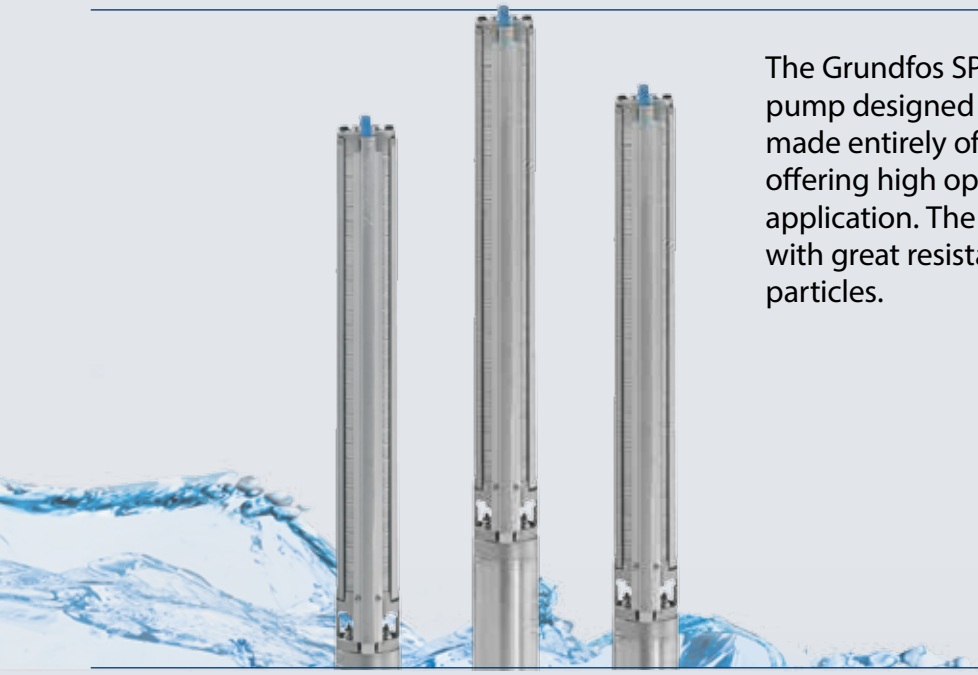
SP



The Grundfos SP is a 4-inch multi-stage, submersible pump designed for operation in boreholes. The SP is made entirely of corrosion-resistant stainless steel, offering high operating reliability regardless of the application. The SP range offers high efficiency along with great resistance to sand and other abrasive particles.

3 YEAR WARRANTY
PUMP & MOTOR

Features

Long life
Grundfos SP pumps are made from 100% high-grade corrosion resistant stainless steel inside and out, to ensure a long life (DIN 1.4301 - AISI 304). Higher grades are available if aggressive liquids are present (AISI316 and AISI904) .

Optimised hydraulics
For better performance and fewer breakdowns

Sand flushed out
Octagonal bearings and sand flush channels remove particles with the pumped water ensuring less abrasive wear

Built-in non-return valve
All SP pumps are delivered with a non-return valve to minimise the risk of water hammering damage.

Customised solutions
Need something extra special? Ask us!

Applications

- Groundwater supply
- Large scale irrigation
- Groundwater lowering
- Pressure boosting
- Industrial applications (heavy duty)
- Dewatering
- Stock watering

Operating Conditions

Liquid temperature
0°C to 40°C degrees with 0.15 m/s cooling flow

Higher flow past motor equals higher permissible liquid temperature. Consult Grundfos for further information.

Technical Data

Mains voltage
1 x 240 V, 50 Hz
3 x 415 V, 50Hz

Enclosure class
IP68

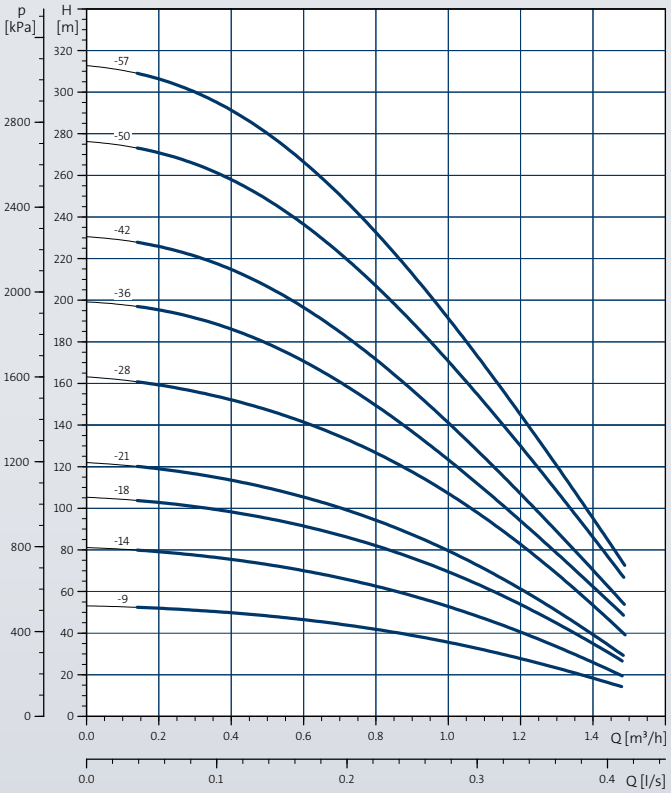
Insulation class
F

Installation depth
Max. 600 m

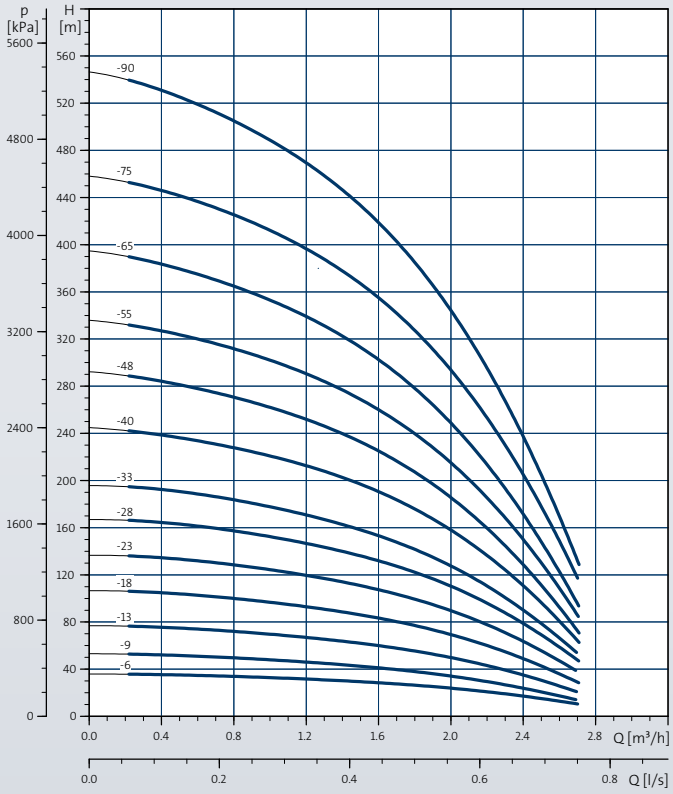
Approvals and markings
UL, CSA, VDE, CE

Performance

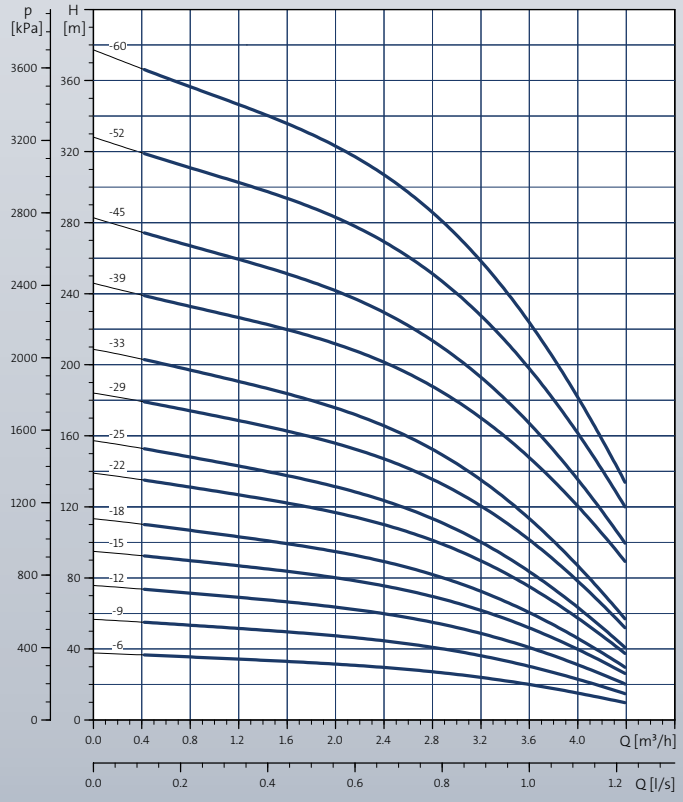
SP 1A



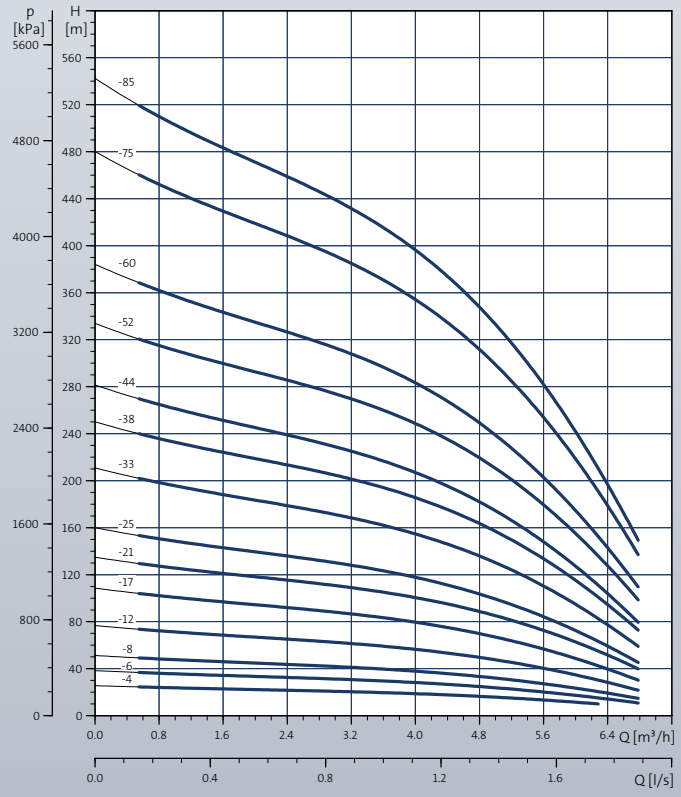
SP 2A



SP 3A

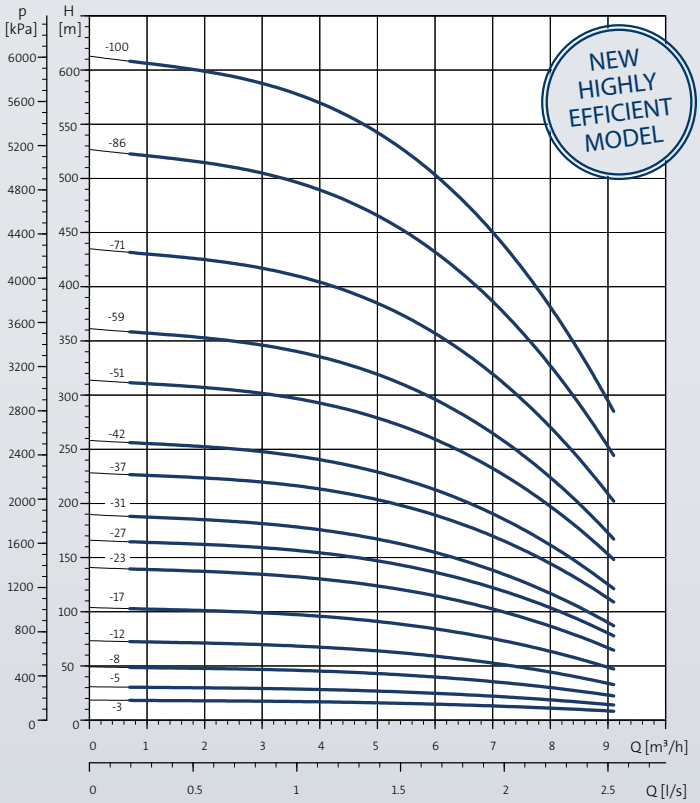


SP 5A

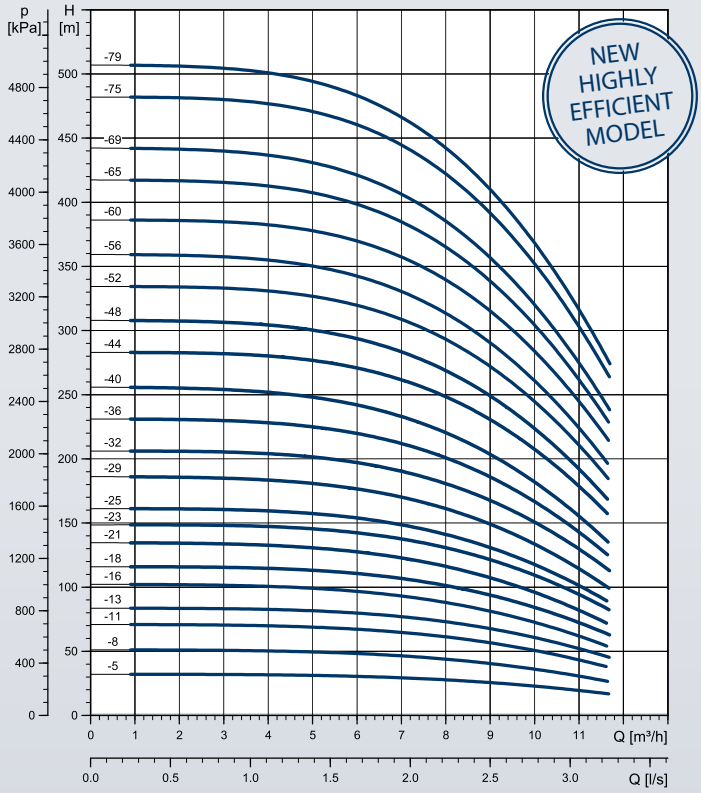


Performance Graphs

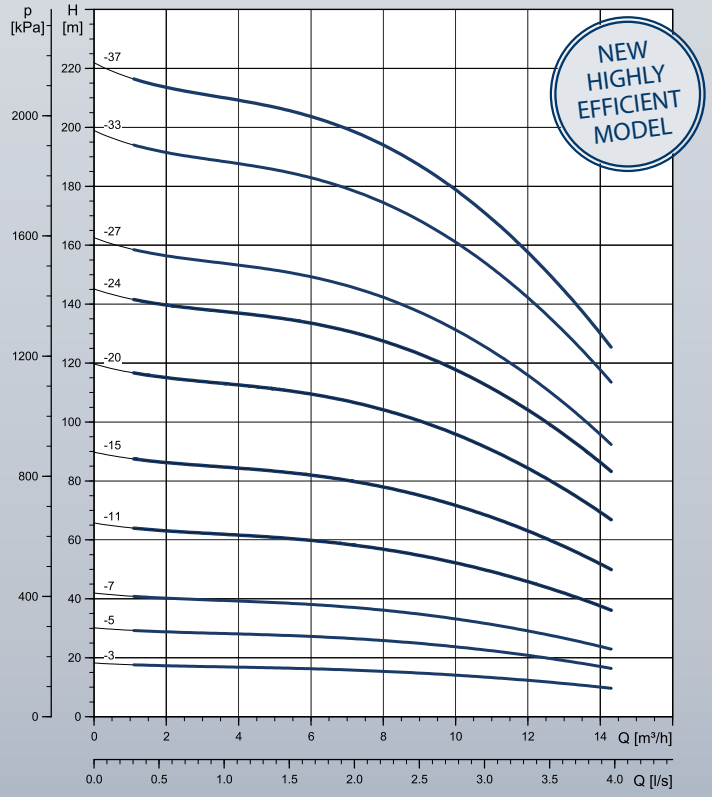
SP 7



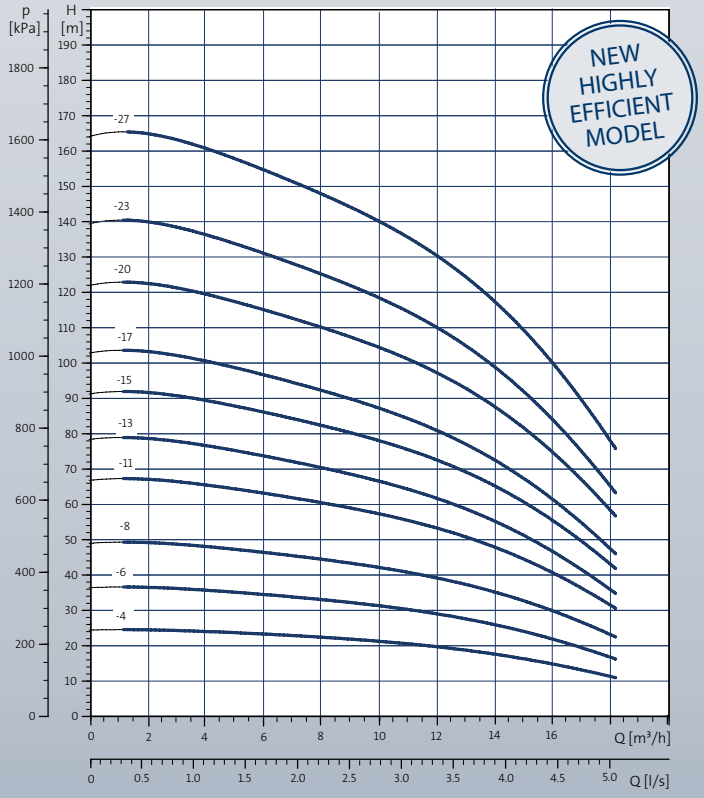
SP 9



SP 11



SP 14



SQEN Controllers

CU300

CU301

Intelligent control and protection unit designed for the Grundfos SQEN submersible pump.

Protects against:

- ✓ No contact
- ✓ Dry running
- ✓ Speed reduction
- ✓ Overtemperature
- ✓ Overload
- ✓ Sensor alarm
- ✓ Overvoltage
- ✓ Undervoltage

Features

Constant water pressure
Constant pressure is guaranteed meaning you can always get what you expect when you turn on the tap.

Adjustable water pressure
Water pressure can be easily adjusted (from 2 – 5 bar) at any time and will automatically adjust the pressure level to provide instant comfort.

Operation monitoring
As the controller constantly receives signals from the pressure sensor in the pump, if the pressure drops below the desired level, it will automatically operate the pump until the water pressure level is restored.

Service alarm indication
When a fault is present an alarm will be sent to help protect the pump from damage.

CU300 Only*

CU300 (R100/ Grundfos GO Connect required for commissioning)

Increased functionality

- Constant pressure (1-6 bar or 1-10 bar)
- Constant flow (connected to a water meter)
- Constant pressure (dual pump operation)
- Constant water level

Customisable system setup
By connecting to various sensors, the CU300 can be used to setup the customised pumping system in order to deliver constant pressure or constant water level at a tank or reservoir. The CU300 box is suitable for domestic use or small irrigation systems; and small scale professional applications.

CU301 Only

User friendly interface
The box displays pump information status in an easy-to-understand graphical way so it is easy to operate and monitor.

Easy to use
The only task for the user is to switch on the box and choose the desired water pressure level through the user friendly operating interface.

Constant Pressure
2-5 bar pressure setting

*Must be programmed by R100 or Grundfos GO

SP Motor Protection

PRO-tect

Specific submersible pump protection and control device.

Protects against:

- ✓ Dry running
- ✓ Overvoltage
- ✓ Undervoltage
- ✓ Short circuit
- ✓ Phase failure (3 phase version only)

Features

Adaptable installation
Suitable for connection with two wire or three wire single phase motors (up to 2.2 kW) and three phase motors (up to 7.5 kW).

User friendly interface
Easy to use interface displays operational status.

East set up
Automatically calibrates with the pump making set up extremely easy.

Flexible design
Free input allows for easy connection to a pressure or float switch.

Automatic restart
Automatic restart if no water present at 10, 22, 45 and 90 minutes.

Easy installation of pump
Eliminating the need to buy and install bore level probes to externally protect against dry running.

MP204

Reliable, easy to set up and easy to use motor protection device.

Protects against:

- ✓ Dry running
- ✓ Overload
- ✓ Motor temperature protection (when motor fitted with Tempcon)
- ✓ Current unbalance
- ✓ Phase failure
- ✓ Start/Run capacitor monitoring

Features

Easy installation
Can be mounted onto any wall or back plate, or simply slide into place on a mounting rail. The simple menu completes set-up in just 2 minutes.

Monitors energy
Acts as a monitoring device for energy consumption, so you are always aware of pump running costs.

Control from a distance
MP204 solution can be connected to any SCADA system, allowing you remote access to your pump data anywhere.