

TP 80-700/2-A-F-A-BAQE 400D 50HZ Grundfos pump 96108706



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https://www.lenntech.com/grundfos/TP000/96108706/TP-80-700-2-A-F-A-BAQE.html

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Position | Qty. | Description

1

TP 80-700/2 A-F-A-BAQE



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

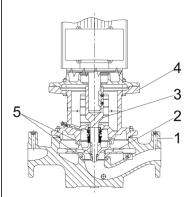
The product's minimum efficiency index (MEI) is greater or equal to 0.70. This is by the Commission Regulation (EU) considered as an indicative benchmark for best-performing water pump available on the market as from 1 January 2013.

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: 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: carbon graphite, metal-impregnated
- Stationary seat material: silicon carbide (SiC)

This material pairing has a very good corrosion resistance and is especially suitable for water up to 120 °C. However, seal life will be reduced at temperatures above 90 °C. The material pairing is not recommended for liquids containing particles as this will result in heavy wear on the SiC face.

Secondary seal material: EPDM (ethylene-propylene rubber)

Position | Qty. | Description

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. 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: 0 .. 120 °C
Liquid temperature during operation: 20 °C
Density: 998.2 kg/m³

Technical:

Rated flow: 132 m³/h
Rated head: 59.7 m
Actual impeller diameter: 219 mm
Primary shaft seal: BAQE

Curve tolerance: ISO9906:2012 3B

Materials:

Pump housing: Cast iron

EN-JL1040 ASTM A48-40 B

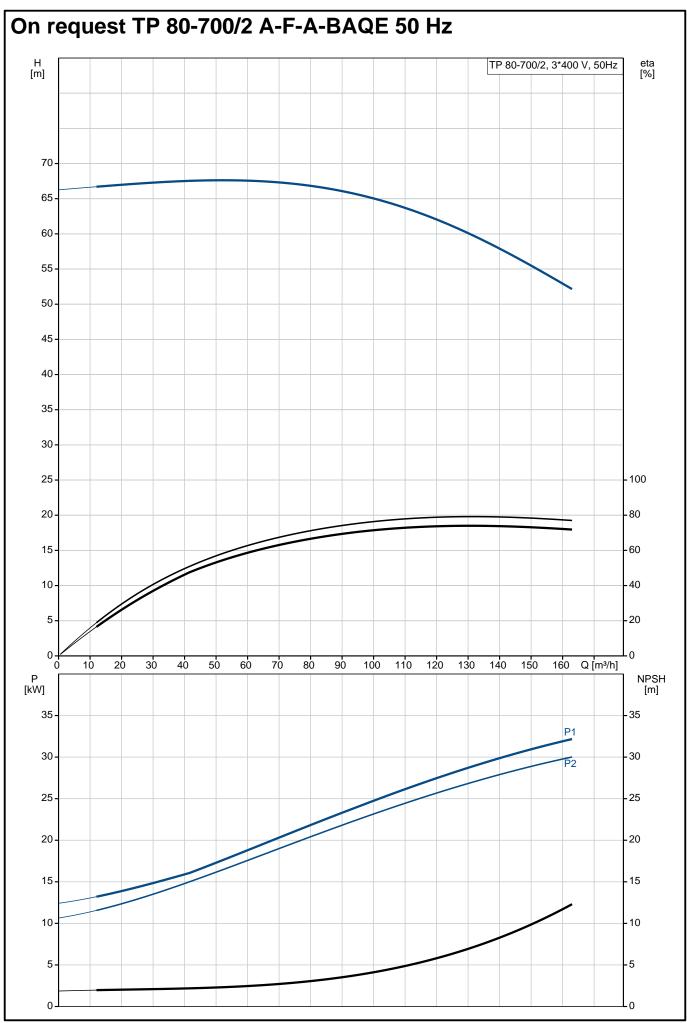
Impeller: Cast iron

EN-JL1030 ASTM A48-30 B

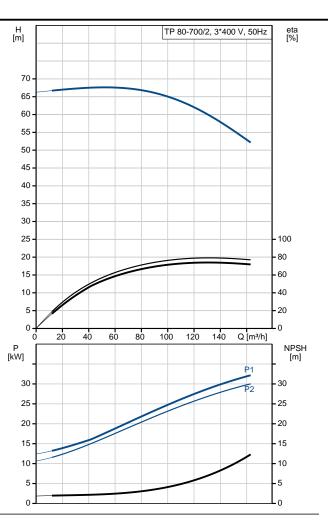
Installation:

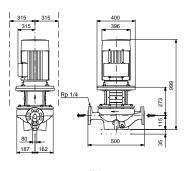
Range of ambient temperature: -20 .. 55 °C Maximum operating pressure: 16 bar DIN Flange standard: Pipe connection: **DN 80 DN 80** Pump inlet: Pump outlet: **DN 80** PN 16 Pressure rating: (@): 500 mm Flange size for motor: FF350

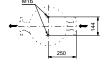
Position	Qty.	Description	
		Electrical data:	
		Motor type:	SIEMENS
		IE Efficiency class:	IE3
		Rated power - P2:	30 kW
		Power (P2) required by pump:	
		Mains frequency:	50 Hz
		Rated voltage:	3 x 380-420D/660-725Y V
		Rated current:	56,0-51,0/32,0-29,5 A
		Starting current:	660-660 %
		Cos phi - power factor:	0.86
		Rated speed:	2955 rpm
		Efficiency:	IE3 93,3%
		Motor efficiency at full load:	93.3-93.3 %
		Motor efficiency at 3/4 load:	93.6-93.6 %
		Motor efficiency at 1/2 load:	93.4-93.4 %
		Number of poles:	2 55 D attletter
		Enclosure class (IEC 34-5):	55 Dust/Jetting
		Insulation class (IEC 85):	F
		Others:	
		Minimum efficiency index, MEI	
		ErP status:	EuP Standalone/Prod.
		Net weight:	316 kg
		Gross weight:	345 kg
		Shipping volume:	1.12 m ³
		Danish VVS No.:	382764701
	I		

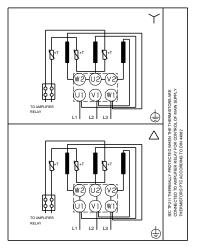


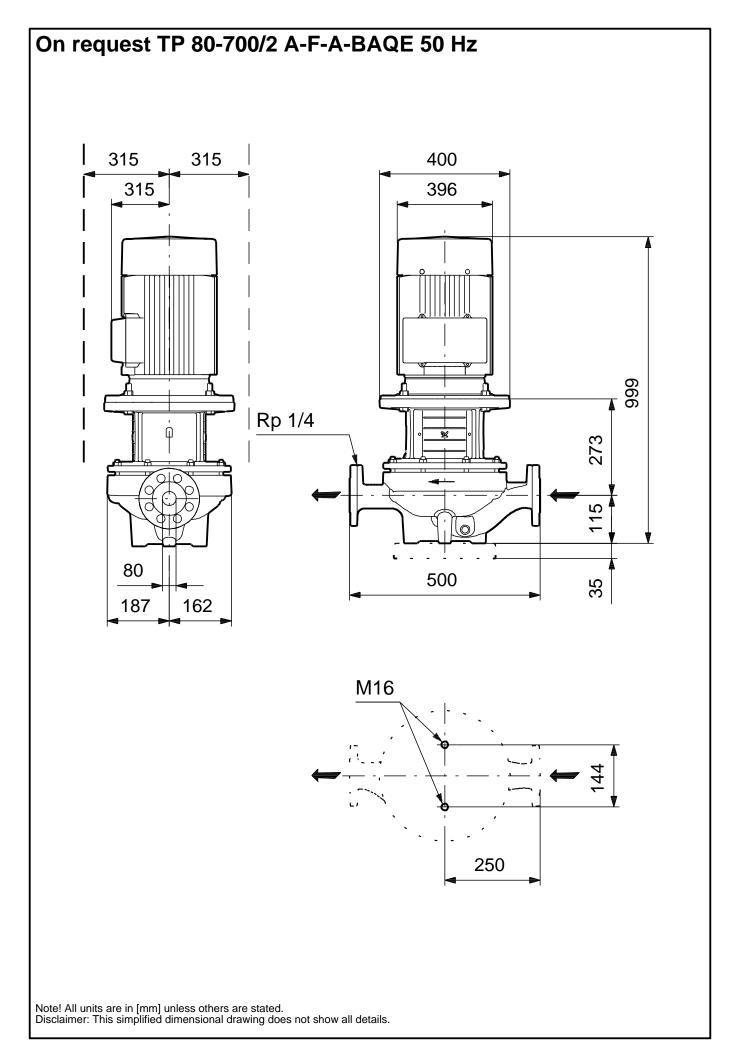
Description General information:	Value		
Product name:	TD 90 700/2 A E A DAOE		
Product No:	TP 80-700/2 A-F-A-BAQE On request		
EAN number:	On request		
Technical:	Off request		
Rated flow:	132 m³/h		
Rated head:	59.7 m		
Head max:	700 dm		
Actual impeller diameter:	219 mm		
Primary shaft seal:	BAQE		
Curve tolerance:	ISO9906:2012 3B		
Pump version:	Α		
Model:	A		
Materials:			
Pump housing:	Cast iron		
	EN-JL1040		
	ASTM A48-40 B		
Impeller:	Cast iron		
	EN-JL1030		
	ASTM A48-30 B		
Material code:	A		
Installation:			
Range of ambient temperature:	-20 55 °C		
Maximum operating pressure:	16 bar		
Flange standard:	DIN		
Pipe connection:	DN 80		
Pump inlet:	DN 80		
Pump outlet:	DN 80		
Pressure rating:	PN 16		
(@)	500 mm		
Flange size for motor:	FF350		
Connect code:	F		
Liquid:			
Pumped liquid:	Water		
Liquid temperature range:	0 120 °C		
Liquid temperature during operation:	20 °C		
Density:	998.2 kg/m³		
Electrical data:	OLEMENIO		
Motor type:	SIEMENS		
IE Efficiency class:	IE3		
Rated power - P2:	30 kW		
Power (P2) required by pump:	30 kW		
Mains frequency:	50 Hz 3 x 380-420D/660-725Y V		
Rated voltage: Rated current:			
Starting current:	56,0-51,0/32,0-29,5 A		
	660-660 % 0.86		
Cos phi - power factor:			
Rated speed: Efficiency:	2955 rpm		
	IE3 93,3%		
Motor efficiency at full load:	93.3-93.3 %		
Motor efficiency at 3/4 load: Motor efficiency at 1/2 load:	93.6-93.6 %		
Number of poles:	93.4-93.4 %		
Enclosure class (IEC 34-5):			
	55 Dust/Jetting		
Insulation class (IEC 85): Motor protec:	PTC		
1901 III I I I I I I I I I I I I I I I I I			
Motor No:	99032179		
Motor No: Others:			
Motor No: Others: Minimum efficiency index, MEI:	0.70		
Motor No: Others: Minimum efficiency index, MEI: ErP status:	0.70 EuP Standalone/Prod.		
Motor No: Others: Minimum efficiency index, MEI: ErP status: Net weight:	0.70 EuP Standalone/Prod. 316 kg		
Motor No: Others: Minimum efficiency index, MEI: ErP status: Net weight: Gross weight:	0.70 EuP Standalone/Prod. 316 kg 345 kg		
Motor No: Others: Minimum efficiency index, MEI: ErP status: Net weight:	0.70 EuP Standalone/Prod. 316 kg		



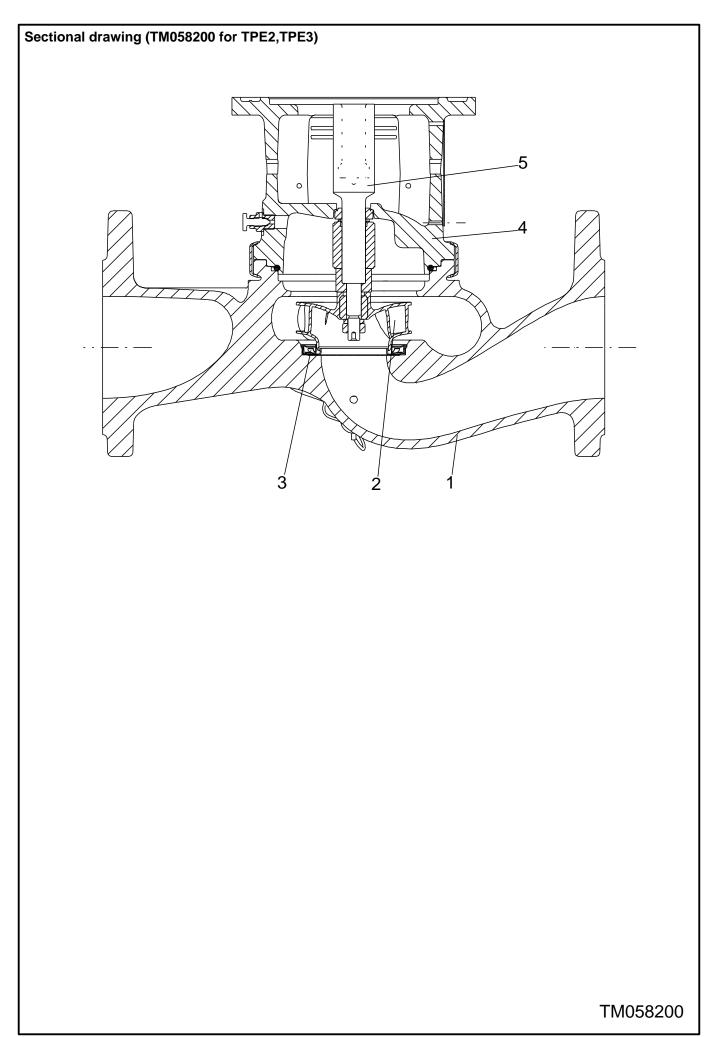














Parts list TP 80-700/2, Product No. On request Valid from 15.7.2011 (1128)

P	os	Description	Annotation	Données de classification	Référence	Quantité	Unité
+		Motor				1	pcs
-		Nut				1	pcs
66	6	Washer				1	
66	6a	Spring lock washer				1	
67	7	Nut		Thread: M14		1	
-		Motor stool cpl.				1	pcs
18	a	Motor stool				1	
7		Coupling guard				2	
7	7a	Pan head screw				4	
-		Pump housing cpl.				1	pcs
6		Pump housing				1	
19	9	Plug				1	
20	0	Plug				1	
36	6	Nut		Thread: M10		8	
-		Kit, Base plate				1	pcs
28	8g	Hex head screw				2	
56	6	Base plate				1	
-		Shaft seal cpl.				1	pcs
72	2.a	O-ring		Diameter: 221,84		1	
				Material type: EPDM			
				Thickness: 3,53			
10	05	Shaft seal		Material type: BAQE		1	
-		Stub shaft				1	pcs
9		Socket set screw		Length (mm): 10		2	
				Thread: M8			
11	1	Parallel key		Dimension: 6X6X35		1	
5	1	Pump shaft				1	
-		Base plate cpl.				1	pcs
28	8g	Hex head cap screw		Length (mm): 30 MM		2	
				Thread: M16			
56	6	Base plate				1	
19	9	Plug				2	pcs
49	9	Impeller				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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