	✗	✗
		007K50 = 7,5 kW	✗	✗	✗
		011K00 = 11 kW	✗	✗	✗
	D	015K00 = 15 kW	✗	-	✗
		018K50 = 18,5 kW	✗	-	✗
		022K00 = 22 kW	✗	-	✗
		030K00 = 30 kW	✗	-	✗
	E	037K00 = 37 kW	✗	-	✗
		045K00 = 45 kW	✗	-	✗
		055K00 = 55 kW	-	-	✗
14	Mounting option				
	M	Motor mounting	✗	✗	✗
	W	Wall mounting	-	✗	✗
	C	Cabinet mounting	-	✗	✗
16	Motor manufacturer				
	K	KSB	✗	✗	✗
	S	Siemens	-	✗	✗
	C	Cantoni	-	✗	✗
	W	Wonder	-	✗	✗
17-20	Motor type				
	1LE1	Siemens 1LE1/ KSB 1PC3	-	✗	✗
	1LA7	Siemens 1LA7/ KSB 1LA7	-	✗	✗
	1LA9	Siemens 1LA9/ KSB 1LA9	-	✗	✗
	1LG6	Siemens 1LG6/ KSB 1LG6	-	✗	✗
	SUPB	KSB SuPremE B	✗	✗	✗
	DMC	KSB(DM) Cantoni	-	✗	✗
	DMW	KSB(DM) Wonder	-	✗	✗
21-22	Efficiency class				
	E1	IE1	-	✗	✗
	E2	IE2	-	✗	✗
	E3	IE3	-	✗	✗
	E4	IE4	✗	✗	✗
	E5	IE5	✗	✗	✗
23-24	Number of motor poles				
	P2	2 poles	✗	✗	✗
	P4	4 poles	✗	✗	✗
	P6	6 poles	-	✗	✗
26	M12 module				
	O	None	✗	✗	✗
	M	M12 module	-	✗	✗
27	Field bus module				
	O	None	✗	✗	✗
	L	LON	-	-	✗
	P	Profibus DP	-	-	✗
	M	Modbus RTU	✗[635)]	✗	✗
	B	BACnet MS / TP	-	✗	✗
	N	Profinet	-	✗	✗
28	Optional component 1				
	O	None	✗	✗	✗
	I	I/O extension board	-	-	✗
29	Optional component 2				
	O	None	✗	✗	✗
	R	Bluetooth module	-	✗	✗

635 Consult the manufacturer.

Position	Code	Description	MyFlow Drive	PumpDrive 2 Eco	PumpDrive 2
30	Optional component 3				
	O	None	✗	✗	✗
	M	Master switch	-	-	✗

Applications

Possible combinations of pump and frequency inverter

Pump	Motor manufacturer	Motor-mounted model (with suitable adapters)	Wall-mounted model	Cabinet-mounted model
Amarex KRT	KSB	-	✗	✗
Etaline	▪ KSB SuPremE C1/ C2 and D1/ D2 motor, IE4/ IE5 ▪ Siemens motor, IE3	✗	✗	✗
Etaline-R		✗	✗	✗
Etaline Z		✗	✗	✗
Etabloc		✗	✗	✗
Etanorm		✗	✗	✗
Etachrom		✗	✗	✗
HPK-L		✗	✗	✗
MegaCPK		✗	✗	✗
Multitec		✗	✗	✗
Omega		✗	✗	✗
Sewatec		✗	✗	✗
Sewabloc		-	✗	✗
Vitachrom		✗	✗	✗
Movitec	KSB (DM) ▪ Cantoni motor ▪ Wonder motor (up to 7.5 kW) ▪ Siemens motor (11 kW and above with thrust bearing housing), IE2, IE3	✗[636)]	✗	✗
UPA	KSB	-	✗	✗

Motor-independent frequency inverter

Motor manufacturer	Motor-mounted model (with suitable adapters)	Wall-mounted model	Cabinet-mounted model
Available for all makes[637)]	Motor assembly on request as it must be checked whether the available motor adapters fit	✗	✗

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

636 Frequency inverter is mounted on pump flange.
637 Standard asynchronous motors to IEC 60072/ IEC 60034. (The motor used must be suitable for use with a frequency inverter).

PumpDrive 2, motor-mounted / wall-mounted / cabinet-mounted models (enclosure IP55)

PumpDrive 2, motor-mounted / wall-mounted / cabinet-mounted models (enclosure IP55)

Housing type	P_N	PumpDrive (parameters not pre-set) + control panel (graphical)	
	[kW]	Mat. No.	[kg][638)]
A	0,37	01608493	5
A	0,55	01608494	5
A	0,75	01608495	5
A	1,10	01608496	5
A	1,50	01608497	5
B	2,20	01608498	6,5
B	3,00	01608499	6,5
B	4,00	01608500	6,5
C	5,50	01608501	12,6
C	7,50	01608502	12,6
C	11,00	01608503	12,6
D	15,00	01608504	27,6
D	18,50	01608505	36
D	22,00	01608506	36
D	30,00	01608508	36
E	37,00	01608509	57,6
E	45,00	01608510	60
E	55,00	01608511	60

Optional

- M12 module
- Profibus DP
- LON
- BACnet MS / TP
- Profinet
- Modbus RTU
- Bluetooth module
- Integrated master switch
- I/O extension board

638 Without motor adapter

PumpDrive 2 Eco, motor-mounted / wall-mounted / cabinet-mounted models (enclosure IP55)

PumpDrive 2 Eco, motor-mounted / wall-mounted / cabinet-mounted models (enclosure IP55)

Housing type	P_N	PumpDrive (parameters not pre-set) + control panel (standard)	
	[kW]	Mat. No.	[kg][639]
A	0,37	01608513	4
A	0,55	01608514	4
A	0,75	01608515	4
A	1,10	01608516	4
A	1,50	01608517	4
B	2,20	01608518	5,5
B	3,00	01608519	5,5
B	4,00	01608520	5,5
C	5,50	01608521	10,5
C	7,00	01608522	10,5
C	11,00	01608523	10,5

Optional

- M12 module[640]
- Profibus DP[640]
- BACnet MS / TP[640]
- Profinet[640]
- Modbus RTU[640]
- Bluetooth module

639 Without motor adapter

640 PumpDrive 2 Eco has only got one slot. This is where the M12 module or the corresponding field bus module can be inserted.

PumpDrive 2 optional components

Fig. 335: PumpDrive 2[641] optional components

1	Master switch (optional)	▪ Can be locked ▪ Retrofit kit comprising master switch, housing components with master switch cutout and installation accessories ▪ Voltage 400 V ▪ Continuous current, master switch, size A (10 A) / size B (16 A) / size C (14 A) / size D (80 A) / size E (160 A)
2	M12 module	▪ Connection of several PumpDrive 2 (for dual-pump configuration / multiple pump configuration) via M12 module ▪ PumpMeter connection to PumpDrive 2 via Modbus using the M12 module ▪ Can be retrofitted ▪ Internal T-connector (bus looped through); uninterruptible even in the event of a frequency inverter power failure ▪ Pre-configured cables (⇨ Page 1043)
3	Field bus module (slot)	▪ For Profibus DP, Modbus RTU, LON, BACnet MS/TP, Profinet ▪ Can be retrofitted ▪ Internal T-connector (bus looped through), uninterruptible[642] even in the event of a frequency inverter power failure
4	Bluetooth module	▪ For communication with a smartphone/tablet (Android or iOS) ▪ Can be retrofitted ▪ Bluetooth 2.0 (range approx. 10 m, compatible from iOS 8) ▪ Installation in control panels of PumpDrive 2 Basic functions of the KSB FlowManager app[643]: ▪ Operation and monitoring ▪ Commissioning wizard ▪ Management of data records ▪ Updating software
5	I/O extension board (optional)	▪ Installation at the factory or retrofittable as accessory ▪ Installation in the frequency inverter Additional inputs / outputs: ▪ 1 analog input ▪ 1 analog output ▪ 3 digital inputs ▪ 2 digital outputs ▪ 1 changeover contact relay ▪ 5 NO contact relays

641 Optional components can be fitted at the factory or retrofitted.
642 This function does not apply when the Profinet module is connected in a bus topology.
643 The KSB FlowManager app is available for download from the App Store and Google Play Store free of charge.

PumpDrive 2 Eco optional components

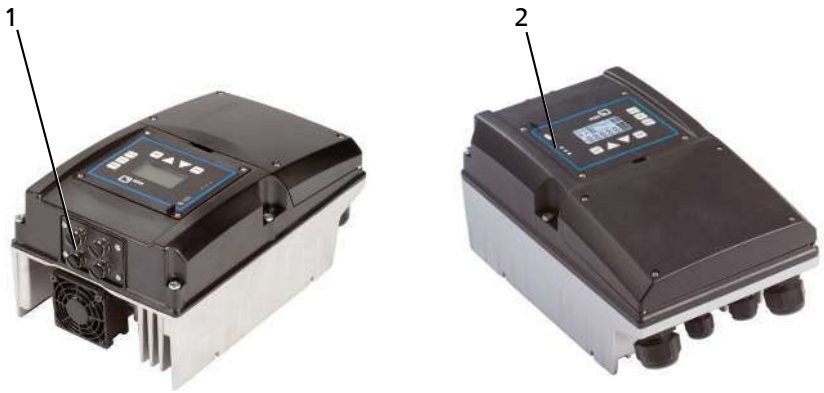


Fig. 336: PumpDrive 2 Eco optional components

1[644)]	M12 module	▪ Connection of several PumpDrive 2 (for dual-pump configuration / multiple pump configuration) via M12 module ▪ PumpMeter connection to PumpDrive 2 via Modbus using the M12 module ▪ Can be retrofitted ▪ Internal T-connector (bus looped through); uninterruptible even in the event of a frequency inverter power failure ▪ Pre-configured cables (⇨ Page 1043)
	Field bus module (slot)	▪ For Profibus DP, Modbus RTU, BACnet MS/TP, Profinet ▪ Can be retrofitted ▪ Internal T-connector (bus looped through), uninterruptible[645)] even in the event of a frequency inverter power failure
2	Bluetooth module	▪ For communication with a smartphone/tablet (Android or iOS) ▪ Can be retrofitted ▪ Bluetooth 2.0 (range approx. 10 m, compatible from iOS 8) ▪ Installation in control panels of PumpDrive 2 Eco Basic functions of the KSB FlowManager app[646)]: ▪ Operation and monitoring ▪ Commissioning wizard ▪ Management of data records ▪ Updating software

644 PumpDrive 2 Eco has only got one slot. This is where the M12 module or the corresponding field bus module can be inserted.
645 This function does not apply when the Profinet module is connected in a bus topology.
646 The KSB FlowManager app is available for download from the App Store and Google Play Store free of charge.

Functions

Overview of functions

Functions / firmware	PumpDrive 2	PumpDrive 2 Eco
Protective functions		
Thermal motor protection	✗	✗
Mains voltage monitoring	✗	✗
Phase failure, motor side	✗	✗
Short-circuit monitoring, motor side (phase to phase and phase to earth)	✗	✗
Dynamic overload protection by speed limitation (i^2t control)	✗	✗
Resonant frequency suppression	✗	✗
Broken wire detection (live zero)	✗	✗
Protection against dry running and hydraulic blockage (sensorless due to learning function)	✗	✗
Dry running protection (external control signal)	✗	✗
Operating point estimation and characteristic curve control	✗	✗
Open-loop control		
Open-loop control mode	✗	✗
Closed-loop control		
Closed-loop control mode via integrated PID controller	✗	✗
Pressure control / differential pressure control (Δp const)	✗	✗
Pressure control / differential pressure control with dynamic pressure compensation (Δp var)	✗	✗
Flow rate control	✗	✗
Sensorless differential pressure control (Δp const) in a single-pump configuration	✗	✗
Sensorless differential pressure control with dynamic pressure compensation (Δp var) in a single-pump configuration	✗	✗
Sensorless flow rate control	✗	✗
Level control	✗	✗
Temperature control	✗	✗
Alternative setpoint	✗	-
Operation and monitoring (display)		
Measured value display (pressure, head, speed, electric power, motor voltage, motor current, torque)	✗	✗
Fault history	✗	✗
Operating hours counter	✗	✗
Fault reporting via relay	✗	✗
Frequency inverter functions		
Programmable start ramps and stop ramps	✗	✗
Field-oriented control (vector control), V/f control	✗	✗
Configurable motor control method (asynchronous motor, KSB SuPremE)	✗	✗
Automatic motor adaptation (AMA)	✗	✗
Motor standstill heater	✗	✗
Manual-0-automatic mode	✗	✗
External OFF	✗	✗
External minimum speed	✗	✗
Sleep mode (stand-by mode)	✗	✗
Energy savings meter	✗	-
Pump functions		
Flow rate estimation	✗	✗
M12 module with PumpMeter bus connection	✗	✗
M12 module for dual-pump configuration	✗	✗
M12 module for multiple pump configuration with up to 6 pumps	✗	✗
Functional check run	✗	✗
Deragging	✗	✗
Integrated dual-pump configuration (1×100 % with redundant pump or 2×50 % without redundant pump)	✗	✗
Multiple pump configuration with up to 6 pumps	✗	✗
Waste water function: start-up at maximum speed	✗	-
Waste water function: rinsing function	✗	-
Operation		

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Functions / firmware	PumpDrive 2	PumpDrive 2 Eco
Control panel	✗	✗[647]
Commissioning wizard	✗	✗[648]
Favourites list	✗	-
Service interface	✗	✗

Protective functions

Sensorless protection against dry running and hydraulic blockage
Dry running of the pump is detected and the pump set is stopped before components are damaged.

Hydraulic blockage is also detected and initially a warning is displayed. If the blockage persists for a prolonged period of time, the pump set is stopped. These protective functions do not require sensors. They are based on an automatic learning function which needs to be run once during commissioning.

Dynamic overload protection by speed limitation (I^2t control)
The frequency inverter is equipped with current sensors that record the motor current and enable motor current limitation. When the defined load limit or temperature limit is reached, the speed is lowered in order to reduce the power (I^2t control). The frequency inverter then no longer operates in closed-loop control mode but maintains the operative function at a lower speed.

Characteristic curve control
The frequency inverter indicates continuous operation outside the permissible range, such as extremely low flow or extreme overload. The frequency inverter monitors the current operating point on the basis of the motor input power and the speed. In the case of extremely low flow or overload, a message is output and, depending on the settings, the pump set is switched off as required.

Open-loop and Closed-loop Control

Sensorless differential pressure control for single-pump configurations
The configurable differential pressure is kept almost constant over a broad operating range without the need for sensors. This can also be achieved using the dynamic pressure compensation function. The speed is adjusted as a function of the power input so that the required differential pressure is maintained.

Dynamic pressure/differential pressure compensation
The dynamic pressure/differential pressure compensation function compensates for pipe friction losses, which need to be considered if the pressure/differential pressure sensor is installed close to the pump or if sensorless differential pressure control is used. This ensures a virtually constant pressure/differential pressure at the consumer (e.g. heating) regardless of the flow. The dynamic pressure compensation function requires signals from two pressure sensors or one differential pressure sensor. Alternatively, sensorless dynamic differential pressure compensation can be used. The differential pressure setpoint is increased as a function of the (estimated or measured) flow rate or the speed.

Operation and monitoring

Display
Various physical data, such as the pressure, flow rate, speed, motor voltage, motor current, electric power, torque and others, can be displayed using the control panel or the service software.

Message history
The last 100 messages of the frequency inverter can be viewed. All messages are provided with a time stamp (real-time clock).

Statistics function
The frequency inverter generates utilisation statistics on the operating hours to date, runtime and number of starts.

Frequency inverter functions

Automatic motor adaptation
Automatic motor adaptation (AMA) is a method for measuring the electric parameters of the motor with the motor at a standstill. The frequency inverter's motor control method is optimised to ensure optimum motor performance and efficiency.

Motor control method
The frequency inverter's motor control method can be set for either an asynchronous motor or the KSB SuPremE motor.

Stand-by mode (sleep mode)
Sleep mode allows the single or multiple pump system to be started and stopped in line with demand. If sleep mode is activated, the frequency inverter stops the pump in the case of low flow rates, i.e. when the low flow limit or stop speed is reached. In pressure control applications, an accumulator can be filled during brief operation with an increased setpoint prior to stopping. If a drop in pressure and, thus, a flow rate requirement are detected, the pump restarts.

647 Some functions can only be parameterised and/or displayed using the KSB ServiceTool (see operating manual).
648 Only available via KSB ServiceTool or app

Pump functions

Direct connection to PumpMeter
PumpMeter can be connected to the M12 module of the frequency inverter via the Modbus interface using the M12 connector. Once they are connected, the frequency inverter and PumpMeter can automatically exchange all the data required for initialisation (pump characteristic curve, sensor data, etc.). This enables easy and straightforward commissioning, even in retrofit applications.

Deragging
If fluids with a high solids content are handled, deposits may form that may in turn impair pump operation or prevent start-up of the pump. The Deragging function serves to prevent deposits from forming in the pump, thus ensuring reliable operation. To this end, the pump is operated in the opposite direction to its normal direction of rotation at regular intervals in order to clean the hydraulic system.

Dual-pump configuration
The dual-pump configuration serves to control two pumps of identical design. Two operating modes can be set:

- In "1 pump" operating mode, the dual pump system is designed to achieve the setpoint with one pump operating at rated values (1 x 100 %).
- In "2 pumps" operating mode, the system's rated operating point is achieved with both pumps operating at rated values (2 x 50 %).

Both frequency inverters are quickly and easily connected to the respective M12 modules by way of pre-configured cables. The PumpMeter sensor signal can also be redundantly connected to the second frequency inverter as an option using a pre-configured "PumpMeter Crosslink" bus cable.

Multiple pump configuration
Up to six PumpDrives can be operated in parallel in a multiple pump configuration. One frequency inverter is used as master and controls all other available frequency inverters as slaves so that the operating point is as close as possible to the best efficiency point. If the master fails or malfunctions, the role of master can be assumed by one of the other frequency inverters. This requires, however, that the appropriate signals be made available in parallel at each frequency inverter. As with dual-pump operation, in a multiple pump configuration, the frequency inverters are quickly and easily connected to the M12 modules using pre-configured cables.

Energy-efficient pump starting and stopping
Pumps operated in a dual-pump or multiple pump configuration are started and stopped with a view to optimal efficiency. Based on the current operating point and the pump characteristic curves, the frequency inverter automatically decides when an additional pump should be started or stopped to ensure that the multiple pump system is operated as efficiently as possible.

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Graphical control panel of PumpDrive 2

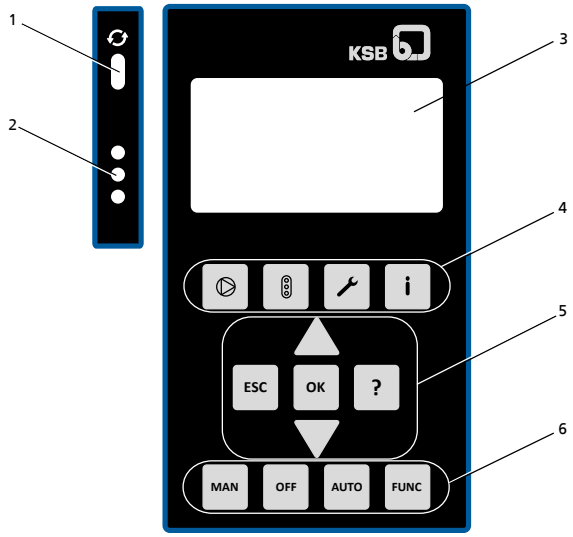


Fig. 337: Graphical control panel of PumpDrive 2

1	Service interface	▪ PumpDrive configuration and parameterisation via PC/notebook
2	LED traffic light function	▪ Traffic light function signalling the operating status of the system
3	Display	▪ Showing operating values, alerts and parameters in different national languages
4	Menu keys	▪ Change to the elements of the first menu level
5	Navigation keys	▪ Setpoint specification, parameter selection and confirmation
6	Operating keys	▪ Switching between operating modes

Standard control panel of PumpDrive 2 Eco

Fig. 338: Standard control panel of PumpDrive 2 Eco

1	Service interface	▪ PumpDrive configuration and parameterisation via PC/notebook
2	LED traffic light function	▪ Traffic light function signalling the operating status of the system
3	Display	▪ Showing the operating status, motor speed, setpoint and actual value via LEDs
4	Operating keys	▪ Switching between operating modes
5	Navigation keys	▪ Setpoint specification, parameter selection and confirmation

Dimensions

PumpDrive 2

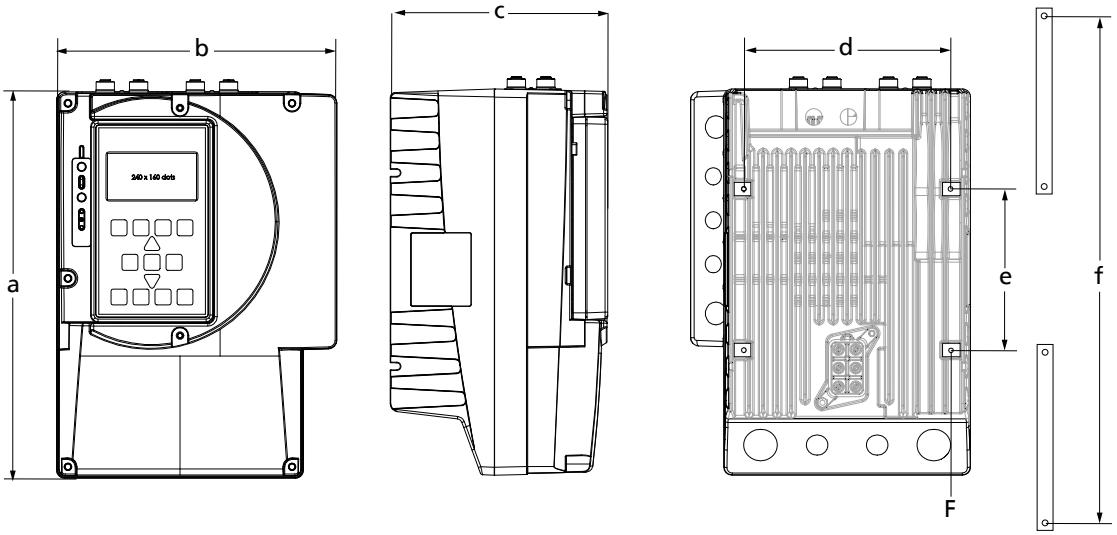


Fig. 339: PumpDrive 2 dimensions

Dimensions and weights

Housing type	P_N	Motor-mounted model					Wall-mounted/ cabinet-mounted model[649]					Fastening screws/bolts	[kg][650]
		a	b	c	d	e	a	b	c	d	f	F	
	[kW]	[mm]										-	
A	0,37	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	0,55	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	0,75	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	1,10	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
A	1,50	260	190	166	140	141	343	190	166	140	333	M4 × 10	5
B	2,20	290	211	166	155	121	328	211	166	155	318	M4 × 10	6,5
B	3,00	290	211	166	155	121	328	211	166	155	318	M4 × 10	6,5
B	4,00	290	211	166	155	121	328	211	166	155	318	M4 × 10	6,5
C	5,50	330	280	210	219	205	401	280	210	219	387	M6 × 12	12,6
C	7,50	330	280	210	219	205	401	280	210	219	387	M6 × 12	12,6
C	11,00	330	280	210	219	205	401	280	210	219	387	M6 × 12	12,6
D	15,00	460	350	290	280	309	582	350	290	280	565	M8 × 14	27,6
D	18,50	460	350	290	280	309	582	350	290	280	565	M8 × 14	36
D	22,00	460	350	290	280	309	582	350	290	280	565	M8 × 14	36
D	30,00	460	350	290	280	309	582	350	290	280	565	M8 × 14	36
E	37,00	700	455	340	375	475	819	455	340	375	800	M8 × 14	57,6
E	45,00	700	455	340	375	475	819	455	340	375	800	M8 × 14	60
E	55,00	700	455	340	375	475	819	455	340	375	800	M8 × 14	60

649 The dimensions provided refer to the frequency inverter including the wall-mounting brackets.
650 Without motor adapter

PumpDrive 2 Eco

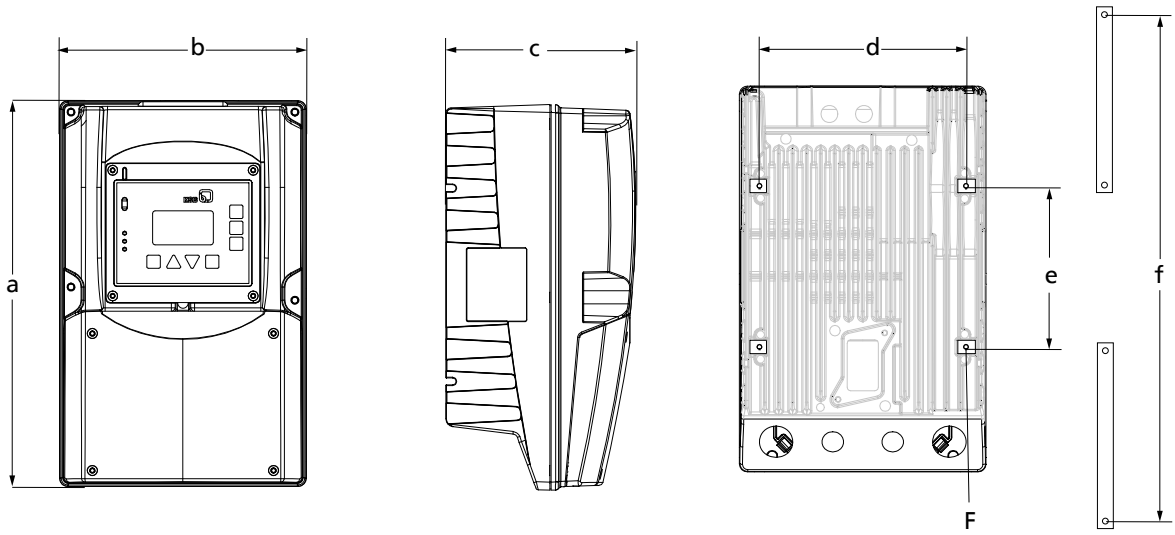


Fig. 340: PumpDrive 2 Eco dimensions

Dimensions and weights

Housing type	P_N	Motor-mounted model					Wall-mounted/ cabinet-mounted model[651]					Fastening screws/bolts	[kg][652]
		a	b	c	d	e	a	b	c	d	f	F	
	[kW]	[mm]										-	
A	0,37	260	171	144	140	141	343	171	144	140	333	M4 × 10	4
A	0,55	260	171	144	140	141	343	171	144	140	333	M4 × 10	4
A	0,75	260	171	144	140	141	343	171	144	140	333	M4 × 10	4
A	1,10	260	171	144	140	141	343	171	144	140	333	M4 × 10	4
A	1,50	260	171	144	140	141	343	171	144	140	333	M4 × 10	4
B	2,20	290	186	144	155	121	328	186	144	155	318	M4 × 10	5,5
B	3,00	290	186	144	155	121	328	186	144	155	318	M4 × 10	5,5
B	4,00	290	186	144	155	121	328	186	144	155	318	M4 × 10	5,5
C	5,50	330	255	185	219	205	401	255	185	219	387	M6 × 12	10,5
C	7,00	330	255	185	219	205	401	255	185	219	387	M6 × 12	10,5
C	11,00	330	255	185	219	205	401	255	185	219	387	M6 × 12	10,5

651 The dimensions provided refer to the frequency inverter including the wall-mounting brackets.
652 Without motor adapter

Variable Speed Systems

PumpDrive R

http://shop.ksb.com/catalog/k0/en/product/ES000898

Product benefits

- Additional energy savings by compensation of flow rate dependent pipe friction losses by dynamic pressure / differential pressure setpoint compensation
- Energy-saving mode with sleep mode function
- Emergency operation at reduced speed in the event of excessive temperature, undervoltage or mains phase failure
- Integrated PID controller e.g. for pressure, differential pressure, flow rate or temperature control
- Process reliability by dry running prevention (no-flow or low-flow detection)

Further information

Prices on request

Accessories..... 1064

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Main applications

Building services:

- Air-conditioning systems
- Heat generation / heat distribution
- Water supply systems

Water:

- Water extraction / water withdrawal
- Water treatment / water conditioning
- Water distribution / water transport

Industry:

- Refrigeration / cooling distribution
- Heat generation / heat distribution
- Water treatment
- Fluid transport
- Cooling lubricant distribution
- Water extraction
- Service water supply

Waste water:

- Tank drainage
- Waste water transport

General description

Modular self-cooling frequency inverter that enables continuously variable speed control of asynchronous and synchronous reluctance motors by means of analog standard signals, a field bus or the control panel. As PumpDrive R is self-cooling, it can be mounted on the wall or in a control cabinet. Up to six pumps can be controlled without needing an additional controller. PumpDrive R extends the power range of PumpDrive 2 up to a rated power of 160 kW (standard) / 400 kW (on request).

Installation types

Wall mounting: PumpDrive R in IP55/54 enclosure can be mounted on the wall.

Cabinet mounting: PumpDrive R in special IP20 enclosure can be mounted in the control cabinet.

Designation

Example: PDRV R 000K55 C

Designation key

Code	Description	
PDRV	PumpDrive type series	
R	R = Extended selection chart	
000K55	Power, e.g. 0.55 kW (0.75 hp)	
C	Installation type	
	C	Cabinet-mounted model
	W	Wall-mounted model

Scope

Possible combinations of pump and frequency inverter

Pump	Motor manufacturer	Wall-mounted model	Cabinet-mounted model
Amarex KRT	KSB	✗	✗
Etaline	▪ KSB SuPremE C1/ C2 and D1/ D2 motor, IE4/ IE5 ▪ Siemens motor, IE3	✗	✗
Etaline-R		✗	✗
Etaline Z		✗	✗
Etabloc		✗	✗
Etanorm		✗	✗
Etachrom		✗	✗
HPK-L		✗	✗
MegaCPK		✗	✗
Multitec		✗	✗
Omega		✗	✗
Sewatec		✗	✗
Sewabloc		✗	✗
Vitachrom		✗	✗
Movitec	KSB (DM) ▪ Cantoni motor ▪ Wonder motor (up to 7.5 kW) ▪ Siemens motor (11 kW and above with thrust bearing housing), IE2, IE3	✗	✗
UPA	KSB	✗	✗

Motor-independent frequency inverter

Motor manufacturer	Wall-mounted model	Cabinet-mounted model
Available for all makes[653)]	✗	✗

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Functions (overview)

- Variable speed control of centrifugal pumps with asynchronous motors, permanent magnet synchronous motors or KSB SuPremE synchronous reluctance motors
- Multi-functional graphical control panel
- Change between Manual / Off / Auto modes and alarm acknowledgement
- Help function for each parameter
- Quick menu for quick start-up/commissioning
- Full motor protection with PTC data analysis
- Emergency operation at reduced speed in the event of excessive temperature, undervoltage or mains phase failure
- Mains phase failure monitoring
- Real-time clock for timed control functions
- Separate operating hours counters, kWh meters and fault message memories for inverter and motor
- Trend function (integrated electronic operating data log)
- Standard cascade control, dry running of pump and no-flow/low-flow detection
- Energy-saving mode with sleep mode function
- Dynamic pressure/differential pressure setpoint compensation
- 4 internal PID controllers
- Smart logic function with 10 actions for simple drive tasks
- Control terminals galvanically isolated from the power unit
- Up to a rating of 90 kW compliant with Product Standard EN 61800-3, category C1 for use in residential, commercial and light industrial environments (first environment).
- For ratings of 110 kW and above compliant with category C2 for use in industrial environments (second environment).

653 Standard asynchronous motors to IEC 60072/ IEC 60034. (The motor used must be suitable for use with a frequency inverter).

PumpDrive R control panel

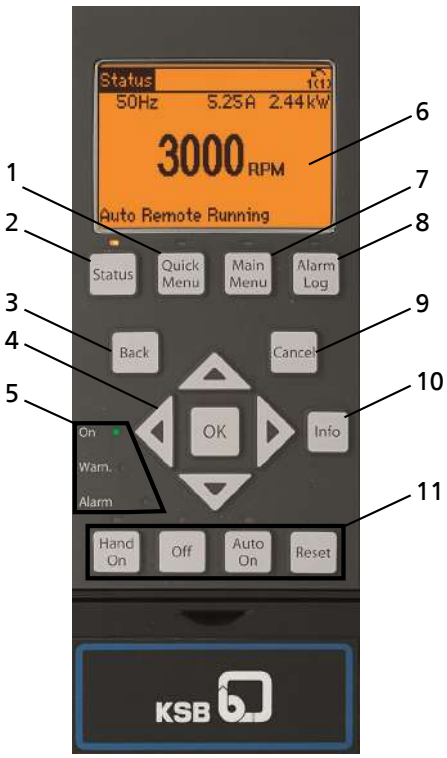


Fig. 341: PumpDrive R control panel

1	Quick Menu	▪ Quick menu for quick start-up/commissioning
2	Status	▪ Display of operating status information
3	Back	▪ Serves to return to the previous menu item or the previous list
4	Navigation key	▪ Quick navigation between menu options
5	LED traffic light function	▪ Traffic light function signalling the operating status of the system
6	Display	▪ Plain-text display in end user's language
7	Main Menu	▪ Access to all parameters
8	Alarm Log	▪ Display of fault history
9	Cancel	▪ Serves to undo the last entry if it has not been confirmed yet.
10	Info	▪ Help function for each parameter
11	Change between Manual / Off / Auto modes and alarm acknowledgement	▪ Keys for fast change to Off, or manual or automatic mode, as well as acknowledgement of alarms

Control panel functions:

- Plain-text display in end user's language
- Illustration of curves (e.g. current, voltage, energy consumption, etc.)
- Access to all system parameters
- Password protection for all frequency inverter settings
- Freely configurable user menu with separate password protection
- Saving and copying of parameter sets

Technical data

Technical data

Characteristic	Value
Mains supply	
Mains voltage	3~ 380 - 480 V ± 10 %
Extended mains voltage range (on request)	3~ 200 - 240 V or 3~ 525 - 690 V
Mains frequency	50/60 Hz
Environment	
Enclosure	IP20 for cabinet-mounted models IP55 for wall-mounted models
Inputs/outputs	
Inputs	2 x analog 4 x digital
Outputs	1 x analog 2 x digital
Terminals	2 x digital

Inputs and outputs

Description of inputs and outputs

	Design	Description
Inputs:	2 × analog	0/4 - 20 mA switchable, scalable and invertible
	4 × digital	24 V logic, selection of H-enabled or L-enabled, programmable (e.g. for release, etc.)
Outputs:	1 × analog	0/4 - 20 mA programmable and scalable
Terminals:	2 × digital	24 V logic, for use as input or output (selection of H-enabled or L-enabled)
Relays:	1 × 240 V AC 1 × 400 V AC	Both relays volt-free, programmable, ON delay and/or OFF delay (e.g. for "in operation" message and fault message, etc.)
Auxiliary voltages:	1 × 10 V DC	For 1 kΩ setpoint potentiometer and motor protection (PTC thermistor)
	2 × 24 V DC	For the digital inputs and to supply active feedback value transmitters, such as KSB PumpMeter

- Optional input (safe stop):
  A digital input for a safe stop function provided as additional terminal; may eliminate need for mains contactor for Emergency OFF (level 2 to EN 13849-1 or SIL 2 to EN 61508)
- Optional integrated fuse and mains switch
- Extended options for input/output
  On request

Accessories

Interface description

Integrated interfaces

- USB interface
- RS485 interface

Bus communication integrated as standard

- MODBUS (RTU)

Optionally available interfaces for bus communication (no combinations)

- Profibus DPV1
- ProfiNet
- Ethernet IP
- Modbus TCP
- DeviceNet

Recommended retail prices, valid from 01/01/2021
Price basis United Kingdom

Intelligent Pressure Sensors

PumpMeter

http://shop.ksb.com/catalog/k0/en/product/ES000807

Product benefits

- Transparent pump operation by on-site display of all relevant operating data, e.g. the operating point of the pump
- Identifies potential energy savings by recording and analysing the load profile and displaying the energy efficiency icon (EFF) if applicable.
- Saves time and money as the sensors are fitted to the pump at the factory, unlike conventional instruments used in systems.
- Higher availability of the pump through detection and prevention of non-intended use

Further information

Prices on request

Dimensions 1067

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

General description

The PumpMeter device is designed for monitoring pump operation. It is an intelligent pressure transmitter for pumps, with on-site display of measured values and operating data.

It records the load profile of the pump in order to indicate any potential for optimising energy efficiency and availability. The device comprises two pressure sensors and a display unit.

PumpMeter is supplied completely assembled and parameterised for the pump it is used with. It is ready for operation as soon as the M12 plug connector is plugged in.

Availability

PumpMeter is configured in KSB EasySelect to match the following type series:

- Movitec B (⇨ Page 371)
- Multitec (not Multitec-RO) (⇨ Page 383)
- Etaline (⇨ Page 528)
- Etaline Z (⇨ Page 610)
- Etaline-R (⇨ Page 569)
- Etanorm (⇨ Page 641)
- Etanorm-R
- Etachrom L (⇨ Page 675)
- Etabloc (⇨ Page 750)
- Etachrom B (⇨ Page 852)
- MegaCPK (⇨ Page 923)
- Magnochem NC / Magnochem NB PumpDrive 2 (⇨ Page 1023)
- Magnochem BC / Magnochem BC PumpDrive 2 (⇨ Page 1025)

Main applications

Industry:

- Air-conditioning systems
- Cooling circuits
- Heating systems
- Water treatment
- Cooling lubricant distribution
- Water extraction
- Service water supply

Water:

- Water supply systems
- Water treatment / water conditioning
- Water distribution / water transport

Building services:
- Air-conditioning systems
- Heating systems
- Water supply systems

Materials

Overview of materials

Wetted components	Material
Pressure sensor measuring unit	1.4542
Pressure sensor measuring unit	Titanium[654)]
Pressure sensor process connection	1.4301
Pressure sensor process connection	Titanium[654)]
Adapter for fitting a sensor[655)]	1.0037 or 1.4571
Joint ring	Centellen

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Technical data

Technical data of the display unit

Characteristic	Value
Power supply	+24 V DC ±15 %
Current input	150 mA
Analog signal output	4 - 20 mA, 3-wire
Digital connection	RS485, Modbus RTU (Slave)
Enclosure	IP65[656)]
Service interface	RS232
Storage temperature	-30 °C to +80 °C
Operating temperature	-10 °C to +60 °C

Technical data of the sensors

Characteristic	Value
Signal	4 - 20 mA
Enclosure	IP67[657)]
Fluid temperature	-30 °C to +140 °C
Fluid temperature (with insulated sensors)	-30 °C to +80 °C
Installation torque	10 Nm
Ambient temperature	-10 °C to +60 °C

Sensor pressure limits

Sensor measuring range		Overpressure limit	Burst pressure
Min.	Max.		
[bar]	[bar]	[bar]	[bar]
-1	3	40	60
-1	10	40	60
-1	16	40	60
-1	25	50	75
-1	40	80	120
-1	65	130	195
-1	80	160	240

654 Special design for seawater applications
655 Depending on the basic material variant of the pump
656 Provided that the connectors are connected correctly
657 Provided that the connectors are connected correctly

Functions

Pressure transmitter function

The discharge pressure or differential pressure of the pump are transmitted as a 4-20 mA signal. Connection via the RS485 serial interface with Modbus protocol is also possible.

Indication of operating data

The device alternately displays the suction pressure and discharge pressure as well as the differential pressure or head.

The flashing segment indicates the position of the current operating point on the generalised characteristic curve.

Recording and analysing of the load profile

The operating hours of the pump in the different modes of operation (see above) are recorded in a load profile and saved in a non-volatile memory (protected against power failure). The energy efficiency symbol (see illustration) is displayed when a potential for optimisation is recognised.

Design variants

- **Adapter:**
  Depending on thread type and size of the pump's pressure gauge connections
- **Cable length:**
  600 mm, 1200 mm or 1800 mm, depending on the pump size
- **Measuring ranges of the pressure sensors:**
  The measuring ranges are selected as a function of the maximum pump inlet pressure specified (suction-side sensor) and the maximum pump discharge pressure at zero flow (discharge-side sensor). If no maximum inlet pressure is specified, calculation is based on a maximum inlet pressure of 5 bar.

Available measuring ranges

Label colour of sensor	Colour code	Measuring range [bar]	
		Minimum	Maximum
-	Red	-1	3
-	Blue	-1	10
-	Light grey	-1	16
-	Green	-1	25
-	Black	-1	40
Silver	None	-1	65
Yellow	None	-1	80

Electrical connections

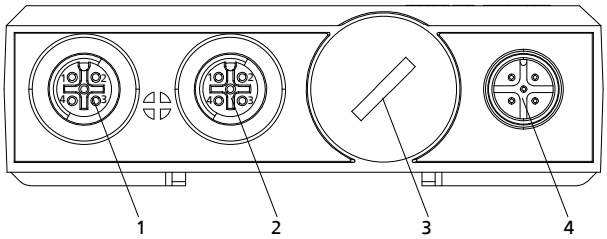


Fig. 342: Connections at the device

1	IN1 / port for the suction-side pressure sensor
2	IN2 / port for the discharge-side pressure sensor
3	Service interface
4	EXT / external port for energy supply and signal output

Dimensions

PumpMeter

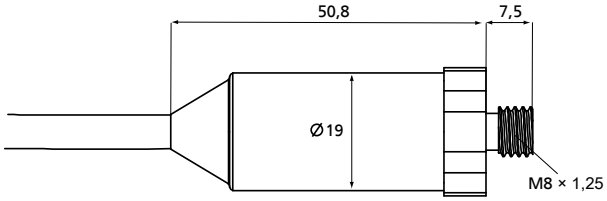


Fig. 343: Dimensions of sensor, measuring range up to 40 bar

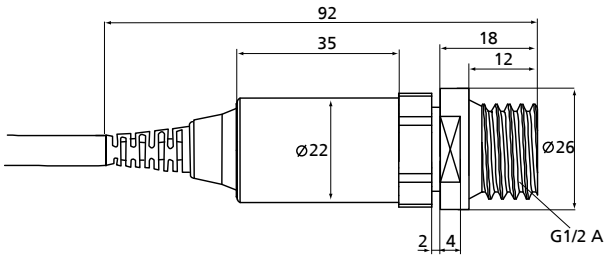


Fig. 344: Dimensions of sensor, measuring range 65 bar and above

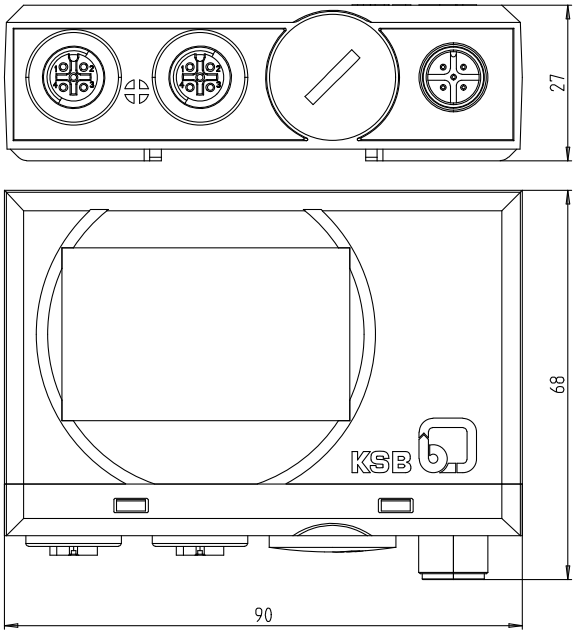


Fig. 345: Dimensions of the display unit

Scope of supply

Depending on the model, the following items are included in the scope of supply:

- Display unit fitted
- Sensors fitted with adapter

Intelligent Pressure Sensors

PumpMeter LSA

http://shop.ksb.com/catalog/k0/en/product/ES000807

Product benefits

- Transparent pump operation by on-site display of all relevant operating data, e.g. the operating point of the pump
- Identifies potential energy savings by recording and analysing the load profile and displaying the energy efficiency icon (EFF) if applicable.
- Saves time and money as the sensors are fitted to the pump at the factory, unlike conventional instruments used in systems.
- Higher availability of the pump through detection and prevention of non-intended use

Further information

Prices on request

Dimensions 1072

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

General description

The PumpMeter device is designed for monitoring pump operation. It is an intelligent pressure transmitter for pumps, with on-site display of measured values and operating data.

It records the load profile of the pump in order to indicate any potential for optimising energy efficiency and availability. The device comprises two pressure sensors and a display unit.

PumpMeter is supplied completely assembled and parameterised for the pump it is used with. It is ready for operation as soon as the M12 plug connector is plugged in.

Availability

PumpMeter LSA is configured in KSB EasySelect to match the following type series:

- Vitachrom (⇨ Page 925)
- Vitacast

Main applications

- Food industry / beverage industry
- Pharmaceutical industry
- Chemical industry

Materials

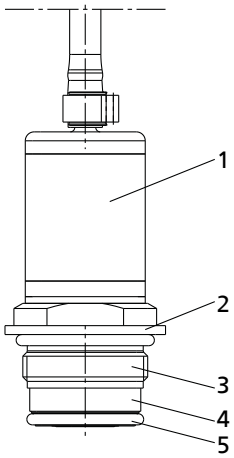


Fig. 346: Materials

1	Housing	2	Rear sealing element
3	Pipe union	4	Intermediate piece
5	Diaphragm		

Overview of materials

Wetted components	Material
Housing	1.4301
Pipe union	1.4571
Intermediate piece	1.4404
Diaphragm	1.4435
Rear sealing element	VMQ
Flush-mounted front sealing element	EPDM
Weld-in socket	1.4432

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Technical data

Technical data of the display unit

Characteristic	Value
Power supply	+24 V DC ±15 %
Current input	150 mA
Analog signal output	4 - 20 mA, 3-wire
Digital connection	RS485, Modbus RTU (Slave)
Enclosure	IP65[658)]
Service interface	RS232
Storage temperature	-30 °C to +80 °C
Operating temperature	-10 °C to +60 °C

Technical data of the sensors

Characteristic	Value
Signal	4 - 20 mA
Enclosure	IP67[659)]
Fluid temperature	-30 °C to +125 °C
CIP & SIP	140 °C / 1 hour
Installation torque	20 Nm
Ambient temperature	-40 °C to +125 °C
Measuring range	-1 to 12 bar
Overpressure range	30 bar
Burst pressure	40 bar

Functions

Pressure transmitter function
The discharge pressure or differential pressure of the pump are transmitted as a 4-20 mA signal. Connection via the RS485 serial interface with Modbus protocol is also possible.

Operating data display
The device alternately displays the suction pressure and discharge pressure as well as the differential pressure or head.

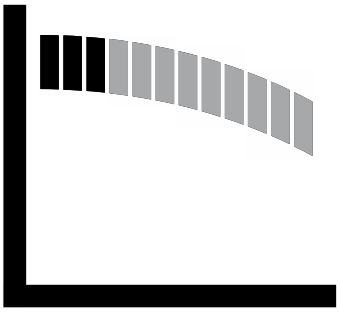
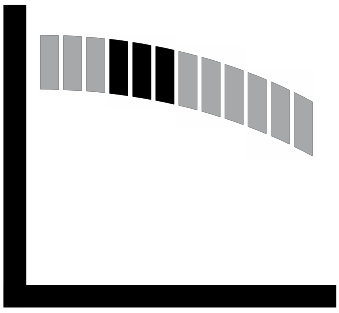
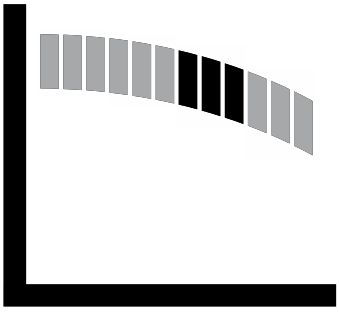
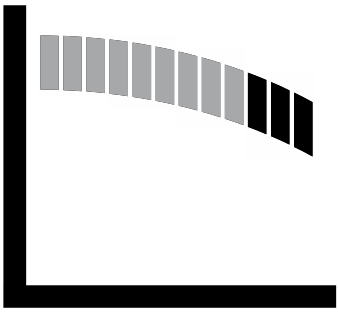
Recording and analysing of the load profile

The operating hours of the pump in the different modes of operation are recorded in a load profile and saved in a non-volatile memory (protected against power failure). The energy efficiency symbol is displayed when a potential for optimisation is recognised.

Qualitative indication of the pump's current operating point
The flashing segment indicates the position of the current operating point on the generalised characteristic curve.

658 Provided that the connectors are connected correctly
659 Provided that the connectors are connected correctly.

Qualitative indication of the pump's current operating point

Operating range	Segment display	Description
Operation in extreme part load conditions[660)] 	First quarter flashing (1)	▪ Pump possibly not operated in accordance with its intended use ▪ Increased load on the components
Operation in moderate part load conditions[660)] 	Second quarter flashing (2)	▪ Operation with potential for optimising energy efficiency
Operation near BEP 	Third quarter flashing (3)	▪ Operation within intended operating range. Optimum energy efficiency
Operation in overload conditions 	Fourth quarter flashing (4)	▪ Limit of the intended operating range ▪ Possibly overload of pump and/or motor

660 For some pump characteristics, no differentiation is made between the part load operating conditions in the curve's first two quarters (both flashing simultaneously).

Electrical connections

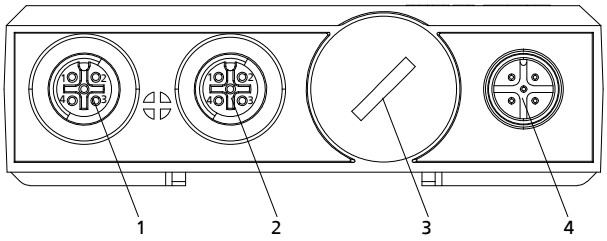


Fig. 347: Connections at the device

1	IN1 / port for the suction-side pressure sensor
2	IN2 / port for the discharge-side pressure sensor
3	Service interface
4	EXT / external port for energy supply and signal output

Dimensions

PumpMeter LSA

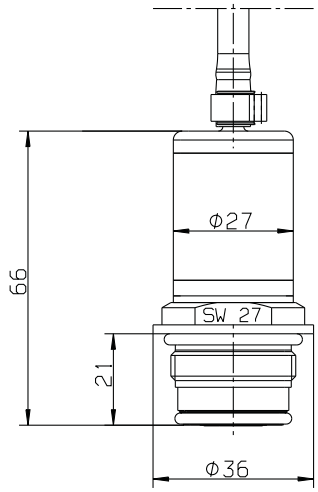


Fig. 348: Dimensions of the sensor

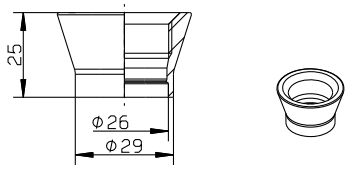


Fig. 349: Dimensions of the weld-in socket

Scope of supply

Depending on the model, the following items are included in the scope of supply:

- Display unit fitted
- Sensors supplied but not fitted

Cloud-based Data Provision

KSB Guard

http://shop.ksb.com/catalog/k0/en/product/ES000938

Product benefits

- Comprises only three components and a cloud application which allows to keep a mobile eye on the performance and status data of the pumps at all times
- Can be quickly attached to the pumps and immediately helps make the system more reliable and reduce operating costs
- Monitors all connected pumps in parallel and immediately transmits notifications if irregularities occur
- Efficient planning of maintenance work based on factual measurement data

Further information

Prices on request

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

System for monitoring the condition of pumps: Sensors on the pump record vibration and temperature data, which is processed in the KSB Cloud. Information on the pump's condition can then be accessed using the KSB Guard app or through the web portal. Easy to retrofit on pumps during operation.

Main applications

- Monitoring of dry-installed pumps
- Improved system availability
- Enhanced transparency of the entire system
- Optimised maintenance

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Intelligent Leakage Monitor for Pumps with Mechanical Seal

KSB Leakage Sensor

http://shop.ksb.com/catalog/k0/en/product/ES000982

Product benefits

- An intelligent addition to pumps handling demanding fluids, the KSB Leakage Sensor comprises a monitoring system with leakage rate measuring unit and an analysing and display unit. It serves to measure and display mechanical seal leakage on site.
- Saves maintenance costs, prevents downtime and consequential damage, does away with the need for additional spare parts, increases the operating reliability by continuous leakage rate monitoring with adjustable warning signal unit featuring acoustic signals and light signals
- Highly flexible, saves investment costs through individual installation (one leakage sensor per pump) and individual retrofitting
- Simple data transmission by integrated analog interface, allowing data to be recorded in existing process control and central management systems

Further information

Prices on request

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

The KSB Leakage Sensor is an intelligent monitoring system for measuring and displaying mechanical seal leakage on site. It comprises a leakage measuring instrument and a display unit.

Main applications

- Plant engineering
- Industry
- Heat transfer fluid pumps
- Demanding fluids

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Protection Module for Water and Waste Water Products

Amacontrol III

http://shop.ksb.com/catalog/k0/en/product/ES000946

Product benefits

- Protection and monitoring of pumps and submersible mixers by all-in-one device for motor temperature measurement, bearing temperature measurement, leakage measurement, vibration measurement and voltage measurement
- Easy to install in control cabinet on top hat rail; quick and easy wiring with spring terminals
- Straightforward commissioning as each variant is pre-parameterised for the product it will be used with
- Increased operating reliability due to warning and cut-out in the event of a fault, with warning option via general alarm contact
- Extended service life of pumps and submersible mixers by preventive maintenance information
- Simple analysis of diagnosis data with saved history, recorded operating data and trends as well as a fault history

Further information

Prices on request

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.

Description / design

Protection module for water and waste water products as all-in-one device for motor temperature measurement, bearing temperature measurement, leakage measurement, vibration measurement and voltage measurement, as well as diagnosing a pump, pump system or submersible mixer to ensure trouble-free and reliable operation.

Main applications

- Protecting and monitoring pumps, pump systems and submersible mixers in the most diverse of applications
- Diagnosing pumps, pump systems and submersible mixers to ensure trouble-free and reliable operation
- Analysing and linking data for condition monitoring
- The protection module cannot be used as the sole temperature monitoring device for explosion-proof motors in “flameproof enclosure” Ex d type of protection.
- Protection module for the following products:
  - Amacan
  - Amamix
  - Amaprop
  - Amaline
  - Amarex KRT
  - Sewatec

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

High-efficiency Drives

KSB SuPremE

The product illustrated as an example may include options incurring a surcharge.

http://shop.ksb.com/catalog/k0/en/product/ES000866

Product benefits

- Energy-efficient operation thanks to high efficiency at the rated load point
- The efficiency of the motor also exceeds 95 % of the nominal efficiency when the motor runs at 25 % of its nominal power on a quadratic torque-speed curve.
- Fully interchangeable with IE2 motors thanks to compliance with DIN EN 50347 and envelope dimensions in accordance with DIN V 42673-4
- Low noise emissions and torque ripple due to use of rotor with air gaps (in accordance with US Patent No. 5818140)
- Sturdy design, no additional sensors
- Lower rotor temperature increases service life of bearings.
- Sustainable and environmentally friendly because no magnets based on “rare earth elements” such as NdFeB are used
- Compact variable speed drive when combined with motor-mounted PumpDrive 2 / PumpDrive 2 Eco

Further information

Prices on request

Product information

Overview

Label	Effective in:	Comment
-	Europe	For information as per chemicals Regulation (EC) No 1907/2006 (REACH), see www.ksb.com/reach.
ErP 2017	Europe	-

Description / design

IEC-compatible sensorless magnetless synchronous reluctance motor (exception: motor sizes 0.55 kW / 0.75 kW with 1500 rpm are designed with permanent magnets) of efficiency class IE4 / IE5 (super/ultra premium efficiency) to IEC TS 60034-30-2:2016 for operation on a KSB PumpDrive 2, PumpDrive 2 Eco or PumpDrive R variable speed system. Suitable for connection to three-phase 380 - 480 V power supply (via PumpDrive). The motor mounting points comply with EN 50347 specifications to ensure compatibility with standardised IEC frame motor applications and full interchangeability with IE2 or IE3 standardised asynchronous motors. Envelope dimensions lie within the limits for IE2 / IE3 motors as recommended in DIN V 42673 (07-2011). The motor is controlled without rotor position sensors. The efficiency of the motor also exceeds 95 percent of nominal efficiency when the motor runs at 25 percent of its nominal power on a quadratic torque-speed curve. The motor is magnetless which means that so-called rare earths are not used in production. Drive production is thus sustainable and environmentally friendly.

Main applications

- Dry-installed pumps, in particular those that accumulate a high number of operating hours per year and have to accommodate fluctuating loads
- Rotating equipment

Prices on request

Type series	MPG	L	[kg]	Mat. No.	Price
...	...	...	...	...	...

Contents

Testing and Inspection / Service / General 1078

Testing and Inspection / Service / General

Pricing / Returns

Price Basis

All prices are exclusive of VAT. They are subject to the latest version of KSB Standard Conditions of Sale (A).
We reserve the right to amend product specifications and prices without prior notice.

Low Value Order Surcharge

Please note, a “low value order” surcharge of £30.00 will be applied to orders for goods having a total value below £150.00 nett.

Carriage

Unless stated otherwise, prices for goods supplied direct from our European factories and hubs include carriage to UK mainland sites. Carriage is not included for orders fulfilled from UK stock.
Express delivery services and timed delivery services can arranged at extra charge.

Cancellation / Returns

Orders due for despatch from UK stock may be cancelled, provided the goods have not been picked and packed. For orders thus prepared for delivery, a re-stocking charge of 35% will apply. For UK stocked goods cancelled in transit or delivered, refer to the further terms below.
Cancellation of orders for goods delivered from our European factories and hubs is not normally permitted, but if agreed will attract a cancellation charge of up to 100% of the value dependent on the progress at the time of the cancellation request.

Product Warranty Claim / Returns / Cancellation Procedure

1) Please do not return any goods without pre-approval / authority as items returned without the correct written consent of KSB will be refused / returned and a handling fee of £75 will be charged in addition to any carriage costs.

2) For all returns, cancellations and warranty claims a Return Form should be requested from KSB. Once received, the numbered form must be fully completed and returned with the goods, according to specific instructions.

3) Upon receipt of the returns package at our facility, and provided the documentation is complete, the returned item(s) will enter our processing system. Note: If the returns documentation is incomplete, the goods will not be accepted and will be returned per clause 1).

4) Warranty claims - If the returned goods are outside of our warranty terms or have failed for reasons other than a manufacturing defect, they will be held for 3 weeks before being scrapped. Should there be a requirement for the goods to be returned, then a request to this effect should be made, in writing, within this time period. Please note that a charge will be made for all such requests. This charge will include the engineer’s time for inspecting the goods, minimum £95.00 per item, plus the carriage charge. Note: An official written order to cover these charges will be required before a return will be made. Please see our Warranty Terms & Conditions below. The warranty period we offer from KSB Ltd is detailed on your quotation, if you did not receive a quotation then the warranty period is as stated in the below terms and conditions of sale.

5) Items no longer required (goods that have either been ordered incorrectly or are no longer required) – Subject to KSB’s approval of a return, there will be a minimum 35% restocking charge for all items returned to UK stock, provided they are returned unused, in full saleable condition, within 1 month of original supply, subject to clauses 2) and 3). Beyond this time period returns will not be accepted.

6) Unless agreed otherwise, returns of items that are not standard stock or that have been manufactured to order are not possible.

7) Where boxes are damaged, provided the item/pump itself is in saleable condition a re-box charge of £75.00 will be made.

8) Any item/pump returned with paint or any other damage will be considered un-saleable and scrapped in accordance with point 4. No credit will be issued.

Terms and Conditions of Sale and Delivery

KSB LIMITED

TERMS AND CONDITIONS OF SALE "A" ISSUE 4 (Sep 2020)

1. **INTERPRETATION**

1.1 In these terms and conditions the following words have the following meanings:

"Buyer"	the person(s) or company whose order for Goods and/or Services is accepted by the Company
"Company"	KSB Limited, Registered Office 2 Cotton Way, Loughborough, Leicestershire LE11 5TF.
"Contract"	any contract between the Company and the Buyer for the sale and purchase of the Goods and/or the supply of Services.
"Delivery Point"	the place where delivery of Goods and/or Services is to take place under condition 4.
"Goods"	any goods which the Company is to supply to the Buyer (including any of them or any part of them).
"Intellectual Property Rights"	copyright, patents, registered and unregistered design rights, database rights, trade marks, trade names, know-how or other intellectual or industrial property rights whether or not registered or capable of registration and whether subsisting in the U.K. or any other part of the world, together with any goodwill relating thereto.
"Services"	any services which the Company is to provide to the Buyer (including any of them or any part of them).
"Site"	any site at which the Company performs the Services.

1.2 The headings in these terms and conditions are for convenience only and shall not affect their interpretation.

2. **FORMATION AND INCORPORATION**

2.1 Subject to any variation under condition 2.4, the Contract will be on these terms and conditions set out below to the exclusion of all other terms and conditions (including any terms or conditions which the Buyer purports to apply under any purchase order, confirmation of order or similar document).

2.2 Each order for Goods and/or Services by the Buyer from the Company shall be deemed to be an offer by the Buyer to purchase Goods and/or Services subject to these terms and conditions.

2.3 No terms or conditions endorsed upon, delivered with or contained in the Buyer's purchase order, specification or similar document will form part of this Contract simply as a result of a reference to such document being made in this Contract.

2.4 Any variation to these terms and conditions and any representations about the Goods shall have no contractual effect unless expressly agreed in writing and signed by a director of the Company.

2.5 Acceptance of delivery of the Goods or the provision of the Services shall be deemed to be conclusive evidence of the Buyer's acceptance of these terms and conditions.

2.6 The Buyer must ensure that the terms of its order and any applicable specification are complete and accurate.

2.7 Any quotation is given on the basis that no Contract will come into existence until the Company despatches an acknowledgement of order to the Buyer. Any quotation is valid for a period of 30 days only from its date provided the Company has not previously withdrawn it.

2.8 Subject to condition 4.4 no order which the Company has accepted may be cancelled by the Buyer except with the written agreement of the Company and on terms that the Buyer shall indemnify the Company in full against all losses (including, but not limited to, loss of profit), costs, damages, charges and expenses suffered or incurred by the Company as a result of such cancellation.

2.9 Following the Company's acceptance of the Buyer's order, the Buyer shall forthwith supply all information, drawings and specifications as the Company may reasonably require to enable it to supply the Goods and/or Services.

2.10 Any terms and/or conditions stated in an order acknowledgment issued by the Company shall form part of the Contract and, in the event of any conflict or inconsistency between the provision of an order acknowledgement and these terms and conditions the provisions of the order acknowledgment shall apply

3. **DESCRIPTION AND TESTING**

3.1 The description of the Goods and Services shall be as set out in the Company's current catalogue or, if supplied, in the Company's quotation.

3.2 All drawings, descriptive matter, and advertising issued by the Company and any descriptions or illustrations contained in the Company's catalogues or brochures are issued or published for the sole purpose of giving an approximate idea of the Goods and/or Services described in them. They will not form part of the Contract.

3.3 The Company may make any changes to the specification, design, materials or finishes of the Goods and/or Services which are required to conform with any applicable safety or other statutory requirements.

3.4 Where the Company considers it necessary or where stated in the Company's quotation, the Company shall carry out testing on the Goods and/or Services. If the Buyer requires any additional testing not specified in its order or in the quotation the Company may charge the Buyer for such tests.

3.5 Where the tests pursuant to condition 3.4 are to be carried out away from the Company's premises the Buyer shall provide free of charge such labour, materials electricity, fuel, stores and apparatus as the Company may reasonably require in order to carry out such tests.

4. **DELIVERY**

4.1 Delivery of the Goods shall be made in accordance with the Incoterms 2020 as stated in the Company's catalogue, quotation or order confirmation.

4.2 Any dates specified by the Company for delivery of the Goods or provision of the Services are approximate only and may not be made of the essence by notice. If no dates are so specified, delivery will be within a reasonable time.

4.3 If the Company through no fault of the Buyer fails to deliver the Goods or complete its performance of the Services within 14 days after the agreed dates specified in the Contract the Company shall be liable to pay the Buyer liquidated damages of 0.5% of the price of the Goods and/or Services (or part thereof) which have not been delivered and/or performed, for each week by which the Goods or Services are performed or delivered late (calculated starting from 14 days after the agreed dates).

4.4 The liquidated damages in respect of any Contract shall not exceed 5% of the price of the Goods and/or Services (or part thereof) which have not been delivered and/or performed. These liquidated damages are accepted by the parties as a genuine pre-estimate of the net losses likely to be suffered by the Buyer. The amount of liquidated damages payable is in full and final settlement of any damages for late delivery or non-delivery of the Goods or late or non-performance of the Services.

4.5 If the Buyer fails to take delivery of any of the Goods when they are ready for delivery or to provide any instructions, documents, licences or authorisations required to enable the Goods to be delivered on time (except because of the Company's fault) the Goods will be deemed to have been delivered and (without prejudice to its other rights) the Company may:

4.5.1 store or arrange for the storage of the Goods until actual delivery or sale and charge the Buyer for all related costs and expenses (including, without limitation, storage and insurance); and/or

4.5.2 following written notice to the Buyer, sell any of the Goods at the best price reasonably obtainable in the circumstances and charge the Buyer for any shortfall below the price under the Contract.

5. **NON-DELIVERY**

5.1 The Company shall not be liable for any non-delivery of Goods and/or Services pursuant to condition 4.3 (even if caused by the Company's negligence) unless written notice is given to the Company within 14 days of the date when the Goods would in the ordinary course of events have been received.

5.2 Any liability of the Company for non-delivery of the Goods shall be limited to replacing the Goods within a reasonable time or issuing a credit note at the pro rata Contract rate against any invoice raised for such Goods.

5.3 A signature of qualified acceptance on a carrier's delivery note shall not be written notice to the Company for the purpose of these terms and conditions and in particular condition 5.1.

6. **FORCE MAJEURE**

6.1 The Company shall not be liable to the Buyer in any manner or be deemed to be in breach of this Contract (subject to condition 11) because of any delay in performing or any failure to perform its obligations under this Contract if the delay or failure was due to any cause beyond its reasonable control.

6.2 Without prejudice to the generality of condition 6.1 the following shall be included as causes beyond the Company's reasonable control:

6.2.1 governmental actions, actions of any governmental agency or quasi-governmental organisation, war or threat of war, national emergency, riot, civil disturbance, sabotage or requisition;

6.2.2 epidemic or pandemic;

6.2.3 backlogs in processing paperwork or other requirements at or around ports or other transport hubs;

6.2.4 Act of God, fire, explosion, flood, epidemic or accident;

6.2.5 insufficient capacity of any transport networks;

6.2.6 import or export restrictions, regulations or embargoes;

6.2.7 labour disputes not including disputes involving the affected party's workforce; or

6.2.8 inability to obtain or delay in obtaining supplies of adequate or suitable material, fuel, parts, machinery or labour.

7. **RISK/OWNERSHIP**

7.1 Risk of damage to or loss of the Goods shall pass to the Buyer upon delivery.

7.2 Ownership of the Goods shall not pass to the Buyer until the Company has received in full (in cash or cleared funds) all sums due to it in respect of:

7.2.1 the Goods; and

7.2.2 all other sums which are or which become due to the Company from the Buyer on any account.

7.3 Until ownership of the Goods has passed to the Buyer, the Buyer must:

7.3.1 hold the Goods on a fiduciary basis as the Company's bailee;

7.3.2 store the Goods (at no cost to the Company) separately from all other goods of the Buyer or any third party in such a way that they remain readily identifiable as the Company's property;

7.3.3 not destroy, deface or obscure any identifying mark or packaging on or relating to the Goods;

7.3.4 maintain the Goods in satisfactory condition insured on the Company's behalf for their full price against all risks to the reasonable satisfaction of the Company. On request the Buyer shall produce the policy of insurance to the Company; and

7.3.5 hold the proceeds of the insurance referred to in condition 7.3.4 on trust for the Company and not mix them with any other money, nor pay the proceeds into an overdrawn bank account.

7.4 The Buyer may resell the Goods before ownership has passed to it solely on the following conditions:

7.4.1 any sale shall be effected in the ordinary course of the Buyer's business at full market value and the Buyer shall account to the Company accordingly; and

7.4.2 any such sale shall be a sale of the Company's property on the Buyer's own behalf and the Buyer shall deal as principal when making such a sale.

7.5 Where the Company is unable to determine whether any goods are the Goods, the Buyer shall be deemed to have sold all goods of the kind sold by the Company to the Buyer in the order in which they were invoiced to the Buyer.

7.6 The Company shall be entitled to recover payment for the Goods notwithstanding that ownership of any of the Goods has not passed from the Company.

7.7 The Buyer grants the Company, its agents and employees an irrevocable licence at any time to enter any premises where the Goods are or may be stored in order to inspect them, until such time as title in the Goods has passed to the Buyer, to recover them.

7.8 Any samples of Goods supplied by the Company shall remain the property of the Company and the Company shall return the samples within the time limit specified by the Company or if no limit is specified, within 30 days of the date of receipt by the Buyer. The samples are held by the Buyer from the date of delivery until returned to the Company at the Buyer's own risk.

8. **PRICE**

8.1 The price for the Goods and/or Services shall be the price as stated in the Company's valid quotation. If no price is stated in the quotation, the price shall be as set out in the Company's published catalogue current at the date of delivery or, in the case of Services, the price shall be calculated on the basis of the hourly rates for the type of Services being performed, as published and amended by the Company from time to time.

8.2 The price for the Goods and/or Services is exclusive of any value added tax or any other applicable tax which the Buyer shall pay in addition when it is due to pay for the Goods and/or Services.

8.3 Where the Delivery Point is other than at the Company's premises the Buyer shall (if demanded by the Company) pay the Company's charges for packaging, loading, unloading and insurance in addition when it is due to pay for the Goods. The price of the Goods shall include carriage by standard carrier to the Delivery Point (provided it is on the UK mainland), unless stated otherwise in the Company's quotation or in the Contract.

8.4 The Company reserves the right to increase or decrease the price of the Goods and/or Services if the cost to the Company of supplying the Goods and/or Services increases or decreases as a direct or indirect result of a change in legislation, regulations, statutory order or other change in law or any Force Majeure event.

9. **PAYMENT**

9.1 The Company may invoice the Buyer for the Goods at any time after delivery and for the Services at any time after they have been provided.

9.2 Time for payment shall be of the essence.

9.3 The Buyer shall pay the price for the Goods and Services within 30 days following the date of the Company's invoice.

9.4 No payment shall be deemed to have been received until the Company has received cleared funds.

9.5 All payments payable to the Company under this Contract shall become due immediately upon termination of this Contract despite any other provision.

9.6 The Buyer shall make all payments due under this Contract without any deduction whether by way of set-off, counterclaim or otherwise unless the Buyer has a valid court order requiring an amount equal to such deduction to be paid by the Company to the Buyer.

9.7 The Company may appropriate any payment made by the Buyer to the Company to such of the Goods as the Company thinks fit despite any purported appropriation by the Buyer.

9.8 If the Buyer fails to make any payment under this Contract on the due date then (without prejudice to its other rights and remedies) the Company may charge the Buyer interest (both before and after judgement) on the amount unpaid at the annual rate of 4% above HSBC Bank PLC's base rate from time to time until payment is made in full (a part of a month being treated as a full month for the purpose of calculating interest).

10. **QUALITY**

10.1 Where the Company is not the manufacturer of the Goods the Company will endeavour to transfer to the Buyer the benefit of any warranty or guarantee given to the Company.

10.2 The Company warrants that (subject to the other provisions of these terms and conditions and where the Company is the manufacturer or the Goods or the benefit of the manufacturer's warranty cannot be transferred to the Buyer), unless otherwise agreed in writing, upon delivery the Goods will, and for a period until the expiry of 12 months from

their first use by the Buyer or 18 months from delivery (whichever is the sooner) from the date of delivery, be of satisfactory quality within the meaning of the Sale of Goods Act 1994.

10.3 The Company warrants that (subject to the other provisions of these terms and conditions) it will perform the Services with reasonable skill and care.

10.4 The Company shall not be liable for a breach of the warranty in condition 10.2 or 10.3 unless:

10.4.1 the Buyer gives written notice of details of the alleged breach of warranty to the Company (and if there is a defect in the Goods as a result of damage in transit, to the carrier as well) within 7 days of:

10.4.1.1 (where the defect or other breach of warranty would be apparent to the Buyer upon a reasonable inspection) the date of delivery of the Goods or in the case of the Services, the date of completion of the Services; or

10.4.1.2 (where the defect or other breach of warranty would not be apparent to the Buyer upon a reasonable inspection) the date when the Buyer knew or ought reasonably to have known of the breach of warranty; and

10.4.2 the Company is given a reasonable opportunity after receiving the notice of examining such Goods or Services and in the case of the Goods the Buyer (if asked to do so by the Company) returns such Goods to the Company for the examination to take place there.

10.5 The Company shall not be liable for breach of the warranties in conditions 10.2 or 10.3 if:

10.5.1 the defect arises because the Buyer failed to follow the Company's oral or written instructions as to the storage, installation, commissioning, use or maintenance of the Goods or Services or (if there are none) good trade practice; or

10.5.2 the Buyer alters or repairs such Goods or alters or re-performs the Services without the written consent of the Company; or

10.5.3 the defect in such Goods or Services arises from any design defect in any drawing, design or specification supplied or approved by the Buyer.

10.6 If the Buyer makes a valid claim against the Company for breach of the warranties in conditions 10.2 or 10.3 the Company shall at its option:

10.6.1 repair or replace such Goods as are defective and/or re-perform the Services (or the relevant part); or

10.6.2 refund the price of such Goods and/or Services at the pro-rata Contract rate;

provided that, in the case of the Goods if the Company so requests, the Buyer shall, at the Buyer's expense, return the Goods or the part of the Goods which are defective to the Company.

10.7 If the Company complies with condition 10.6 it shall have no further liability for a breach of the warranties in condition 10.2 and 10.3 in respect of the quality of such Goods and Services.

10.8 Any Goods replaced will belong to the Company and any repaired or replacement Goods will be guaranteed on these terms and conditions for the unexpired portion of the warranty period referred to in condition 10.2.

11. **LIMITATION OF LIABILITY**

11.1 The following provisions and the provisions of condition 10 set out the entire liability of the Company (including any liability for the acts or omissions of its employees, agents and sub-contractors) to the Buyer in respect of:

11.1.1 any breach of these terms and conditions; and

11.1.2 any representation, statement or tortious act or omission including negligence arising under or in connection with the Contract.

11.2 All warranties, conditions and other terms implied by statute or common law (save for the conditions implied by section 12 of the Sale of Goods Act 1979) are excluded from the Contract.

11.3 Nothing in these terms and conditions excludes or limits the liability of the Company for death or personal injury caused by the Company's negligence or for fraudulent misrepresentation or any other liability which cannot be excluded as a matter of law.

THE BUYER'S ATTENTION IS IN PARTICULAR DRAWN TO THE PROVISIONS OF CONDITIONS 11.4 AND 11.5

11.4 Subject to conditions 11.2 and 11.3, the Company's total liability in contract, tort (including negligence or breach of statutory duty), misrepresentation or otherwise, arising in connection with the performance or contemplated performance of this Contract shall be limited to the Contract price.

11.5 Subject to conditions 11.2 and 11.3, the Company shall not be liable to the Buyer by reason of any representation or any implied warranty, condition or other term or any duty at law or under the express terms of this Contract for:

11.5.1 any indirect or consequential loss or damage (whether for loss of profit, loss of business, depletion of goodwill or otherwise), costs, expenses or other claims for consequential compensation; and

11.5.2 any direct loss of profit, loss of business or depletion of goodwill;

(whether or not caused by the negligence of the Company, its employees, agents or sub-contractors) which arises out of or in connection with the Contract.

12. **INTELLECTUAL PROPERTY RIGHTS AND CONFIDENTIALITY**

12.1 The Buyer shall indemnify and keep indemnified the Company in full from and against all direct, indirect or consequential liability, losses, damages, costs and expenses (including legal expenses) awarded against or incurred or paid by the Company as a result of any claim that any specification, drawing, design or other information supplied by the Buyer infringes any Intellectual Property Rights or that the Goods or Services infringe any Intellectual Property Rights as a result of any specification, drawing or design supplied by the Buyer.

12.2 All Intellectual Property Rights in the Goods, Services, designs, drawings, and specifications supplied by the Company shall vest and remain vested in the Company (or, where applicable, its supplier) and the Buyer shall do or procure the doing of any acts and execute any documents as may be required to confirm this.

12.3 Each party undertakes that it shall not at any time disclose to any person any confidential information concerning the business, affairs, customers, clients or suppliers of the other party, except as permitted by clause 12.4.

12.4 Each party may disclose the other party's confidential information to its employees, officers, representatives or advisers who need to know such information for the purposes of exercising the party's rights or carrying out its obligations under the Contract. Each party shall ensure that its employees, officers, representatives or advisers to whom it discloses the other party's confidential information comply with this clause 12.4 and as may be required by law, a court of competent jurisdiction or any governmental or regulatory authority.

12.5 Neither party shall use the other party's confidential information for any purpose other than to exercise its rights and perform its obligations under or in connection with the Contract.

13. **SERVICES**

The following provisions shall apply where the Contract includes the provision of Services:

13.1 The Company shall only be obliged to carry out the Services during its normal working hours, Monday to Friday inclusive, excluding public holidays and any work carried out outside these hours will incur additional charges.

13.2 The Buyer shall at its own expense within any period specified by the Company (or where no period is specified, within a reasonable time):

13.2.1 provide proper and safe storage and protection of all goods, tools, equipment and materials brought onto the Site by the Company;

13.2.2 ensure suitable and safe access to and around the Site and COVID 19 precautions are in accordance with government guidelines at all times;

13.2.3 provide such equipment, craneage, consumable stores, water and power, scaffolding, lighting, heating, welfare facilities and guarding as specified in the Contract or as reasonably necessary to enable the Company to perform the Services;

13.2.4 provide all facilities and services as are necessary to enable the Services to be performed safely, healthily and expeditiously; and

13.2.5 check that the civil structure or Site within which the Services will be performed or Goods supplied corresponds to the Company's drawings, designs and condition reports, prior to the Company attending the Site.

13.3 Unless otherwise stated in the Company's quotation or in the Contract, the Company shall not be required to carry out any building, civil engineering or demolition work in connection with performing the Services.

14. **ANTI BRIBERY AND CORRUPTION**

14.1 The Buyer shall:

14.1.1 comply with all applicable laws, statutes, regulations, and codes relating to anti-bribery and anti-corruption including but not limited to the Bribery Act 2010 (**Relevant Requirements**);

14.1.2 not engage in any activity, practise or conduct which would constitute an offence under sections1, 2 or 6 of the Bribery Act 2010 if such an activity, practise or conduct had been carried out in the UK;

14.1.3 comply with the Company's Anti-bribery and Anti-corruption Policies (which are available for review at www.ksb.com) as the Company may update them from time to time (**Relevant Policies**).

14.1.4 have and shall maintain in place throughout the term of the Contract its own policies and procedures, including but not limited to adequate procedures under the Bribery Act 2010, to ensure compliance with the Relevant Requirements and the Relevant Policies, and will enforce them where appropriate; and

14.1.5 promptly report to the Company any request or demand for any undue financial or other advantage of any kind received by the Buyer in connection with the performance of the Contract;

14.2 Breach of this clause 14 shall be deemed a material breach of the Contract.

15. **TERMINATION**

15.1 The Contract will terminate immediately upon the happening of any one or more of the following events: the Buyer has a bankruptcy order made against him or makes an arrangement or composition with his creditors or otherwise takes the benefit of any Act for the time being in force for the relief of insolvent debtors, or (being a body corporate) convenes a meeting of creditors (whether formal or informal) or enters into liquidation (whether voluntary or compulsory), except a solvent voluntary liquidation for the purpose only of reconstruction or amalgamation, or has a receiver, manager, administrator or administrative receiver appointed of its undertaking or any part thereof, or a resolution is passed or a petition presented to any court for the winding-up of the Buyer or for the granting of an administration order in respect of the Buyer or any proceedings are commenced relating to the insolvency or possible insolvency of the Buyer.

15.2 The Contract will terminate immediately upon service of written notice of termination by the Company on the Buyer on the happening of any one or more of the following: the Buyer suffers or allows any execution whether legal or equitable to be levied on his/its property or obtained against him/it, or fails to observe or perform any of his/its obligations or duties under the Contract or any other contract between the Company and the Buyer or is unable to pay its debts within the meaning of section 123 of the Insolvency Act 1986 or the Buyer ceases to trade.

15.3 The Company's rights contained in condition 7 (but not the Buyer's rights) shall continue beyond the discharge of the Buyer's and the Company's primary obligations under the Contract consequent upon its termination.

15.4 The termination of the Contract howsoever arising shall be without prejudice to the rights and duties of either the Buyer or the Company accrued prior to termination.

16. **GENERAL**

16.1 Each right or remedy of a party to this Contract is without prejudice to any other right or remedy of that party whether under this Contract or not.

16.2 Any provision of this Contract which is held by any competent authority to be invalid, void, voidable, unenforceable or unreasonable (in whole or in part) shall to the extent of such invalidity, voidness, voidability, unenforceability or unreasonableness be deemed severable and the other provisions of this Contract and the remainder of such provision shall not be affected.

16.3 Failure by either party to enforce or partially enforce any provision of this Contract will not be construed as a waiver of any of its rights under this Contract.

16.4 The Company may assign, license or sub-contract all or any part of its rights or obligations under this Contract without the Buyer's consent.

16.5 This Contract is personal to the Buyer who may not assign, license or sub-contract all or any of its rights or obligations under this Contract without the Company's prior written consent.

16.6 The parties to this Contract do not intend that any of its terms will be enforceable by virtue of the Contracts (Rights of Third Parties) Act 1999 by any person not a party to it.

16.7 The formation, construction, performance, validity and all aspects of this Contract are governed by English law and the parties submit to the exclusive jurisdiction of the English Courts.

17. **COMMUNICATION**

17.1 Any notice to be sent under this Contract must be in writing sent by recorded delivery:-

17.1.1 (in case of communications to the Company) to the address for the Company stated in condition 1.1 or such changed address as shall be notified to the Buyer by the Company; or

17.1.2 (in the case of the communications to the Buyer) to any address of the Buyer set out in any document which forms part of this Contract or such other address as shall be notified to the Company by the Buyer; or

17.1.3 Communications shall be deemed to have been received 2 days (excluding Saturdays, Sundays and bank and public holidays) after posting (exclusive of the day of posting).

Glossary

ACS

French drinking water regulations (ACS = Attestation de Conformité Sanitaire)

ATEX

The acronym ATEX is the French abbreviation for "Atmosphère explosible" and refers to the two European Union (EU) directives covering the area of explosion protection: ATEX Equipment Directive 2014/34/EU (also referred to as ATEX 95) and ATEX Workplace Directive 1999/92/EC (also referred to as ATEX 137).

Back pull-out design

The complete back pull-out unit can be pulled out without having to remove the pump casing from the piping.

Bubbler control with compressor

The air compressor is integrated in the measuring system in addition to the pneumatic level measurement. Condensation can be discharged.

Close-coupled design

Motor directly fitted to the pump via a flange or a drive lantern

Collecting tank

Component of a waste water lifting unit in which the incoming waste water is stored in unpressurised condition prior to automatic lifting.

DOL starting

For low power ratings (usually up to 4 kW), the three-phase motor is connected directly to the mains voltage.

EN 12050-1

European Standard for sewage lifting units which are used to dispose of sewage with faeces occurring below the flood level of buildings and land. It defines general requirements as well as principles of construction and testing.

EN 12050-2

European Standard for waste water lifting units which are used to dispose of faeces-free waste water occurring below the flood level of buildings and sites. It defines general requirements as well as principles of construction and testing.

EN 752

European Standard for drainage systems outside of buildings. This Standard applies to drainage systems which are mainly operated as gravity discharge systems.

FM

Certification by FM Global (FM = Factory Mutual) regarding property insurance in industry and risk management; FM Approved products

IE1

Efficiency class to IEC 60034-30: 1 = Standard Efficiency (IE = International Efficiency)

IE2

Efficiency class to IEC 60034-30: 2 = High Efficiency (IE = International Efficiency)

IE3

Efficiency class to IEC 60034-30: 3 = Premium Efficiency (IE = International Efficiency)

IE4

Efficiency class to IEC TS 60034-30-2:2016 = Super Premium Efficiency (IE = International Efficiency)

IE5

Efficiency class to IEC TS 60034-30-2:2016 = Ultra Premium Efficiency (IE = International Efficiency)

In-line design

A pump whose suction and discharge nozzle are arranged opposite each other and have the same nominal diameter.

L

Available ex stock Germany; stock availability may differ in other countries

Mat. No.

This identification number is composed of an 8-digit numerical code that uniquely identifies a product entered in SAP.

Mech. seal

Mechanical seal

MPG

The material price group is composed of a 2-digit numerical code / letter code and serves to automatically find the conditions/discounts for a product that has been entered in SAP.

Nominal diameter DN

Identifier (inside diameter) used for characterising mating components such as pipes, pipe connections and fittings

Pneumatic level measurement

Determining the liquid level in the tank by means of a pressure sensor integrated in the control unit.

Self-priming ability

Ability of a filled pump to evacuate a suction line, i.e. to self-prime from an unfilled suction line.

Soft starting

Measures taken to limit the output of a power supply unit or electric motor, to limit the starting current, and avoid excessive acceleration and torques.

Star/delta starting

For starting large three-phase squirrel-cage motors (5.5 kW and above). Prevents voltage dips and fuses from tripping. Used if direct starting would result in a high starting current.

SU

Shaft unit

Submersible motor pump

Submersible motor pumps are floodable, close-coupled units which are not self-priming. The pumps are usually operated completely submerged. They may be operated outside the fluid for short periods of time, until the minimum fluid level has been reached.

Swing check valve

Element of a waste water lifting unit which prevents waste water from flowing back from the discharge line into the waste water lifting unit.

Thermal circuit breaker

The thermal circuit breaker or bimetal element tripping the pump in the event of excessive heat build-up in the motor is connected to the control unit. When the thermal circuit breaker opens, the control unit trips the pump. As the motor cools down, the thermal circuit breaker closes again. In the monitoring circuit, also called lower circuit, the alert is automatically acknowledged after the motor has cooled down. The pump is operational again. In the limiting circuit, also called upper circuit, the alert must be acknowledged manually.

UBA

German drinking water regulations to German Environment Agency

UL

Certification of materials, components and end products regarding product safety (UL = Underwriters Laboratories)

VdS

Certification for fire protection and safety by VdS

Waste water

Faecal-free waste water

Waste water lifting unit

Device for collecting and automatically lifting faecal-free waste water above the flood level

WRAS

Approved by all water suppliers in the UK (WRAS = Water Regulations Advisory Scheme)

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Catalogue

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Head Office

2 Cotton Way
Loughborough
Leicestershire
LE11 5TF

Tel.: 01509 231872
Fax.: 01509 215228
E-mail: sales@ksb.com

Customer Portal:
https://shop.ksb.com

Twitter:
https://twitter.com/ksbcompany

Building Services Division

10 Beech Business Park
Bristol Road
Bridgwater
TA6 4FF

Tel.: 01278 458686
Fax.: 01278 452454
E-mail: sales@ksb.com

Customer Portal:
https://shop.ksb.com

Twitter:
https://twitter.com/ksbcompany

KSB Limited
www.ksb.com/ksb-uk

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