

TP 40-180/2-A-F-A-BQQE 400Y 50HZ

Grundfos pump 98133671



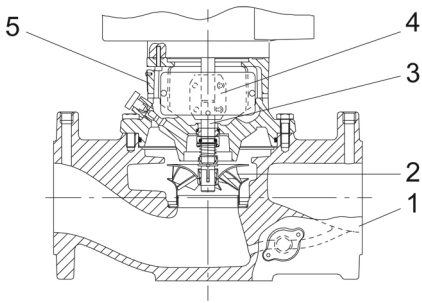
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<https://www.lenntech.com/grundfos/TP000/98133671/TP-40-180-2-A-F-A-BQQE.html>

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Position	Qty.	Description
	1	TP 40-180/2 A-F-A-BQQE  Product No.: On request Single-stage, close-coupled, volute pump with in-line suction and discharge ports of identical diameter. The pump is of the top-pull-out design, i.e. the power head (motor, pump head and impeller) can be removed for maintenance or service while the pump housing remains in the pipework. The pump is fitted with an unbalanced rubber bellows seal. The shaft seal is according to EN 12756. Pipework connection is via PN 6/10 DIN flanges (EN 1092-2 and ISO 7005-2). The pump is fitted with a fan-cooled asynchronous motor. Further product details The product's minimum efficiency index (MEI) is greater or equal to 0.70. This is by the Commission Regulation (EU) considered as an indicative benchmark for best-performing water pump available on the market as from 1 January 2013. Pump Pump housing and pump head are electrocoated to improve the corrosion resistance. Electrocoating includes: 1) Alkaline-based cleaning. 2) Pretreatment with zinc phosphate coating. 3) Cathodic electrocoating (epoxy). 4) Curing of paint film at 200-250 °C.  1: Pump housing 2: Impeller 3: Shaft 4: Coupling 5: Pump head The pump housing is provided with a replaceable stainless steel/PTFE neck ring to reduce the amount of liquid running from the discharge side of the impeller to the suction side. The impeller is secured with a split cone with nut. The pump is fitted with an unbalanced rubber bellows seal with torque transmission across the spring and around the bellows. Due to the bellows, the seal does not wear the shaft, and the axial movement is not prevented by deposits on the shaft. Primary seal: • Rotating seal ring material: silicon carbide (SiC) • Stationary seat material: silicon carbide (SiC) This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles. Secondary seal material: EPDM (ethylene-propylene rubber) EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.

A circulation of liquid through the duct of the air vent screw ensures lubrication and cooling of the shaft seal.

The flanges have tappings for mounting of pressure gauges.

The motor stool forms connection between the pump housing and the motor, and is equipped with a manual air vent screw for venting of the pump housing and the shaft seal chamber. The sealing between motor stool and pump housing is an O-ring.

The central part of the motor stool is provided with guards for protection against the shaft and coupling. Motor and pump shaft are connected via a shell coupling.

Motor

The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.

The motor is flange-mounted with tapped-hole flange (FT).

Motor-mounting designation in accordance with IEC 60034-7: IM B 14, IM V 18 (Code I) / IM 3601, IM 3611 (Code II).

The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.

The motor does not incorporate motor protection and must be connected to a motor-protective circuit breaker which can be manually reset. The motor-protective circuit breaker must be set according to the rated current of the motor (I1/1).

Technical data

Liquid:

Pumped liquid:	Water
Liquid temperature range:	-25 .. 120 °C
Liquid temperature during operation:	20 °C
Density:	998.2 kg/m ³

Technical:

Rated flow:	12.5 m ³ /h
Rated head:	10 m
Actual impeller diameter:	98 mm
Primary shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B

Materials:

Pump housing:	Cast iron EN-JL1040 ASTM A48-40 B
Impeller:	Stainless steel DIN W.-Nr. 1.4301 AISI 304

Installation:

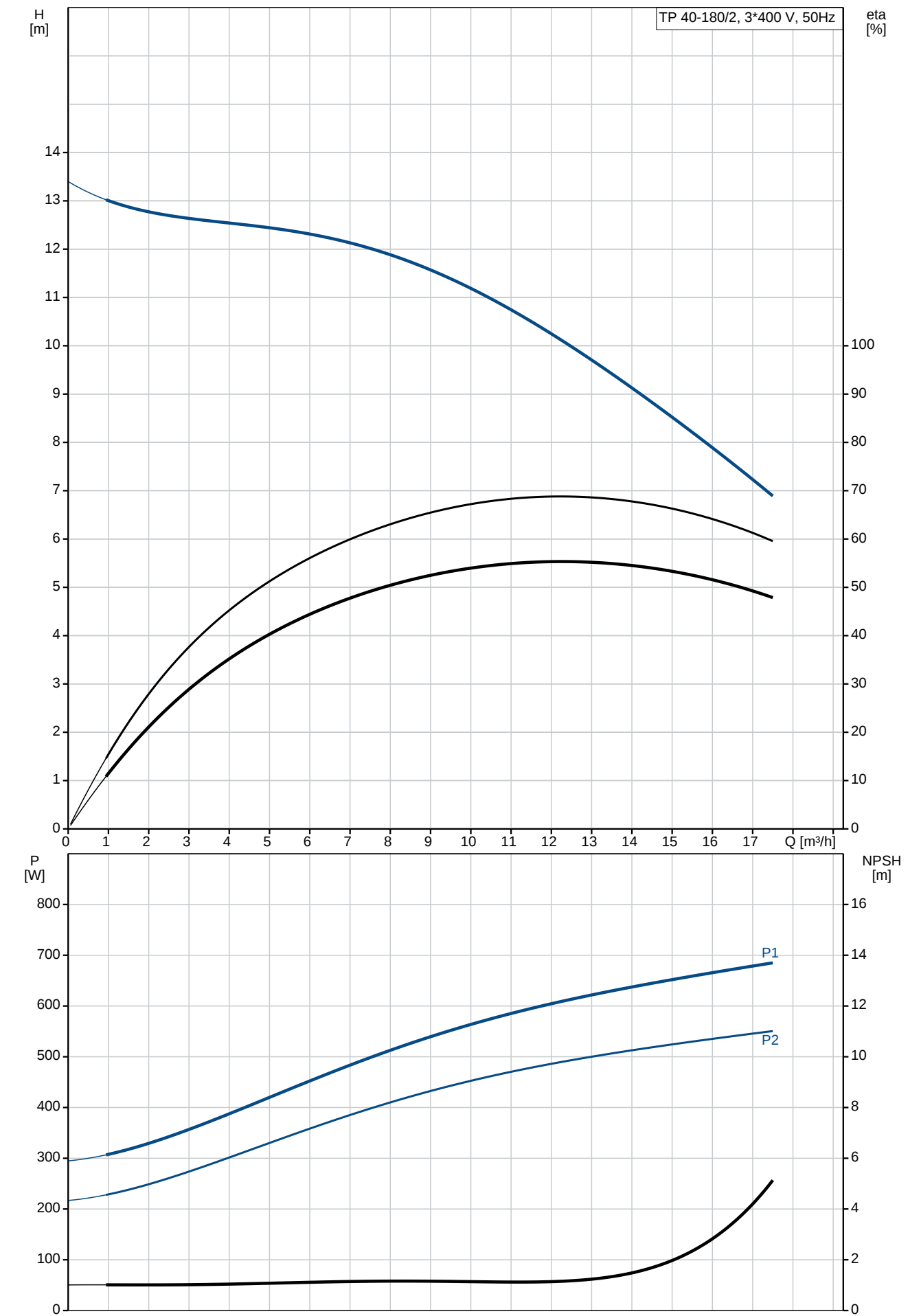
Range of ambient temperature:	-30 .. 40 °C
Maximum operating pressure:	10 bar
Flange standard:	DIN
Pipe connection:	DN 40
Pump inlet:	DN 40
Pump outlet:	DN 40
Pressure rating:	PN 6/10
(@):	250 mm
Flange size for motor:	FT85

Electrical data:

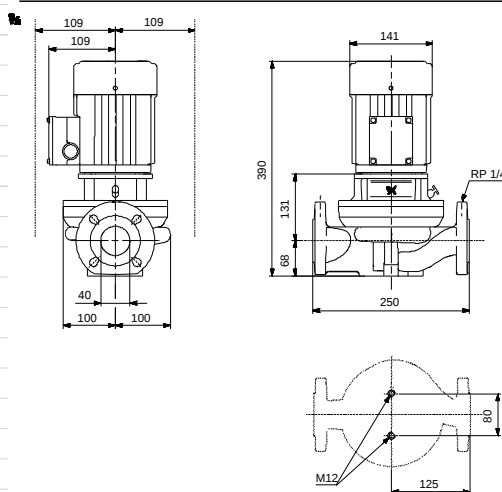
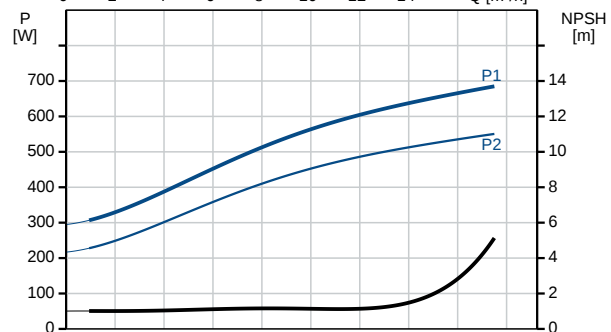
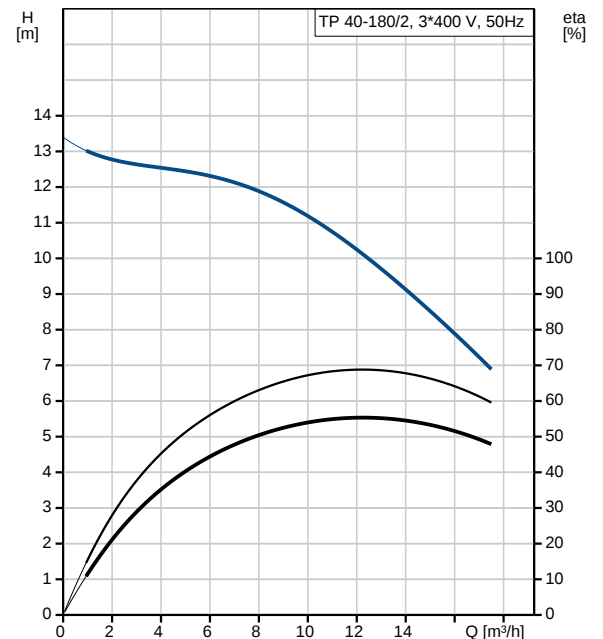
Motor type:	71B
IE Efficiency class:	IE3
Rated power - P2:	0.55 kW
Power (P2) required by pump:	0.55 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 220-240D/380-415Y V
Rated current:	2.50/1.44 A

Position	Qty.	Description
		Starting current: 580-620 % Cos phi - power factor: 0.80-0.70 Rated speed: 2830-2850 rpm Efficiency: IE3 77,8% Motor efficiency at full load: 77.8 % Motor efficiency at 3/4 load: 81.5 % Motor efficiency at 1/2 load: 79.5 % Number of poles: 2 Enclosure class (IEC 34-5): 55 Dust/Jetting Insulation class (IEC 85): F Others: Minimum efficiency index, MEI ≥: 0.70 ErP status: EuP Standalone/Prod. Net weight: 24.7 kg Gross weight: 28.2 kg Shipping volume: 0.06 m³ Danish VVS No.: 381812180 Norwegian NRF no.: 9043542

On request TP 40-180/2 A-F-A-BQQE 50 Hz



Description	Value
General information:	
Product name:	TP 40-180/2 A-F-A-BQQE
Product No:	On request
EAN number:	On request
Technical:	
Rated flow:	12.5 m³/h
Rated head:	10 m
Head max:	180 dm
Actual impeller diameter:	98 mm
Primary shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Materials:	
Pump housing:	Cast iron
	EN-JL1040
	ASTM A48-40 B
Impeller:	Stainless steel
	DIN W.-Nr. 1.4301
	AISI 304
Material code:	A
Installation:	
Range of ambient temperature:	-30 .. 40 °C
Maximum operating pressure:	10 bar
Flange standard:	DIN
Pipe connection:	DN 40
Pump inlet:	DN 40
Pump outlet:	DN 40
Pressure rating:	PN 6/10
(@)	250 mm
Flange size for motor:	FT85
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-25 .. 120 °C
Liquid temperature during operation:	20 °C
Density:	998.2 kg/m³
Electrical data:	
Motor type:	71B
IE Efficiency class:	IE3
Rated power - P2:	0.55 kW
Power (P2) required by pump:	0.55 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 220-240D/380-415Y V
Rated current:	2.50/1.44 A
Starting current:	580-620 %
Cos phi - power factor:	0.80-0.70
Rated speed:	2830-2850 rpm
Efficiency:	IE3 77,8%
Motor efficiency at full load:	77.8 %
Motor efficiency at 3/4 load:	81.5 %
Motor efficiency at 1/2 load:	79.5 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protec:	NONE
Motor No:	85805103
Others:	
Minimum efficiency index, MEI ≥:	0.70
ErP status:	EuP Standalone/Prod.
Net weight:	24.7 kg
Gross weight:	28.2 kg
Shipping volume:	0.06 m³
Danish VVS No.:	381812180

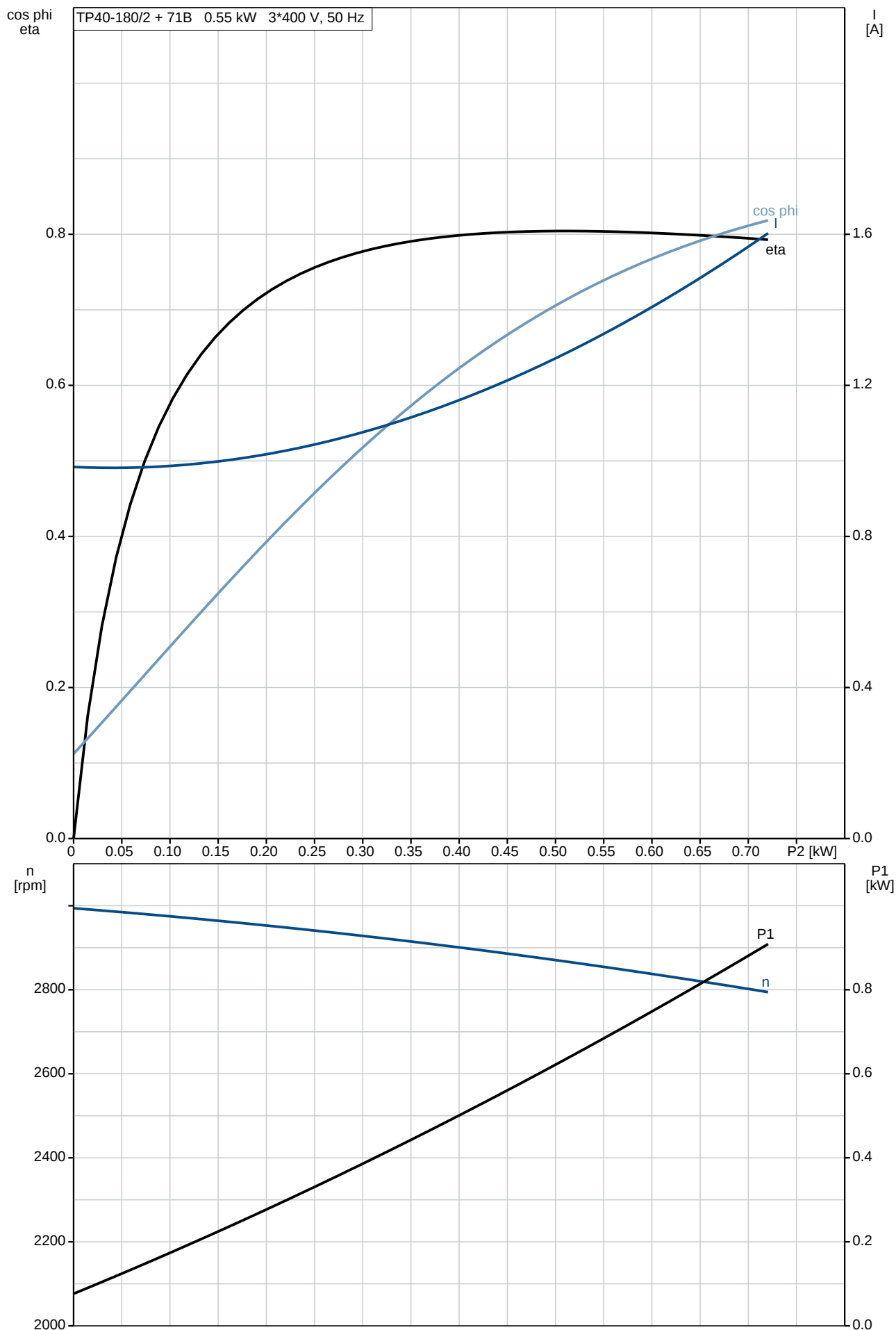


Description	Value
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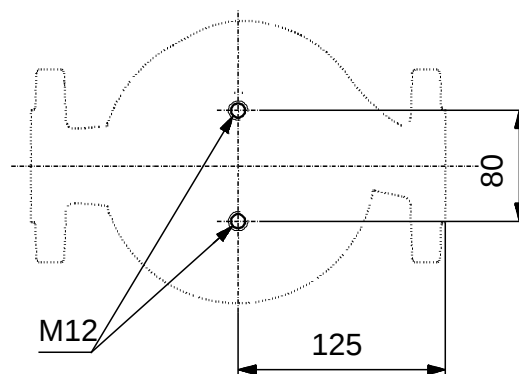
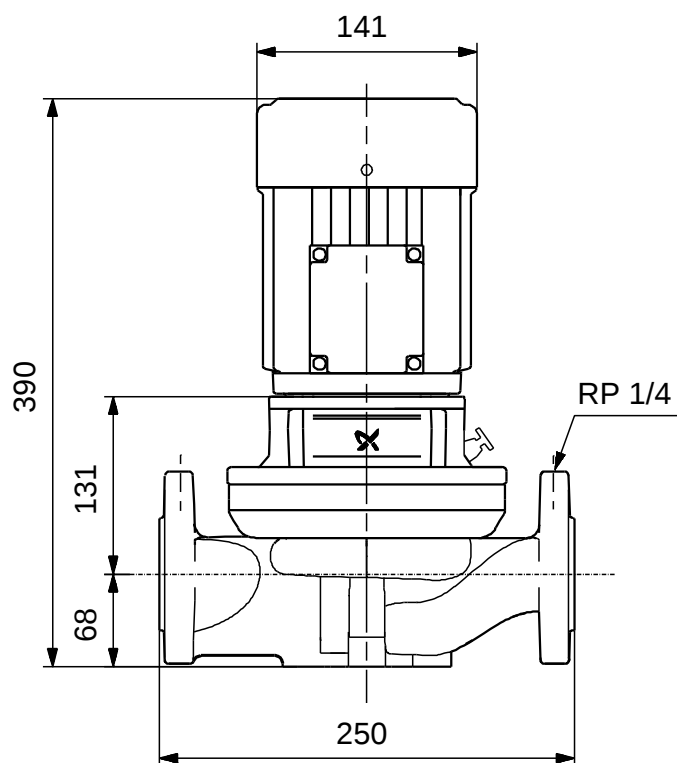
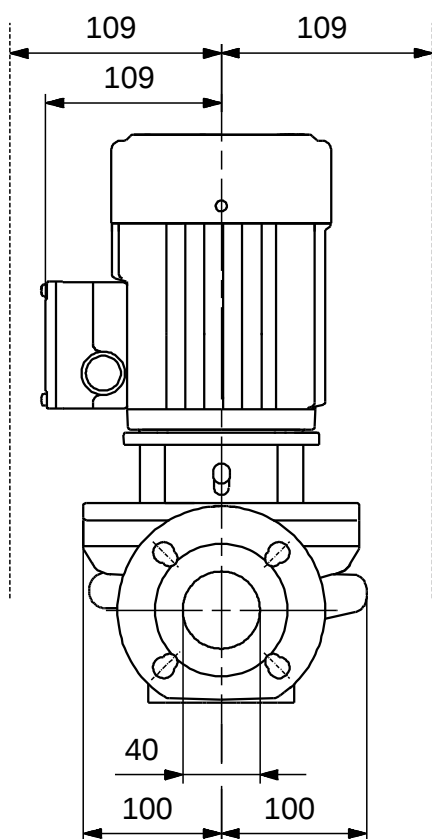
Norwegian NRF no.:	9043542
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On request TP 40-180/2 A-F-A-BQQE 50 Hz

TP40-180/2 + 71B 0.55 kW 3*400 V, 50 Hz



On request TP 40-180/2 A-F-A-BQQE 50 Hz



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)

This is a technical sectional drawing of a mechanical assembly, likely a valve or actuator. The drawing is oriented vertically with a horizontal centerline. The assembly consists of several components: a top flange (1), a central shaft (2), a valve body (3), a valve seat (4), and a valve core (5). The shaft (2) passes through the valve body (3) and the valve seat (4). The valve core (5) is located at the bottom of the shaft. The valve body (3) has a curved, flared shape. The valve seat (4) is a ring-like component. The valve core (5) is a small, cylindrical component. The drawing uses standard mechanical conventions, including hatching for cross-sections and a centerline for symmetry.

1

2

3

4

5

TM058200

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Exploded view (TM057026 for MGE model H/I)



Parts list TP 40-180/2, Product No. On request
Valid from 20.6.2010 (1024)

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
+	Motor				1	pcs
-	Coupling cpl.				1	pcs
9	Hex socket head cap screw		Designation: DIN 912		4	
			Length (mm): 20			
			Thread: M6			
10	Shaft pin		Diameter: 5		1	
			Length (mm): 26			
10a	Coupling half				2	
-	Motor stool cpl.				1	pcs
2	Motor stool				1	
26	Hex head screw		Length (mm): 28		8	
			Thread: M10			
28	Hex head screw		Length (mm): 20		4	
			Thread: M6			
-	Pump housing cpl.				1	pcs
6	Pump housing cpl.				1	
65	Retainer for neck ring				1	
-	Coupling guard cpl.				1	pcs
7	Coupling guard				2	
7a	Pan head screw				4	
-	Shaft seal cpl.				1	pcs
105	Shaft seal				1	
-	Shaft w/impeller cpl.				1	pcs
49	Impeller cpl.				1	
49b	Split cone				1	
49b	Split cone nut				1	
51	Pump shaft				1	
18	Air vent screw		Thread: 1/4"		1	pcs
19	Plug				2	pcs
72a	O-ring		Diameter: 154		1	pcs
			Material type: EPDM			
			Thickness: 4			

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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