

### TP 40-270/2-A-F-A-BQQE 1X230 50HZ

Grundfos pump 98958128



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https://www.lenntech.com/grundfos/TP000/98958128/TP-40-270-2-A-F-A-BQQE.html

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#### Position | Qty. | Do

1

Qty. Description

TP 40-270/2 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 16 DIN flanges (EN 1092-2 and ISO 7005-2).

The pump is fitted with a fan-cooled asynchronous motor.

#### Further product details

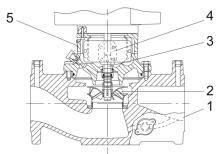
The product's minimum efficiency index (MEI) is greater or equal to 0.70. This is by the Commission Regulation (EU) considered as an indicative benchmark for best-performing water pump available on the market as from 1 January 2013.

#### **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 stainles 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 has built-in thermal protection (PTO current and temperature sensors) in accordance with IEC 60034-11 and requires no further motor protection. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

As the thermal protection incorporates automatic reset, the motor must be connected in a way which ensures that the automatic reset cannot cause accidents.

#### **Technical data**

#### Liquid:

Pumped liquid: Water
Liquid temperature range: -25 .. 120 °C
Liquid temperature during operation: 20 °C
Density: 998.2 kg/m³

#### Technical:

Rated flow: 12.5 m³/h
Rated head: 19.9 m
Actual impeller diameter: 145 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:

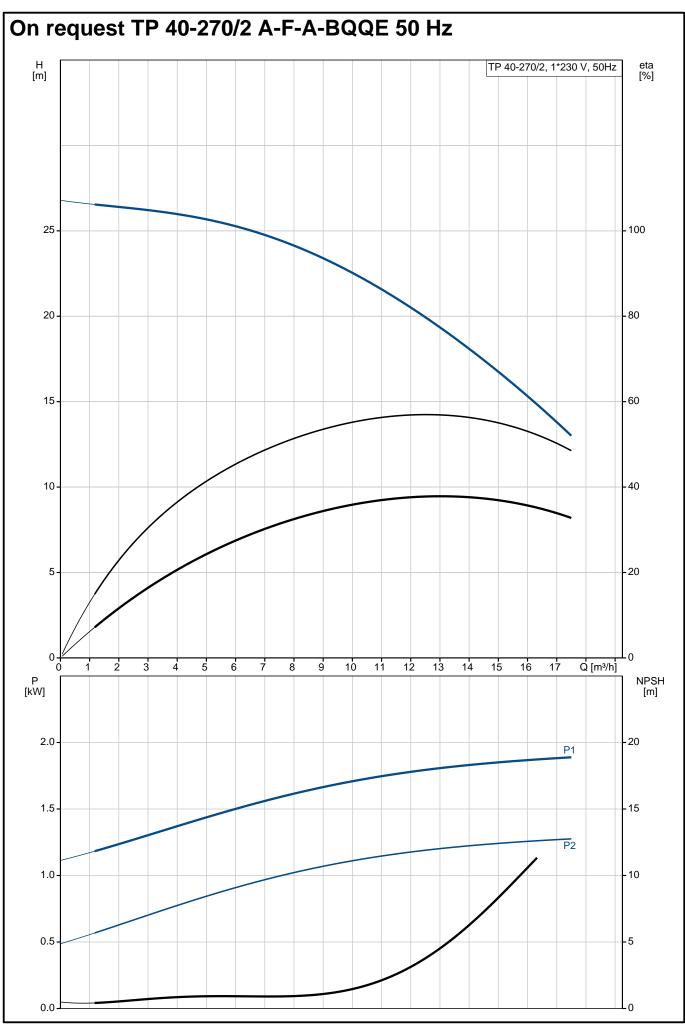
Range of ambient temperature: -30 .. 40 °C Maximum operating pressure: 16 bar Flange standard: DIN Pipe connection: **DN 40** Pump inlet: **DN 40** Pump outlet: **DN 40** Pressure rating: **PN 16** 320 mm Flange size for motor: FT115

#### **Electrical data:**

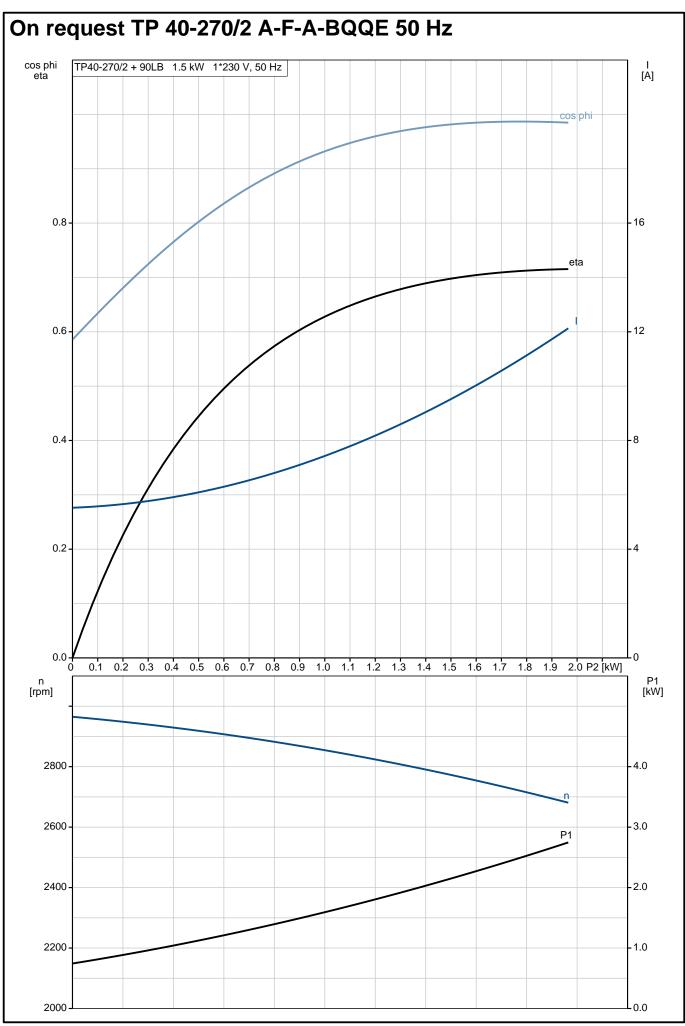
Motor type: 90LB
Rated power - P2: 1.5 kW
Power (P2) required by pump: 1.5 kW
Mains frequency: 50 Hz

Rated voltage: 1 x 220-230/240 V Rated current: 9.90/8.90 A

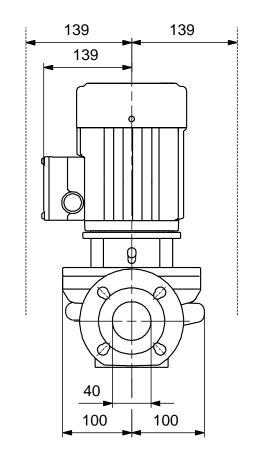
Position	Qty.	Description	
	-	Starting current: Cos phi - power factor: Rated speed: Motor efficiency at full load: Number of poles: Enclosure class (IEC 34-5): Insulation class (IEC 85):	390 % 0.98/0.99 2750/2740 rpm 72-70 % 2 55 Dust/Jetting F
		Others: Minimum efficiency index, MEI ErP status: Net weight: Gross weight: Shipping volume:	: 0.70 EuP Standalone/Prod. 38.6 kg 42.2 kg 0.16 m³

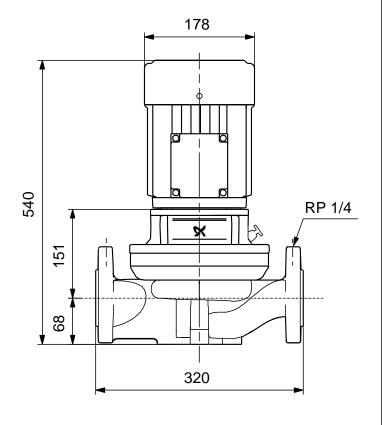


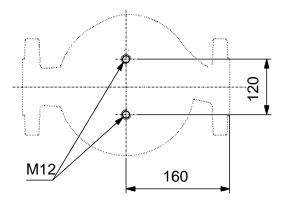
Description	Value	H [m] TP 40-270/2, 1*230 V, 50Hz eta [%]
General information:	· AIWV	
Product name:	TP 40-270/2 A-F-A-BQQE	
Product No:	On request	
	•	
EAN number:	On request	25
Technical:		25 - 100
Rated flow:	12.5 m³/h	
Rated head:	19.9 m	
Head max:	270 dm	20 - 80
Actual impeller diameter:	145 mm	
Primary shaft seal:	BQQE	
Curve tolerance:	ISO9906:2012 3B	15 - 60
Pump version:	A	
Model:	A	10 - 40
Materials:		
Pump housing:	Cast iron	
	EN-JL1040	5 - 20
	ASTM A48-40 B	
Impeller:	Stainless steel	
	DIN WNr. 1.4301	
		0
	AISI 304	
Material code:	Α	P [kW] NPSH [m]
Installation:		2.0
Range of ambient temperature:	-30 40 °C	
Maximum operating pressure:	16 bar	4.5
Flange standard:	DIN	1.5
Pipe connection:	DN 40	
	-	1.0
Pump inlet:	DN 40	
Pump outlet:	DN 40	0.5
Pressure rating:	PN 16	
(@)	320 mm	
Flange size for motor:	FT115	0.0
Connect code:	F	139139
Liquid:		139 139
Pumped liquid:	Water	
Liquid temperature range:	-25 120 °C	┊ <sub>┩</sub> ╌╫╸║║╢║┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈┈
Liquid temperature during operation:	20 °C	
Density:	998.2 kg/m³	RP 1/4
Electrical data:		
Motor type:	90LB	
Rated power - P2:	1.5 kW	
Power (P2) required by pump:	1.5 kW	
	50 Hz	100   100
Mains frequency:		<del>   </del>
Rated voltage:	1 x 220-230/240 V	
Rated current:	9.90/8.90 A	
Starting current:	390 %	1
Cos phi - power factor:	0.98/0.99	
Rated speed:	2750/2740 rpm	M12/
Motor efficiency at full load:	72-70 %	160
Number of poles:	2	
Enclosure class (IEC 34-5):		DIRECTION OF ROTATION DIRECTION OF ROTATION
	55 Dust/Jetting	
Insulation class (IEC 85):	F	BLACK BLACK
Motor protec:	PTO	YELLOW
Motor No:	85215706	
Others:		
Minimum efficiency index, MEI:	0.70	HOTO NOT THE BROWN NEW TO NOT
ErP status:	EuP Standalone/Prod.	
Net weight:		
	38.6 kg	
Gross weight:	42.2 kg	
Shipping volume:	0.16 m <sup>3</sup>	BLACK BLACK
		- 3



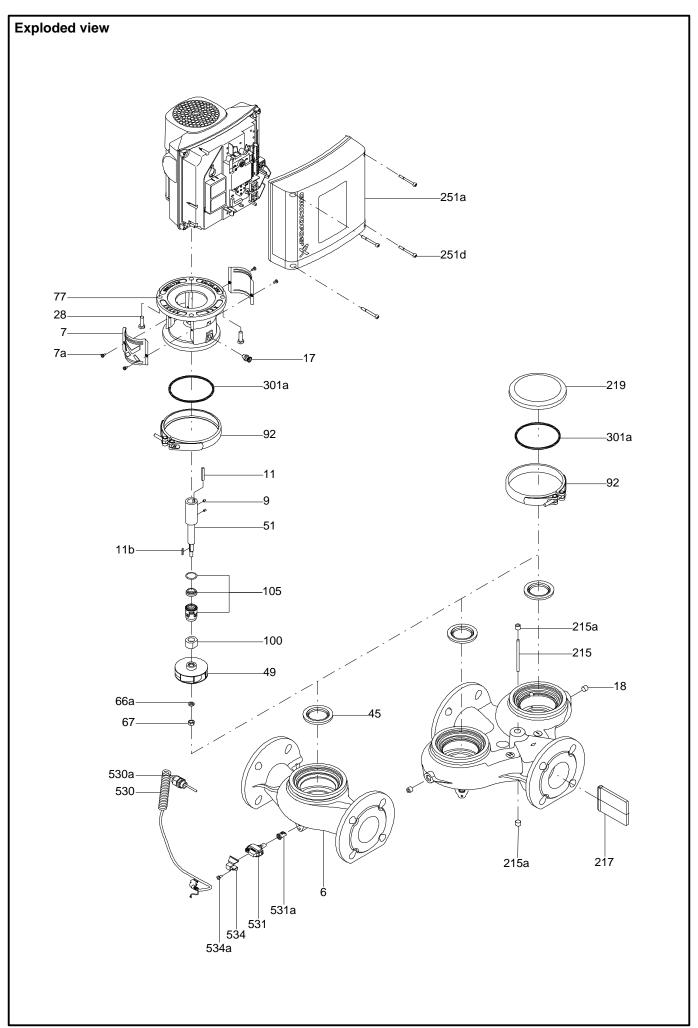
## On request TP 40-270/2 A-F-A-BQQE 50 Hz

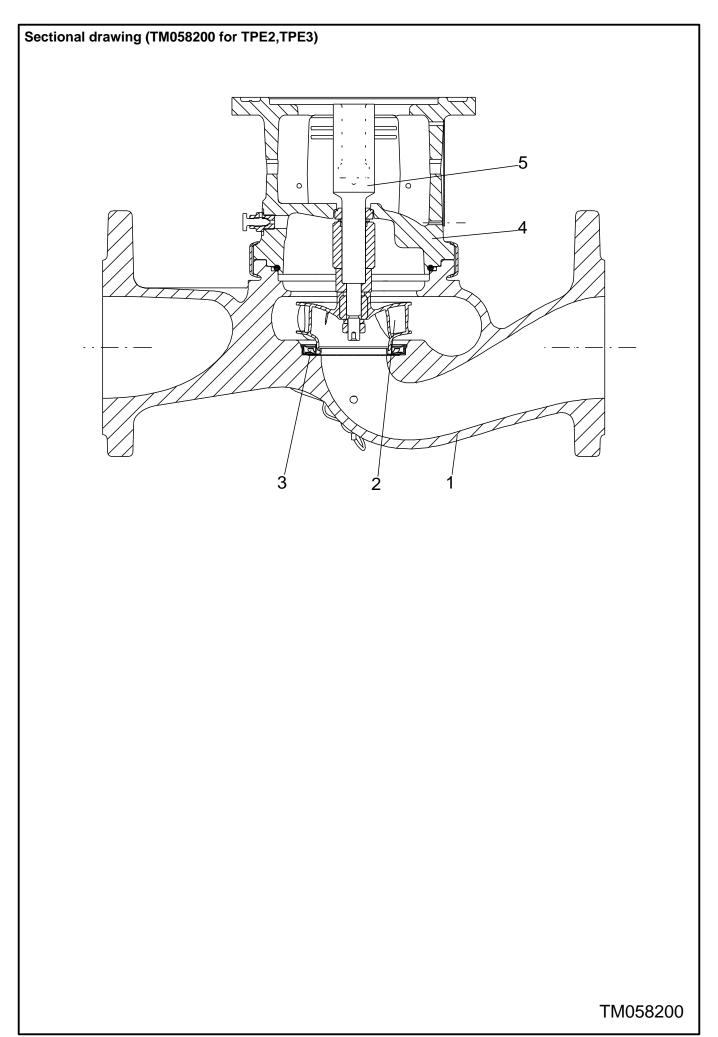


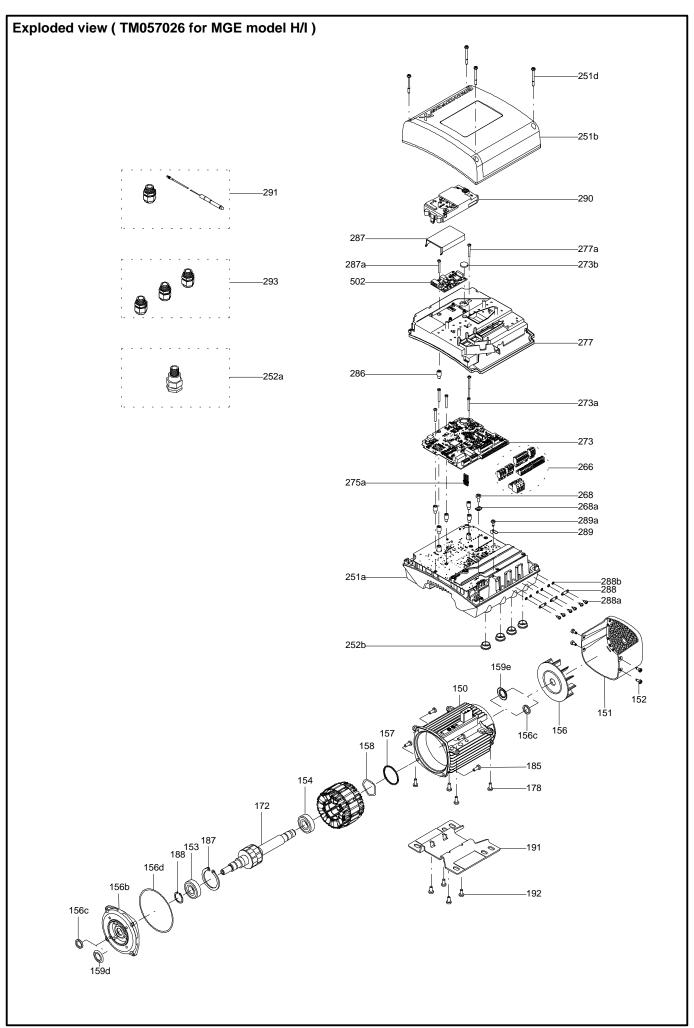




Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.







# Parts list TP 40-270/2, Product No. On request Valid from 20.6.2010 (1024)

	Pos	Description	Annotation	Données de classification	Référence	Quar	ntité	Unité
+		Motor				1		pcs
-		Coupling cpl.				1		pcs
	9	Hex socket head cap screw		Designation: DIN 912		4		
				Length (mm): 25				
				Thread: M8				
	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): 25		8	}	
				Thread: M10				
	28	Hex head screw		Length (mm): 20		4		
				Thread: M8				
-		Pump housing cpl.				1		pcs
-	6	Pump housing				1		
		Pump housing					1	
	45	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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