

SP3A-45N 3.0kW 3x380-415V 50Hz

Grundfos pump 10201945



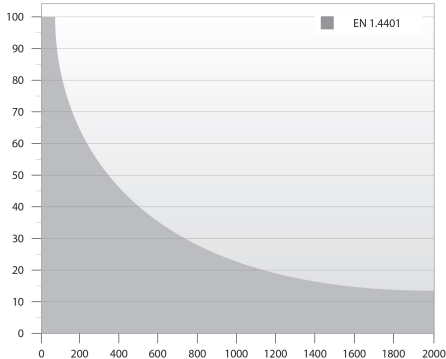
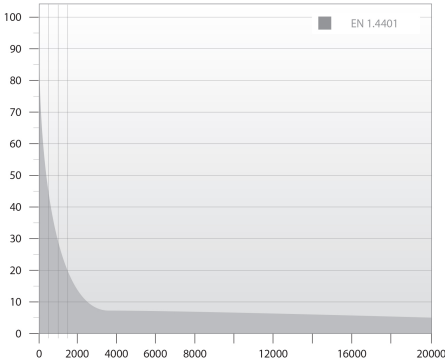
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<https://www.lenntech.com/grundfos/SPFAM/10201945/SP-3A-45N.html>

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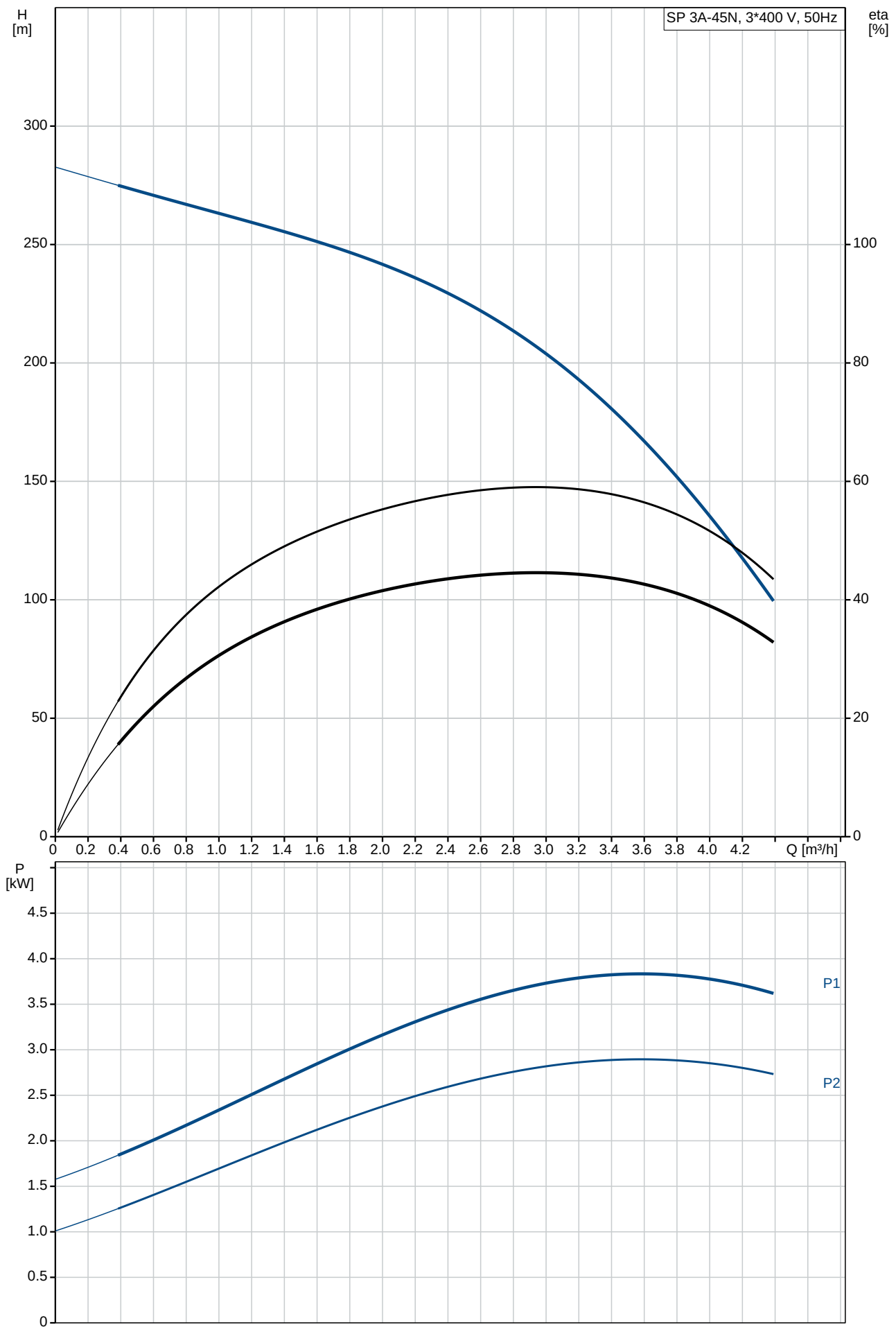
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Position	Qty.	Description
	1	SP 3A-45N  Note! Product picture may differ from actual product Product No.: On request Submersible borehole pump, suitable for pumping clean water. Can be installed vertically or horizontally. All steel components are made in stainless steel, EN 1.4401 (AISI 316), that ensures high corrosive resistance. The pump is fitted with a 3 kW MS4000 motor with sand shield, mechanical shaft seal, water-lubricated journal bearings and a volume compensating diaphragm. The motor is a canned type submersible motor offering good mechanical stability and high efficiency. Suitable for temperatures up to 40 °C. The motor is fitted with the Grundfos Tempcon sensor that, by use of powerline communication together with a MP204 control panel, enables temperature monitoring. The motor is for direct-on-line starting (DOL). Further product details The pump is suitable for applications similar to the following: - raw-water supply - irrigation - groundwater lowering - pressure boosting - fountain applications - mining applications - off-shore applications. Pump All pump surfaces that are in contact with pumped liquids are made in stainless steel which makes them corrosion- and wear-resistant. The corrosion diagram below shows the capabilities of the pump and motor in relation to the temperature in Celsius (y-axis) and the concentration of chloride in ppm (x-axis).   The elastomer parts in the pump are made of NBR (Nitrile-Butadiene Rubber) and TPU (Thermoplastic Poly-Urethane) which offers good wear resistance and long service intervals. The suction interconnector is fitted with a strainer to prevent large particles from entering the pump. The suction interconnector is designed to comply with NEMA standards for motor mounting/dimensions. Motor

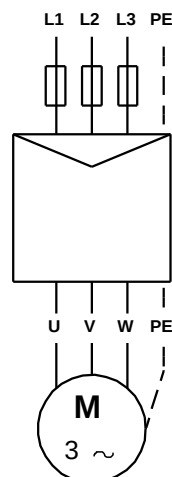
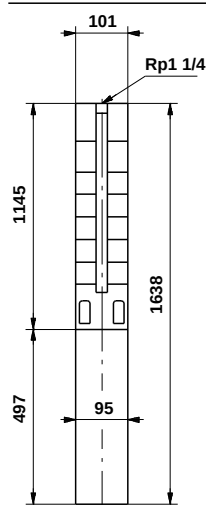
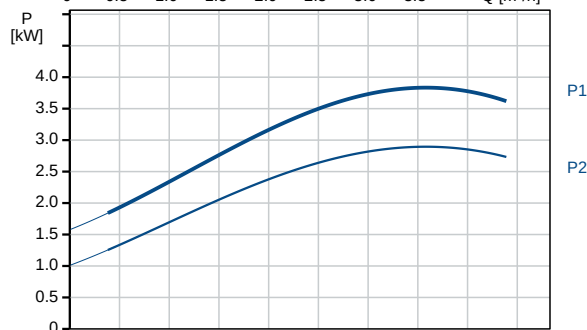
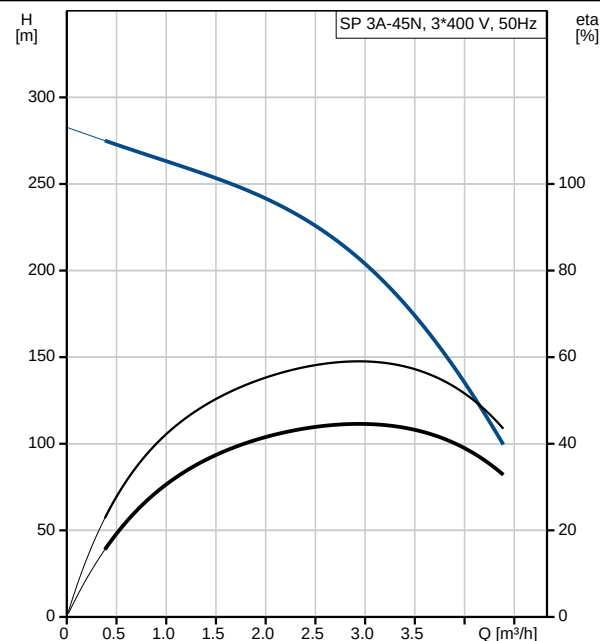
Position	Qty.	Description
		The stator is hermetically encapsulated in stainless steel and the windings are embedded in polymer compound. This results in high mechanical stability, optimum cooling and reduces the risk of short circuits in the windings. The shaft seal faces are SiC/SiC. The material combination gives good performance when abrasive particles (sand) is present. Together with the shaft seal housing, the sand shield forms a labyrinth seal, which during normal operating conditions prevents penetration of sand particles into the shaft seal. This shaft seal is drinking water approved. The motor is fitted with the Grundfos Tempcon temperature sensor device that includes a NTC-resistor which senses the temperature. The resistor is built-in close to the winding. The temperature is converted into a high-frequency signal which is sent via the submersible drop cable and which can be converted into a temperature reading by means of Grundfos MP204. The MP204 is an electronic motor protection device that also monitors the supply network quality to protect the submersible motor against supply network disturbances.  Liquid: Pumped liquid: Water Maximum liquid temperature: 40 °C Max liquid t at 0.15 m/sec: 40 °C Liquid temperature during operation: 20 °C Density: 998.2 kg/m³ Technical: Rated flow: 3 m³/h Rated head: 210 m Shaft seal for motor: SiC/SiC Approvals on nameplate: CE,EAC Curve tolerance: ISO9906:2012 3B Motor version: T40 Materials: Pump: Stainless steel EN 1.4401 AISI 316 Impeller: Stainless steel EN 1.4401 AISI 316 Motor: Stainless steel DIN W.-Nr. 1.4539 AISI 904 L Installation: Pump outlet: Rp1 1/4 Motor diameter: 4 inch Electrical data: Motor type: MS4000 Rated power - P2: 3 kW Power (P2) required by pump: 3 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-400-415 V Rated current: 7.70-7.85-8.10 A Starting current: 460-490-500 % Cos phi - power factor: 0.82-0.77-0.73 Rated speed: 2850-2865-2875 rpm Start. method: direct-on-line

Position	Qty.	Description
		Enclosure class (IEC 34-5): IP68 Insulation class (IEC 85): F Built-in temp. transmitter: yes Others: Minimum efficiency index, MEI ≥: 0.70 ErP status: EuP Standalone/Prod. Net weight: 34.1 kg Gross weight: 38.9 kg Shipping volume: 73.7 m ³

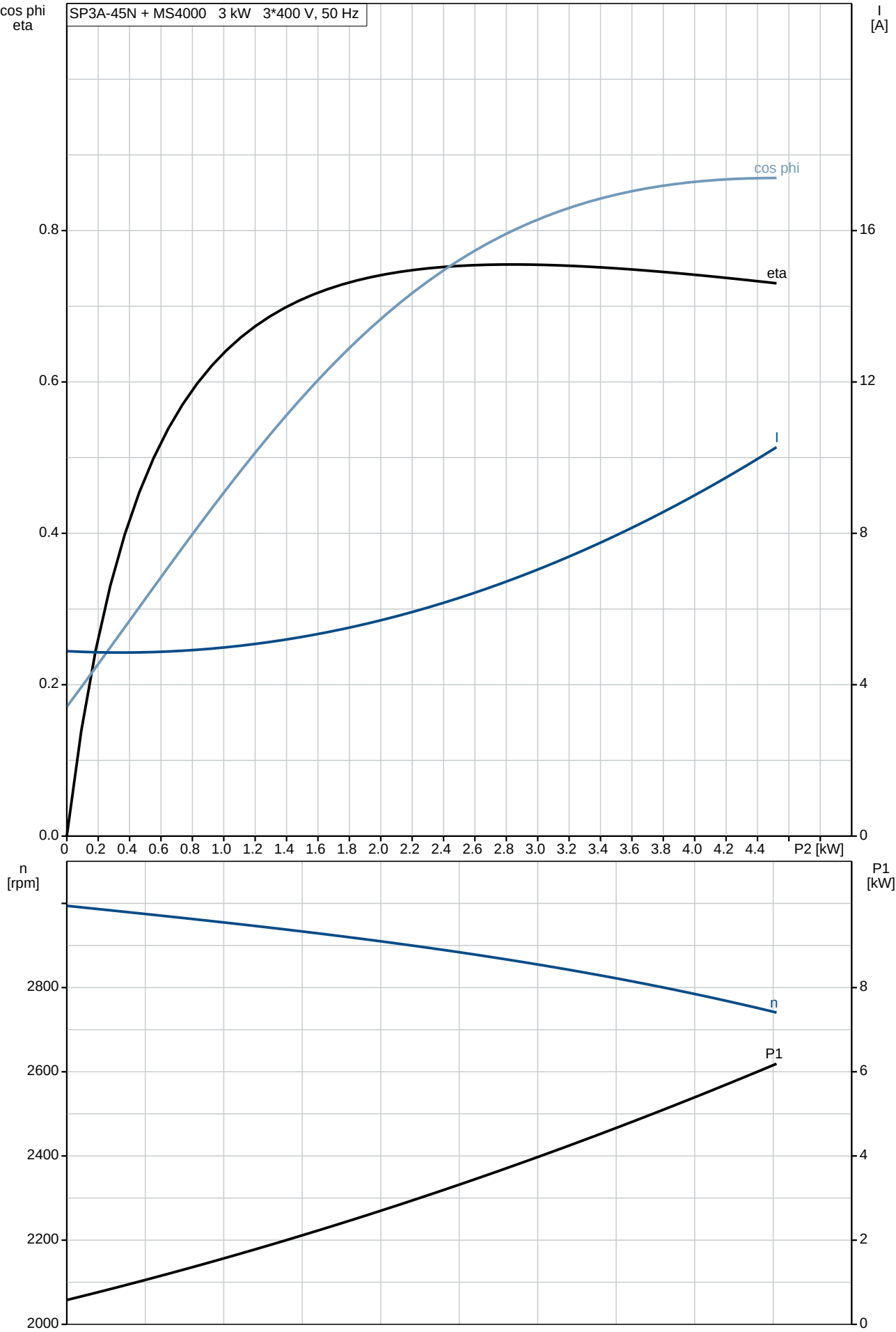
On request SP 3A-45N 50 Hz



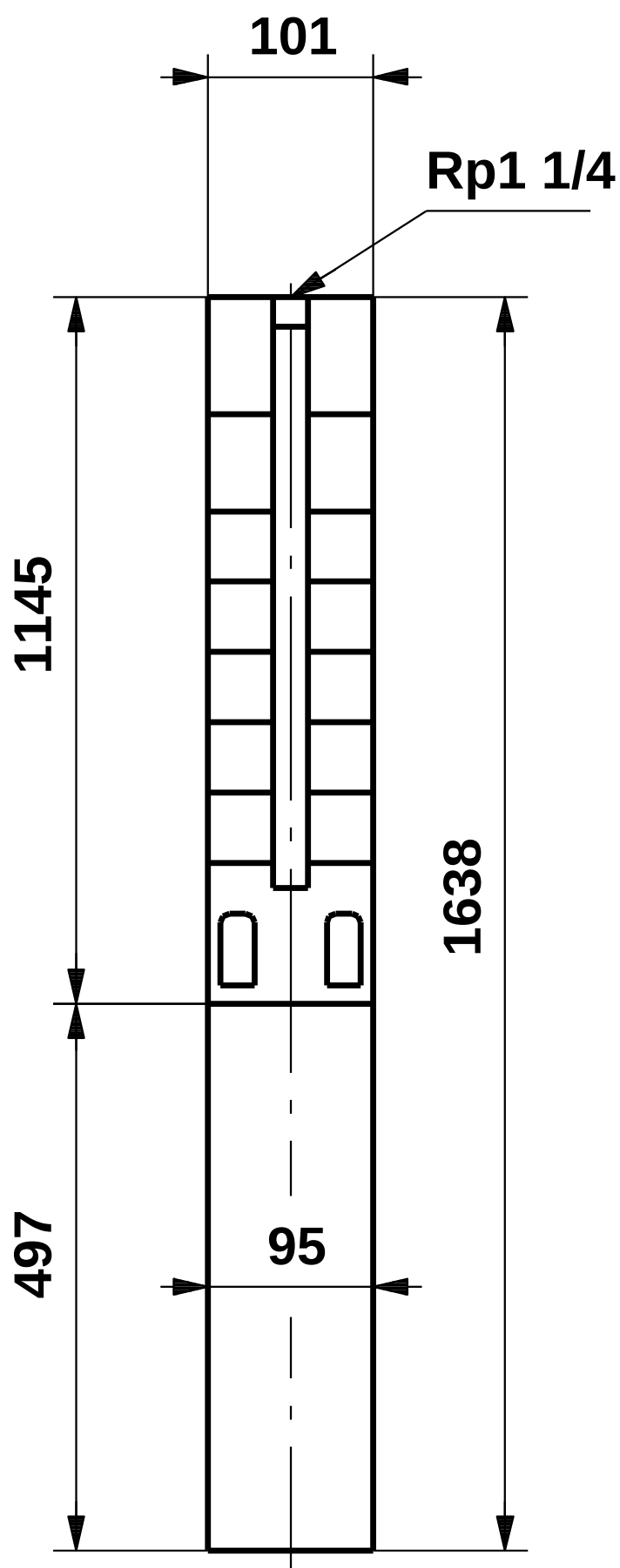
Description	Value
General information:	
Product name:	SP 3A-45N
Product No:	On request
EAN number:	On request
Technical:	
Rated flow:	3 m³/h
Rated head:	210 m
Stages:	45
Impeller reduc.:	NONE
Shaft seal for motor:	SIC/SIC
Approvals on nameplate:	CE,EAC
Curve tolerance:	ISO9906:2012 3B
Model:	A
Valve:	YES
Motor version:	T40
Materials:	
Pump:	Stainless steel
	EN 1.4401
	AISI 316
Impeller:	Stainless steel
	EN 1.4401
	AISI 316
Motor:	Stainless steel
	DIN W.-Nr. 1.4539
	AISI 904 L
Installation:	
Pump outlet:	Rp1 1/4
Motor diameter:	4 inch
Liquid:	
Pumped liquid:	Water
Maximum liquid temperature:	40 °C
Max liquid t at 0.15 m/sec:	40 °C
Liquid temperature during operation:	20 °C
Density:	998.2 kg/m³
Electrical data:	
Motor type:	MS4000
Applic. motor:	GRUNDFOS
Rated power - P2:	3 kW
Power (P2) required by pump:	3 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-400-415 V
Rated current:	7.70-7.85-8.10 A
Starting current:	460-490-500 %
Cos phi - power factor:	0.82-0.77-0.73
Rated speed:	2850-2865-2875 rpm
Start. method:	direct-on-line
Enclosure class (IEC 34-5):	IP68
Insulation class (IEC 85):	F
Motor protec:	NONE
Thermal protec:	external
Built-in temp. transmitter:	yes
Motor No:	79195608
Others:	
Minimum efficiency index, MEI ≥:	0.70
ErP status:	EuP Standalone/Prod.
Net weight:	34.1 kg
Gross weight:	38.9 kg
Shipping volume:	73.7 m³



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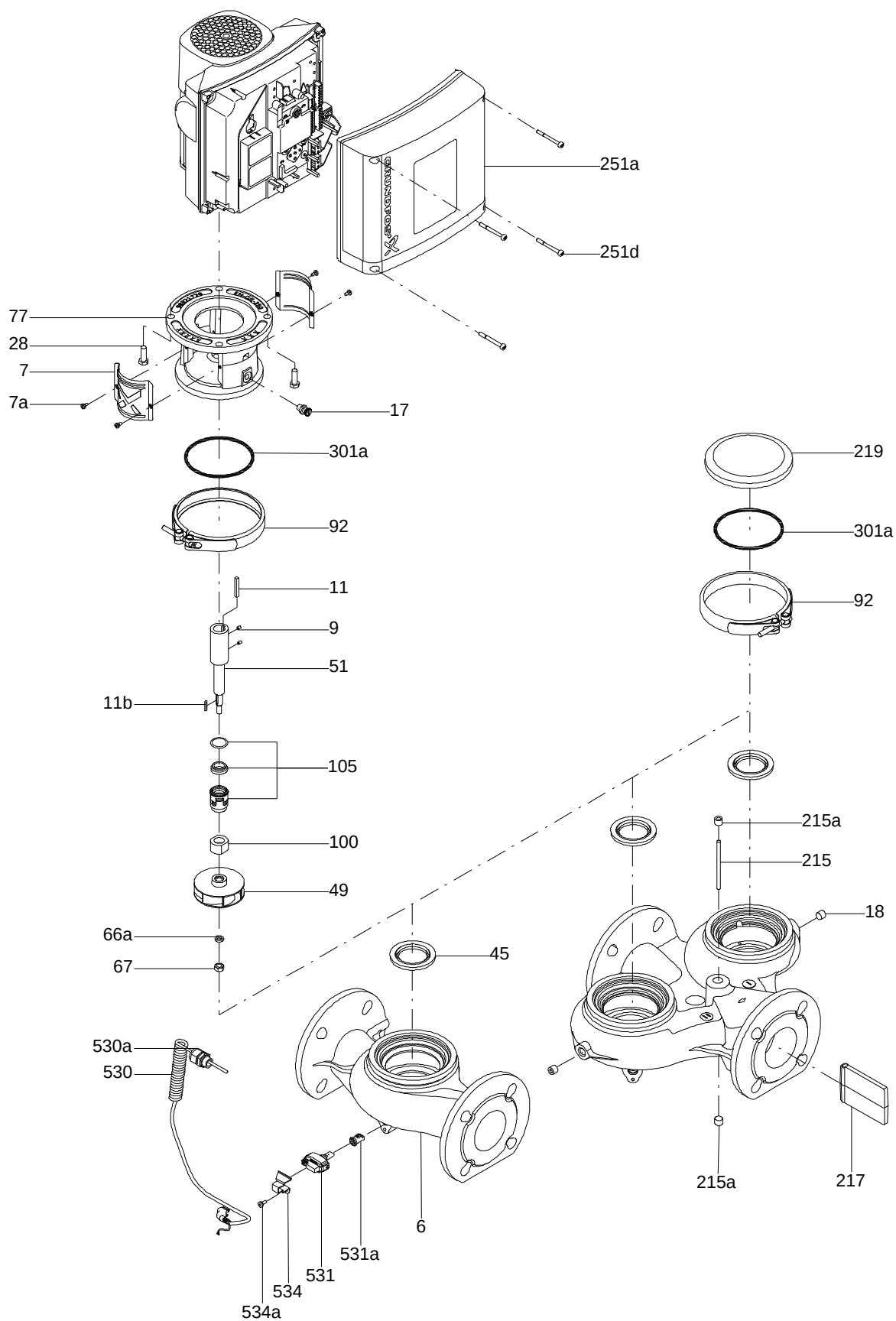


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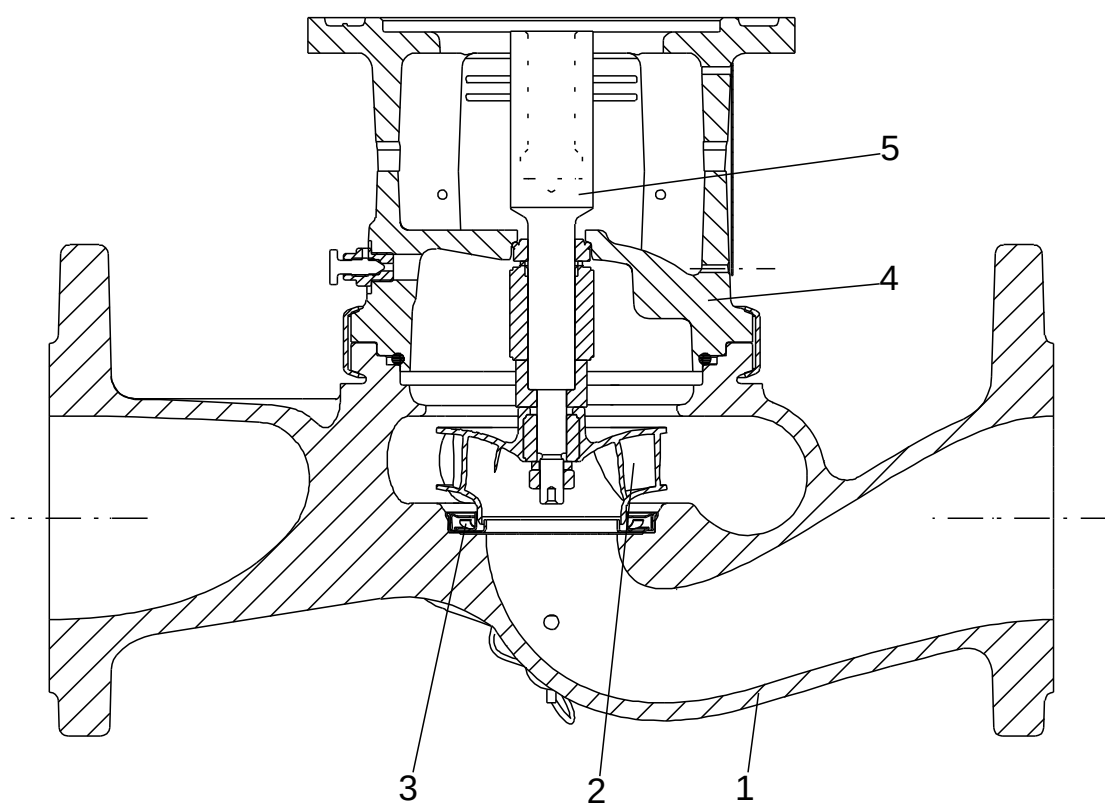


Note! All units are in [mm] unless others are stated.
Disclaimer: This simplified dimensional drawing does not show all details.

Exploded view

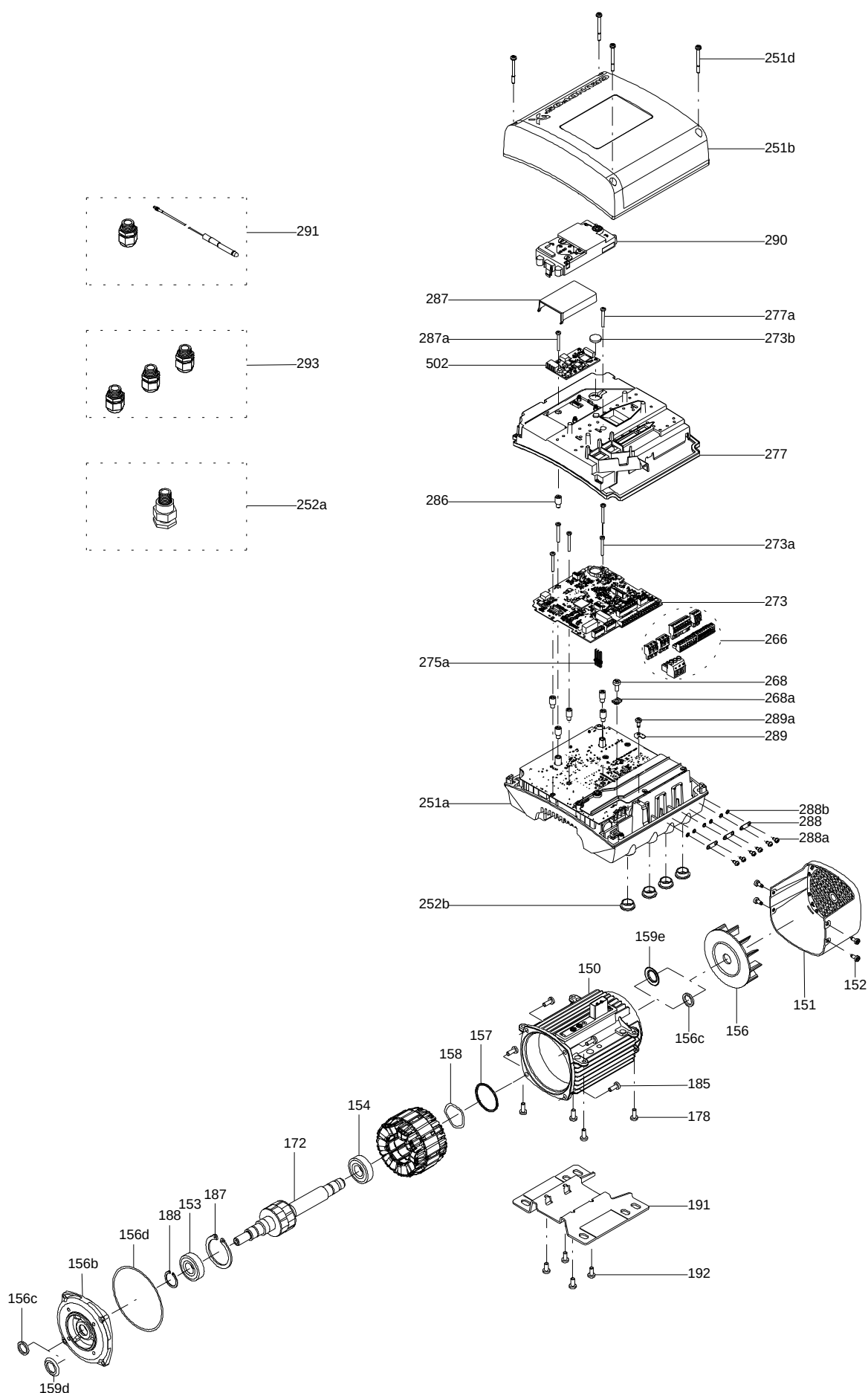


Sectional drawing (TM058200 for TPE2,TPE3)



TM058200

Exploded view (TM057026 for MGE model H/I)



Parts list SP 3A-45N, Product No. On request
Valid from 18.4.1995 (9516)

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
-	Pump w/o motor				1	pcs
	Stop ring				3	
	Retainer				1	
- 1	Valve casing cpl.				1	
	Valve casing				1	
6	Bearing				1	
- 9	Intermediate chamber cpl.				45	
	Chamber				1	
7	Neck ring				1	
- 10	Chamber, bottom				1	
7	Neck ring				1	
- 13a	Impeller cpl.				45	
	Impeller				1	
- 11	Split cone nut				1	
	Split cone nut					
11a	O-ring		Diameter: 15,00			
			Material type: NBR			
			Thickness: 70SHOR			
12	Split cone				1	
14	Suction interconnector				1	
15	Strainer				1	
16	Shaft cpl.		Length (mm): 1053		1	
17	Strap cpl.		Length (mm): 1072		4	
			Thread: M8			
18	Cable guard cpl.				1	
18b	Support for cable guard				1	
18d	Hex nut				2	
19	Nut				4	
78	Nameplate				1	
-	Motor				1	pcs
1	Stator w/housing				1	
2	Shaft w/rotor				1	
3	Thrust ring support cpl.				1	
4	Radial bearing				1	
5	Bearing pipe				1	
6	Thrust bearing				1	
7	Lock ring				1	
10	Bearing retainer				1	
11	Adjusting screw				1	
12	Diaphragm				1	
13	End shield				1	
15	Nut				1	
16	Lock washer				1	
18	Nut		Thread: M8 DIN 934		1	
21	Nut		Thread: M8 DIN 934		4	
22	Staybolt		Thread: M8 X M8		3	
22a	Staybolt		Thread: M8 X M8 R		1	
22b	Cheese head screw				1	
22c	O-ring		Diameter: 4		1	
			Material type: NBR			
			Thickness: 1			
24	O-ring		Diameter: 40		1	
			Material type: NBR			
			Thickness: 2			
25	Shaft seal housing				1	
27	Spline protector				1	
28	Supporting ring				1	
29	Sand shield				1	
30	Compression spring				1	

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
31	Supporting ring				1	
32	Shaft seal cpl.				1	
- 34	Shaft seal cpl.				1	
	Seal ring				1	
	Seal ring, rotating				1	
33	O-ring		Diameter: 16		1	
			Material type: VITON			
			Thickness: 2.5			
20	Motor cable		Length (M): 1,7M		1	pcs

Disclaimer: The information about the Grundfos pump in this document may be outdated.

Data may be subject to alterations without further notice.

Please contact us to verify the data above is still accurate/up-to-date.

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