

TP 100-370/4-A-F-A-BQQE 400D 50HZ

Grundfos pump 96109310



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https://www.lenntech.com/grundfos/TP000/96109310/TP-100-370-4-A-F-A-BQQE.html

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Position | Qty. | Description

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TP 100-370/4 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).

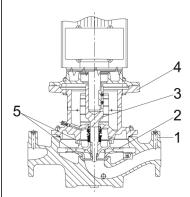
The pump is fitted with a fan-cooled asynchronous motor.

Further product details 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: Stub shaft
- 4: Pump head/motor stool
- 5: Wear rings

The pump housing is provided with a replaceable brass neck ring to reduce the amount of liquid running from the outlet side of the impeller to the inlet side. The impeller is secured to the shaft with a 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.

Position | Qty. | Description

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. The pump shaft is fastened directly on the motor shaft with key and set screws.

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 free-hole flange (FF).

Motor-mounting designation in accordance with IEC 60034-7: IM B 5, IM V 1 (Code I) / IM 3001, IM 3011 (Code II).

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

The motor has thermistors (PTC sensors) in the windings in accordance with DIN 44081/DIN 44082. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

Thermal switches must be connected to an external control circuit in a way which ensures that the automatic reset cannot cause accidents. The motors must be connected to a motor-protective circuit breaker according to local regulations.

The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.

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: 164 m³/h
Rated head: 29.3 m
Actual impeller diameter: 320 mm
Primary shaft seal: BQQE

Curve tolerance: ISO9906:2012 3B

Materials:

Pump housing: Cast iron

EN-JL1040

ASTM A48-40 B

Impeller: Cast iron

EN-JL1030 ASTM A48-30 B

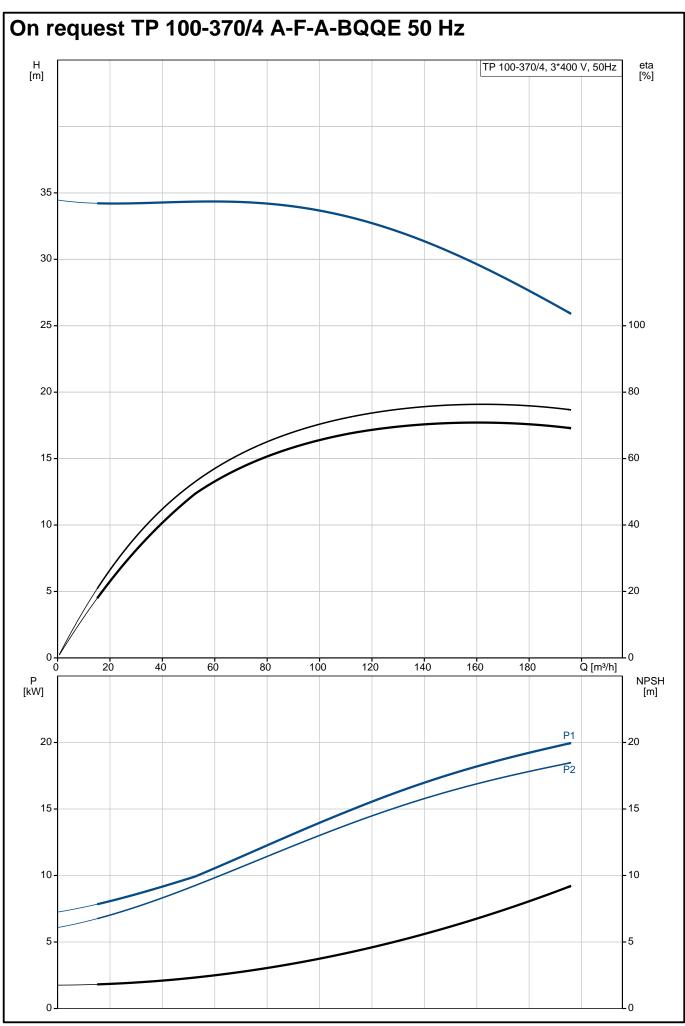
Installation:

Range of ambient temperature: -20 .. 55 °C Maximum operating pressure: 16 bar Flange standard: DIN Pipe connection: **DN 100** Pump inlet: **DN 100** Pump outlet: **DN 100** Pressure rating: PN 16 (@):670 mm Flange size for motor: FF300

Electrical data:

Motor type: SIEMENS
IE Efficiency class: IE3
Rated power - P2: 18.5 kW
Power (P2) required by pump: 18.5 kW

Position	Qty.	Description	
	-	Mains frequency: Rated voltage: Rated current: Starting current: Cos phi - power factor: Rated speed: Efficiency: Motor efficiency at full load: Motor efficiency at 1/2 load: Number of poles: Enclosure class (IEC 34-5): Insulation class (IEC 85):	50 Hz 3 x 380-420D/660-725Y V 37,0-33,5/21,6-19,6 A 690-690 % 0.82 1470 rpm IE3 92,6% 92.6-92.6 % 93.2-93.2 % 93.2-93.2 % 4 55 Dust/Jetting F
		Others: Minimum efficiency index, MEI ErP status: Net weight: Gross weight: Shipping volume: Danish VVS No.:	: 0.69 EuP Standalone/Prod. 337 kg 385 kg 1.12 m³ 381716370



Description	Value	H [m]	TP 100-370/4, 3*400 V, 50
General information:			
Product name:	TP 100-370/4 A-F-A-BQQE		
Product No:	On request		
EAN number:	On request	35 -	
Technical:	311 request		
Rated flow:	164 m³/h	30 -	
Rated head:			
	29.3 m		
Head max:	370 dm	25 -	
Actual impeller diameter:	320 mm		
Primary shaft seal:	BQQE	20 -	
Curve tolerance:	ISO9906:2012 3B		
Pump version:	A	15 -	
Model:	A	15-	
Materials:			
Pump housing:	Cast iron	10-	
. amp nodeling.	EN-JL1040		
	ASTM A48-40 B	5-	
Impeller:	Cast iron	ĭ //	
шренег.		/	
	EN-JL1030	0 1	50 100 150 Q [m³
	ASTM A48-30 B	Р	100 100 Q [m ^a
Material code:	A	[kW]	
Installation:		20 -	P1
Range of ambient temperature:	-20 55 °C		P2
Maximum operating pressure:	16 bar	15 -	
Flange standard:	DIN	19	
Pipe connection:	DN 100		
Pump inlet:	DN 100	10-	
Pump outlet:	DN 100		
Pressure rating:	PN 16	5-	
	-		
	670 mm	0	
Flange size for motor:	FF300	. —	
Connect code:	F	â	
Liquid:		290 290	350
Pumped liquid:	Water	286	368
Liquid temperature range:	-25 120 °C		- furnit
Liquid temperature during operation:	20 °C	╎┟╾╢╢╢┃╎	
Density:	998.2 kg/m³		_
Electrical data:		Rp 1/4	<u> </u>
Motor type:	SIEMENS		
IE Efficiency class:	IE3	-	
Rated power - P2:	18.5 kW		
Power (P2) required by pump:	18.5 kW	290 249	670
		ia ** 6 a * 6 	
Mains frequency:	50 Hz		M16
Rated voltage:	3 x 380-420D/660-725Y V		
Rated current:	37,0-33,5/21,6-19,6 A	. ←	- <u></u>
Starting current:	690-690 %		
Cos phi - power factor:	0.82		335
Rated speed:	1470 rpm		
Efficiency:	IE3 92,6%		
Motor efficiency at full load:	92.6-92.6 %		<u> </u>
Motor efficiency at 3/4 load:	93.2-93.2 %		'
Motor efficiency at 1/2 load:	93.2-93.2 %		
			[⊤]
Number of poles:	4]	
Enclosure class (IEC 34-5):	55 Dust/Jetting		
Insulation class (IEC 85):	F	[] [F] [U]	0
Motor protec:	PTC	TO AMPLIFIER RELAY	S Now U SC
Motor No:	99032117	L1	E THESMISS
Others:			C TP: 11 HERWALLY PROTECT DIVENNE THE HERWALDS AND THE HE
Minimum efficiency index, MEI:	0.69		INTERNAL STORY FOR
ErP status:	EuP Standalone/Prod.	 	T SOURCE IN THE REI
			MALLY P MARUET MARUE
Net weight:	337 kg		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Gross weight:	385 kg		S TP 21
		. IT ~~	
Shipping volume: Danish VVS No.:	1.12 m ³ 381716370	TO AMPLIFIER RELAY	-

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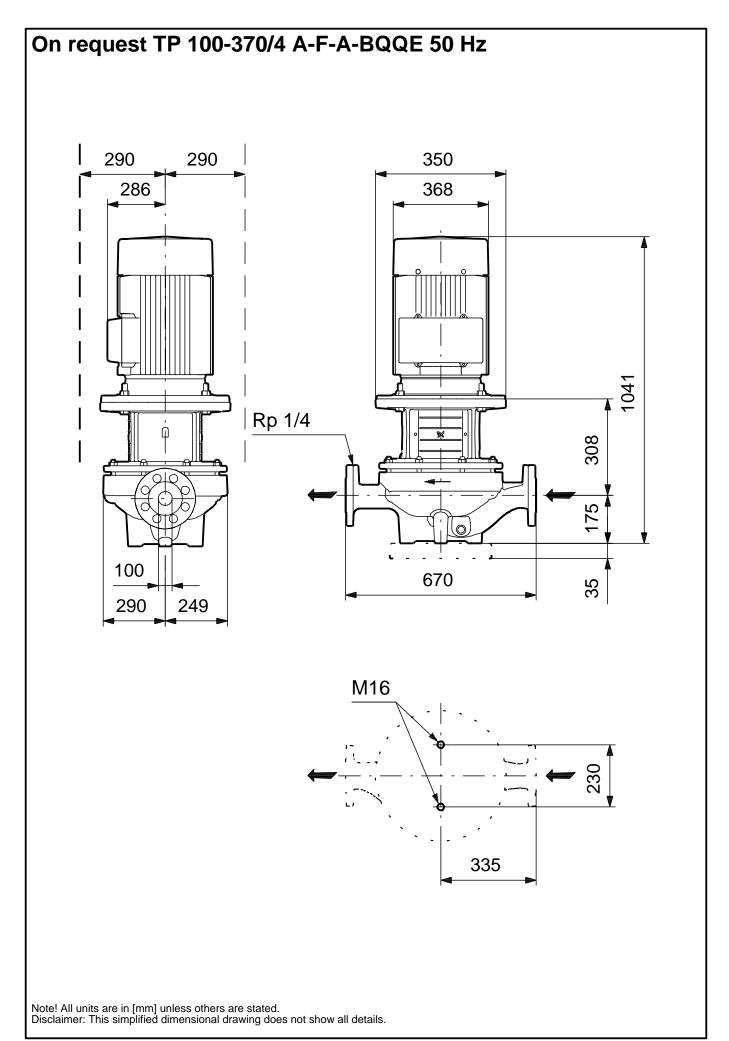
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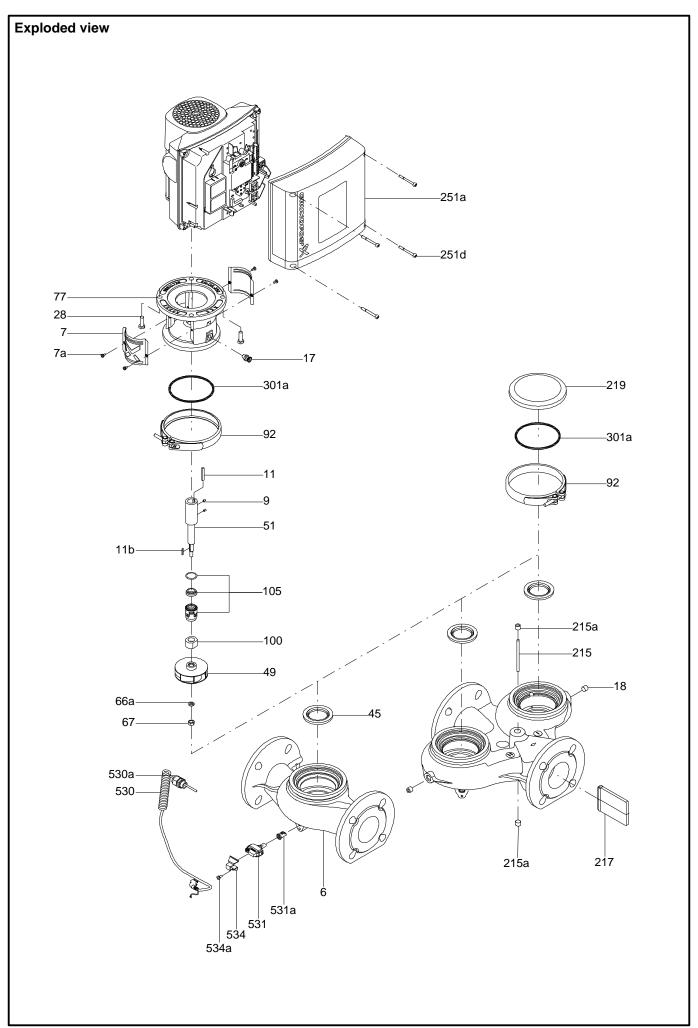
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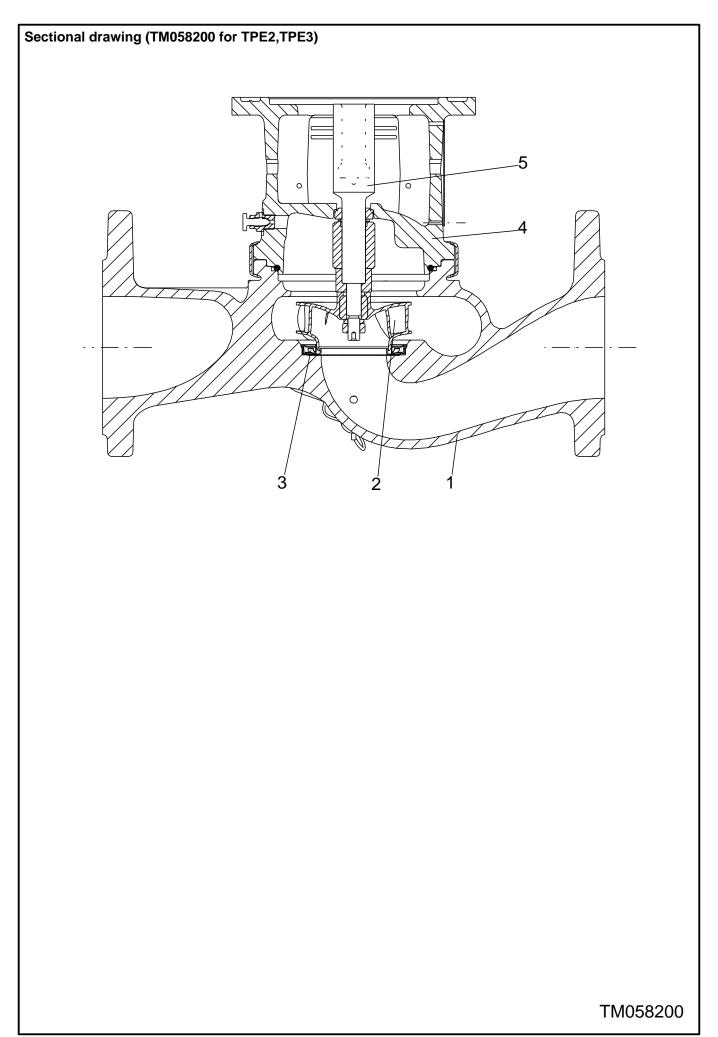
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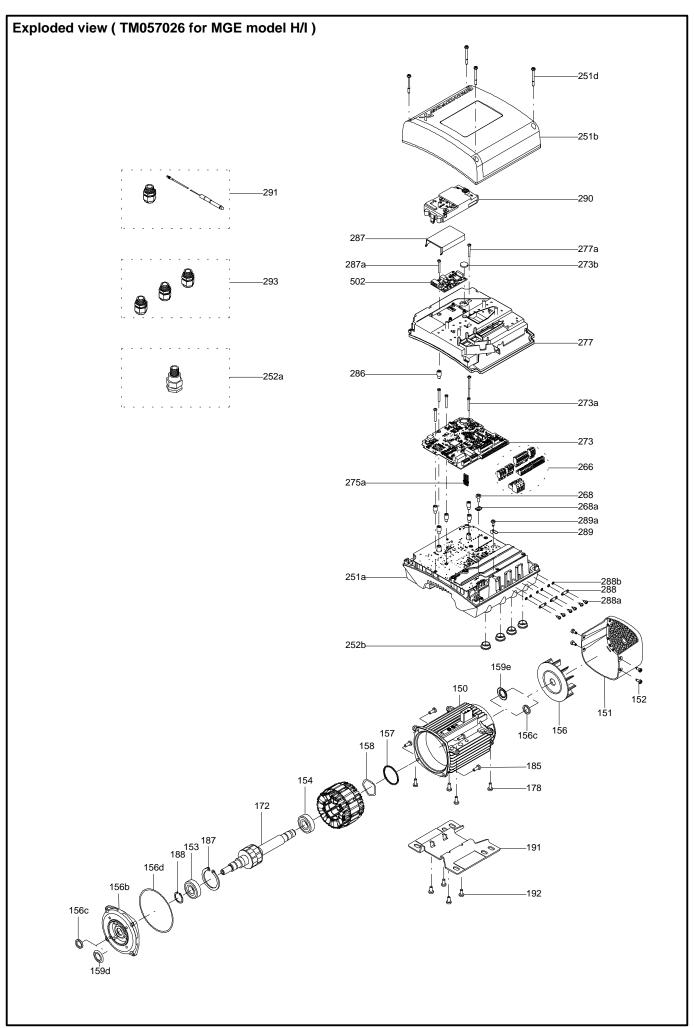
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NPSH [m]









Parts list TP 100-370/4, Product No. On request Valid from 19.3.2012 (1212)

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unit
	Motor				1	pcs
	Nut				1	pcs
66	Washer		Designation: DIN 125 A2		1	
			Internal diameter: 19			
			Outer diameter: 34			
			Thickness: 3			
66a	Spring lock washer				1	
67	Nut		Thread: M18		1	
	Motor stool cpl.				1	pcs
1a	Motor stool				1	
7	Coupling guard				2	
77a	Pan head screw				4	
	Pump housing cpl.				1	pcs
6	Pump housing				1	
19	Plug				1	
20	Plug				1	
66a	Nut		Thread: M12		14	
	Shaft seal cpl.				1	pcs
72.a	O-ring		Diameter: 329,79		1	
			Material type: EPDM			
			Thickness: 3,53			
105	Shaft seal				1	
	Stub shaft				1	pcs
9	Socket set screw		Length (mm): 6		2	
			Thread: M8			
11	Parallel key				1	
51	Pump shaft		Diameter: 32		1	
	Base plate cpl.				1	pcs
28g	Hex head cap screw		Length (mm): 30 MM		2	
			Thread: M16			
56	Base plate				1	
19	Plug				2	pcs
49	Impeller				1	pcs
77	Cover				1	pcs
36	Nut		Thread: M10		8	•
77	Cover				1	
105h	Spacer				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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