TPED 32-250/2-S-A-F-A-BQQE 3X400 50HZ

Grundfos pump 98112532



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https://www.lenntech.com/grundfos/TPEDS2/98112532/TPED-32-250-2-S-A-F-A-BQQE.html

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Position	Qty.	Description
	1	**TPED 32-250/2-S A-F-A-BQQE**



Product No.: On request

Single-stage, close-coupled, volute twin-head pump with in-line suction and discharge ports of identical diameter. The twin-head pump is designed with two parallel power-heads. 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.

Each power head 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).

Each power head is fitted with a fan-cooled, permanent-magnet synchronous motor of identical size. The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.

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.

The pump is fitted with a differential-pressure sensor.

Further product details

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.

A cable ensures communication between the two power heads. The selector switch in the terminal boxes enables changeover between the operating modes "alternating operation" and "standby operation".

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".

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".

The operating panel on the motor terminal box features a four-inch TFT display, push-buttons and the Grundfos Eye indicator.

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".

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".

The Grundfos Eye indicator on the operating panel provides visual indication of pump status:

- "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).

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.

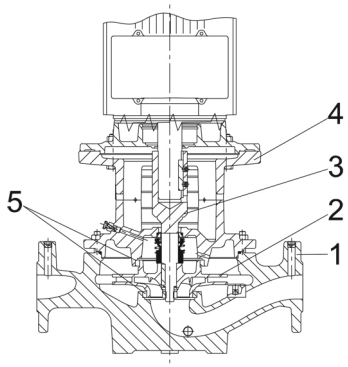
Pump

Pump housing and pump head are electrocoated to improve the corrosion resistance.

Electrocoating includes:

Position	Qty.	Description

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 twin-head pump is designed with two parallel power-heads. A non-return flap valve in the common discharge port is opened by the flow of the pumped liquid and prevents backflow of liquid into the idle pump head.

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:

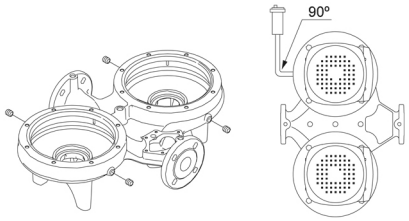
- Rotating seal ring material: silicon carbide (SiC)
- Stationary seat material: silicon carbide (SiC)

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 pump housing has four Rp 1/8 tappings for mounting of automatic air vents. Fit an air vent to the upper pump housing if the twin-head pump is to be installed in a horizontal pipeline with horizontal pump shaft.



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.

Position	Qty.	Description

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.

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

Liquid:

Pumped liquid:	Water
Liquid temperature range:	-25 .. 120 °C
Liquid temperature during operation:	20 °C
Density:	998.2 kg/m³

Technical:

Rated flow:	12.7 m³/h
Rated head:	19.3 m
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:

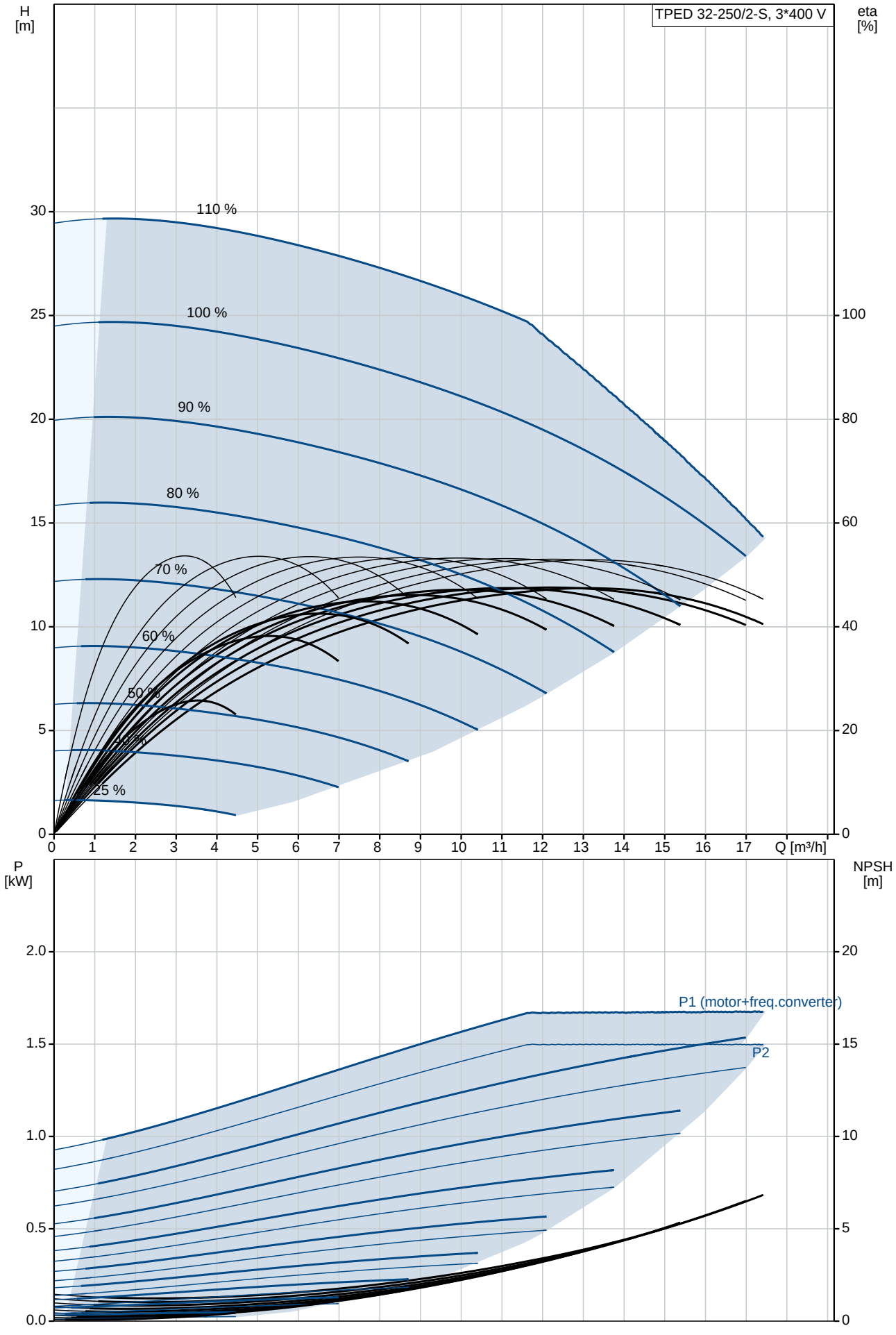
Range of ambient temperature:	-20 .. 50 °C
Maximum operating pressure:	16 bar
Max pressure at stated temp:	16 bar / 120 °C
Flange standard:	DIN
Pipe connection:	DN 32
Pressure rating:	PN 16
(@):	340 mm
Flange size for motor:	FF165

Electrical data:

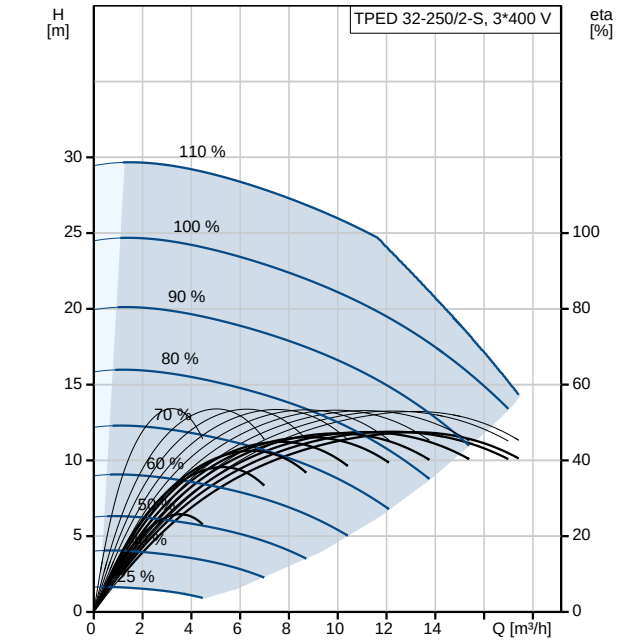
Motor type:	90SC
IE Efficiency class:	IE5
Rated power - P2:	2 x 1.5 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-500 V
Rated current:	2.90-2.40 A
Cos phi - power factor:	0.92-0.85
Rated speed:	360-4000 rpm
Efficiency:	88.9%
Motor efficiency at full load:	88.9 %
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F

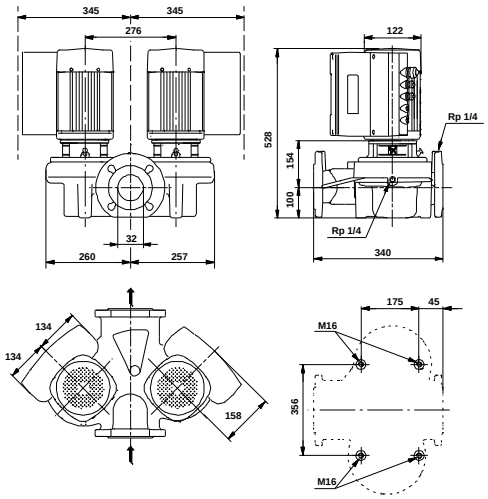
Position	Qty.	Description
		Others:
		Minimum efficiency index, MEI ≥: 0.70
		ErP status: EuP Standalone/Prod.
		Net weight: 90 kg
		Gross weight: 104 kg
		Shipping volume: 0.39 m^3

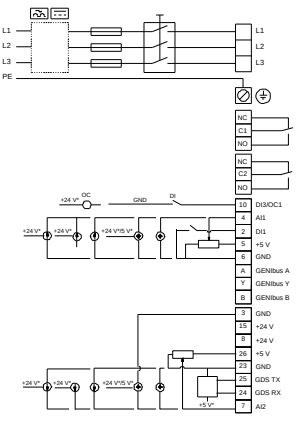
On request TPED 32-250/2-S A-F-A-BQQE 50 Hz



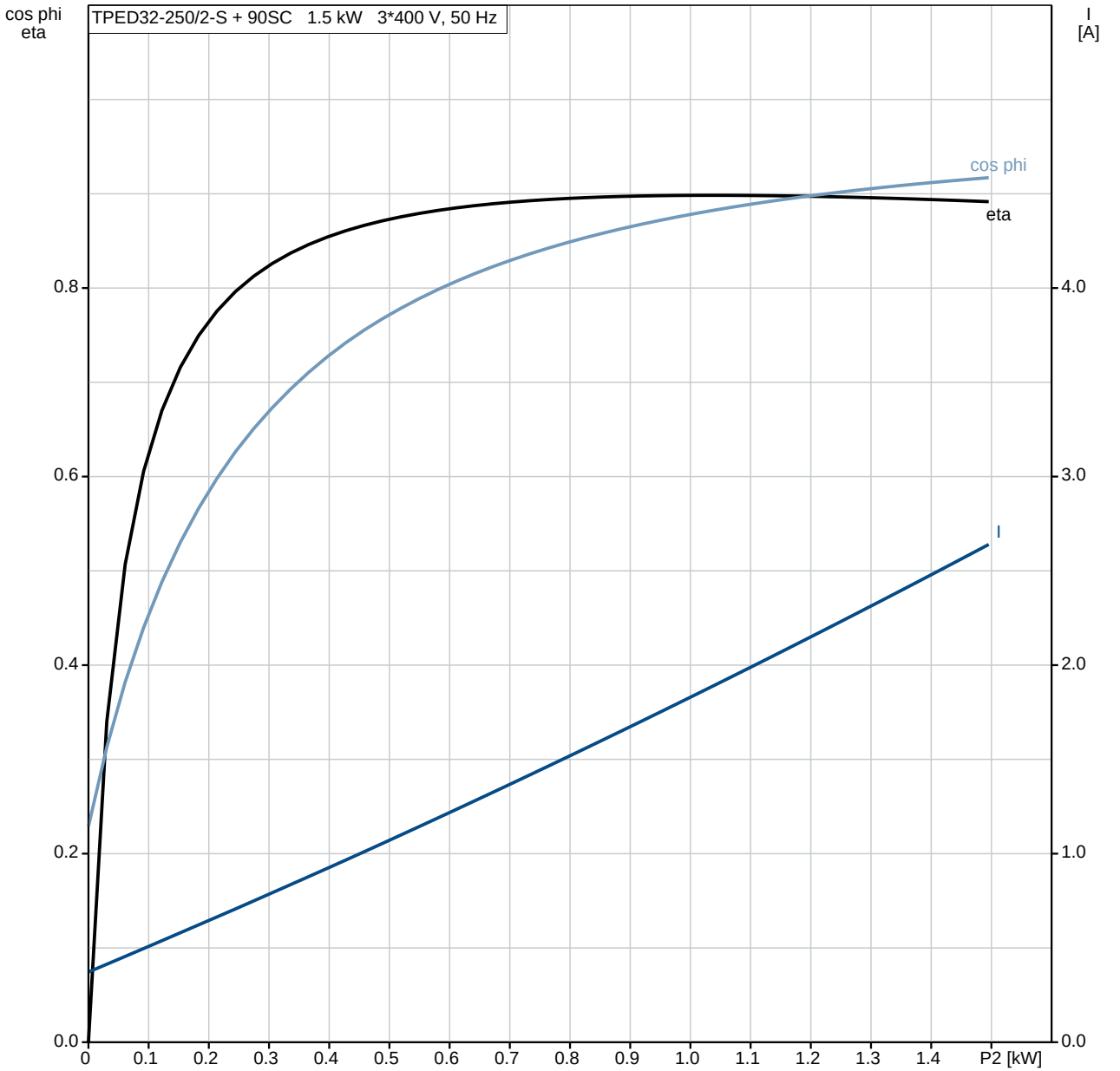
Description	Value
General information:	
Product name:	TPED 32-250/2-S A-F-A-BQQE
Product No:	On request
EAN number:	On request
Technical:	
Rated flow:	12.7 m³/h
Rated head:	19.3 m
Head max:	250 dm
Primary shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Materials:	
Pump housing:	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 32
Pressure rating:	PN 16
(@)	340 mm
Flange size for motor:	FF165
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-25 .. 120 °C
Liquid temperature during operation:	20 °C
Density:	998.2 kg/m³
Electrical data:	
Motor type:	90SC
IE Efficiency class:	IE5
Rated power - P2:	2 x 1.5 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-500 V
Rated current:	2.90-2.40 A
Cos phi - power factor:	0.92-0.85
Rated speed:	360-4000 rpm
Efficiency:	88.9%
Motor efficiency at full load:	88.9 %
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor protec:	YES
Motor No:	98362354
Controls:	
Control panel:	HMI300 - Graphical
Function Module:	FM200 - Standard
Others:	
Minimum efficiency index, MEI ≥:	0.70
ErP status:	EuP Standalone/Prod.
Net weight:	90 kg
Gross weight:	104 kg
Shipping volume:	0.39 m³
Config. file no:	98479971

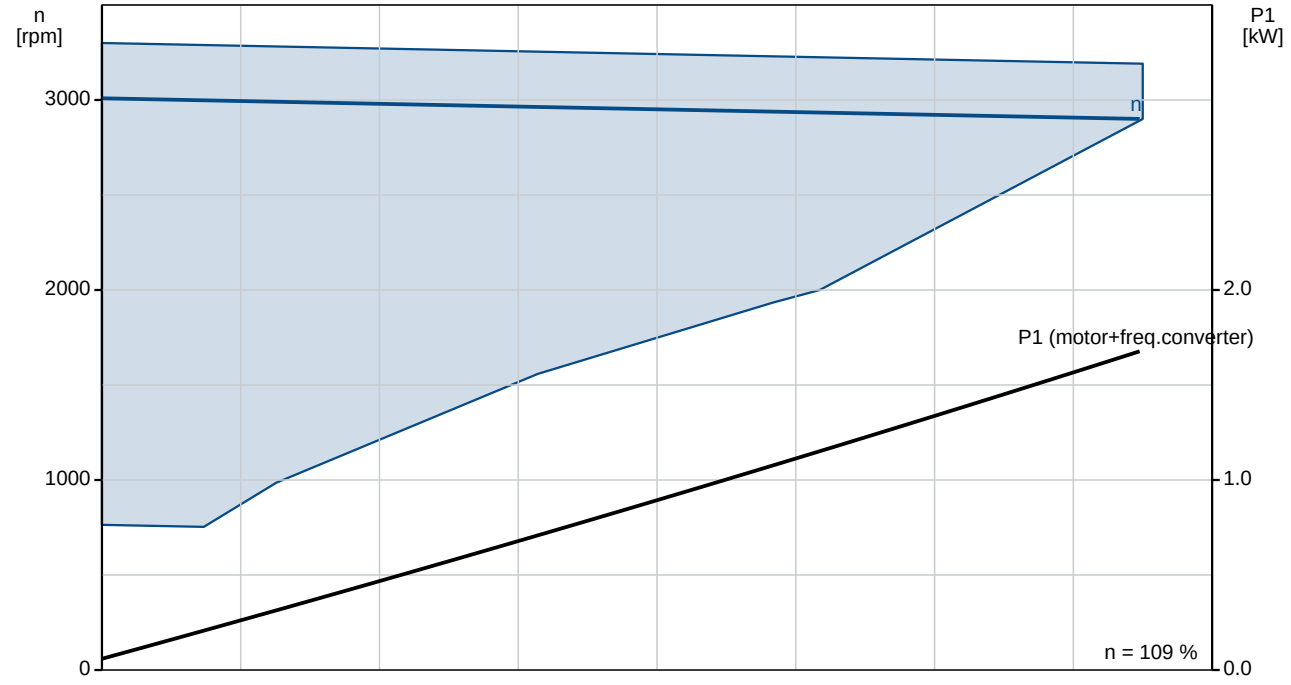




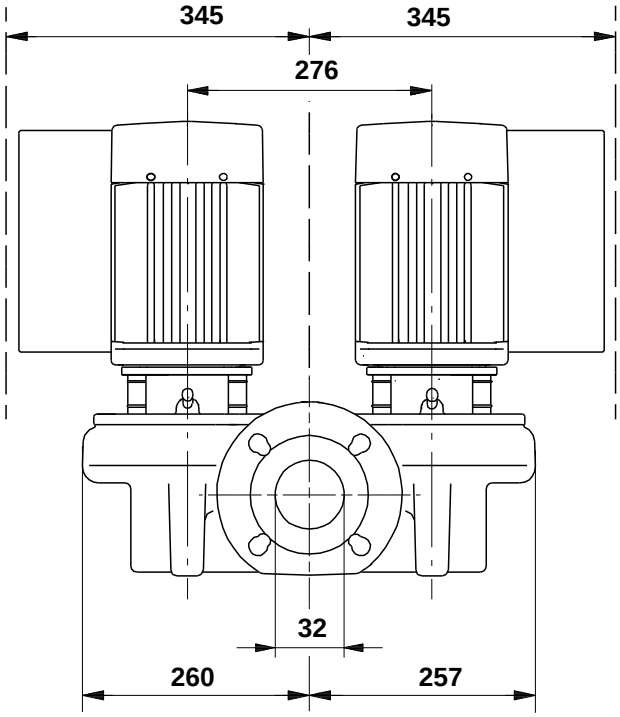


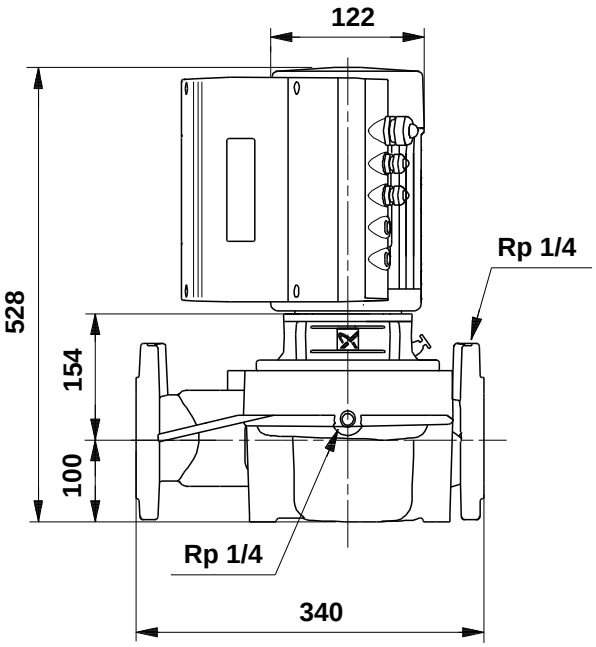
On request TPED 32-250/2-S A-F-A-BQQE 50 Hz

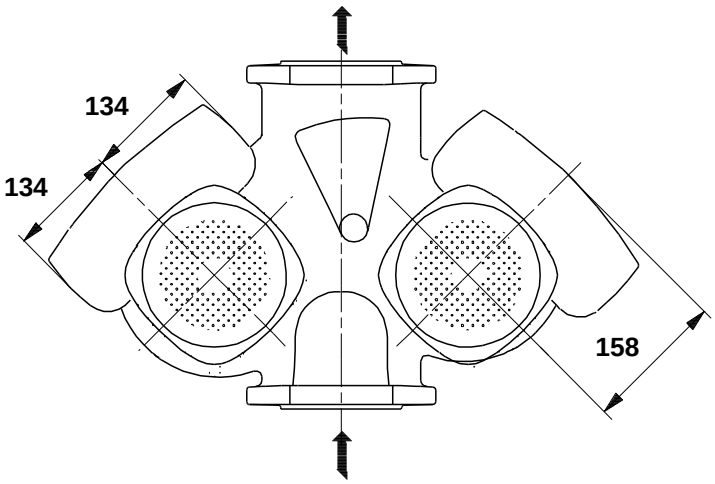


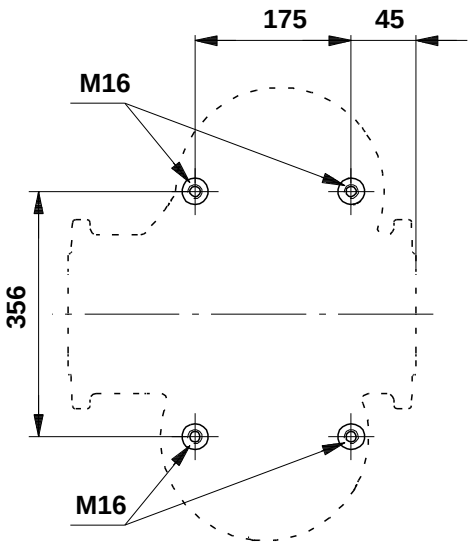


On request TPED 32-250/2-S A-F-A-BQQE 50 Hz



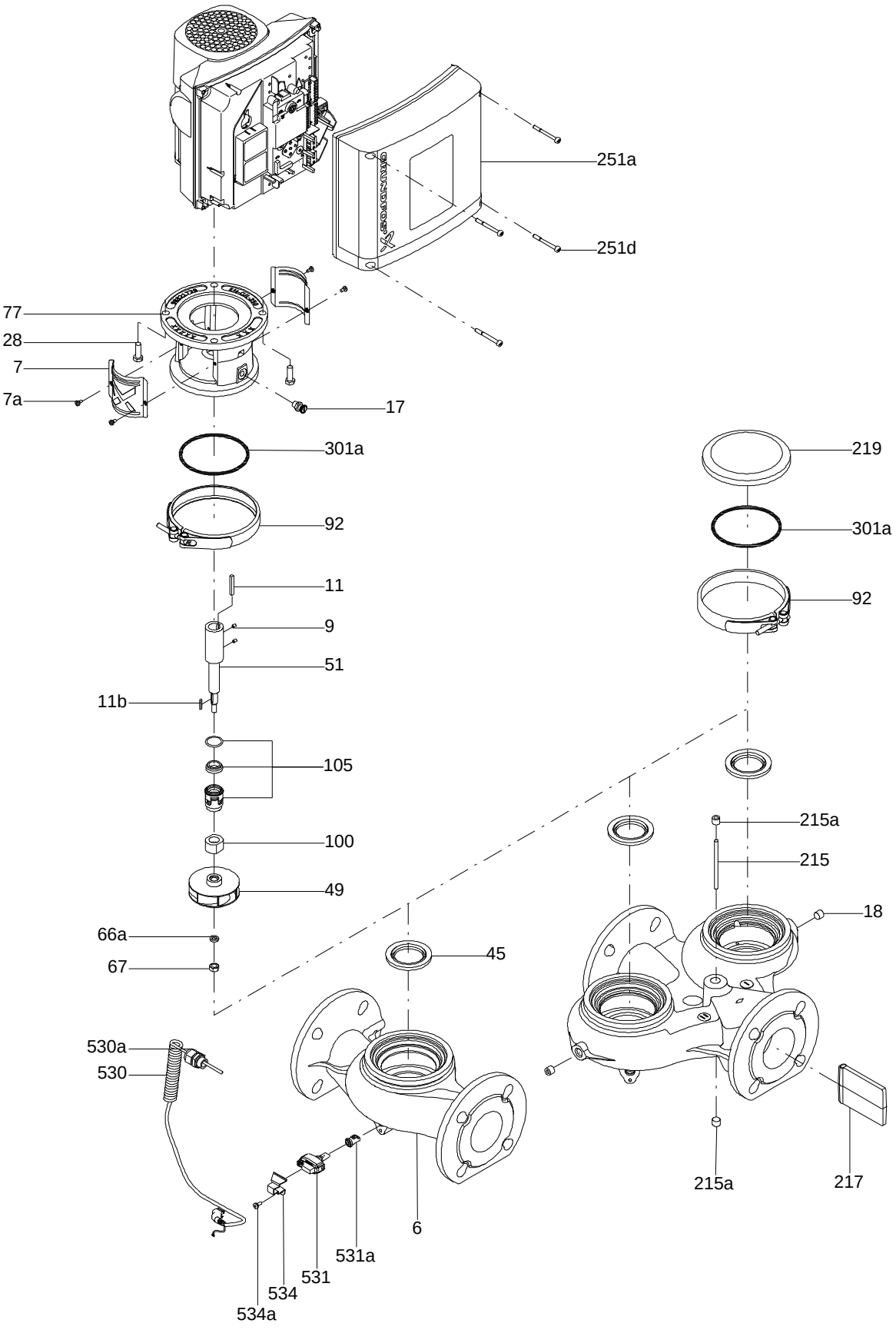




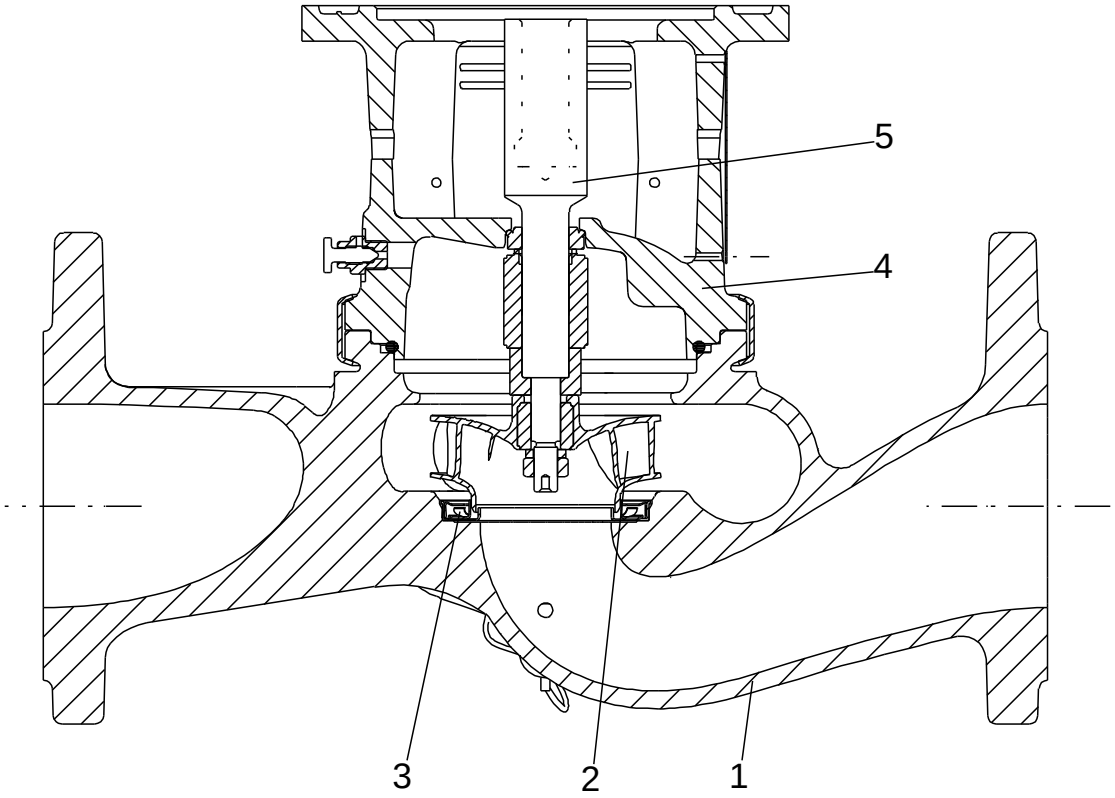


Note! All units are in [mm] unless others are stated.
Disclaimer: This simplified dimensional drawing does not show all details.

Exploded view

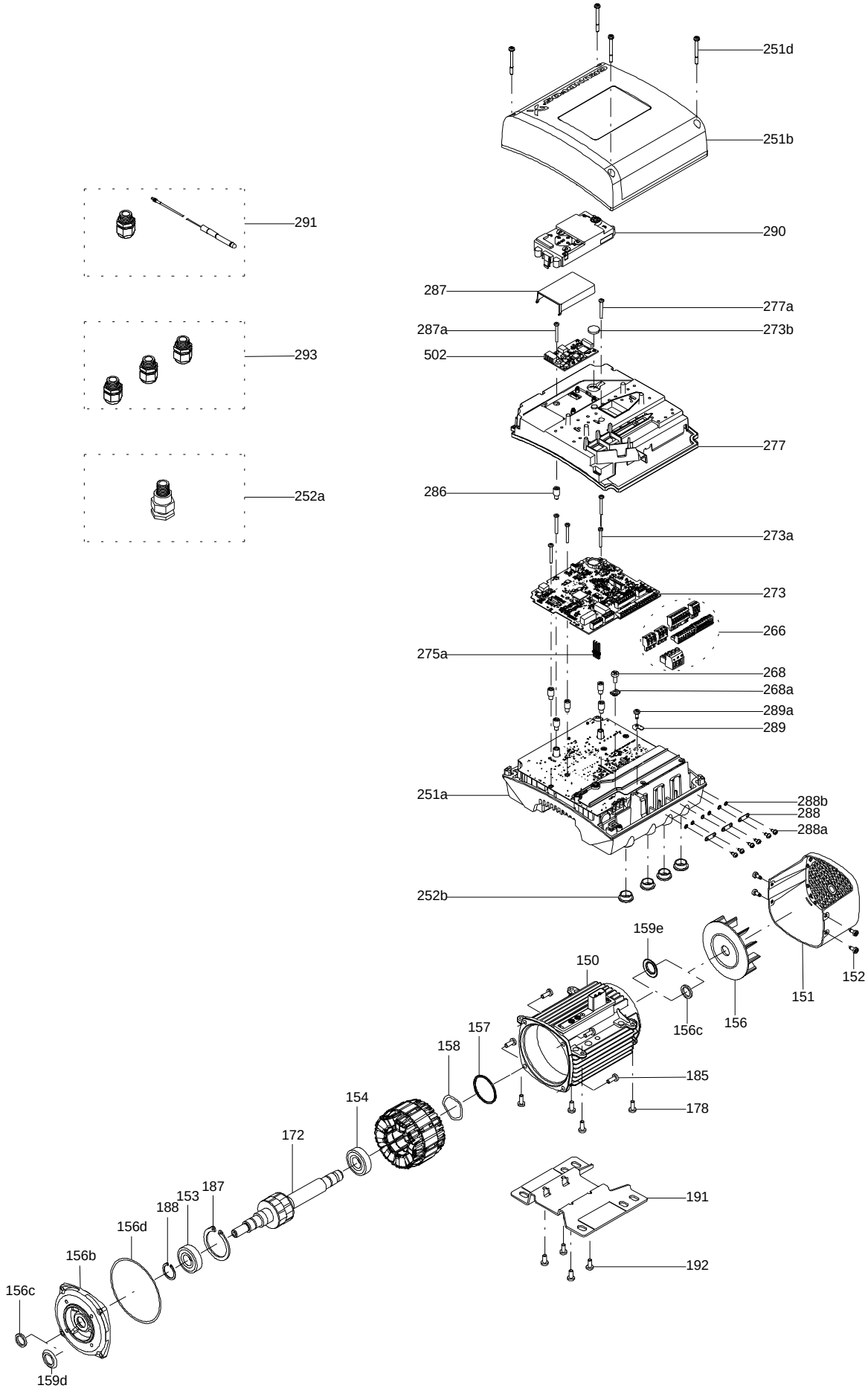


Sectional drawing (TM058200 for TPE2,TPE3)



TM058200

Exploded view (TM057026 for MGE model H/I)



Parts list TPED 32-250/2-S, Product No. On request
Valid from 23.9.2013 (1339)

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
-	Motor				2	pcs
	Terminal				3	
	Pan head thread forming screw				4	
150	Stator housing				1	
150	Stator				1	
151	Fan cover				1	
152	Pan head thread forming screw				6	
152	Pan head thread forming screw				1	
152	Pan head thread forming screw				1	
152	Pan head thread forming screw				4	
153	Ball bearing				1	
154	Ball bearing		Designation: 6204.2Z.C3.SYN		1	
156	Fan				1	
156b	Flange				1	
156d	Gasket		Internal diameter: 114,80		1	
			Outer diameter: 121,20			
			Thickness: 0,25			
157	O-ring		Diameter: 47		1	
			Material type: NBR			
			Thickness: 3			
158	Waved washer				1	
159a	Seal ring				1	
159c	Seal ring				1	
166	Torx Screw				2	
172	Shaft w/rotor				1	
172a	Parallel key		Dimension: 8X7X40		1	
173a	Base				1	
185	Cross recess Pan head screw				4	
186	Drain plug				1	
187	Retaining ring				1	
188	Retaining ring				1	
203	Terminal plug				1	
251a	Control box				1	
251b	Control box				1	
251d	Pan head thread forming screw				4	
266	Connector plug 3-pole				1	
266	Connector plug 3-pole				1	
266	Connector plug 8-pole				1	
266	Connector plug 8-pole				1	
266	Connector plug 10-pole				1	
268	Pan head screw				1	
273	Funct. Module cpl.				1	
275a	Pin				1	
277	Isolation cover				1	
277a	Cross recess Pan head screw				1	
277a	Cross recess Pan head screw				4	
277a	Cross recess Pan head screw				1	
286	Spacer				1	
286	Spacer				1	
287	Cover				1	
288	Wire clamp				3	
288b	Washer				6	
289	Wire clamp				1	
290	Control panel, cpl.				1	
300	Plug cpl.				4	
301	Jumper				1	
-	Nut				2	pcs
66	Washer				1	
66a	Spring lock washer				1	

	Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
	67	Nut		Thread: M14		1	
-		Kit, sensor				1	pcs
		Bracket				1	
		Cable tie				5	
	7a	Combi Slot Torx screw				3	
	84c	Disc spring				3	
	268	Pan head screw				1	
	501	Sensor				1	
	505	Bracket		Type: MGE		1	
	506	Socket head cap screw				1	
	508	Tube				1	
	509	Capillary tube.				1	
	510	Mounting bush.				2	
	511	Cable pin				3	
-		Motor stool cpl.				2	pcs
	1a	Motor stool				1	
	7	Coupling guard				2	
	9	Hex socket head cap screw		Length (mm): 30		4	
				Thread: M10			
	77a	Pan head screw				4	
-		Pump housing cpl.				1	pcs
	6	Pump housing				1	
	9	Hex socket head cap screw		Designation: DIN 912		6	
				Length (mm): 20			
				Thread: M6			
	19	Pipe plug		Thread: R 3/8		2	
	19	Plug				5	
	66a	Nut		Thread: M10		12	
	210	Cover				1	
	212	Gasket				1	
	215	Shaft pin				1	
	216	Helical torsion spring				1	
	217	Valve flap				2	
-		Shaft seal cpl.				2	pcs
	72a	O-ring		Diameter: 177,39		1	
				Material type: EPDM			
				Thickness: 3,53			
	105	Shaft seal				1	
-		Stub shaft				2	pcs
	9	Socket set screw		Length (mm): 6		2	
				Thread: M8			
	11	Parallel key		Dimension: 6X6X35		1	
	51	Pump shaft				1	
-		Bracket cpl.				1	pcs
		Cross recess countersunk screw				1	
	505	Bracket		Type: MGE		1	
	49	Impeller		Outer diameter: 140		2	pcs
-	501	Pressure transducer				1	pcs
	7a	Pan washer head screw				2	
	501	DPI sensor cpl.				1	
	508	Tube				1	
	509	Capillary tube.				1	
	510	Mounting bush.				2	
	511	Cable pin				3	

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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