

Submittal Data

| | | |
|-----------------------|------------------|-------------|
| PROJECT: | UNIT TAG: | QUANTITY: |
| REPRESENTATIVE: _____ | TYPE OF SERVICE: | DATE: _____ |
| ENGINEER: | SUBMITTED BY: | DATE: |
| CONTRACTOR: | APPROVED BY: | DATE: |
| | ORDER NO.: | DATE: |

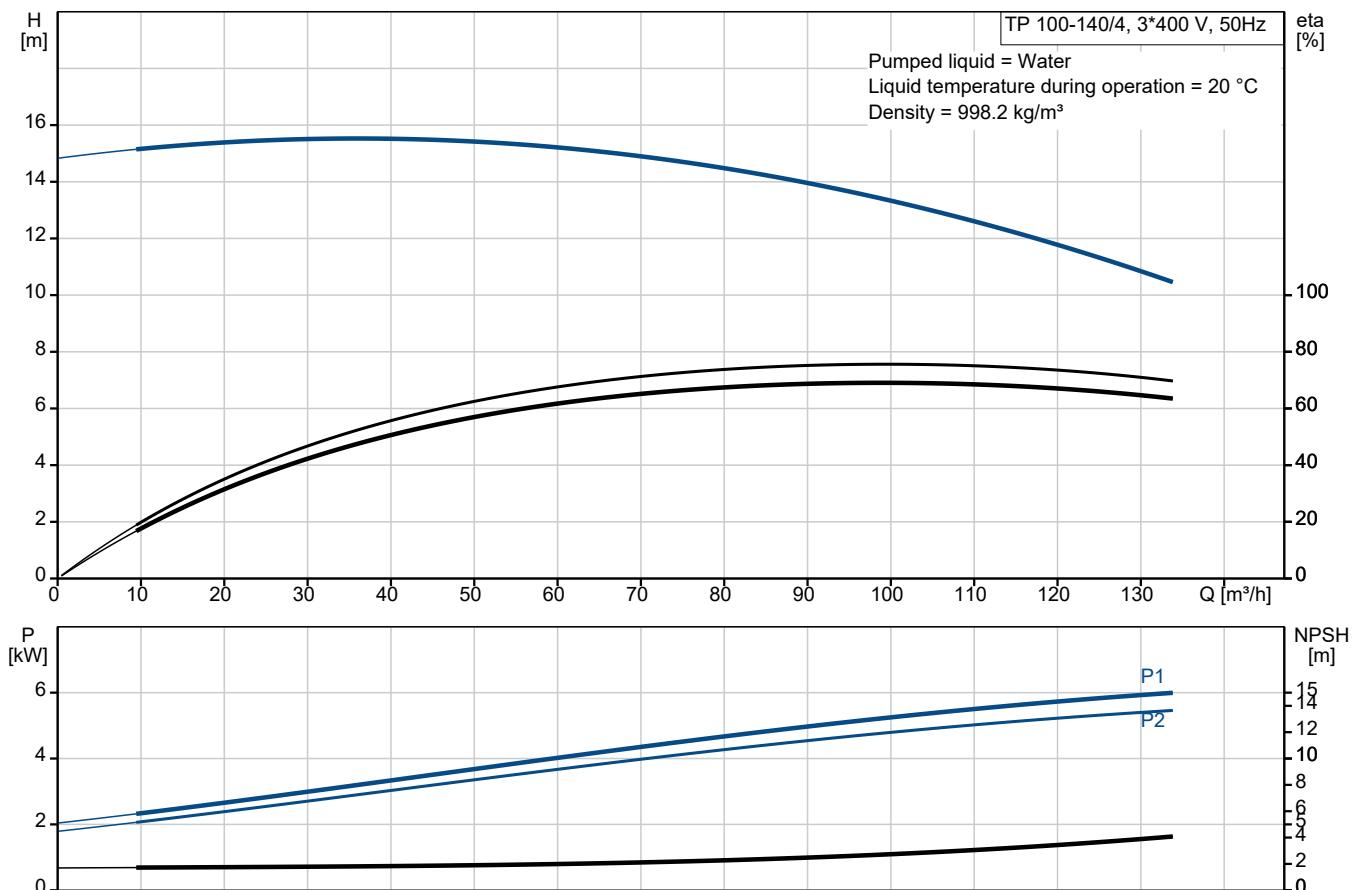


TP 100-140/4 A3-F-O-DAQF-LW3

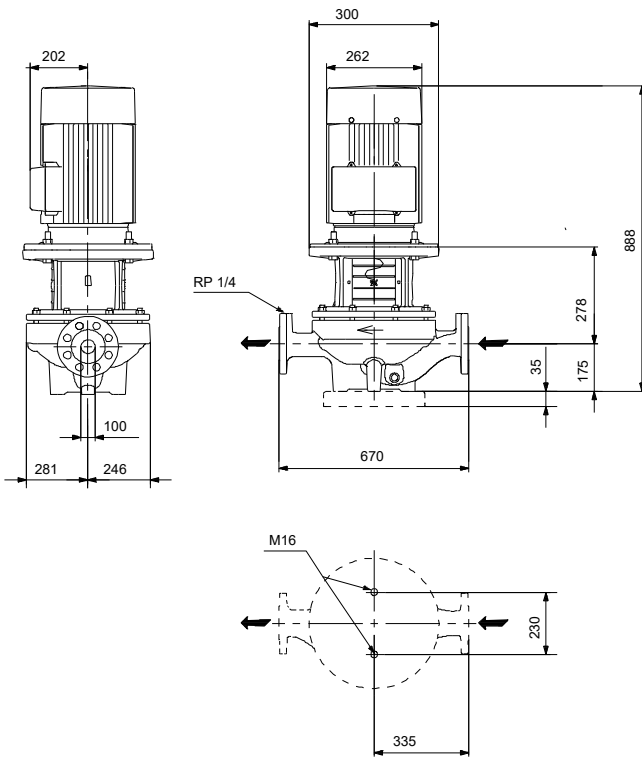
Grundfos TP pumps are single-stage, close-coupled in-line centrifugal pumps with mechanical shaft seal and primely for applications such as heating/cooling/district energy. The pumps are fitted with fixed speed motors.

Note! Product picture may differ from actual product

| Conditions of Service | Pump Data | Motor Data |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Max pressure at stated temp: 25 bar / 140 °C Liquid temperature range: 0 .. 140 °C Maximum ambient temperature: 55 °C Shaft seal: DAQF Product number: On request | Rated voltage: 220-240D/380-420Y V Mains frequency: 50 Hz Enclosure class: IP55 Insulation class: F Motor protection: PTC Motor type: SIEMENS Eta 1/1: 89.6-89.6 % |



Submittal Data



Materials:

Pump housing: Ductile iron
Pump housing: ASTM Grade 60-40-18
Impeller: Cast iron
Impeller: ASTM class 30
Impeller: EN-GJL-200
Material code: O

Qty. Description

1 TP 100-140/4 A3-F-O-DAQF-LW3



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.

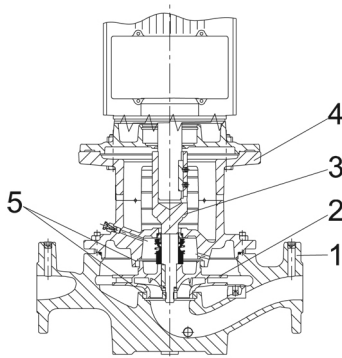
The pump is fitted with a balanced O-ring seal. The shaft seal is according to EN 12756. Pipework connection is via PN 25 DIN flanges (EN 1092-2 and ISO 7005-2).

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

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 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:

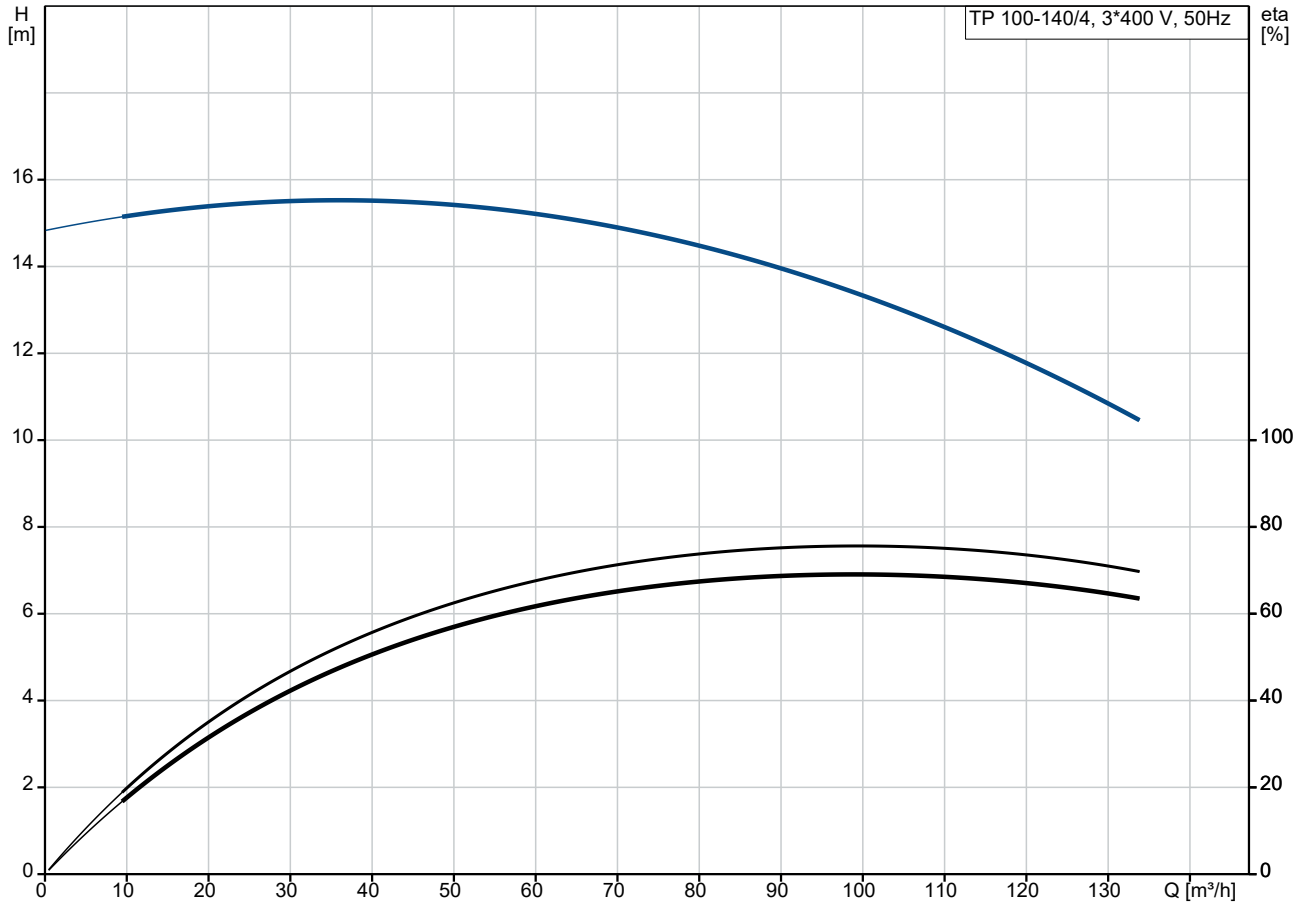
- Rotating seal ring material: carbon graphite, metal-impregnated
- Stationary seat material: silicon carbide (SiC)

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

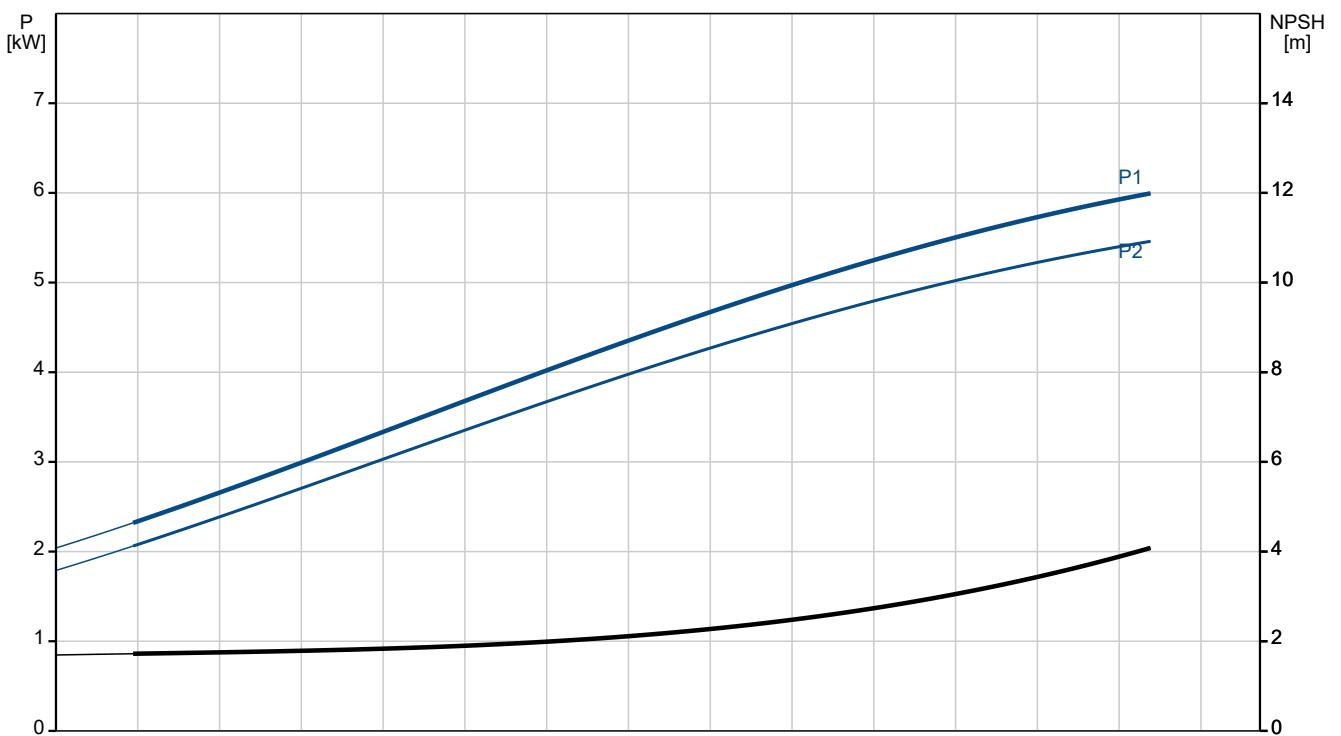
Qty. Description

| | |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 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: FF265 Electrical data: Motor type: SIEMENS Rated power - P2: 5.5 kW Mains frequency: 50 Hz Rated voltage: 3 x 220-240D/380-420Y V Rated current: 18.8/10.8 A Starting current: 850-850 % Cos phi - power factor: 0.82 Rated speed: 1470 rpm IE efficiency: IE3 89,6% IE Efficiency class: IE3 Motor efficiency at full load: 89.6-89.6 % Motor efficiency at 3/4 load: 90-90 % Motor efficiency at 1/2 load: 89.5-89.5 % Number of poles: 4 Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Motor No: 83V05217 Others: Minimum efficiency index, MEI ≥: 0.70 Net weight: 226 kg Gross weight: 263 kg Shipping volume: 0.743 m ³ Country of origin: HU Custom tariff no.: 84137051 |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

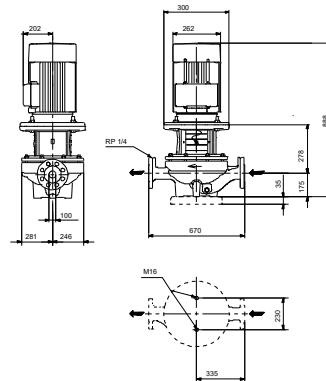
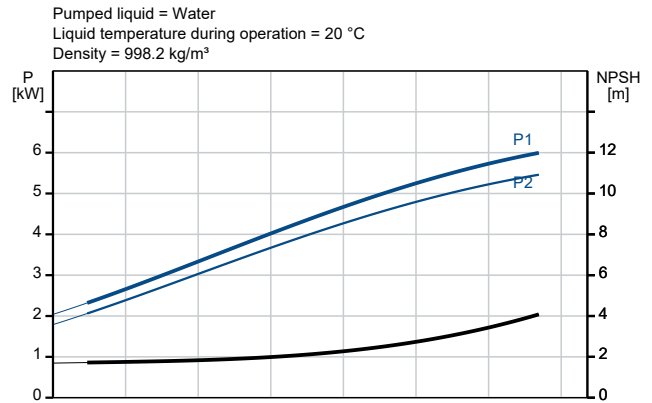
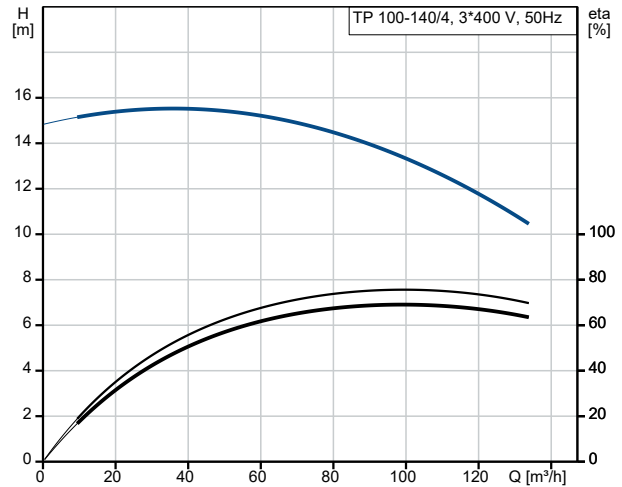
On request TP 100-140/4 A3-F-O-DAQF-LW3 50 Hz



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



| Description | Value |
|------------------------------------------|---------------------------------|
| General information: | |
| Product name: | TP 100-140/4 A3-F-O-DAQF-LW3 |
| Product No: | On request |
| EAN number: | On request |
| Technical: | |
| Pump speed on which pump data are based: | 1460 rpm |
| Rated flow: | 102 m ³ /h |
| Rated head: | 12.91 m |
| Maximum head: | 140 dm |
| Actual impeller diameter: | 215 mm |
| Code for shaft seal: | DAQF |
| Curve tolerance: | ISO9906:2012 3B2 |
| 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: | FF265 |
| Connect code: | F |
| Liquid: | |
| Liquid temperature range: | 0 .. 140 °C |
| Electrical data: | |
| Motor type: | SIEMENS |
| Rated power - P2: | 5.5 kW |
| Mains frequency: | 50 Hz |
| Rated voltage: | 3 x 220-240D/380-420Y V |
| Rated current: | 18.8/10.8 A |
| Starting current: | 850-850 % |
| Cos phi - power factor: | 0.82 |
| Rated speed: | 1470 rpm |
| IE efficiency: | IE3 89,6% |
| IE Efficiency class: | IE3 |
| Motor efficiency at full load: | 89.6-89.6 % |
| Motor efficiency at 3/4 load: | 90-90 % |
| Motor efficiency at 1/2 load: | 89.5-89.5 % |
| Number of poles: | 4 |
| Enclosure class (IEC 34-5): | IP55 |
| Insulation class (IEC 85): | F |
| Built-in motor protection: | PTC |
| Motor No: | 83V05217 |
| Controls: | |
| Frequency converter: | None |
| Others: | |
| Minimum efficiency index, MEI ≥: | 0.70 |





Company name:

Created by:

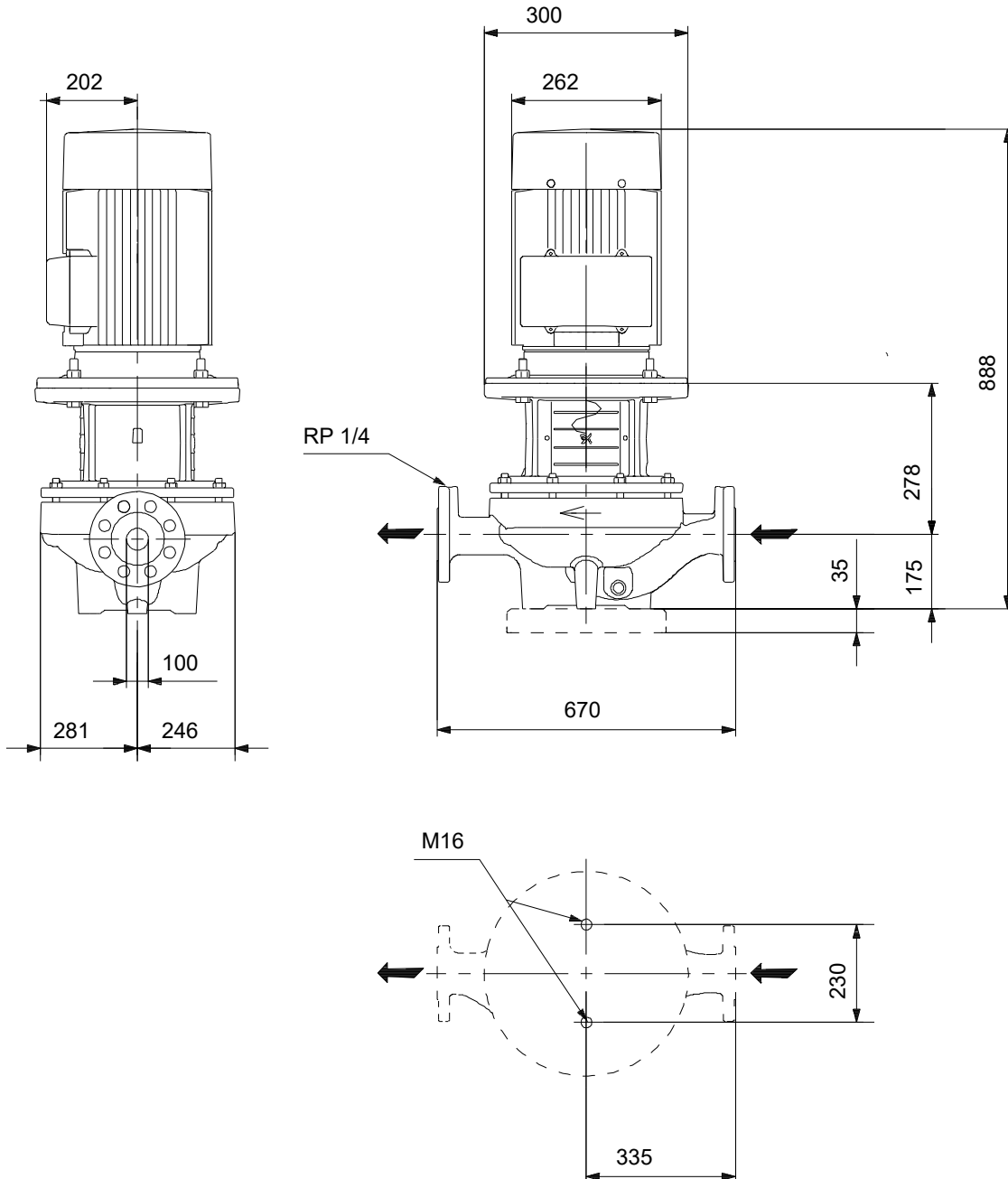
Phone:

Date:

01/12/2023

| Description | Value |
|--------------------|----------------------|
| Net weight: | 226 kg |
| Gross weight: | 263 kg |
| Shipping volume: | 0.743 m ³ |
| Country of origin: | HU |
| Custom tariff no.: | 84137051 |

On request TP 100-140/4 A3-F-O-DAQF-LW3 50 Hz



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

On request TP 100-140/4 A3-F-O-DAQF-LW3 50 Hz



IEC TP211 THERMALLY PROTECTED WHEN THE THERMISTORS ARE
CONNECTED TO AMPLIFIER RELAY FOR CONTROL OF MAIN SUPPLY
THERMISTORS PTC ACCORDING TO DIN 44082

Note! All units are in [mm] unless others are stated.

