

Date: 09/09/2021 Qty. Description TP 40-90/2 A-F-A-BQQE-DX1 1 Note! Product picture may differ from actual product Product No.: 98282359 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. 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. Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface. Pump 4 5 3 2 1 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 pressed onto the shaft. Printed from Grundfos Product Centre [2021.23.003] 1/8



09/09/2021

Qty. | Description

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.

Date:

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 or a flat gasket.

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 (11/1).

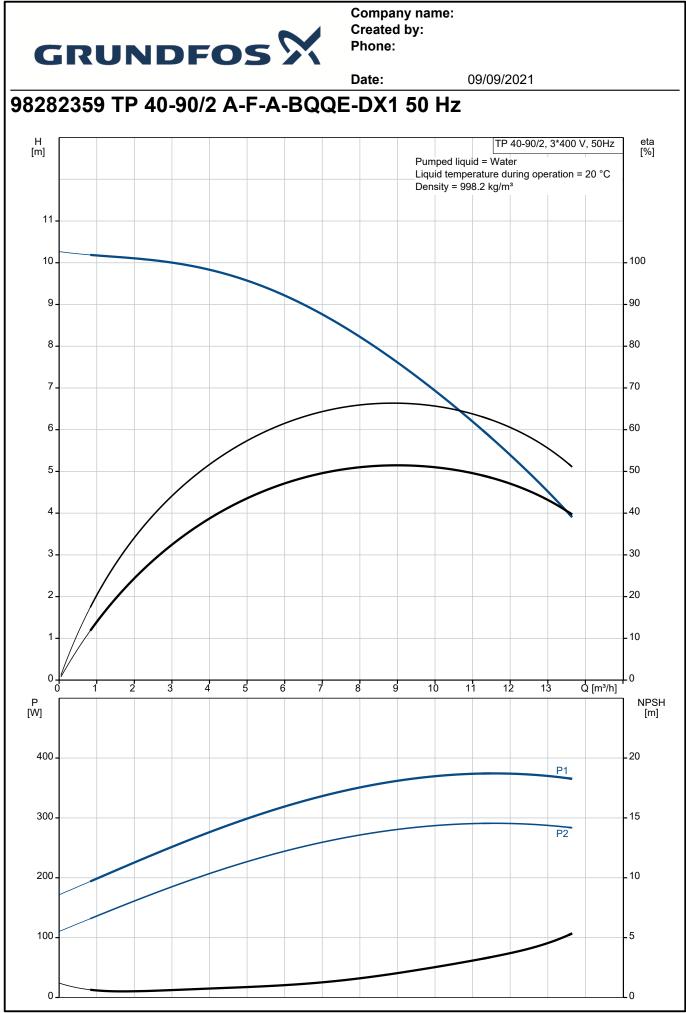
Further product details

Technical data

Controls: Frequency converter:	NONE
Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water -25 120 °C 20 °C 998.2 kg/m³
Technical: Pump speed on which pump data Rated flow: Rated head: Actual impeller diameter: Code for shaft seal: Curve tolerance:	are based: 2865 rpm 9.48 m³/h 7.01 m 89 mm BQQE ISO9906:2012 3B2
Materials: Pump housing: Impeller:	Cast iron EN-GJL-200 ASTM class 30 Composite PES+30% GF
Installation: Range of ambient temperature:	-30 60 °C



		Date:	09/09/2021
Description			
Maximum operating pressure:	10 bar		
Max pressure at stated temp:	10 bar / 120 °C		
Type of connection:	DIN		
Size of connection:	DN 40		
Pressure rating for connection:	PN 6/10		
Port-to-port length:	250 mm		
Flange size for motor:	FT85		
Electrical data:			
Motor type:	71A		
IE Efficiency class:	IE3		
Rated power - P2:	0.37 kW		
Mains frequency:	50 Hz		
Rated voltage:	3 x 220-240D/380-41	5Y V	
Rated current:	1.74/1.00 A		
Starting current:	490-530 %		
Cos phi - power factor:	0.80-0.70		
Rated speed:	2850-2880 rpm		
Efficiency:	IE3 73,8%		
Motor efficiency at full load:	73.8 %		
Motor efficiency at 3/4 load:	79.0 %		
Motor efficiency at 1/2 load:	75.5 %		
Number of poles:	2		
Enclosure class (IEC 34-5):	55 Dust/Jetting		
	F		
Insulation class (IEC 85):			
Motor No:	85805102		
Others:			
Minimum efficiency index, MEI ≥:			
Net weight:	14 kg		
Gross weight:	16 kg		
Shipping volume:	0.04 m³		
Danish VVS No.:	381812090		
Finnish LVI No.:	4616028		
Norwegian NRF no.:	9043544		
Country of origin:	HU		
Custom tariff no.:	84137051		





GRUNDF		Date:	09/09/2021
Description	Value	H [m]	TP 40-90/2, 3*400 V, 50Hz [%]
General information:			Pumped liquid = Water Liquid temperature during operation = 20 °C
Product name:	TP 40-90/2 A-F-A-BQQE-DX1	11 -	Density = 998.2 kg/m ³
Product No:	98282359	10 -	100
EAN number:	5711492402450	9 _	90
Technical:			
Pump speed on which pump data are based:	2865 rpm	8 - 7 -	80
Rated flow:	9.48 m³/h		
Rated head:	7.01 m	6 -	60
Maximum head:	90 dm	5 -	50
Actual impeller diameter:	89 mm	4	40
Code for shaft seal:	BQQE	4 -	40
Curve tolerance:	ISO9906:2012 3B2	3 -	30
Pump version:	A	2	20
Materials:		-1//	
Pump housing:	Cast iron	1 - //	
Pump housing:	EN-GJL-200	۰	
Pump housing:	ASTM class 30	o	2 4 6 8 10 12 Q [m ³ /h]
Impeller:	Composite	P [W]	NPSH [m]
Impeller:	PES+30% GF	400 -	20
Material code:	A		P1 2.5
Installation:		300 -	15
Range of ambient temperature:	-30 60 °C		P2
Maximum operating pressure:	10 bar	200 -	10
Max pressure at stated temp:	10 bar / 120 °C		
Type of connection:	DIN	100	5
Size of connection:	DN 40		
Pressure rating for connection:	PN 6/10	0	0
Port-to-port length:	250 mm	h	
Flange size for motor:	FT85		
Connect code:	F	109	
Liquid:			
Pumped liquid:	Water		
Liquid temperature range:	-25 120 °C		
Selected liquid temperature:	20 °C		
Density:	998.2 kg/m³		
Electrical data:		40	
Motor type:	71A	75 75	250
IE Efficiency class:	IE3		Ø
Rated power - P2:	0.37 kW		
Mains frequency:	50 Hz		
Rated voltage:	3 x 220-240D/380-415Y V		0
Rated current:	1.74/1.00 A		
Starting current:	490-530 %	2	HIGH VOLTAGE DIRECTION OF ROTATION
Cos phi - power factor:	0.80-0.70		
Rated speed:	2850-2880 rpm		-f-=
Efficiency:	IE3 73,8%		
Motor efficiency at full load:	73.8 %		
Motor efficiency at 3/4 load:	79.0 %	≻	
Motor efficiency at 1/2 load:	75.5 %	′	
Number of poles:	2	2	LOW VOLTAGE DIRECTION OF ROTATION
Enclosure class (IEC 34-5):	55 Dust/Jetting		
Insulation class (IEC 85):	F	r a	
Built-in motor protection:	NONE	(Er	
Motor No:	85805102		
Controls:			
Frequency converter:	NONE	⊲	

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GROND		Date:	09/09/2021
Description	Value		
Others:			
Minimum efficiency index, MEI ≥:	0.70		
Net weight:	14 kg		
Gross weight:	16 kg		
Shipping volume:	0.04 m³		
Danish VVS No.:	381812090		
Finnish LVI No.:	4616028		
Norwegian NRF no.:	9043544		
Country of origin:	HU		
Custom tariff no.:	84137051		

