

Submittal Data

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

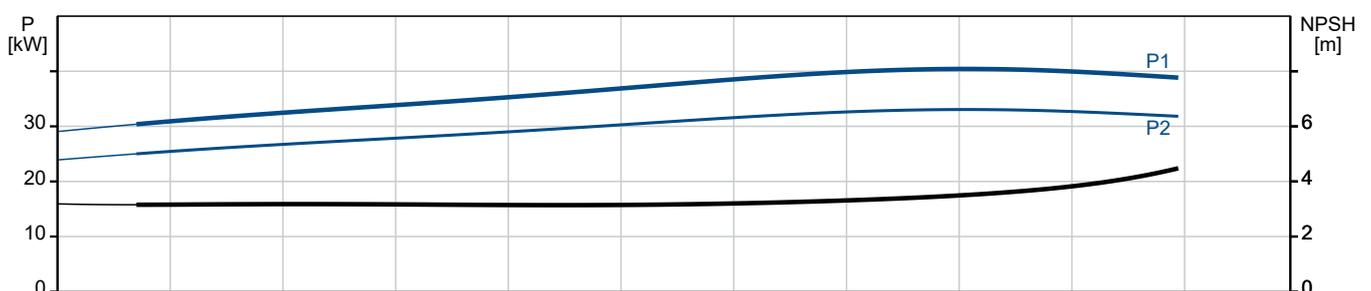
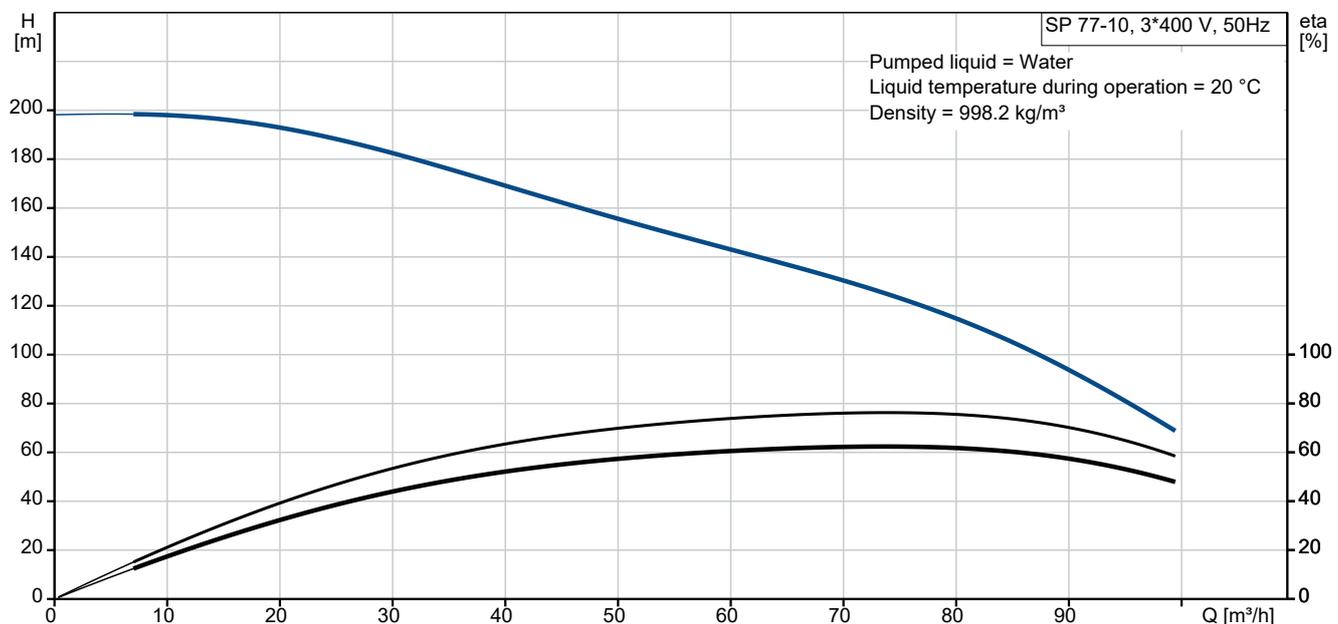


SP 77-10

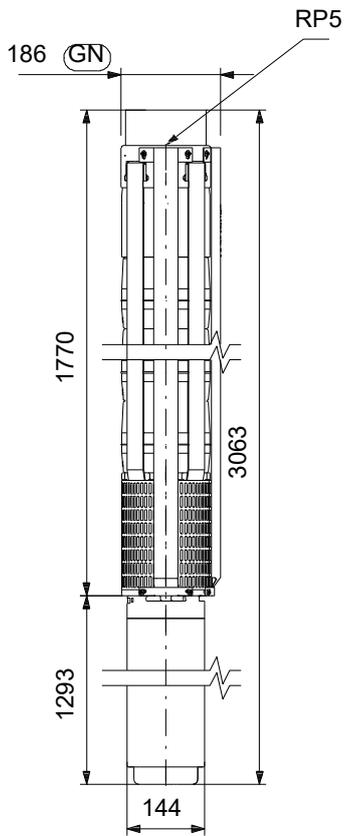
Grundfos SP are submersible borehole pumps, designed for pumping groundwater. Grundfos SP are all stainless-steel pumps, and they are available in 3 material grades. The pumps are suitable for boreholes in sizes ranging from 4" over 6" and 8" to 10". The motor sizes for the pumps are available in 0.37-250 kW.

Note! Product picture may differ from actual product

Conditions of Service	Pump Data	Motor Data
Liquid: Water	Approvals: CE	Rated voltage: 380-400-415 V
Temperature: 20 °C	Product number: On request	Mains frequency: 50 Hz
Specific Gravity: 1.000		Enclosure class: IP68
		Motor protection: NONE
		Thermal protection: external
		Motor type: MS6



Submittal Data



Materials:

- Impeller: Stainless steel
- Impeller: AISI 304
- Impeller: EN 1.4301
- Motor: Cast iron
- Motor: DIN W.-Nr. 0.6025
- Motor: ASTM 35-40

Qty. Description

1 **SP 77-10**



Note! Product picture may differ from actual product

Product No.: On request

Submersible borehole pump, suitable for pumping clean water. Can be installed vertically or horizontally. All steel components are made in stainless steel, EN 1.4301 (AISI 304), that ensures high corrosive resistance. This pump carries drinking water approval.

The pump is fitted with a 37 kW MS6 motor with sand shield, water-lubricated journal bearings and a volume compensating diaphragm.

The rewindable motor construction allows complete access to the windings for easy rewinding.

The stator windings are PE/PA insulated made for continuous operations (S1).

Suitable for temperatures up to 50 °C.

The motor is fitted with a mechanical shaft seal.

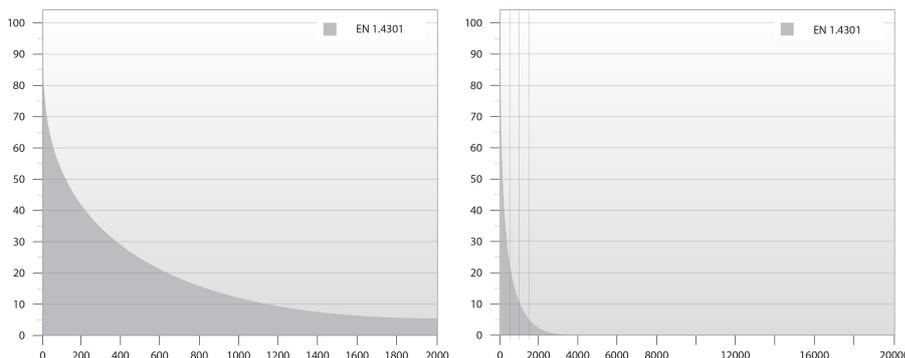
Further product details

The pump is suitable for applications similar to the following:

- raw-water supply
- irrigation
- groundwater lowering
- pressure boosting
- fountain applications.

Pump

All pump surfaces that are in contact with pumped liquids are made in stainless steel which makes them corrosion- and wear-resistant. The corrosion diagram below shows the capabilities of the pump and motor in relation to the temperature in Celsius (y-axis) and the concentration of chloride in ppm (x-axis).



The elastomer parts in the pump are made of NBR (Nitrile-Butadiene Rubber) which ensures good wear resistance and long service intervals.

In case the pump is used for pumping water with high content of hydrocarbons or solvents, Grundfos offers FKM rubber parts (Fluorocarbon) which are oil and temperature-resistant up to 90 °C.

The pump is built with octagonal bearings with sand flush channels that minimise wear. As wear of the pump is inevitable, the pump design allows for easy replacement of all internal wear parts (bearings, impeller, wear rings and seal rings) to maintain high performance and a long lifetime.

The suction interconnector is fitted with a strainer to prevent large particles from entering the pump. The suction interconnector is designed to comply with NEMA standards for motor mounting/dimensions.

Motor

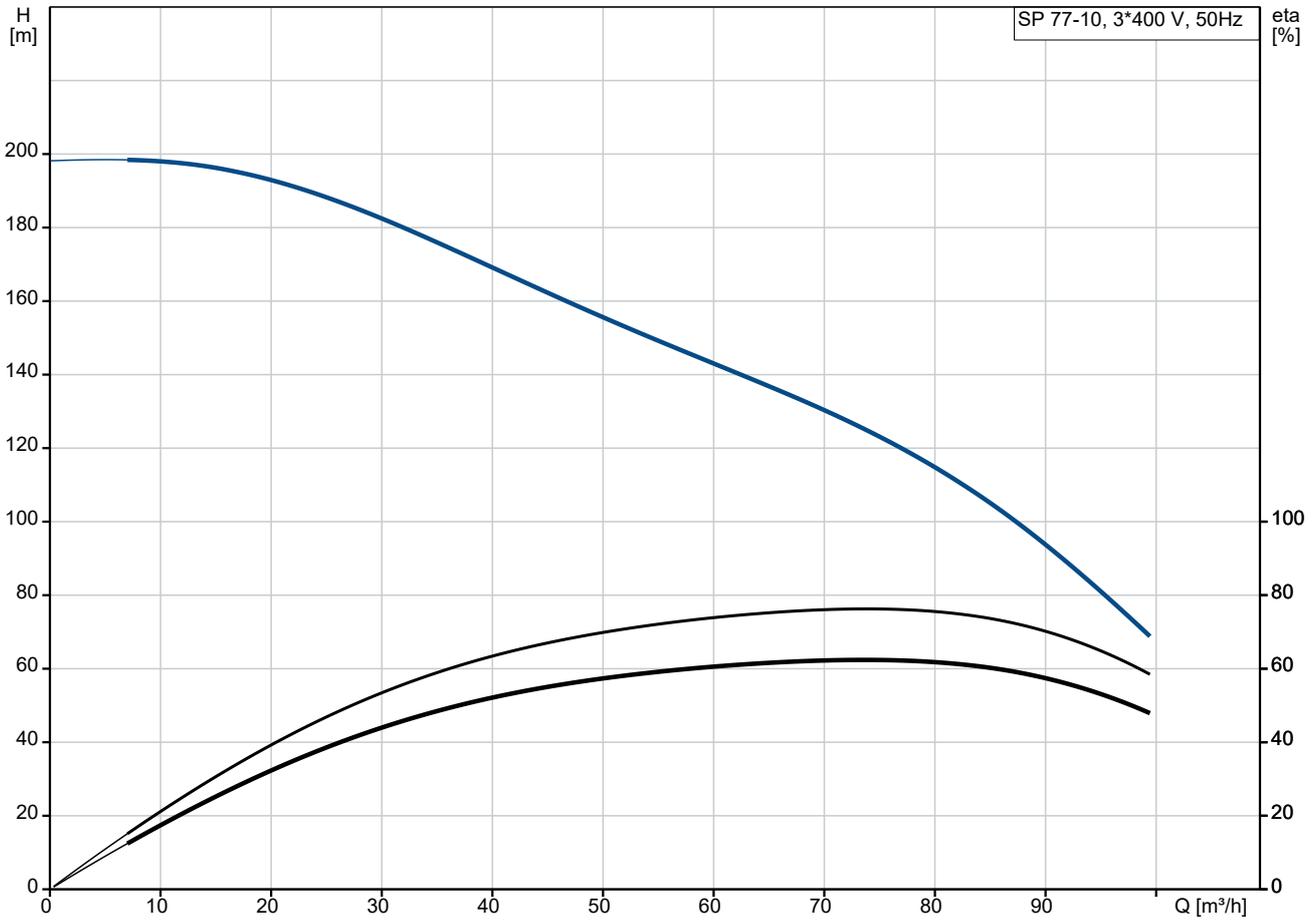
Qty.	Description
1	<p>The winding wire is made from pure electrolytic cobber insulated by extruded two layers of PE/PA with high dielectric strength properties allowing direct contact between the motor fluid and winding wire.</p> <p>This ensures the best possible cooling of the winding wire.</p> <p>The PA layer ensures high mechanical wear properties of the winding wire.</p> <p>The shaft seal faces are SiC/SiC.</p> <p>The material combination gives good performance when abrasive particles (sand) is present.</p> <p>Together with the shaft seal housing, the sand shield forms a labyrinth seal, which during normal operating conditions prevents penetration of sand particles into the shaft seal.</p> <p>This shaft seal is drinking water approved.</p> <p>Liquid:</p> <p>Pumped liquid: Water</p> <p>Maximum liquid temperature: 50 °C</p> <p>Max liquid t at 0.5 m/sec: 50 °C</p> <p>Selected liquid temperature: 20 °C</p> <p>Density: 998.2 kg/m³</p> <p>Technical:</p> <p>Pump speed on which pump data are based: 2900 rpm</p> <p>Rated flow: 77 m³/h</p> <p>Rated head: 123 m</p> <p>Shaft seal for motor: SIC/SIC</p> <p>Approvals: CE</p> <p>Curve tolerance: ISO9906:2012 3B</p> <p>Motor version: T50</p> <p>Return valve: YES</p> <p>Materials:</p> <p>Pump: Stainless steel EN 1.4301 AISI 304</p> <p>Impeller: Stainless steel EN 1.4301 AISI 304</p> <p>Motor: Cast iron DIN W.-Nr. 0.6025 ASTM 35-40</p> <p>Installation:</p> <p>Type of connection: Rp</p> <p>Size of connection: 5 inch</p> <p>Motor diameter: 6 inch</p> <p>Electrical data:</p> <p>Motor type: MS6</p> <p>Motor flange design: Grundfos</p> <p>Rated power - P2: 37 kW</p> <p>Mains frequency: 50 Hz</p> <p>Rated voltage: 3 x 380-400-415 V</p> <p>Service factor: 1.00</p> <p>Rated current: 87.0-84.5-85.0 A</p> <p>Starting current: 455-495-510 %</p> <p>Cos phi - power factor: 0.85-0.82-0.79</p> <p>Rated speed: 2830-2860-2870 rpm</p> <p>Method of start: Star-delta (YD)</p> <p>Enclosure class (IEC 34-5): IP68</p> <p>Motor No: 96879432</p> <p>Windings: PE2/PA</p>



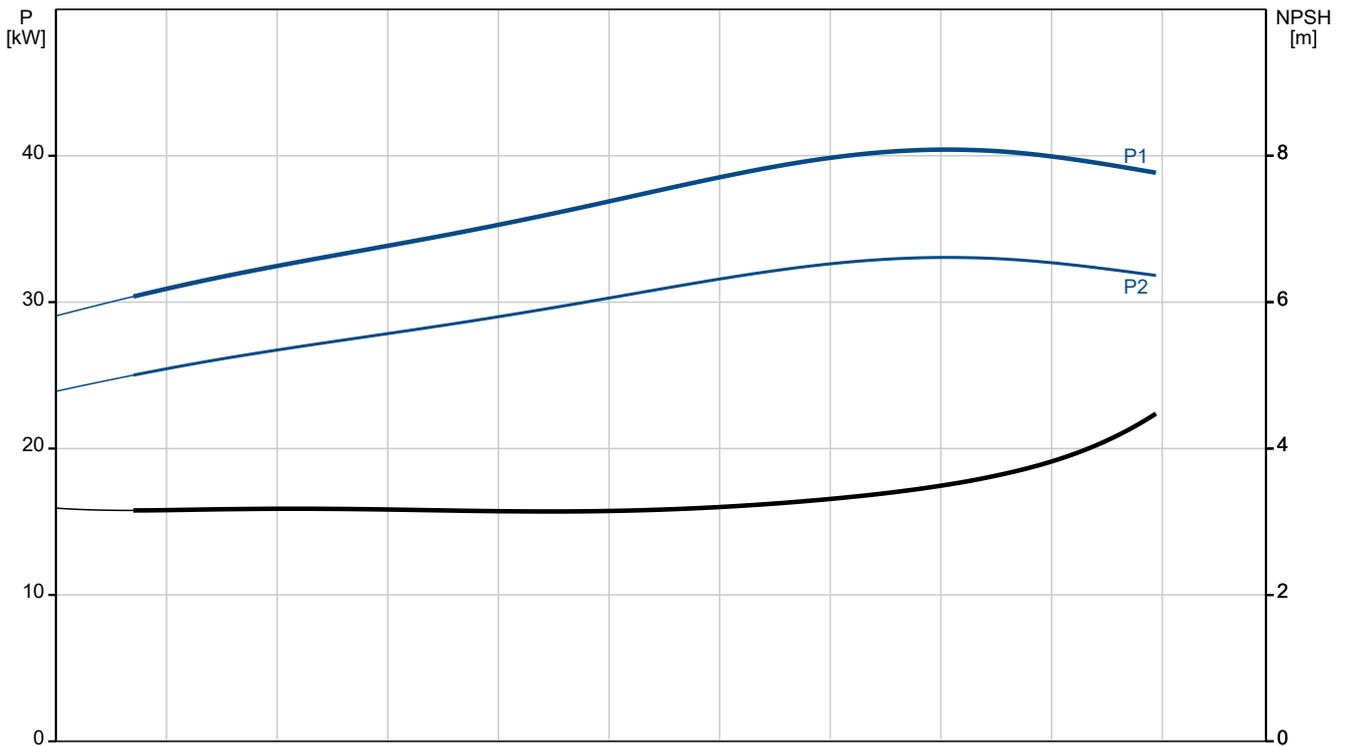
Company name: Al Mawared Engineering & Trading S.A.E (MET)
Created by: Mostafa Mohamed
Phone: 02 26421242 - 01223033998
Email: info@met-eg.com - Almawared@link.net
Date: 08/10/2023

Qty.	Description
1	Others: Net weight: 181 kg Gross weight: 223 kg

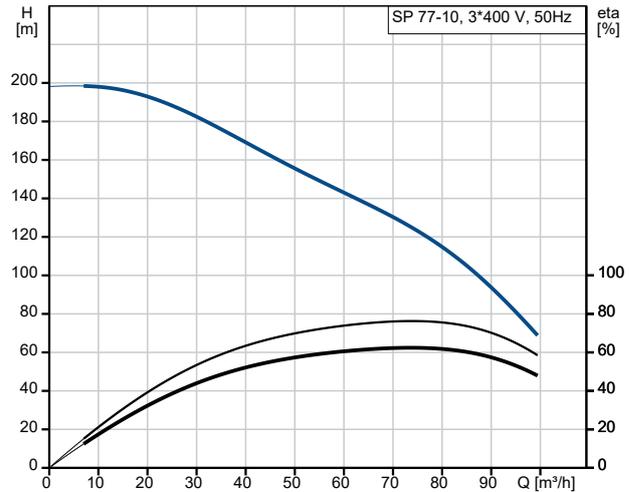
On request SP 77-10 50 Hz



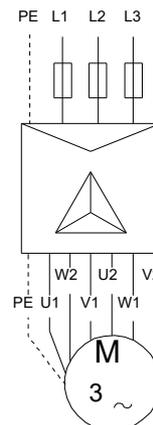
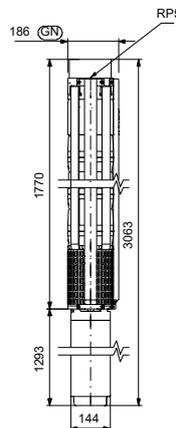
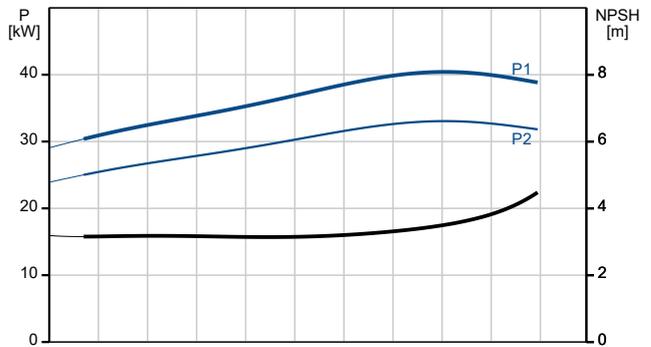
Pumped liquid = Water
 Liquid temperature during operation = 20 °C
 Density = 998.2 kg/m³



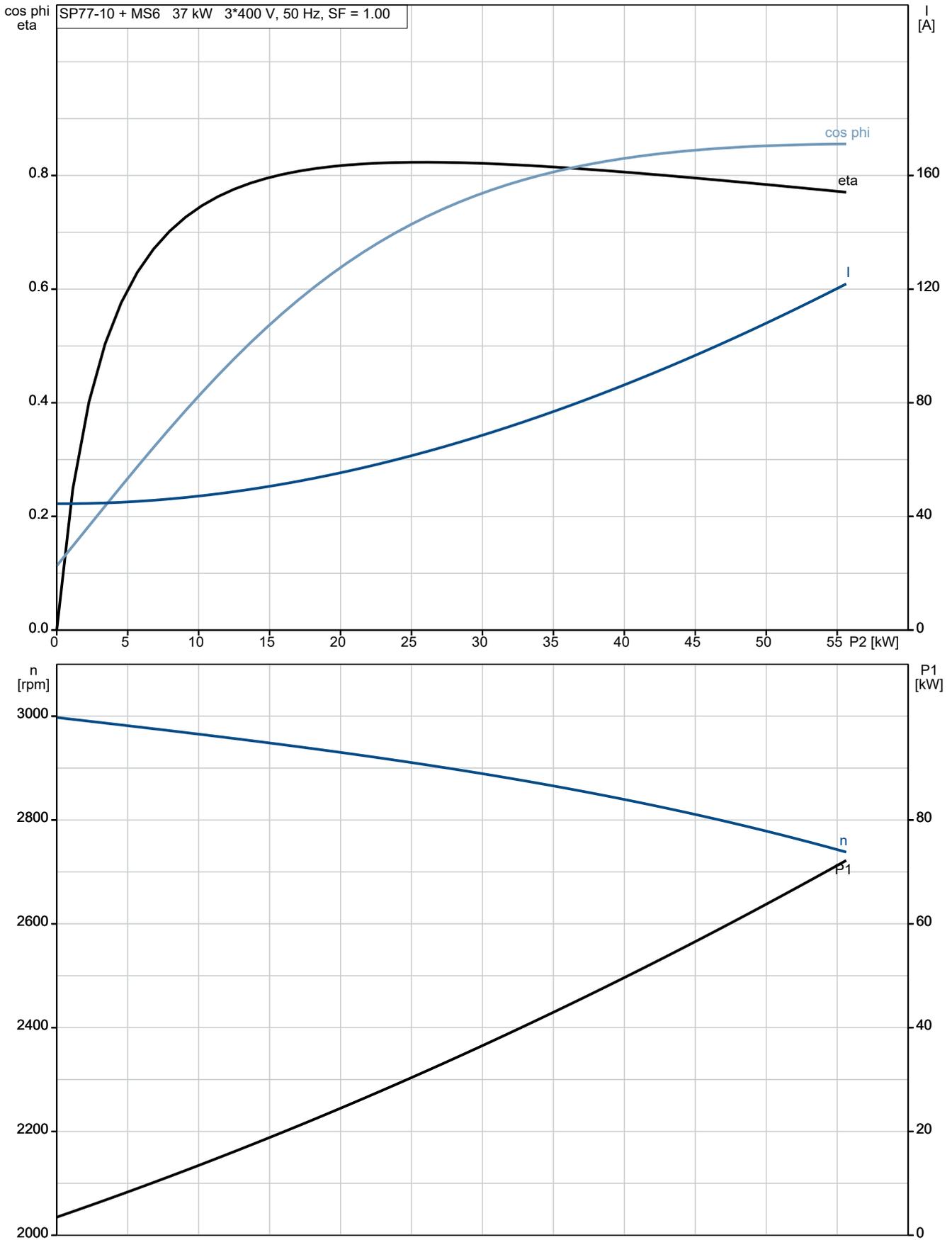
Description	Value
General information:	
Product name:	SP 77-10
Product No:	On request
EAN number:	On request
Technical:	
Pump speed on which pump data are based:	2900 rpm
Rated flow:	77 m ³ /h
Rated head:	123 m
Stages:	10
Number of reduced-diameter impellers:	NONE
Shaft seal for motor:	SIC/SIC
Approvals:	CE
Curve tolerance:	ISO9906:2012 3B
Model:	C
Motor version:	T50
Return valve:	YES
Materials:	
Pump:	Stainless steel
Pump:	EN 1.4301
Pump:	AISI 304
Impeller:	Stainless steel
Impeller:	EN 1.4301
Impeller:	AISI 304
Motor:	Cast iron
Motor:	DIN W.-Nr. 0.6025
Motor:	ASTM 35-40
Installation:	
Type of connection:	Rp
Size of connection:	5 inch
Motor diameter:	6 inch
Liquid:	
Pumped liquid:	Water
Maximum liquid temperature:	50 °C
Max liquid t at 0.5 m/sec:	50 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m ³
Electrical data:	
Motor type:	MS6
Motor flange design:	Grundfos
Rated power - P2:	37 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-400-415 V
Service factor:	1.00
Rated current:	87.0-84.5-85.0 A
Starting current:	455-495-510 %
Cos phi - power factor:	0.85-0.82-0.79
Rated speed:	2830-2860-2870 rpm
Method of start:	Star-delta (YD)
Enclosure class (IEC 34-5):	IP68
Built-in motor protection:	NONE
Thermal protec:	external
Motor No:	96879432
Windings:	PE2/PA
Others:	
Net weight:	181 kg
Gross weight:	223 kg



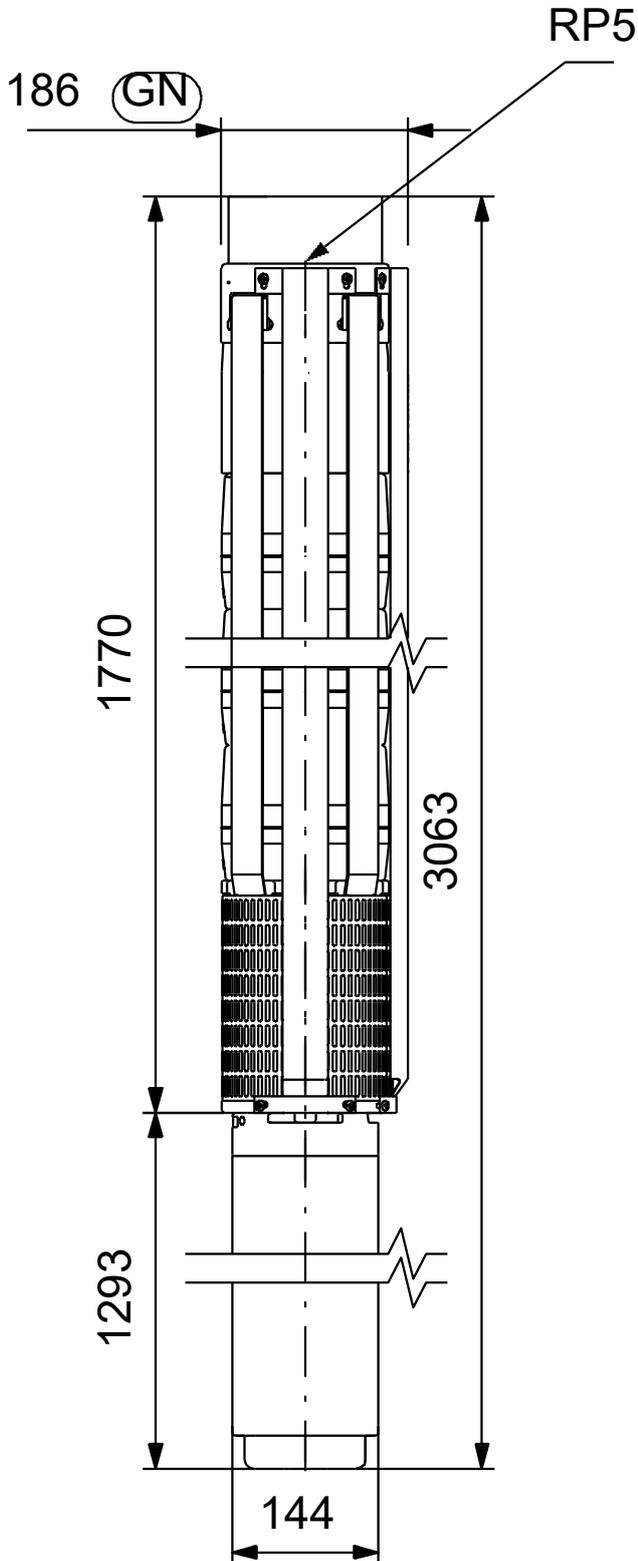
Pumped liquid = Water
 Liquid temperature during operation = 20 °C
 Density = 998.2 kg/m³



On request SP 77-10 50 Hz

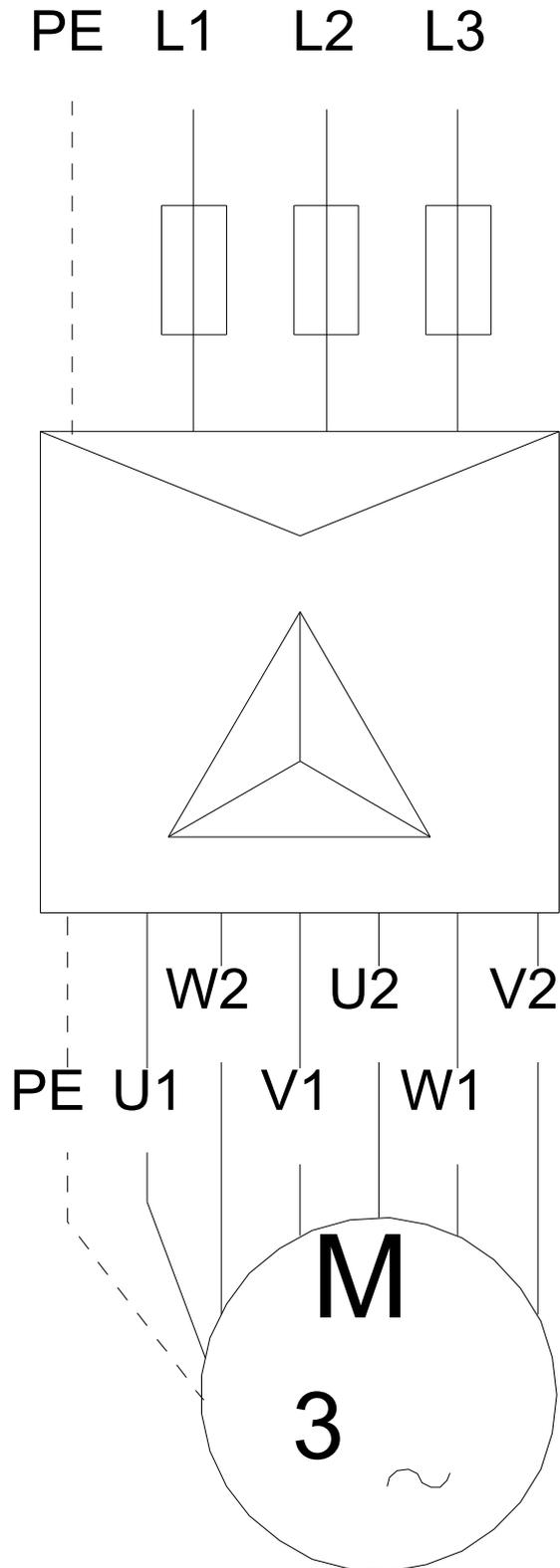


On request SP 77-10 50 Hz



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

On request SP 77-10 50 Hz



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

