

# TP 50-60/2-A-F-A-BQQE 1X230 50HZ

Grundfos pump 98957977



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https://www.lenntech.com/grundfos/TP000/98957977/TP-50-60-2-A-F-A-BQQE.html

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Position	Qty.	Description
	1	TP 50-60/2 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 Pump
		<ul> <li>Pump housing and pump head are electrocoated to improve the corrosion resistance.</li> <li>Electrocoating includes: <ol> <li>Alkaline-based cleaning.</li> <li>Pretreatment with zinc phosphate coating.</li> <li>Cathodic electrocoating (epoxy).</li> <li>Curing of paint film at 200-250 °C.</li> </ol> </li> </ul>
		5 4 3 4 3 4 4 4 4 4 4 5 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1
		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.

V

#### **Technical data**

#### Liquid:

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

#### **Technical:**

2 m³/h
m
mm
QE
09906:2012 3B

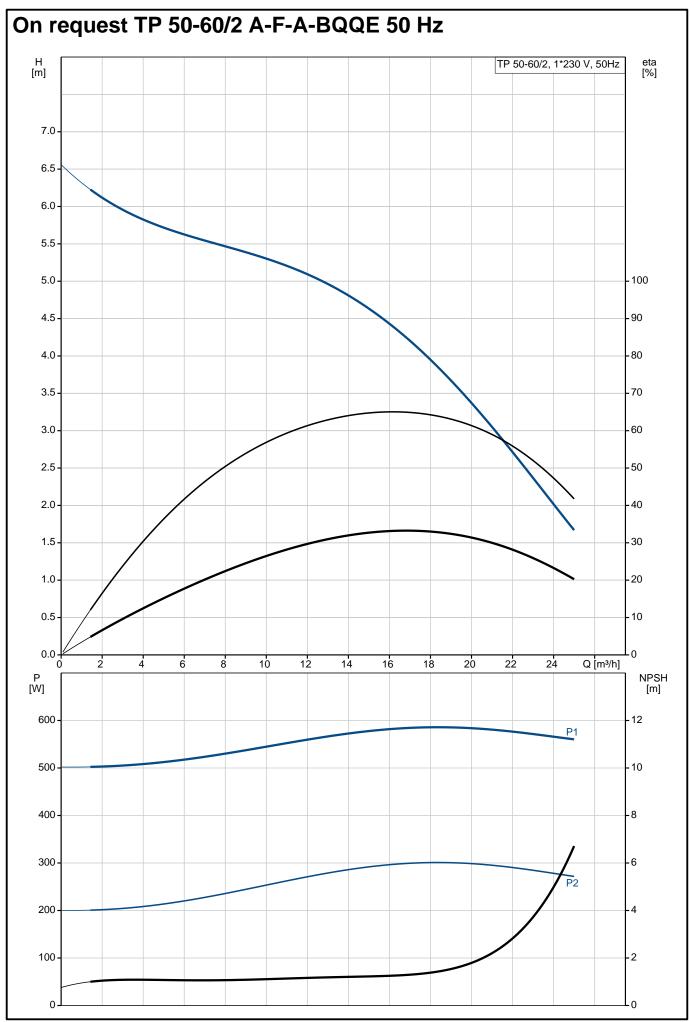
#### Materials:

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

#### Installation:

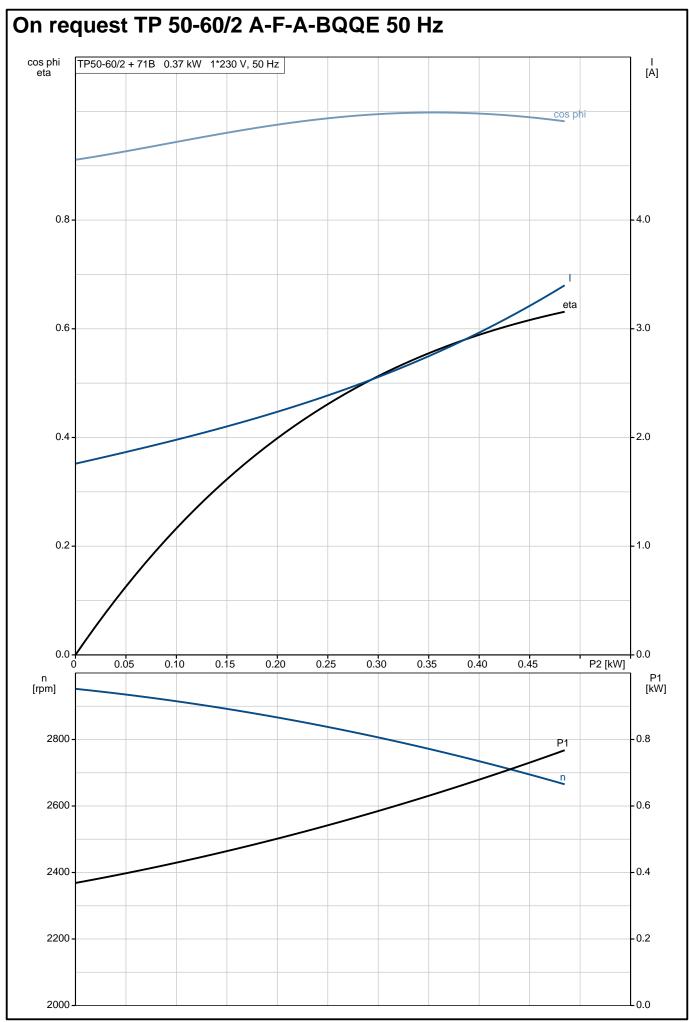
Installation:	
Range of ambient temperature:	-30 40 °C
Maximum operating pressure:	10 bar
Flange standard:	DIN
Pipe connection:	DN 50
Pump inlet:	DN 50
Pump outlet:	DN 50
Pressure rating:	PN 6/10
(@):	280 mm
Flange size for motor:	FT85
Electrical data:	
Motor type:	71B
Rated power - P2:	0.37 kW
Power (P2) required by pump:	0.37 kW
Mains frequency:	50 Hz
Rated voltage:	1 x 220-230/240
Rated current:	2.95/2.70 A
Starting current:	280 %
Cos phi - power factor:	0.99
Rated speed:	2770 rpm
Motor efficiency at full load:	60.0-56.0 %

Position	Qty.	Description	
		Number of poles: Enclosure class (IEC 34-5): Insulation class (IEC 85):	2 55 Dust/Jetting F
		Others: Minimum efficiency index, MEI ErP status: Net weight: Gross weight: Shipping volume:	: 0.60 EuP Standalone/Prod. 25.9 kg 29.4 kg 0.06 m <sup>3</sup>



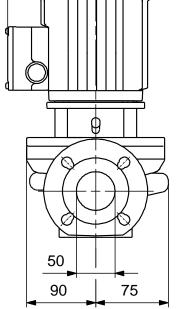
Description	Value	H [m] TP 50-60/2, 1*230 V, 50Hz [%]
General information:	Value	
Product name:	TP 50-60/2 A-F-A-BQQE	7.0 -
Product No:	On request	6.5 -
EAN number:	On request	6.0
Technical:	1	
Rated flow:	16.2 m³/h	5.5
Rated head:	4.4 m	5.0 - 100
Head max:	60 dm	4.5 - 90
Actual impeller diameter:	74 mm	4.0 - 80
Primary shaft seal:	BQQE	
Curve tolerance:	ISO9906:2012 3B	3.5
Pump version:	A	3.0 60
Model:	A	2.5
Materials:		2.0 40
Pump housing:	Cast iron	
· •···· ···· ···· ······	EN-JL1040	1.5
	ASTM A48-40 B	1.0 20
Impeller:	Stainless steel	0.5
•	DIN WNr. 1.4301	0.0
	AISI 304	0 5 10 15 20 Q [m³/h]
Material code:	A	P [W] [m]
Installation:		P1
Range of ambient temperature:	-30 40 °C	500 - 10
Maximum operating pressure:	10 bar	
Flange standard:	DIN	400 - 8
Pipe connection:	DN 50	300 - 6
Pump inlet:	DN 50	300 P2 0
Pump outlet:	DN 50	200 4
Pressure rating:	PN 6/10	100
(@)	280 mm	
Flange size for motor:	FT85	0
Connect code:	F	133 133
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	
Rated power - P2:	0.37 kW	
Power (P2) required by pump:	0.37 kW	
Mains frequency:	50 Hz	
Rated voltage:	1 x 220-230/240 V	sufere u
Rated current:	2.95/2.70 A	
Starting current:	280 %	
Cos phi - power factor:	0.99	
Rated speed:	2770 rpm	M12 140
Motor efficiency at full load:	60.0-56.0 %	اد <sup>بن</sup> ه
Number of poles:	2	LOW VOLTAGE
Enclosure class (IEC 34-5):	55 Dust/Jetting	LOW VOLTAGE DIRECTION OF ROTATION
Insulation class (IEC 85):	F	
Motor protec:	PTO	
Motor No:	85215102	
Others:		
Minimum efficiency index, MEI :	0.60	
ErP status:	EuP Standalone/Prod.	
Net weight:	25.9 kg	
Gross weight:	29.4 kg	HIGH VOLTAGE DIRECTION OF ROTATION
Shipping volume:	0.06 m³	
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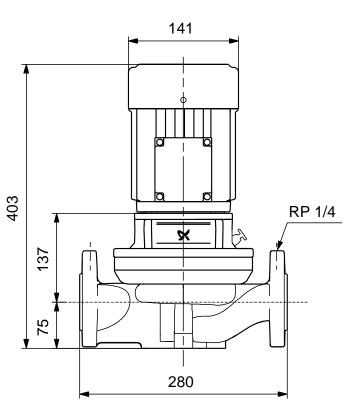
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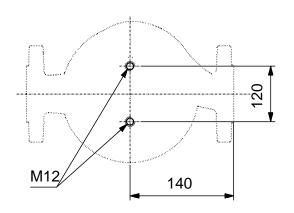


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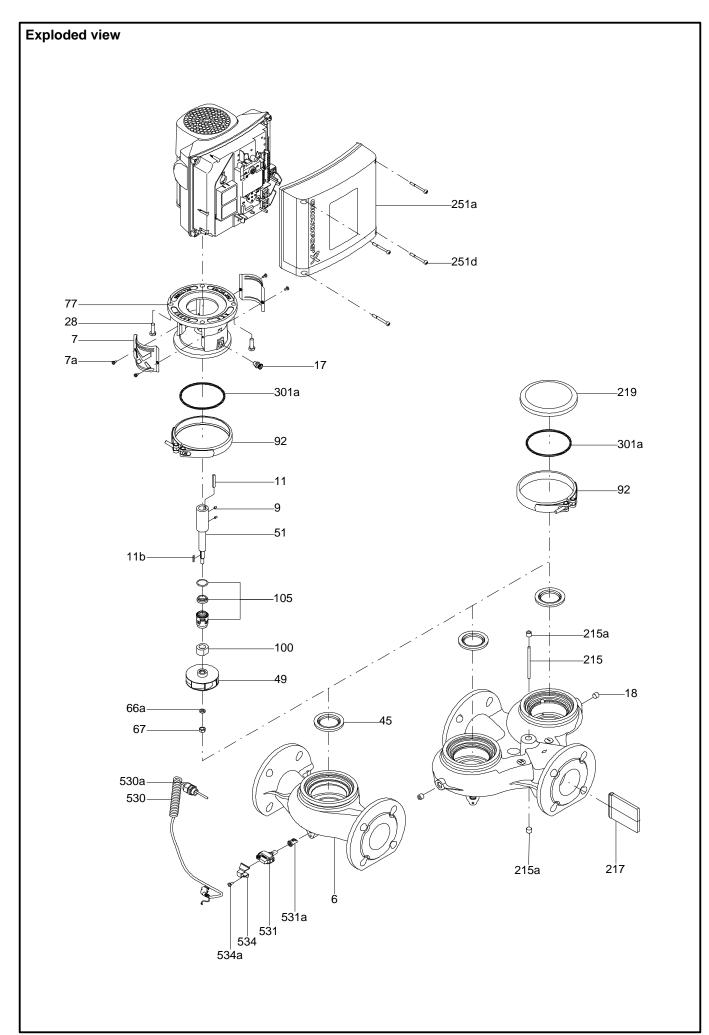
# On request TP 50-60/2 A-F-A-BQQE 50 Hz

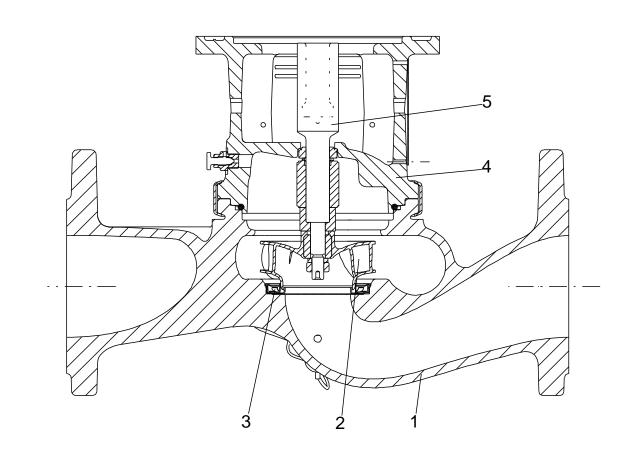




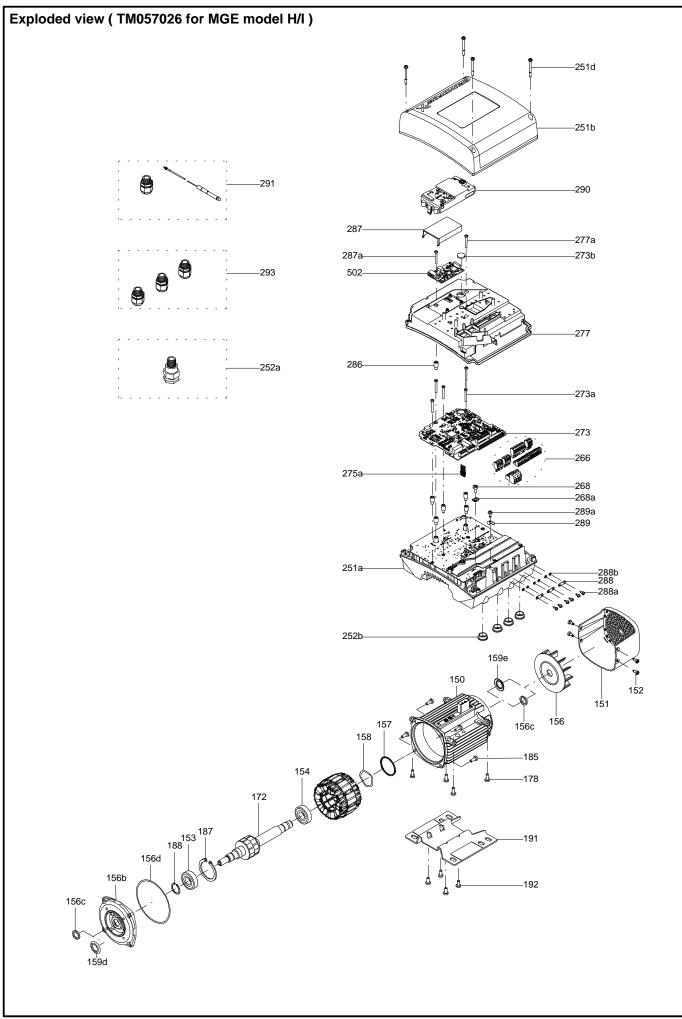


Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.





### TM058200



## Parts list TP 50-60/2, 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	9	Hex socket head cap screw		Designation: DIN 912		4	
				Length (mm): 20			
				Thread: M6			
10	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				4	
	28	Hex head screw		Length (mm): 20		4	
				Thread: M8			
-		Pump housing cpl.				1	pcs
(	6	Pump housing				1	
(	65	Teflon 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
	48	Split cone nut				1	
	49	Impeller cpl.				1	
	49b	Split cone				1	
	51	Pump shaft				1	
	18	Air vent screw		Thread: 1/4"		1	pcs
	19	Plug				2	pcs
	72a	O-ring				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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