

08/08/2022

Date:

Description TP 40-140/4 A-F-A-BQQE-GX3 Product No.: 98743317

Note! Product picture may differ from actual product

Qty.

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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.

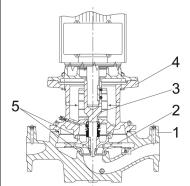
The shaft seal is according to EN 12756. Pipework connection is via PN 16 DIN flanges (EN 1092-2 and ISO 7005-2).

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

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



- 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.

Seal faces:

- 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.

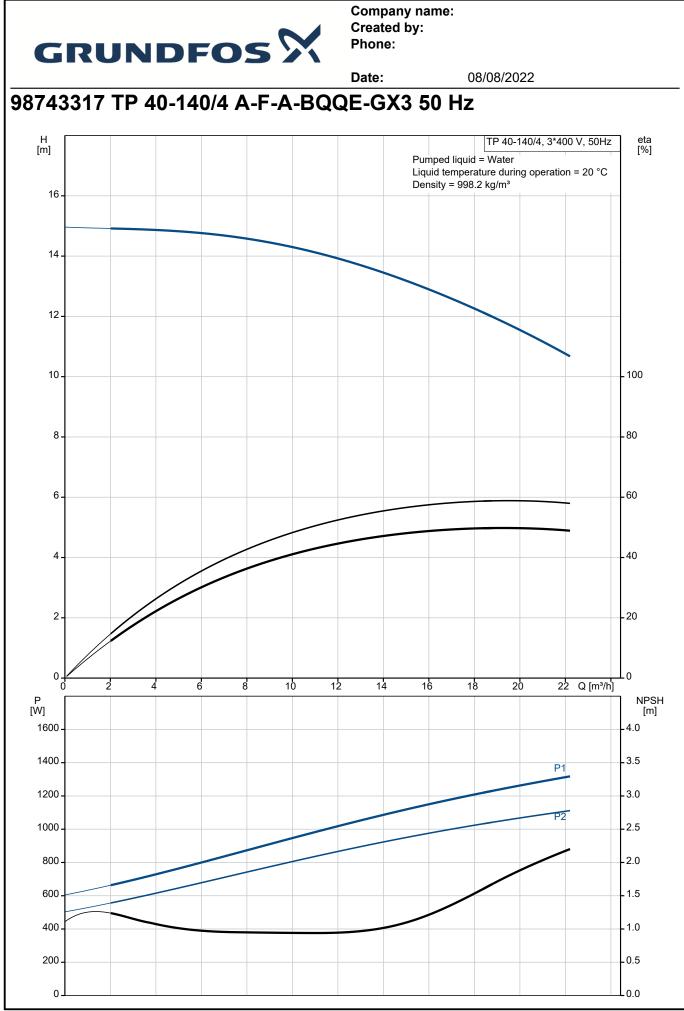


Date: 08/08/2022 Description Qty. Secondary seal material: EPDM (ethylene-propylene rubber) 1 EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils. A circulation of liquid through the duct of the air vent screw ensures lubrication and cooling of the shaft seal. The flanges 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 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).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. **Further product details** 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. **Technical data** Controls: Frequency converter: NONE Liquid: Pumped liquid: Water Liquid temperature range: -25 .. 120 °C Selected liquid temperature: 20 °C Density: 998.2 kg/m³ Technical: Pump speed on which pump data are based: 1440 rpm Rated flow: 19.2 m³/h Rated head: 11.5 m Actual impeller diameter: 212 mm Code for shaft seal: BQQE Curve tolerance: ISO9906:2012 3B2 Materials: Pump housing: Cast iron EN-GJL-250 ASTM class 35 Impeller: Cast iron EN-GJL-200 ASTM class 30 Installation: Range of ambient temperature: -20 .. 55 °C Maximum operating pressure: 16 bar



Phone:

y.	Description		
-	-	40.1 (400.00	
	Max pressure at stated temp:	16 bar / 120 °C	
	Type of connection:	DIN	
	Size of connection:	DN 40	
	Pressure rating for connection:	PN 16	
	Port-to-port length:	440 mm	
	Flange size for motor:	FF165	
	Electrical data:		
	Motor type:	SIEMENS	
	IE Efficiency class:	IE3	
	Rated power - P2:	1.1 kW	
	Mains frequency:	50 Hz	
	Rated voltage:	3 x 220-240D/380-420Y V	
	Rated current:	4.2/2.4 A	
	Starting current:	690-690 %	
	Cos phi - power factor:	0.78	
	Rated speed:	1440 rpm	
	Efficiency:	IE3 84,1%	
	Motor efficiency at full load:	84.1-84.1 %	
	Motor efficiency at 3/4 load:	84.7-84.7 %	
	Motor efficiency at 1/2 load:	83.4-83.4 %	
	Number of poles:	4	
	Enclosure class (IEC 34-5):	IP55	
	Insulation class (IEC 85):	F	
	Motor No:	83V02205	
	Others:		
	Minimum efficiency index, MEI ≥	: 0.70	
	Net weight:	55.4 kg	
	Gross weight:	67 kg	
	Shipping volume:	0.217 m ³	
	Danish VVS No.:	381712140	
	Finnish LVI No.:		
		4616033	
	Norwegian NRF no.:	9043548	
	Country of origin:	HU	
	Custom tariff no.:	84137051	
1			



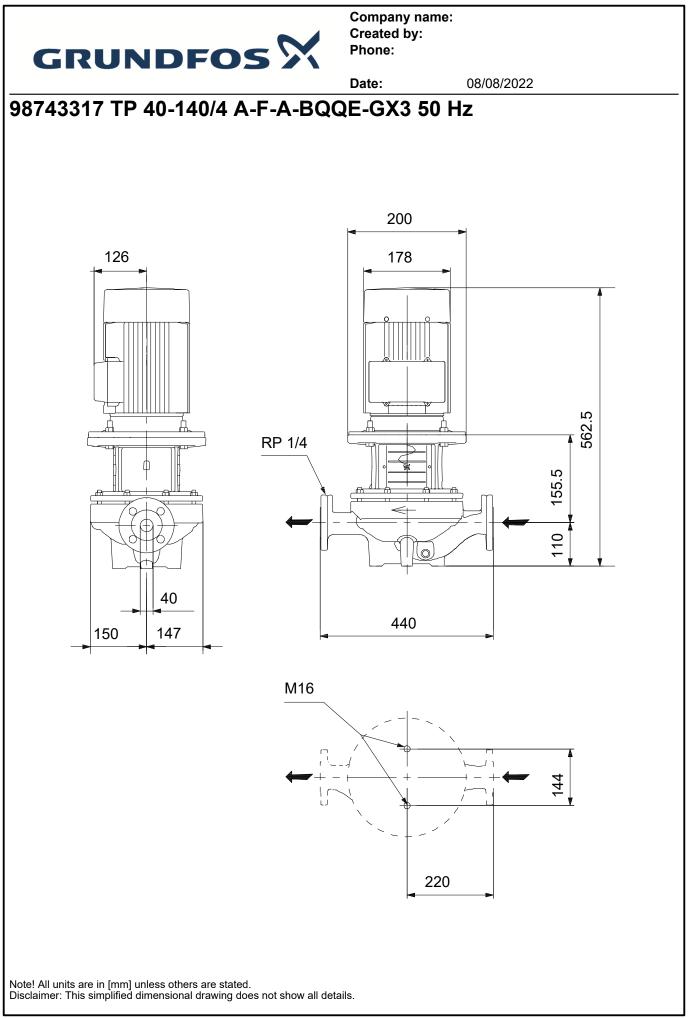
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		Date:	08/08/2022		
Description	Value	H [m]	TP 40-14	10/4, 3*400 V, 50Hz	
General information:	Value		Pumped liquid = Water	1	1 '
	TP 40-140/4	16 -	Liquid temperature during Density = 998.2 kg/m ³	operation = 20 °C	
Product name:	A-F-A-BQQE-GX3		Denský – 556.2 kg/m		
Product No:	98743317	14 -			-
EAN number:	5712600820388				
Technical:		12			
Pump speed on which pump data are based:	1440 rpm	_			
Rated flow:	19.2 m³/h	10 -			- 10
Rated head:	11.5 m	_			
Maximum head:	140 dm	8 -			- 80
Actual impeller diameter:	212 mm	_			
Code for shaft seal:	BQQE	6 -			60
Curve tolerance:	ISO9906:2012 3B2				
Pump version:	A				1
Pump version: Materials:	~	4 -			+40
	Castiron	_			
Pump housing:	Cast iron	2-			- 20
Pump housing:	EN-GJL-250	_			
Pump housing:	ASTM class 35	0			Lo
Impeller:	Cast iron	d'	5 10 15	20 Q [m³/h]	
Impeller:	EN-GJL-200	P [W]			יך
Impeller:	ASTM class 30				t
Material code:	A	1400 -		P1	- 3.5
Installation:		1200 -			- 3.0
Range of ambient temperature:	-20 55 °C	1000 -		P2	2.5
Maximum operating pressure:	16 bar	800 -		/	2.0
Max pressure at stated temp:	16 bar / 120 °C				
Type of connection:	DIN	600 -			- 1.5
Size of connection:	DN 40	400			- 1.0
Pressure rating for connection:	PN 16	200 -			0.5
Port-to-port length:	440 mm				10.0
Flange size for motor:	FF165				
Connect code:	F				
Liquid:	•				
Pumped liquid:	Water				
Liquid temperature range:	-25 120 °C				
Selected liquid temperature:	20 °C				
Density:	998.2 kg/m³				
Electrical data:					
Motor type:	SIEMENS				
IE Efficiency class:	IE3				
Rated power - P2:	1.1 kW				
Mains frequency:	50 Hz				
Rated voltage:	3 x 220-240D/380-420Y V				
Rated current:	4.2/2.4 A				
Starting current:	690-690 %				
Cos phi - power factor:	0.78				
Rated speed:	1440 rpm				
Efficiency:	IE3 84,1%				
Motor efficiency at full load:	84.1-84.1 %				
Motor efficiency at 3/4 load:	84.7-84.7 %				
Motor efficiency at 1/2 load:	83.4-83.4 %				
Number of poles:	4				
Enclosure class (IEC 34-5):	+ IP55				
Insulation class (IEC 85):	F				
Built-in motor protection:	NONE				
Motor No:	83V02205				
Controls:					



		_	
		Date:	08/08/2022
Description	Value		
Others:			
Minimum efficiency index, MEI ≥:	0.70		
Net weight:	55.4 kg		
Gross weight:	67 kg		
Shipping volume:	0.217 m³		
Danish VVS No.:	381712140		
Finnish LVI No.:	4616033		
Norwegian NRF no.:	9043548		
Country of origin:	HU		
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Date: 08/08/2022 98743317 TP 40-140/4 A-F-A-BQQE-GX3 50 Hz

