# **SQ RANGE**

# SUBMERSIBLE PUMPS

FOR COMPACT RELIABILITY

The SQ pump is Grundfos' most compact submersible solution for ground water extraction. A mere 3" in diameter, the long, lean pump fits nicely into small boreholes of the same size – or in 4" boreholes that over time have become smaller due to ochre deposits. The compact design along with key features like dryrunning protection and soft start to reduce wear on motor makes the SQ pump one of the most reliable choices for submersible operation.

# BENEFITS

- Unique 3" design
- · Wide voltage window
- Soft start reduces wear on motor and minimises stress of the entire installation
- Dry-running protection
- · Overload protection
- Automatic restart
- All stainless steel exterior design reduces risk of corrosion to a minimum
- Built-in electronics facilitate installation and operation

# APPLICATIONS

- Domestic water supply
- Small water works
- · Irrigation systems
- Groundwater lowering

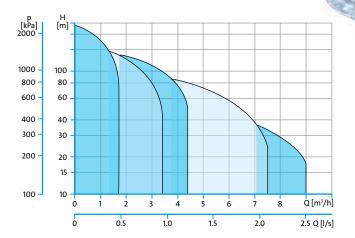
# THE SQ RANGE IN MORE DETAIL

# **KEY FEATURES**

- · Soft start and low amp draw
- · High starting torque & deep setting handling
- · 2 wire & no extra box needed
- Handle voltage fluctuation, protection and automatic restart
- Dry-running protection
- Soft start
- Built-in electronics
- Permanent magnet motors

## TECHNICAL DATA

- Performance range: Flow up to 7m³/h (SQ/SQN 7)
- Head up to 180 m (SQ/SQN 1)
- Nominal voltage range: 1x200-240V
- Frequency: 50/60Hz
- Max. acceptable media temp: 30 °C (40 °C)
- Pump diameter: Ø74 mm
- Weight (min./max.): 4.7-6.4 kg
- Thread connections: RP 1¼ / RP 1½
- Minimum well diameter: Ø76 mm
- Materials (Stainless steel):
  SQ DIN W.-Nr. 1.4301, AISI 304,
- The SQ pump can be installed vertically or horizontally





# THE CHOICE IS YOURS

The SQ pump is the basic model of the Grundfos 3" submersible pump range. With a wide range of performance parameters, you're sure to find a model that will suit your individual require-

Long and lean, this multistage pump is constructed of corrosion-resistant stainless steel, ensuring a long, reliable life. Only 3" in diameter, the compact design allows placement in small boreholes of the same size, or even 4" boreholes that have become smaller due to ochre deposits. Other pumps with similar capacities are usually 4" in diameter.

The SQ single high-speed pumps are ideally suited for a variety of applications:

- Domestic water supply
- Small water works
- Irrigation
- Groundwater lowering

### **PERMANENT MAGNET MOTOR**

A series of unique features make the SQ series very easy to install and operate, and ensure a reliable water supply at all times. Thanks to its' high-speed permanent magnet motor, it offers a very high performance in relation to its compact design.

The motor enables the SQ to pump water from a borehole to a depth of 238 metres.

The special SQN pumps are engineered in an even higher grade of stainless steel for applications with slightly aggressive liquids.

# **YEARS OF RELIABILITY**

The individual models of the SQ series are composed of high-quality stainless steel. Combining this with a robust internal construction and sturdy impellers provides the user with years of reliable operation.

### PROTECTION AGAINST DRY RUNNING

Dry running is one of the most disastrous situations a pump can experience. The absence of liquid can cause the pump shaft to seize up, initiating the burn out of motor windings, unless the power is switched off. In case of dry running the SQ pump automatically switches off.





# **GRUNDFOS** SQ/SQN - an outstanding solution

- · Soft start reduces wear on motor and prevents spikes in electrical demand
- · High starting torque, even at low supply voltage
- Overload protection protects motor from unstable voltage supplies
- Dry running protection safeguards against damage from an absence of
- Automatic re-start ensures a reliable water supply following preventative shutdown
- 100% stainless steel construction provides durability and peace-of-mind

# **Technical information**

Performance range:

Flow up to 9m3/h (SQ/SQN 7),

Head up to 238 m (SQ/SQN 1)

Nominal voltage range: 1x200-230V

Frequency (of the voltage supply): Max. acceptable media temp:

Pump diameter:

50/60Hz 30°C (40°C) Ø74mm

Weight (min./max.): Thread connections:

Minimum well diameter:

4.7 - 6.4 kg RP 1¼ / RP 1½ Ø76mm

Materials (Stainless steel): SQ - DIN W.-Nr. 1.4301, AISI 304,

SQN - DIN W.-Nr. 1.4401, AISI 316

The SQ/SQN pumps can be installed vertically or horizontally.

