


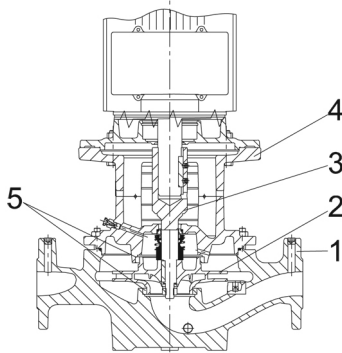
Qty.	Description
1	<p data-bbox="199 336 558 369">TPED 100-70/4-S A-F-A-BQQE</p> <div data-bbox="319 436 470 593" style="text-align: center;">  </div> <p data-bbox="199 660 470 683">Product No.: 99132858</p> <p data-bbox="199 716 1444 795">Single-stage, close-coupled, volute pump with in-line suction 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.</p> <p data-bbox="199 806 1412 884">TPED 100-70/4-S A-F-A-BQQE The pump is fitted with an unbalanced rubber bellows seal. TPED 100-70/4-S A-F-A-BQQE TPED 100-70/4-S A-F-A-BQQE The shaft seal is according to EN 12756. Pipework connection is via PN 16 DIN flanges (EN 1092-2 and ISO 7005-2).</p> <p data-bbox="199 896 1037 918">Pipework connection is via PN 16 DIN flanges (EN 1092-2 and ISO 7005-2).</p> <p data-bbox="199 929 1444 974">The pump is fitted with a fan-cooled, permanent-magnet synchronous motor. The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.</p> <p data-bbox="199 985 1428 1030">The motor includes a frequency converter and PI controller in the motor terminal box. This enables continuously variable control of the motor speed, which again enables adaptation of the performance to a given requirement.</p> <p data-bbox="199 1064 790 1086">The pump is fitted with a differential-pressure sensor.</p> <p data-bbox="199 1120 518 1153">Further product details</p> <p data-bbox="199 1164 1404 1232">The pump is suitable for applications requiring pressure control. The pump is fitted with a differential-pressure transmitter registering the differential pressure across the pump and enabling constant pressure or proportional-pressure control of the pump.</p> <p data-bbox="199 1243 1428 1299">A control panel enables setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop". The control panel has indicator lights for "Operation" and "Fault".</p> <p data-bbox="199 1332 1460 1411">Communication with the pump is possible by means of the Grundfos GO Remote (accessory). The remote control enables further settings as well as reading out of a number of parameters such as "Actual value", "Speed", "Power input" and total "Power consumption".</p> <p data-bbox="199 1444 1428 1500">The operating panel on the motor terminal box features a four-inch TFT display, push-buttons and the Grundfos Eye indicator.</p> <p data-bbox="199 1534 1444 1612">The display gives an intuitive and user-friendly interface to all functions. The push-buttons are used to navigate through the menu structure to access pump and performance data on site and enable setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop".</p> <p data-bbox="199 1646 1460 1724">Communication with the pump is also possible by means of Grundfos GO Remote (accessory). The remote control enables further settings as well as reading out of a number of parameters such as "Actual value", "Speed", "Power input" and total "Power consumption".</p> <p data-bbox="199 1758 1220 1792">The Grundfos Eye indicator on the operating panel provides visual indication of pump status:</p> <ul data-bbox="239 1792 1420 1937" style="list-style-type: none"> • "Power on": Motor is running (rotating green indicator lights) or not running (permanently green indicator lights) • "Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights) • "Alarm": Motor has stopped (flashing red indicator lights). <p data-bbox="199 1971 1428 2049">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.</p> <p data-bbox="199 2060 287 2094">Pump</p>

Qty. Description

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.

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 IE5 in accordance with IEC 60034-30-2.

The motor requires no external motor protection. The motor control unit incorporates protection against slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

Qty. Description

TPED 100-70/4-S A-F-A-BQQE The terminal box holds terminals for these connections:

- one dedicated digital input
- two analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 - 3.5 V; the factory-fitted pressure sensor is connected to one of these inputs
- 5 V voltage supply to potentiometer and sensor
- one configurable digital input or open-collector output
- Grundfos Digital Sensor input and output
- 24 V voltage supply for sensors
- two signal relay outputs (potential-free contacts)
- GENIbus connection
- interface for Grundfos CIM fieldbus module.

TPED 100-70/4-S A-F-A-BQQE The terminal box holds terminals for these connections:

- one dedicated digital input
- two analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 - 3.5 V; the factory-fitted pressure sensor is connected to one of these inputs
- 5 V voltage supply to potentiometer and sensor
- one configurable digital input or open-collector output
- Grundfos Digital Sensor input and output
- 24 V voltage supply for sensors
- two signal relay outputs (potential-free contacts)
- the two power heads communicate via wireless GENIair or wired GENI connection
- interface for Grundfos CIM fieldbus module.

Technical data

Controls:

Frequency converter: Built-in

Liquid:

Pumped liquid: Water
 Liquid temperature range: -25 .. 120 °C
 Selected liquid temperature: 20 °C
 Density at selected liquid temperature: 998.2 kg/m³

Technical:

Pump speed on which pump data are based: 1445 rpm
 Rated flow: 79.1 m³/h
 Rated head: 4.79 m
 Actual impeller diameter: 150 mm
 Primary shaft seal: BQQE
 Curve tolerance: ISO9906:2012 3B

Materials:

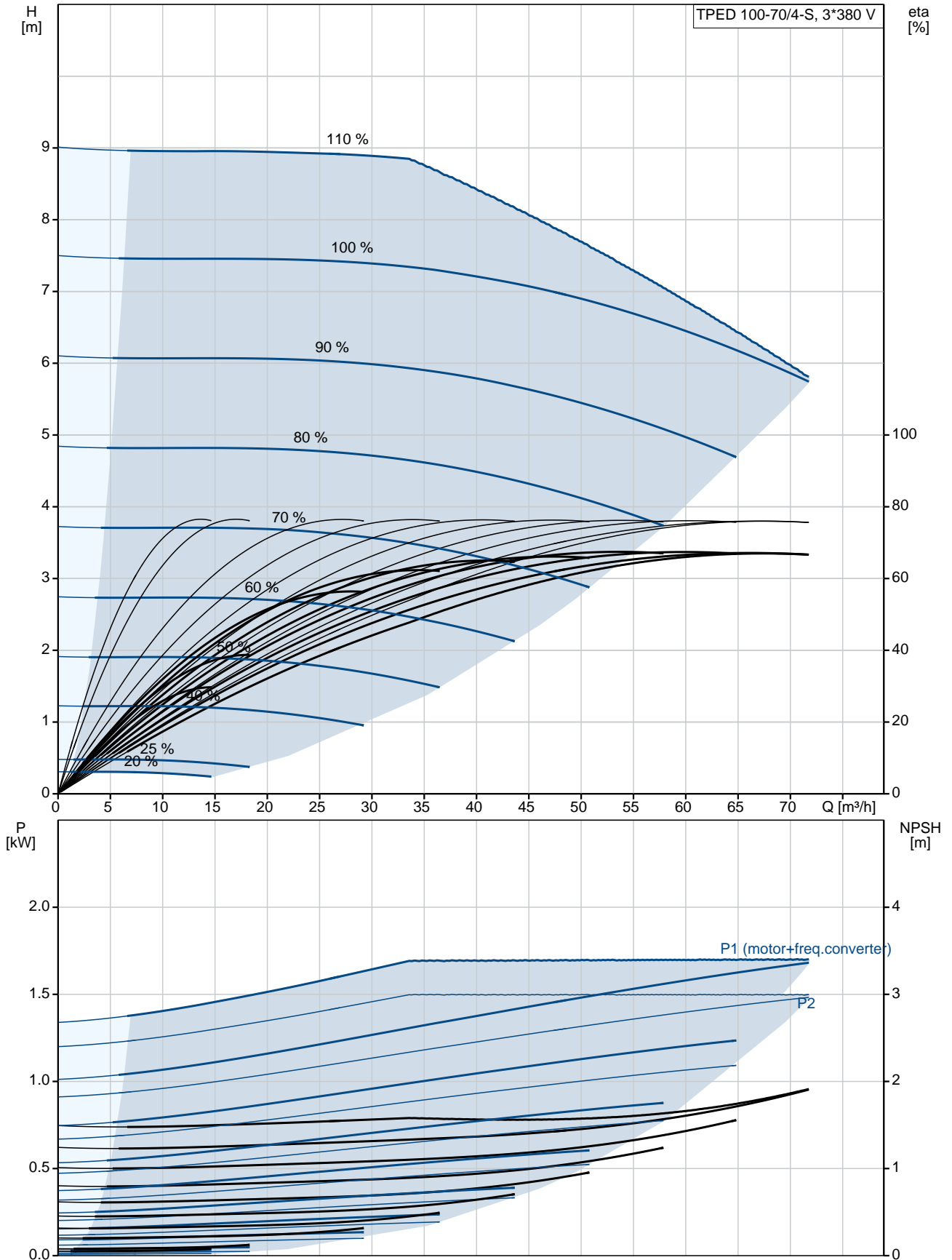
Pump housing: Cast iron
 EN-JL1040
 ASTM A48-40 B
 Impeller: Cast iron
 EN-JL1030
 ASTM A48-30 B

Installation:

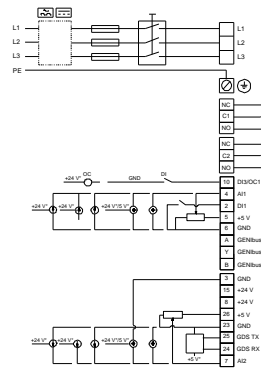
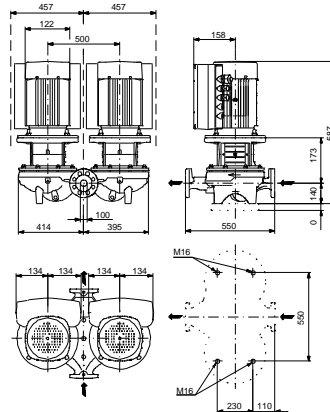
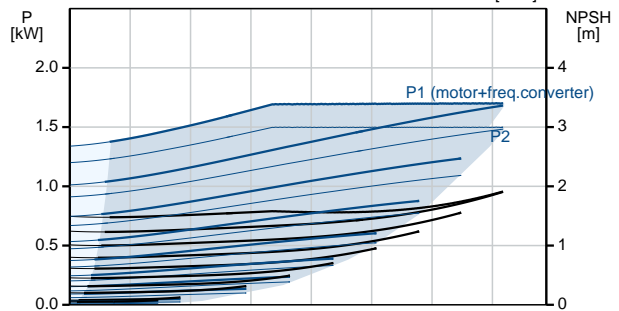
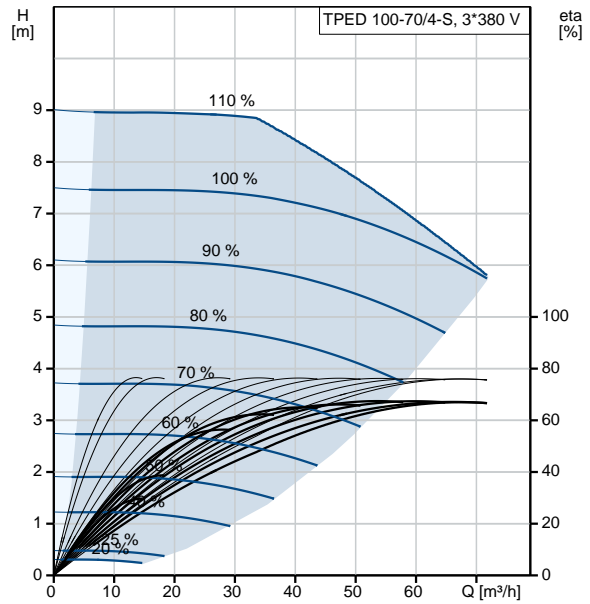
Range of ambient temperature: -20 .. 50 °C
 Maximum operating pressure: 16 bar
 Max pressure at stated temp: 16 bar / 120 °C
 Flange standard: DIN
 Pipe connection: DN 100
 Pressure rating: PN 16
 Port-to-port length: 550 mm

Qty.	Description
	Flange size for motor: FF165
	Electrical data:
	Motor type: 90LE
	IE Efficiency class: IE5
	Rated power - P2: 1.5 kW
	Mains frequency: 50 Hz
	Rated voltage: 3 x 380-500 V
	Rated current: 2.90-2.50 A
	Cos phi - power factor: 0.93
	Rated speed: 180-2000 rpm
	Efficiency: 88.0%
	Motor efficiency at full load: 88.0 %
	Enclosure class (IEC 34-5): IP55
	Insulation class (IEC 85): F
	Motor No: 98971263
	Others:
	Minimum efficiency index, MEI : 0.70
	ErP status: EuP Standalone/Prod.
	Net weight: 185 kg
	Gross weight: 216 kg
	Shipping volume: 1.14 m ³

99132858 TPED 100-70/4-S A-F-A-BQQE 50 Hz



Description	Value
General information:	
Product name:	TPED 100-70/4-S A-F-A-BQQE
Product No:	99132858
EAN number:	5712607355425
Price:	5712607355425
Price:	8.378,00 GBP
Technical:	
Pump speed on which pump data are based:	1445 rpm
Rated flow:	79.1 m³/h
Rated head:	4.79 m
Head max:	70 dm
Actual impeller diameter:	150 mm
Primary shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
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 .. 50 °C
Maximum operating pressure:	16 bar
Max pressure at stated temp:	16 bar / 120 °C
Flange standard:	DIN
Pipe connection:	DN 100
Pressure rating:	PN 16
Port-to-port length:	550 mm
Flange size for motor:	FF165
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-25 .. 120 °C
Selected liquid temperature:	20 °C
Density at selected liquid temperature:	998.2 kg/m³
Electrical data:	
Motor type:	90LE
IE Efficiency class:	IE5
Rated power - P2:	1.5 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-500 V
Rated current:	2.90-2.50 A
Cos phi - power factor:	0.93
Rated speed:	180-2000 rpm
Efficiency:	88.0 %
Motor efficiency at full load:	88.0 %
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor protec:	YES
Motor No:	98971263
Controls:	
Control panel:	HMI300 - Graphical
Function Module:	FM300 - Advanced





Company name:

Created by:

Phone:

Date:

29/08/2019

Description	Value
Frequency converter:	Built-in
Others:	
Minimum efficiency index, MEI :	0.70
ErP status:	EuP Standalone/Prod.
Net weight:	185 kg
Gross weight:	216 kg
Shipping volume:	1.14 m ³
Config. file no:	99139278

99132858 TPED 100-70/4-S A-F-A-BQQE 50 Hz

