

Qty. Description

1 TP 100-410/4 A3-F-O-DAQF-QW3



Note! Product picture may differ from actual product

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 a balanced O-ring seal. The shaft seal is according to EN 12756. Pipework connection is via PN 25 DIN flanges (EN 1092-2 and ISO 7005-2).

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

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 a balanced O-ring seal. Due to the balancing, this seal type is suitable for high-pressure applications. This seal type is excellent for high-viscosity, dirt- and fibre-containing liquids due to the spring location on the atmospheric side. The seal features a rigid torque-transmission design.

Seal faces:

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

Due to the favourable lubricating properties of carbon graphite, the seal is suitable for use even under poor lubricating conditions, such as hot water.

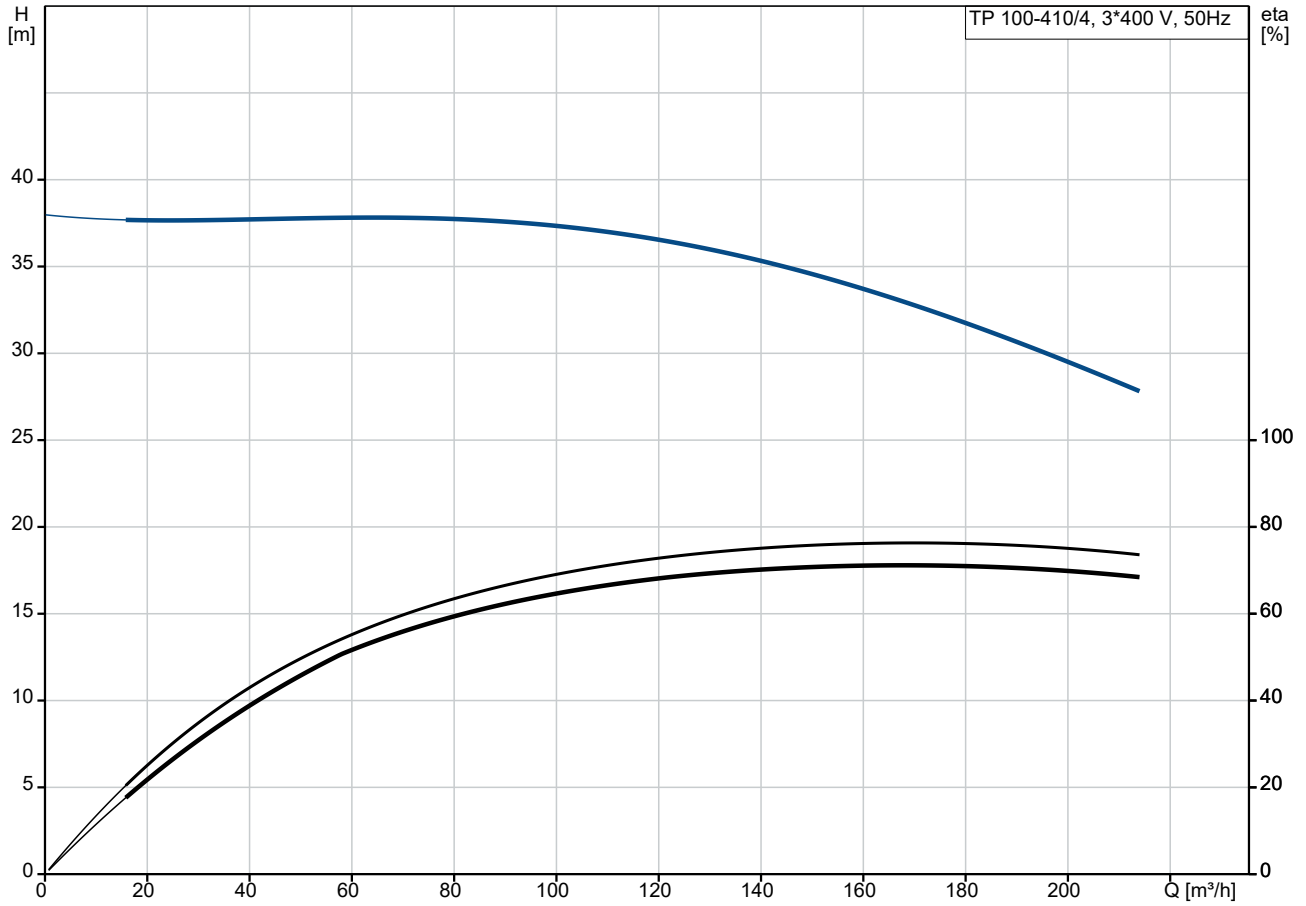
However, under such conditions, wear on the carbon graphite face can be expected, and seal life will be reduced .

The material pairing is not recommended for liquids containing particles as this will result in wear on the SiC face.
Secondary seal material: FXM (fluorinated copolymer)

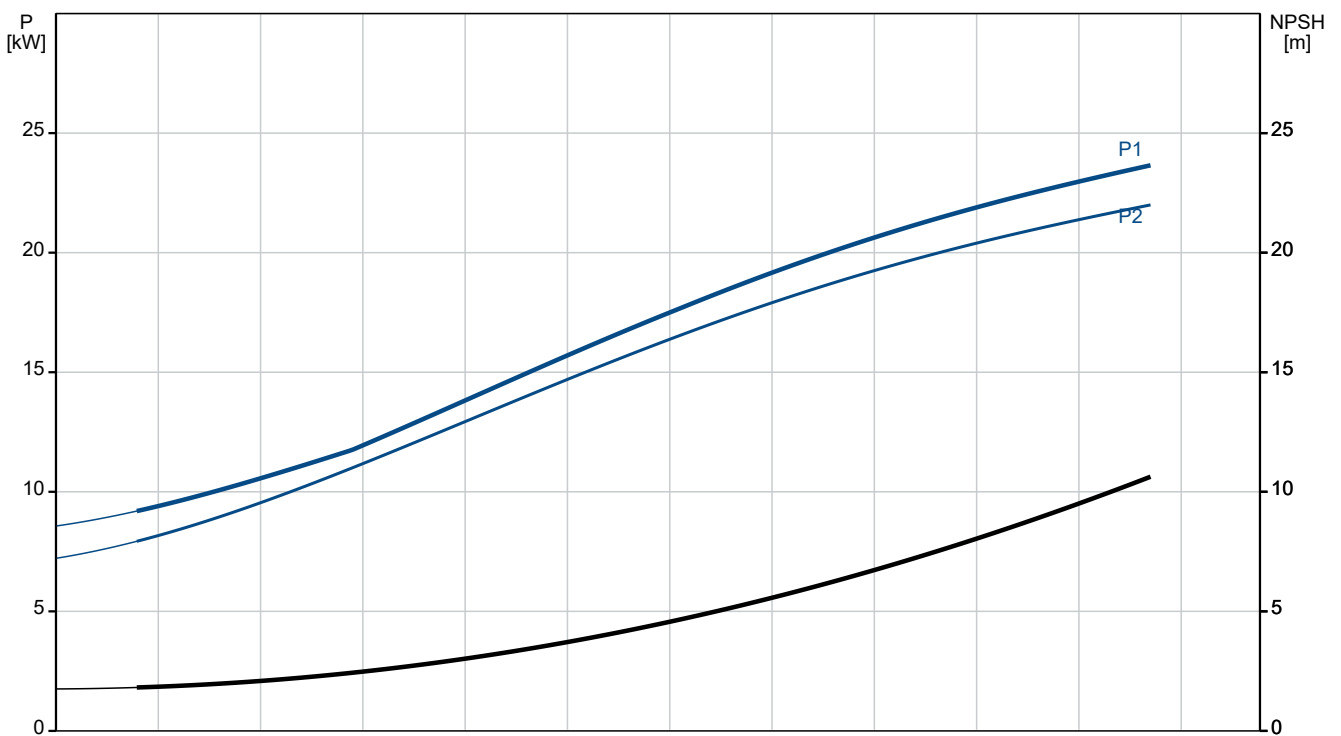
Qty.	Description
1	<p data-bbox="201 338 1414 367">FXM is particularly suitable for extremely high temperatures and pressures. FXM has a good chemical resistance.</p> <p data-bbox="201 398 1350 427">A circulation of liquid through the duct of the air vent screw ensures lubrication and cooling of the shaft seal.</p> <p data-bbox="201 427 847 456">The flanges have tappings for mounting of pressure gauges.</p> <p data-bbox="201 456 1442 533">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.</p> <p data-bbox="201 542 1414 595">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.</p> <p data-bbox="201 600 632 629">The pump is mounted with a base plate.</p> <p data-bbox="201 660 284 689">Motor</p> <p data-bbox="201 694 1394 748">The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.</p> <p data-bbox="201 752 794 781">The motor is flange-mounted with free-hole flange (FF).</p> <p data-bbox="201 781 1426 810">Motor-mounting designation in accordance with IEC 60034-7: IM B 5, IM V 1 (Code I) / IM 3001, IM 3011 (Code II).</p> <p data-bbox="201 842 1015 871">The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.</p> <p data-bbox="201 871 1433 925">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.</p> <p data-bbox="201 929 1422 1005">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.</p> <p data-bbox="201 1014 1406 1068">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.</p> <p data-bbox="201 1099 512 1128">Further product details</p> <p data-bbox="201 1133 1453 1209">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.</p> <p data-bbox="201 1281 400 1310">Technical data</p> <p data-bbox="201 1348 300 1377">Controls:</p> <p data-bbox="201 1377 624 1406">Frequency converter: None</p> <p data-bbox="201 1438 276 1467">Liquid:</p> <p data-bbox="201 1467 683 1496">Liquid temperature range: 0 .. 140 °C</p> <p data-bbox="201 1527 316 1556">Technical:</p> <p data-bbox="201 1556 820 1585">Pump speed on which pump data are based: 1465 rpm</p> <p data-bbox="201 1585 663 1615">Rated flow: 171 m³/h</p> <p data-bbox="201 1615 639 1644">Rated head: 32.7 m</p> <p data-bbox="201 1644 655 1673">Actual impeller diameter: 334 mm</p> <p data-bbox="201 1673 635 1702">Code for shaft seal: DAQF</p> <p data-bbox="201 1702 759 1731">Curve tolerance: ISO9906:2012 3B</p> <p data-bbox="201 1762 309 1792">Materials:</p> <p data-bbox="201 1792 810 1890">Pump housing: Ductile iron EN-GJS-400-18-LT ASTM Grade 60-40-18</p> <p data-bbox="201 1890 730 1989">Impeller: Cast iron EN-GJL-200 ASTM class 30</p> <p data-bbox="201 2020 325 2049">Installation:</p> <p data-bbox="201 2049 691 2078">Range of ambient temperature: -20 .. 55 °C</p> <p data-bbox="201 2078 635 2107">Maximum operating pressure: 25 bar</p>

Qty.	Description
1	<p>Max pressure at stated temp: 25 bar / 140 °C Type of connection: DIN Size of connection: DN 100 Pressure rating for connection: PN 25 Port-to-port length: 670 mm Flange size for motor: FF300</p> <p>Electrical data: Motor type: SIEMENS Rated power - P2: 22 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-420D/660-725Y V Rated current: 41/24 A Starting current: 680-680 % Cos phi - power factor: 0.83 Rated speed: 1470 rpm IE efficiency: IE3 93% IE Efficiency class: IE3 Motor efficiency at full load: 93-93 % Motor efficiency at 3/4 load: 93.6-93.6 % Motor efficiency at 1/2 load: 93.6-93.6 % Number of poles: 4 Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Motor No: 99032118</p> <p>Others: Minimum efficiency index, MEI ≥: 0.69 Net weight: 353 kg Gross weight: 414 kg Shipping volume: 0.937 m³ Country of origin: HU Custom tariff no.: 84137051</p>

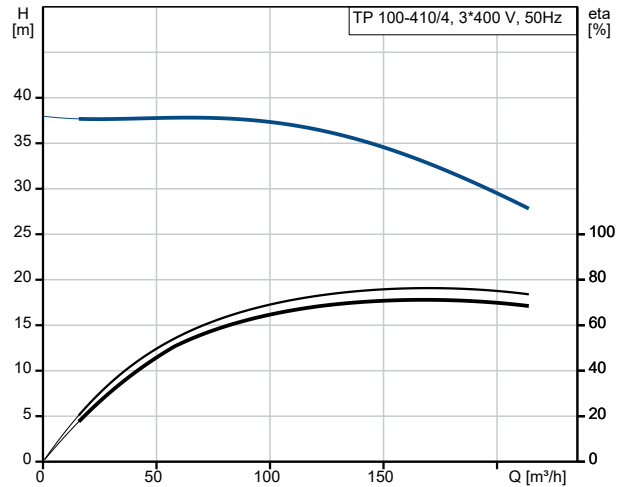
On request TP 100-410/4 A3-F-O-DAQF-QW3 50 Hz



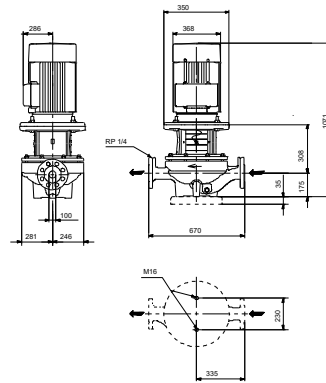
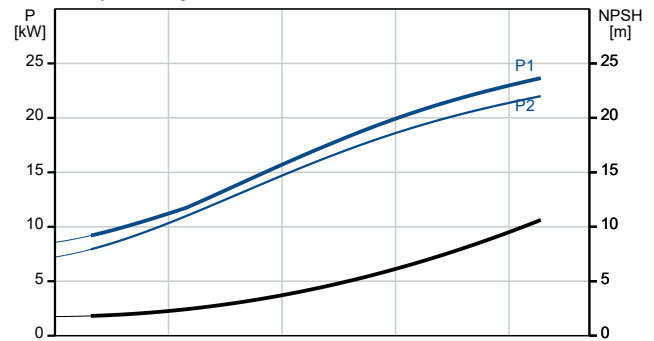
Pumped liquid = Water
 Liquid temperature during operation = 20 °C
 Density = 998.2 kg/m³



Description	Value
General information:	
Product name:	TP 100-410/4 A3-F-O-DAQF-QW3
Product No:	On request
EAN number:	On request
Technical:	
Pump speed on which pump data are based:	1465 rpm
Rated flow:	171 m ³ /h
Rated head:	32.7 m
Maximum head:	410 dm
Actual impeller diameter:	334 mm
Code for shaft seal:	DAQF
Curve tolerance:	ISO9906:2012 3B
Pump version:	A3
Materials:	
Pump housing:	Ductile iron
Pump housing:	EN-GJS-400-18-LT
Pump housing:	ASTM Grade 60-40-18
Impeller:	Cast iron
Impeller:	EN-GJL-200
Impeller:	ASTM class 30
Material code:	O
Installation:	
Range of ambient temperature:	-20 .. 55 °C
Maximum operating pressure:	25 bar
Max pressure at stated temp:	25 bar / 140 °C
Type of connection:	DIN
Size of connection:	DN 100
Pressure rating for connection:	PN 25
Port-to-port length:	670 mm
Flange size for motor:	FF300
Connect code:	F
Liquid:	
Liquid temperature range:	0 .. 140 °C
Electrical data:	
Motor type:	SIEMENS
Rated power - P2:	22 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725Y V
Rated current:	41/24 A
Starting current:	680-680 %
Cos phi - power factor:	0.83
Rated speed:	1470 rpm
IE efficiency:	IE3 93%
IE Efficiency class:	IE3
Motor efficiency at full load:	93-93 %
Motor efficiency at 3/4 load:	93.6-93.6 %
Motor efficiency at 1/2 load:	93.6-93.6 %
Number of poles:	4
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	99032118
Controls:	
Frequency converter:	None
Others:	
Minimum efficiency index, MEI ≥:	0.69



Pumped liquid = Water
Liquid temperature during operation = 20 °C
Density = 998.2 kg/m³





Company name:

Created by:

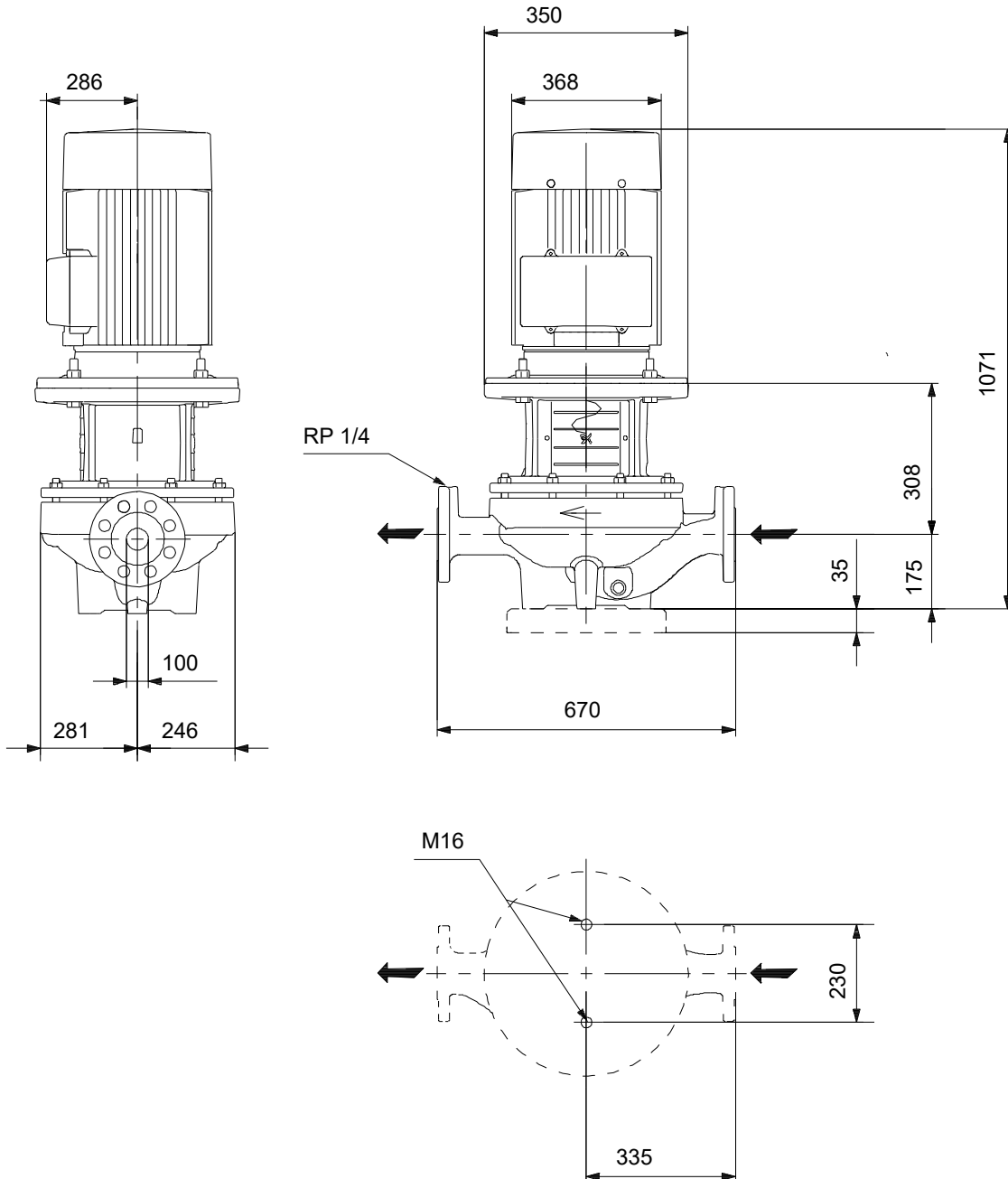
Phone:

Date:

02/12/2023

Description	Value
Net weight:	353 kg
Gross weight:	414 kg
Shipping volume:	0.937 m ³
Country of origin:	HU
Custom tariff no.:	84137051

On request TP 100-410/4 A3-F-O-DAQF-QW3 50 Hz



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

