

SQ, SQE

Installation and operating instructions



GRUNDFOS X

English (GB) Installation and operating instructions

Original installation and operating instructions.

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Warning



Prior to installation, read these installation and operating instructions. Installation and operation must comply with local regulations and accepted codes of good practice.

Warning



The use of this product requires experience with and knowledge of the product. Persons with reduced physical, sensory or mental capabilities must not use this product, unless they are under supervision or have been instructed in the use of the product by a person responsible for their safety.

Children must not use or play with this product.

1. Symbols used in this document

Warning



If these safety instructions are not observed, it may result in personal injury.

Caution



If these safety instructions are not observed, it may result in malfunction or damage to the equipment.

Note



Notes or instructions that make the job easier and ensure safe operation.

2. General

On page 17 of these installation and operating instructions, you will find copies of the pump and motor nameplates.

Before the SQ/SQE pump is lowered into the borehole, this page should be filled in with the relevant nameplate data.

These installation and operating instructions must be kept in a dry place near the installation site for reference purposes.

2.1 Applications

The SQ and SQE pumps are designed for pumping thin, clean, non-aggressive, non-explosive liquids, not containing solid particles or fibres.

Typical applications:

- Groundwater supply for
 - private housing
 - small waterworks
 - irrigation systems in for instance green houses.
- Liquid transfer in tanks.
- Pressure boosting.

The **SQE-NE** pumps are designed for pumping thin, clean, non-explosive liquids, not containing solid particles or fibres.

These pumps are suitable for pumping contaminated or hydrogen-carbonate containing groundwater, e.g. from

- dumps
- chemical depots
- industrial areas
- oil and petrol filling stations
- environmental applications.

The **SQE-NE** pumps can also be used for sampling and monitoring and to some extent for incorporation in water treatment systems.

Information applying to all pump types

The maximum sand content of the water must not exceed 50 g/m³. A larger sand content will reduce the life of the pump and increase the risk of blocking.

Note If liquids with a viscosity higher than that of water are to be pumped, please contact Grundfos.

pH values

SQ and SQE: 5 to 9.

SQE-NE: Please contact Grundfos.

Liquid temperature

The temperature of the pumped liquid must not exceed 35 °C.

3. Technical data

Supply voltage

1 x 200-240 V - 10 %/+ 6 %, 50/60 Hz, PE.

Operation via generator: As a minimum, the generator output must be equal to the motor P₁ [kW] + 10 %.

Starting current

The motor starting current is equal to the highest value stated on the motor nameplate.

Power factor

PF = 1.

Motor liquid

Type SML 3.

Motor cable

1.5 m, 3 x 1.5 mm², PE.

Liquid temperature

Maximum 35 °C.

Pump outlet size

SQ 1, SQ 2, SQ 3: Rp 1 1/4.

SQ 5, SQ 7: Rp 1 1/2.

Pump diameter

74 mm.

Borehole diameter

Minimum 76 mm.

Installation depth

Maximum 150 m below static water level.

See also section [6.8.2 Installation depths](#).

Net weight

Maximum 6.5 kg.

3.1 Storage

Storage temperature: -20 °C to +60 °C.

3.1.1 Frost protection

If the pump has to be stored after use, it must be stored on a frost-free location or it must be ensured that the motor liquid is frost-proof.

The motor must not be stored without being filled with motor liquid.

3.2 Sound pressure level

The sound pressure level of the pump is lower than the limiting values stated in the EC Council Directive 2006/42/EC relating to machinery.

4. Preparation

Grundfos MS 3 and MSE 3 submersible motors have water-lubricated slide bearings. No additional lubrication is required.

The submersible motors are factory-filled with a special Grundfos motor liquid (type SML 3), which is frost-proof down to - 20 °C and preserved to prevent the growth of bacteria.

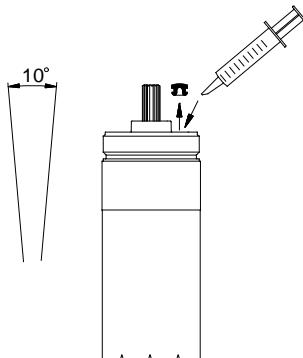
The level of motor liquid is decisive for the operating life of the bearings and consequently the life of the motor.

4.1 Refilling of motor liquid

If for any reason the motor liquid has been drained or lost, the motor must be refilled with Grundfos motor liquid SML 3.

To refill the motor, proceed as follows:

1. Remove the cable guard and separate the pump part from the motor.



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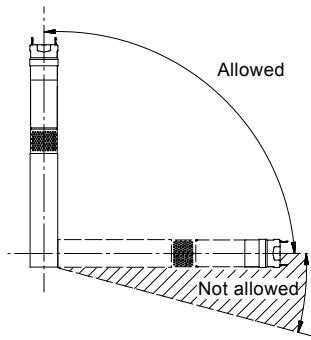
Fig. 1

2. Place the motor in vertical position with an inclination of approx. 10 °.
3. Remove the filling plug using a screwdriver or a similar tool.
4. Inject motor liquid into the motor with a filling syringe or the like.
5. To allow possible air to escape, move the motor from side to side.
6. Refit the filling plug and make sure it is tight.
7. Assemble pump part and motor.
8. Refit the cable guard.

The pump is now ready for installation.

4.2 Positional requirements

The pump is suitable for vertical as well as horizontal installation, however, the pump shaft **must never** fall below the horizontal plane. See fig. 2.

**Fig. 2**

If the pump is to be installed horizontally, e.g. in a tank, and there is a risk that the pump might be covered by mud, it must be fitted in a flow sleeve.

For installation depths, see section [6.8.2 Installation depths](#).

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4.3 Liquid temperatures/cooling

Figure 3 shows an SQ/SQE pump installed in a borehole. The pump is operating.

Figure 3 illustrates the following:

- borehole diameter
- pump diameter
- temperature of pumped liquid
- flow past the motor to the pump suction strainer.

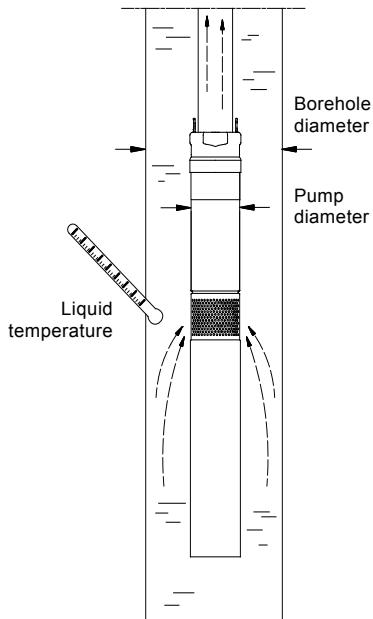


Fig. 3

To ensure sufficient cooling of the motor, it is important to observe the maximum liquid temperature of 35 °C under all conditions.

Caution The borehole diameter must be at least 76 mm (approx. 3").

The motor should always be installed above the well screen. If a flow sleeve is used, the pump may be installed freely in the borehole.

Do not let the pump run against a closed discharge pipe for more than 5 minutes.

Caution When the discharge pipe is closed, there is no cooling flow and there is a risk of overtemperature in motor and pump.

If the actual temperature of the pumped liquid exceeds the specified value or the operating conditions otherwise fall outside the specified conditions, the pump may stop. Please contact Grundfos.

5. Electrical connection

5.1 General

The electrical connection should be carried out by an authorised electrician in accordance with local regulations.

Warning

Before starting work on the pump, make sure that the power supply has been switched off and that it cannot be accidentally switched on.

The pump must be earthed.

The pump must be connected to an external mains switch with a minimum contact gap of 3 mm in all poles.

If the motor cable is damaged, it must be replaced by Grundfos, an authorised Grundfos service workshop or similarly qualified persons to avoid a hazard.

The supply voltage, rated maximum current and power factor (PF) appear from the motor nameplate.

The required voltage for Grundfos submersible motors, measured at the motor terminals, is -10 %/+ 6 % of the nominal voltage during continuous operation (including variation in the supply voltage and losses in cables).

If the pump is connected to an electric installation where an earth-leakage circuit breaker (ELCB) is used as an additional protection, this circuit breaker **must** trip out when earth fault currents with DC content (pulsating DC) occur.

The earth leakage circuit breaker **must** be marked with the following symbol:

Supply voltage

1 x 200-240 V -10 %/+ 6 %, 50/60 Hz, PE.

The current consumption can only be measured by means of a true RMS instrument. If other instruments are used, the value measured will differ from the actual value.

On SQ/SQE pumps, a leakage current of 2.5 mA at 230 V, 50 Hz, can typically be measured. The leakage current is proportional to the supply voltage.

The SQE and SQE-NE pumps can be connected to a control box, type CU 300 or CU 301.

The pump must never be connected to a capacitor or to another type of control box than CU 300 or CU 301.

Caution The pump must never be connected to an external frequency converter.

5.2 Motor protection

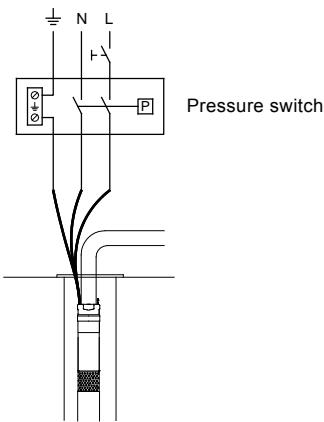
The motor incorporates thermal overload protection and requires no additional motor protection.

5.3 Connection of motor

The motor incorporates a starter device and can therefore be connected directly to the mains.

Start/stop of the pump will typically be done via a pressure switch. See fig. 4.

Caution The pressure switch must be rated for the maximum amps of the specific pump size.



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Fig. 4

6. Installation

6.1 General

Warning

Before starting any work on the pump/motor, make sure that the power supply has been switched off and that it cannot be accidentally switched on.

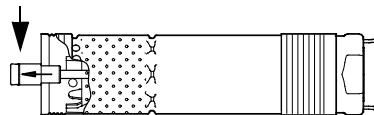
Caution Do not lower or lift the pump by means of the motor cable.

The loose data plate supplied with the pump should be fixed close to the installation site.

6.2 Assembly of pump part and motor

To assemble pump part and motor, proceed as follows:

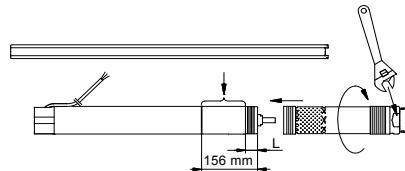
1. Place the motor horizontally in a vice and tighten it. See fig. 6.
2. Pull the pump shaft out to the position shown in fig. 5.



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Fig. 5

3. Grease the motor shaft end with the grease supplied with the motor.
4. Screw the pump part on the motor (55 Nm). **Caution:** The pump shaft must engage with the motor shaft. A spanner may be used on the clamping faces of the pump part. See fig. 6.



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Fig. 6

Motor (P2) [kW]	L [mm]
0.70	120
1.15	102
1.55	84
1.85	66

When pump part and motor have been assembled correctly, there must not be a clearance between pump part and motor.

6.3 Removal of non-return valve

If a pump without non-return valve is required, the valve can be removed as follows:

1. Cut off the legs of the valve guide using side-cutting pliers or a similar tool. See fig. 7.
2. Turn the pump upside down.
3. Check that all loose parts fall out of the pump.

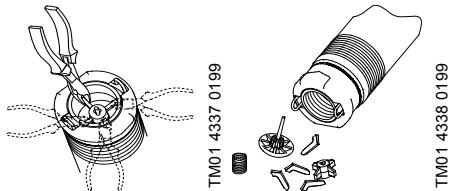


Fig. 7

Note

SQE-NE is supplied without non-return valve.

The non-return valve can be fitted in a Grundfos service workshop.

6.4 Fitting the cable plug to the motor

Warning

The motor plug must under no circumstances be removed by the user.

The following description is exclusively intended for service personnel.

If the motor cable is to be replaced, see section [5.1 General](#).

The cable with plug must be fitted or removed by an authorised Grundfos service workshop or a similarly qualified person.

The cable plug supplied with the motor is factory-greased. Check that the plug is greased correctly.

To fit the cable plug, proceed as follows:

1. Check that the cable is of the correct type, cross-section and length.
2. Check that the mains on the location has correct connection to earth.
3. Check that the motor socket is clean and dry. Make sure that the loose gasket has been fitted.
4. Press the cable plug onto the motor socket. The plug cannot be fitted wrongly. See fig. 8.

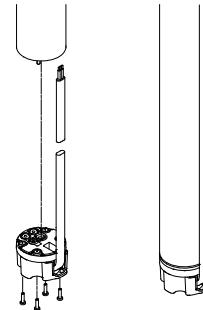


Fig. 8

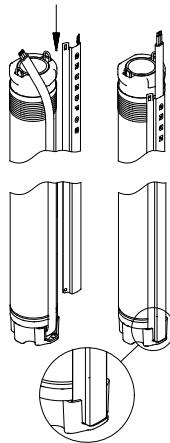
5. Fit and tighten the four screws (1 - 1.5 Nm). See fig. 8.

When the plug has been fitted, there must not be a clearance between the motor and the cable plug.

6.5 Fitting the cable guard

To fit the cable guard, proceed as follows:

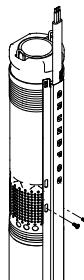
1. Make sure that the submersible drop cable lies flat in the cable guard.
2. Place the cable guard in the groove in the cable plug. The two flaps of the cable guard must engage with the upper edge of the pump sleeve. See fig. 9.



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Fig. 9

3. Fasten the cable guard to the pump suction strainer with the two self-tapping screws supplied. See fig. 10.



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Fig. 10

6.6 Cable sizing

Grundfos can supply submersible drop cables for any type of installation.

The cross-section of the submersible drop cable must be large enough to meet the voltage requirements specified in section [5.1 General](#).

The table values below are calculated from the following formula:

$$q = \frac{I \times 2 \times 100 \times PF \times L \times \rho}{U \times \Delta U}$$

where

q = Cross-section of submersible drop cable [mm²].

I = Rated maximum current of the motor [A].

PF = 1.0.

L = Length of submersible drop cable [m].

ρ = Specific resistance: 0.02 [Ωmm²/m].

U = Nominal voltage [V].

ΔU = Voltage drop [%] = 4 %.

The 4 % voltage drop is according to IEC 3-64, HD-384 Series.

The calculation gives the following maximum cable lengths at a supply voltage of 240 V:

Motor (P2) [kW]	I_N [A]	Max. cable length [m]					
		Cable size					
		1.5 mm ²	2.1 mm ² / 14 AWG	2.5 mm ²	3.3 mm ² / 12 AWG	4 mm ²	6 mm ²
0.7	5.2	80	112	133	176	213	320
1.15	8.4	50	69	83	109	132	198
1.55	11.0	37	52	62	82	99	149
1.85	12	35	49	58	76	92	139

6.7 Fitting the submersible drop cable

It is recommended to join the submersible drop cable and the motor cable by means of a Grundfos cable termination kit, type KM.

Cable termination kit, type KM	
Cross-sectional area	Product number
4.0 to 6.0 mm ²	96021473

For larger cross-sections, please contact Grundfos.

6.8 Pipework connection

If a tool, e.g. a chain pipe wrench, is used when the riser pipe is fitted to the pump, the pump must only be gripped by the pump discharge chamber.

When connecting plastic pipes, a compression coupling should be used between the pump and the first pipe section.

For pumps fitted with plastic pipes, the expansion of the pipes when loaded should be taken into consideration, when deciding on the installation depth of the pump.

Note

Where flanged pipes are used, the flanges should be slotted to take the submersible drop cable.

Figure 11 shows a pump installation with indication of:

- position of cable clips, pos. 1, and distance between the clips.
- fitting of straining wire, pos. 2.
- maximum installation depth below the static water level.

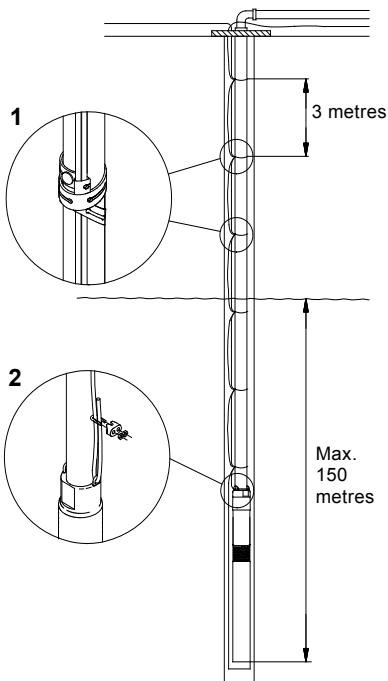


Fig. 11

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6.8.1 Cable clips

Cable clips must be fitted every 3 metres. See fig. 11.

When connecting plastic pipes, some slackness must be left between each cable clip as plastic pipes expand when loaded.

Where flanged pipes are used, the cable clips should be fitted above and below each joint.

6.8.2 Installation depths

Maximum installation depth below the static water level: 150 metres. See fig. 11.

Minimum installation depths below the dynamic water level:

- **Vertical installation:**

During start-up and operation, the pump must always be completely submerged in water.

- **Horizontal installation:**

The pump must be installed and run at least 0.5 metres below the dynamic water level.

If there is a risk that the pump might be covered by mud, the pump must always be fitted in a flow sleeve.

6.8.3 When lowering the pump into the borehole

It is recommended to secure the pump by an unloaded straining wire. See fig. 11, pos. 2.

Slacken the straining wire so that it becomes unloaded and lock it to the borehole seal by means of wire locks.

Caution The straining wire must not be used for pulling the pump with riser pipe out of the borehole.

Caution Do not lower or lift the pump by means of the motor cable.

7. Start-up

Make sure that the well is capable of yielding a minimum quantity of water corresponding to the pump capacity.

Do not start the pump until it is completely submerged in the liquid.

Start the pump and do not stop it until the pumped liquid is completely clean, as otherwise the pump parts and the non-return valve may choke up.

8. Operation

8.1 Minimum flow rate

To ensure the necessary cooling of the motor, the pump flow rate should never be set to a value lower than 50 l/h.

If the flow rate suddenly falls, the reason might be that the pump is pumping more water than the borehole can yield. The pump must be stopped and the fault corrected.

Caution The pump dry-running protection is effective only within the recommended duty range of the pump.

8.2 Selection of diaphragm tank and setting of precharge pressure and pressure switch



Warning

The installation must be designed for the maximum pump pressure.

As the pump has a built-in soft starter giving a run-up time of 2 seconds, the pressure at the pressure switch and diaphragm tank during starting will be lower than the pump cut-in pressure set on the pressure switch (p_{cut-in}). This lower pressure is called minimum pressure (p_{min}).

p_{min} is equal to the desired minimum pressure at the highest tap + head and head loss in the pipe from the pressure switch and diaphragm tank to the highest tap ($p_{min} = B + C$). See fig. 12.

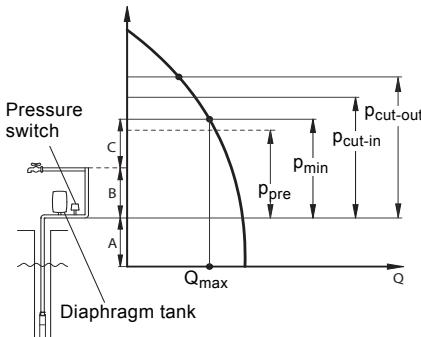


Fig. 12

- A: Head + head loss from dynamic water level to diaphragm tank.
- B: Head + head loss from diaphragm tank to highest tap.
- C: Minimum pressure at highest tap.

- Caution** Make sure that the selected pump can deliver a pressure higher than $p_{cut-out} + A$.
- p_{pre} : Precharge pressure of diaphragm tank.
- p_{min} : Desired minimum pressure.
- p_{cut-in} : Cut-in pressure set on pressure switch.
- $p_{cut-out}$: Cut-out pressure set on pressure switch.
- Q_{max} : Maximum flow at p_{min} .

Using p_{min} and Q_{max} , the **minimum** diaphragm tank size, precharge pressure and pressure switch settings can be found in the guideline table below:

Example

$p_{min} = 35 \text{ m head}$, $Q_{max} = 2.5 \text{ m}^3/\text{h}$.

On the basis of this information, the following values can be found in the table:

Minimum diaphragm tank size = 33 litres.

$p_{pre} = 31.5 \text{ m head}$.

$p_{cut-in} = 36 \text{ m head}$.

$p_{cut-out} = 50 \text{ m head}$.

p_{min} [m]	Q_{max} [m^3/h]															p_{pre} [m]	p_{cut-in} [m]	$p_{cut-out}$ [m]	
	0.6	0.8	1	1.2	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	
Diaphragm tank size [litres]																			
25	8	8	18	18	18	18	24	33	33	50	50	50	50	80	80	80	22.5	26	40
30	8	8	18	18	18	24	33	33	50	50	50	50	80	80	80	80	27	31	45
35	8	18	18	18	18	24	33	33	50	50	50	80	80	80	80	80	31.5	36	50
40	8	18	18	18	18	24	33	50	50	50	80	80	80	80	80	80	36	41	55
45	8	18	18	18	24	33	33	50	50	50	80	80	80	80	80	80	40.5	46	60
50	8	18	18	18	24	33	50	50	50	80	80	80	80	80	80	80	45	51	65
55	18	18	18	18	24	33	50	50	50	80	80	80	80	80	80	80	49.5	56	70
60	18	18	18	18	24	33	50	50	80	80	80	80	80	80	80	80	54	61	75
65	18	18	18	24	24	33	50	50	80	80	80	80	80	80	80	80	58.5	66	80

1 m head = 0.098 bar.

8.3 Built-in protection

The motor incorporates an electronic unit which protects the motor in various situations.

In case of overload, the built-in overload protection will stop the pump for 5 minutes. After that period, the pump will attempt to restart.

If the pump has been stopped as a result of dry running, it will start automatically after 5 minutes.

If the pump is restarted and the borehole is empty, the pump will stop after 30 seconds.

Resetting of the pump: Switch off the power supply for 1 minute.

The motor is protected in case of:

- dry running
- voltage surges (up to 6000 V)
In areas with high lightning intensity, external lightning protection is required.
- overvoltage
- undervoltage
- overload
- overtemperature.

SQE pumps/MSE 3 motors

Note Via the CU 300 or CU 301, the dry-running stop limit of the MSE 3 motors can be adjusted to match the actual application.

9. Maintenance and service

The pumps are normally maintenance-free.

Deposits and wear may occur. For that purpose, service kits and service tools are available from Grundfos. The Grundfos Service Manual is available on request.

The pumps can be serviced at a Grundfos service centre.

9.1 Contaminated pumps

If a pump has been used for a liquid which is injurious to health or toxic, the pump will be classified as contaminated.

If Grundfos is requested to service the pump, Grundfos must be contacted with details about the pumped liquid, etc. *before* the pump is returned for service. Otherwise Grundfos can refuse to accept the pump for service.

However, any application for service (no matter to whom it may be made) must include details about the pumped liquid if the pump has been used for liquids which are injurious to health or toxic.

SQE-NE: Only pumps that can be certified as uncontaminated, i.e. pumps containing no hazardous and/or toxic material, may be returned to Grundfos for servicing.

To prevent injury to the health of persons involved and to the environment, a document certifying that the pump is clean is required.

Grundfos must receive this certificate before the product. Otherwise, Grundfos will refuse to accept the product for servicing.

Possible costs of returning the pump are paid by the customer.

10. Fault finding chart

Warning

 Before starting any work on the pump/motor, make sure that the power supply has been switched off and that it cannot be accidentally switched on.

Fault	Cause	Remedy
1. The pump does not run.	a) The fuses in the electric installation are blown. b) The ELCB or the voltage-operated ELCB has tripped out. c) No power supply. d) The motor protection has cut off the power supply due to overload. e) The pump/submersible drop cable is defective. f) Overvoltage or undervoltage has occurred.	Replace the blown fuses. If the new ones blow too, the electric installation and the submersible drop cable should be checked. Cut in the circuit breaker. Contact the power supply authorities. Check whether the motor/pump is blocked. Repair/replace the pump/cable. Check the power supply.
2. The pump runs but gives no water.	a) The discharge valve is closed. b) No water or too low water level in borehole. c) The non-return valve is stuck in its closed position. d) The suction strainer is choked up. e) The pump is defective.	Open the valve. See item 3 a). Pull out the pump and clean or replace the valve. Pull out the pump and clean the strainer. Repair/replace the pump.
3. The pump runs at reduced capacity.	a) The drawdown is larger than anticipated. b) The valves in the discharge pipe are partly closed/blocked. c) The discharge pipe is partly choked by impurities (ochre). d) The non-return valve of the pump is partly blocked. e) The pump and the riser pipe are partly choked by impurities (ochre). f) The pump is defective. g) Leakage in the pipework. h) The riser pipe is defective. i) Undervoltage has occurred.	Increase the installation depth of the pump, throttle the pump or replace it by a smaller model to obtain a smaller capacity. Check and clean/replace the valves, if necessary. Clean/replace the discharge pipe. Pull out the pump and check/replace the valve. Pull out the pump. Check and clean or replace the pump, if necessary. Clean the pipes. Repair/replace the pump. Check and repair the pipework. Replace the riser pipe. Check the power supply.

Fault	Cause	Remedy
4. Frequent starts and stops.	a) The differential of the pressure switch between the start and stop pressures is too small. b) The water level electrodes or level switches in the reservoir have not been installed correctly.	Increase the differential. However, the stop pressure must not exceed the operating pressure of the pressure tank, and the start pressure should be high enough to ensure sufficient water supply. Adjust the intervals of the electrodes/level switches to ensure suitable time between the cutting-in and cutting-out of the pump. See installation and operating instructions for the automatic devices used. If the intervals between stop/start cannot be changed via the automatics, the pump capacity may be reduced by throttling the discharge valve.
	c) The non-return valve is leaking or stuck half-open.	Pull out the pump and clean/replace the non-return valve.
	d) The supply voltage is unstable.	Check the power supply.
	e) The motor temperature gets too high.	Check the water temperature.

10.1 Megging

Megging of an installation incorporating SQ/SQE pumps is not allowed, as the built-in electronics may be damaged. See fig. 13.

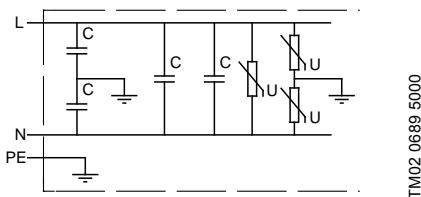


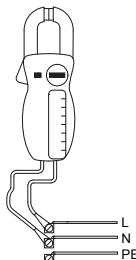
Fig. 13

11. Checking the power supply

Warning

Before starting any work on the pump/motor, make sure that the power supply has been switched off and that it cannot be accidentally switched on.

1. Supply voltage

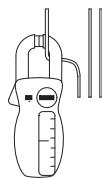


TM00 1371 4904

Measure the voltage (RMS) between phase and neutral. Connect the voltmeter to the terminals at the connection.

The voltage should, when the motor is loaded, be within the range specified in section [5. Electrical connection](#). Large variations in supply voltage indicate poor power supply, and the pump should be stopped until the defect has been remedied.

2. Current consumption



TM00 1372 5082

Measure the current (RMS) while the pump is operating at a constant discharge head (if possible, at the capacity where the motor is most heavily loaded).

For maximum current, see nameplate.

If the current exceeds the full load current, there are the following possible faults:

- Poor connection in leads, possibly in the cable joint.
- Too low supply voltage, see item 1.

12. Environment

During handling, operation, storage and transport, all environment regulations dealing with the handling of hazardous materials must be observed.

Warning

When the pump is taken out of operation, it must be ensured that no hazardous material is left in the pump/motor and the riser pipe, which can be injurious to persons and the environment.

In case of doubt, please contact Grundfos or the local authorities.

13. Disposal

This product or parts of it must be disposed of in an environmentally sound way:

1. Use the public or private waste collection service.
2. If this is not possible, contact the nearest Grundfos company or service workshop.

Subject to alterations.

Appendix

Nameplates to be filled in

GRUNDFOS

PUMP UNIT 96033644

MODEL A P1 9744

SQ SQE X - XXX

Q: xx m³/h H: XXX m

Stages: X

P2 motor: X.XX kW

Weight: X.X kg

Made in _____

Rp 1 1/4

GRUNDFOS

PROD.NO. _____
MODEL P1 _____

U: _____ 50/60 Hz

I: A SINGLE PHASE

P1: _____ kW

P2: _____ kW

S1/35 °C

IEC/EN 60034 Cl.1

P2: _____ HP

SF _____ LRA _____

Ins Cl F

PF 1.0 PRM: _____

Weight _____ kg/lb
150m

IP 68

Made in _____

Declaration of conformity

GB: EU declaration of conformity

We, Grundfos, declare under our sole responsibility that the products SQ, SQE, to which the declaration below relates, are in conformity with the Council Directives listed below on the approximation of the laws of the EU member states.

CZ: Prohlášení o shodě EU

My firma Grundfos prohlašujeme na svou plnou odpovědnost, že výrobky SQ, SQE, na které se toto prohlášení vztahuje, jsou v souladu s níže uvedenými ustanoveními směrnice Rady pro sbližení právních předpisů členských států Evropského společenství.

DK: EU-overensstemmelseserklæring

Vi, Grundfos, erklærer under ansvar at produkterne SQ, SQE, som erklæringen nedenfor omhandler, er i overensstemmelse med Rådets direktiver der er nævnt nedenfor, om indbyrdes tilnærmelse til EU-medlemsstaternes lovgivning.

ES: Declaración de conformidad de la UE

Grundfos declara, bajo su exclusiva responsabilidad, que los productos SQ, SQE, a los que hace referencia la siguiente declaración cumplen lo establecido por las siguientes Directivas del Consejo sobre la aproximación de las legislaciones de los Estados miembros de la UE.

FR: Déclaration de conformité UE

Nous, Grundfos, déclarons sous notre seule responsabilité, que les produits SQ, SQE, auxquels se réfère cette déclaration, sont conformes aux Directives du Conseil concernant le rapprochement des législations des États membres UE relatives aux normes énoncées ci-dessous.

HR: EU deklaracija uskladnosti

Mi, Grundfos, izjavljujemo s punom odgovornošću da su proizvodi SQ, SQE, na koja se izjava odnosi u nastavku, u skladu s direktivama Vijeća dojde navedene o uskladivanju zakona država članica EU-a.

IT: Dichiarazione di conformità UE

Grundfos dichiara sotto la sua esclusiva responsabilità che i prodotti SQ, SQE, ai quali si riferisce questa dichiarazione, sono conformi alle seguenti direttive del Consiglio riguardanti il riacvicinamento delle legislazioni degli Stati membri UE.

LV: ES atbilstības deklarācija

Sabiedrība Grundfos ar pilnu atbilstību paziņo, ka produkti SQ, SQE, uz kuri attiecas tālāk redzētā deklarācija, atbilst tālāk norādītajām Padomes direktīvām par EK/ES dalībvalstu normatīvo aktu tuvināšanu.

PL: Deklaracja zgodności UE

My, Grundfos, oświadczamy z pełną odpowiedzialnością, że nasze produkty SQ, SQE, których deklaracja niniejsza dotyczy, są zgodne z następującymi dyrektywami Rady w sprawie zbliżenia przepisów prawnych państw członkowskich.

RO: Declarația de conformitate UE

Noi Grundfos declarăm pe propria răspundere că produsele SQ, SQE, la care se referă această declaratie, sunt în conformitate cu Directivele de Consiliu specificate mai jos privind armonizarea legilor statelor membre UE.

RU: Декларация о соответствии нормам ЕС

Мы, компания Grundfos, со всей ответственностью заявляем, что изделия SQ, SQE, к которым относится настоящая декларация, соответствуют нижеприведенным директивам Совета Европейского Союза о тождественности законов стран-членов ЕС.

SI: Izjava o skladnosti EU

V Grundfosu s polno odgovornostjo izjavljamo, da je izdelek SQ, SQE, na katerega se spodnja izjava nanaša, v skladu s spodnjimi direktivami Sveta o približevanju zakonodaje za izenačevanje pravnih predpisov držav članic EU.

TR: AB uygunluk bildirgesi

Grundfos olarak, aşağıdaki bildirilen konusu olan SQ, SQE, ürünlerinin, AB Üyesi ülkelerin direktiflerinin yakınılaştırımlılarıyla ilgili durumun aşağıdaki Konsey Direktifleriyle uyumlu olduğunu ve bununla ilgili olarak tüm sorumluluğun bize ait olduğunu beyan ederiz.

BG: Декларация за съответствие на ЕО

Ние, фирма Grundfos, заявяваме с пълна отговорност, че продукти SQ, SQE, на които се отнася настоящата декларация, отговарят на следните директиви на Съвета за уеднаквяване на правните разпоредби на държавите-членки на ЕО.

DE: EU-Konformitätserklärung

Wir, Grundfos, erklären in alleiniger Verantwortung, dass die Produkte SQ, SQE, auf die sich diese Erklärung beziehen, mit den folgenden Richtlinien des Rates zur Angleichung der Rechtsvorschriften der EU-Mitgliedsstaaten übereinstimmen.

EE: EÜ vastavusdeklaratsioon

Meie, Grundfos, kinnitame ja kanname ja olev ainsuisikulist vastutust selle eest, et toode SQ, SQE, mille kohta all olev deklaratsioon kätib, on kooskõlas Nõukogu Direktiividega, mis on nimetatud all pool vastavalt vastuvõetud õigusaktide ühtlustamise kohta EU liikmesriikides.

FI: EU-vaatimustenmukaisuusvaakutus

Grundfos vaikuttaa omalla vastuullaan, että tuotteet SQ, SQE, joita tämä vaakuutus koskee, ovat EU:n jäsenvaltioiden lainsäädännön lähestymisen tähän tien Euroopan neuvooston direktiivien vaatimusten mukaisia seuraavasti.

GR: Διάλωση συμμόρφωσης ΕΕ

Εμείς, η Grundfos, δηλώνουμε με αποκλειστική δική μας ευθύνη ότι τα προϊόντα SQ, SQE, στα οποία αναφέρεται η παρακάτω δήλωση, συμμόρφωνται με τις παρακάτω Οδηγίες του Συμβουλίου περί προσέγγισης των νομοσχεδίων των κρατών μελών της ΕΕ.

HU: EU megfelelőségi nyilatkozat

Mi, Grundfos vállalat, teljes felelősséggel kijelentjük, hogy a(z) SQ, SQE, termék, amelyre az alábbi nyilatkozat vonatkozik, megfelelnek az Európai Unió tagállamainak jogi irányelvét összehangoltanában előírtaknak.

LT: ES atitikties deklaracija

Mes, Grundfos, su visa atskomybe pareiskiami, kad produktai SQ, SQE, kuriems skirta ši atitikties deklaracija, atitinka žemiau nurodytas Tarybos Direktyvias dėl ES šalių narių įstatymų suderinimo.

NL: EU-conformiteitsverklaring

Wij, Grundfos, verklaren geheel onder eigen verantwoordelijkheid dat de producten SQ, SQE, waarop de onderstaande verklaring betrekking heeft, in overeenstemming zijn met de onderstaande Richtlijnen van de Raad inzake de onderlinge aanpassing van de wetgeving van de EU-lidstaten.

PT: Declaração de conformidade UE

A Grundfos declara sob sua única responsabilidade que os produtos SQ, SQE, aos quais diz respeito a declaração abaixo, estão em conformidade com as Directivas do Conselho sobre a aproximação das legislações dos Estados Membros da UE.

RS: Deklaracija o usklađenosti EU

Mi, kompanija Grundfos, izjavljujemo pod punom vlastitom odgovornošću da je proizvod SQ, SQE, na koji se odnosi deklaracija ispod, u skladu sa dole prikazanim direktivama Saveta za uskladivanje zakona država članica EU.

SE: EU-försäkran om överensstämmelse

Vi, Grundfos, försäkrar under ansvar att produkterna SQ, SQE, som omfattas av nedanstående försäkran, är i överensstämmelse med de rådsskickligheten om inbördes närmande till EU-medlemsstaternas lagstiftning som listas nedan.

SK: ES vyhlásenie o zhode

My, spoločnosť Grundfos, vyhľadujeme na svoju plnú zodpovednosť, že produkty SQ, SQE, na ktoré sa vyhlásenie uvedené nižšie vzťahuje, sú v súlade s ustanoveniami nižšie uvedených smerníc Rady pre zbliženie právnych predpisov členských štátov EÚ.

KZ: Сәйкестік жөніндегі ЕО декларациясы

Biz, Grundfos, ЕО мүшіндерінің заңдарының жақын төмөнде көрсетілген Кеңес директиваларының сәйкес темендегі декларацияға кітпес SQ, SQE, енімдері біздің жеке жауапкершілігімізде екенін мәлімдейміз.

МК: Декларација за сообразност на ЕУ

Ние, Grundfos, изјавуваме под целосна одговорност дека производите SQ, SQE, на кои се однесува долнаведената декларација, се во согласност со овие директиви на Советот за приближување на законите на земите-членки на ЕУ.

NO: EUs samsvarsærklaering

Vi, Grundfos, erklærer under vårt eneansvar at produktene SQ, SQE, som denne erklæringen gjelder, er i samsvar med styrets direktiver om tilnærming av forordninger i EU-landene.

MY: Perisyntiharhan keakuran EU

Kami, Grundfos, mengisyiharkan di bawah tanggungjawab kami semata-mata bahawa produk SQ, SQE, yang berkaitan dengan perisytiharan di bawah, akur dengan Perintah Majlis yang disenaraikan di bawah ini tentang penghampiran undang-undang negara ahli EU.

AR مطابقة EU:

SQ **قرآن وفلاسفه، مصطفى مسوليان الفريدي** **بيان المتوجهين**
SQE, **الذين يختص بهما الإقرار أدنى، يكتسبان مطابقين لتجهيزات**
المجلس المترددة أدنى، بشأن التقرير بين قوانين الدول أعضاء المجموعة
لأوروبيّة الاتحاد الأوروبيّ (EU)

- Machinery Directive (2006/42/EC).
Standard used: EN 809:1998,A1:2009.
 - Low Voltage Directive (2014/35/EU).
Standards used:
EN 60335-1:2012 + A11:2014
EN 60335-2-41:2003 + A1:2004 + A2:2010
 - EMC Directive (2014/30/EU).
Standards used:
EN 55014-1:2006 + A1:2009 + A2:2011
EN 55014-2:1997 + A1:2001 + A2:2008
EN 61000-2-6:2005
EN 61000-6-3:2007

This EU declaration of conformity is only valid when published as part of the Grundfos safety instructions (publication number 96160909 0516).

Bjerringbro, 25th February 2016

Sv. Dr. Kral

Svend Aage Kaae
Director
Grundfos Holding A/S
Poul Due Jensens Vej 7
8850 Bierringbro, Denmark

Person authorised to compile the technical file and empowered to sign the EU declaration of conformity.

Argentina

Bombas GRUNDFOS de Argentina S.A.
Ruta Panamericana km. 37.500 Centro
Industrial Garin
1619 - Garin Pcia. de B.A.
Phone: +54-3327 414 444
Telefax: +54-3327 411 111

Australia

GRUNDFOS Pumps Pty. Ltd.
P.O. Box 2040
Regency Park
South Australia 5942
Phone: +61-8-8461-4611
Telefax: +61-8-8340 0155

Austria

GRUNDFOS Pumpen Vertrieb
Ges.m.b.H.
Grundstrasse 2
A-5082 Grödig/Salzburg
Tel.: +43-6246-883-0
Telefax: +43-6246-883-30

Belgium

N.V. GRUNDFOS Bellux S.A.
Boomsesteenweg 81-83
B-2630 Aartselaar
Tél.: +32-3-870 7300
Télécopie: +32-3-870 7301

Belarus

Представительство ГРУНДФОС в
Минске
220125, Минск
ул. Шаффарнянская, 11, оф. 56
Тел.: +7 (375 17) 286 39 72, 286 39 73
Факс: +7 (375 17) 286 39 71
E-mail: minsk@grundfos.com

Bosnia/Herzegovina

GRUNDFOS Sarajevo
Trg Heroja 16,
BiH-71000 Sarajevo
Phone: +387 33 713 290
Telefax: +387 33 659 079
e-mail: grundfos@bih.net.ba

Brazil

BOMBAS GRUNDFOS DO BRASIL
Av. Humberto de Alencar Castelo
Branco, 630
CEP 09850 - 300
São Bernardo do Campo - SP
Phone: +55-11 4393 5533
Telefax: +55-11 4343 5015

Bulgaria

Grundfos Bulgaria EOOD
Slatina District
Iztochna Tangenta street no. 100
BG - 1592 Sofia
Tel. +359 2 49 22 200
Fax. +359 2 49 22 201
email: bulgaria@grundfos.bg

Canada

GRUNDFOS Canada Inc.
2941 Brighton Road
Oakville, Ontario
L6H 6C9
Phone: +1-905 829 9533
Telefax: +1-905 829 9512

China

Grundfos Alldos
Dosing & Disinfection
ALLDOS (Shanghai) Water Technology
Co. Ltd.
West Unit, 1 Floor, No. 2 Building (T 4-2)
278 Jinhu Road, Jin Qiao Export
Processing Zone
Pudong New Area
Shanghai, 201206
Phone: +86 21 5055 1012
Telefax: +86 21 5032 0596
E-mail:
grundfosalldos-CN@grundfos.com

China

GRUNDFOS Pumps (Shanghai) Co. Ltd.
10F The Hub, No. 33 Suhong Road
Minhang District
Shanghai 201106
PRC
Phone: +86-21 6122 5222
Telefax: +86-21 6122 5333

Croatia

GRUNDFOS CROATIA d.o.o.
Cebini 37, Buzin
HR-10010 Zagreb
Phone: +385 1 6595 400
Telefax: +385 1 6595 499
www.hr.grundfos.com

Czech Republic

GRUNDFOS s.r.o.
Čapkovského 21
779 00 Olomouc
Phone: +420-585-716 111
Telefax: +420-585-716 299

Denmark

GRUNDFOS DK A/S
Martin Bachs Vej 3
DK-8850 Bjerringbro
Tlf.: +45-87 50 50 50
Telefax: +45-87 50 51 51
E-mail: info_GDK@grundfos.com
www.grundfos.com/DK

Estonia

GRUNDFOS Pumps Eesti OÜ
Peterburri tee 92G
11415 Tallinn
Tel: + 372 606 1690
Fax: + 372 606 1691

Finland

OY GRUNDFOS Pumput AB
Trukkikuja 1
FI-01360 Vantaa
Phone: +358-(0)207 889 500
Telefax: +358-(0)207 889 550

France

Pompes GRUNDFOS Distribution S.A.
Parc d'Activités de Chesnes
57, rue de Malacombe
F-38290 St. Quentin Fallavier (Lyon)
Tél.: +33-4 74 82 15 15
Télécopie: +33-4 74 94 10 51

Germany

GRUNDFOS Water Treatment GmbH
Reetzstraße 85
D-76327 Pfinztal (Söllingen)
Tel.: +49 7240 61-0
Telefax: +49 7240 61-177
E-mail: gwt@grundfos.com

Germany

GRUNDFOS GMBH
Schlüterstr. 33
40699 Erkrath
Tel.: +49-(0) 211 929 69-0
Telefax: +49-(0) 211 929 69-3799
E-mail: infoservice@grundfos.de
Service in Deutschland:
E-mail: kundendienst@grundfos.de

Greece

GRUNDFOS Hellas A.E.B.E.
20th km. Athinon-Markopoulou Av.
P.O. Box 71
GR-19002 Peania
Phone: +0030-210-66 83 400
Telefax: +0030-210-66 46 273

Hong Kong

GRUNDFOS Pumps (Hong Kong) Ltd.
Unit 1, Ground floor
Siu Wai Industrial Centre
29-33 Wing Hong Street &
68 King Lam Street, Cheung Sha Wan
Kowloon
Phone: +852-27861706 / 27861741
Telefax: +852-27858664

Hungary

GRUNDFOS Hungária Kft.
Park u. 8
H-2045 Törökbalint,
Phone: +36-23 511 110
Telefax: +36-23 511 111

India

GRUNDFOS Pumps India Private
Limited
118 Old Mahabalipuram Road
Thoraipakkam
Chennai 600 097
Phone: +91-44 4596 6800

Indonesia

PT. GRUNDFOS POMPA
Graha Intirub Lt. 2 & 3
Jln. Ciliilitan Besar No.454. Makasar,
Jakarta Timur
ID-Jakarta 13650
Phone: +62 21-469-51900
Telefax: +62 21-460 6910 / 460 6901

Ireland

GRUNDFOS (Ireland) Ltd.
Unit A, Merrywell Business Park
Ballymount Road Lower
Dublin 12
Phone: +353-1-4089 800
Telefax: +353-1-4089 830

Italy

GRUNDFOS Pompe Italia S.r.l.
Via Gran Sasso 4
I-20060 Truccazzano (Milano)
Tel.: +39-02-95838112
Telefax: +39-02-95309290 / 95838461

Japan

GRUNDFOS Pumps K.K.
Gotanda Metalion Bldg. 5F,
5-21-15, Higashi-gotanda
Shiagawa-ku, Tokyo,
141-0022 Japan
Phone: +81 35 448 1391
Telefax: +81 35 448 9619

Korea

GRUNDFOS Pumps Korea Ltd.
6th Floor, Aju Building 679-5
Yeoksam-dong, Gangnam-ku, 135-916
Seoul, Korea
Phone: +82-2-5317 600
Telefax: +82-2-5633 725

Latvia

SIA GRUNDFOS Pumps Latvia
Deglava biznesss centrs
Augusta Deglava ielā 60, LV-1035, Riga,
Tālrs: + 371 714 9640, 7 149 641
Fakss: + 371 914 9646

Lithuania

GRUNDFOS Pumps UAB
Smolensko g. 6
LT-03201 Vilnius
Tel: + 370 52 395 430
Fax: + 370 52 395 431

Malaysia

GRUNDFOS Pumps Sdn. Bhd.
7 Jalan Peguam U1/25
Glenmarie Industrial Park
40150 Shah Alam
Selangor
Phone: +60-3-5569 2922
Telefax: +60-3-5569 2866

Mexico

Bombas GRUNDFOS de México S.A. de C.V.
Boulevard TLC No. 15
Parque Industrial Stiva Aeropuerto
Apodaca, N.L. 66600
Phone: +52-81-8144 4000
Telefax: +52-81-8144 4010

Netherlands

GRUNDFOS Netherlands
Veluwzezoom 35
1326 AE Almere
Postbus 22015
1302 CA ALMERE
Tel.: +31-88-478 6336
Telefax: +31-88-478 6332
E-mail: info_gnl@grundfos.com

New Zealand

GRUNDFOS Pumps NZ Ltd.
17 Beatrice Tinsley Crescent
North Harbour Industrial Estate
Albany, Auckland
Phone: +64-9-415 3240
Telefax: +64-9-415 3250

Norway

GRUNDFOS Pumpen A/S
Strømsveien 344
Postboks 235, Leirdal
N-1011 Oslo
Tlf.: +47-22 90 47 00
Telefax: +47-22 32 21 50

Poland

GRUNDFOS Pompy Sp. z o.o.
ul. Klonowa 23
Baranowo k. Poznania
PL-62-081 Przeźmierowo
Tel: (+48-61) 650 13 00
Fax: (+48-61) 650 13 50

Portugal

Bombas GRUNDFOS Portugal, S.A.
Rua Calvet de Magalhães, 241
Apartado 1079
P-2770-153 Paço de Arcos
Tel.: +351-21-440 76 00
Telefax: +351-21-440 76 90

Romania

GRUNDFOS Pompe România SRL
Bd. Biruentei, nr 103
Pantelimon county Ilfov
Phone: +40 21 200 4100
Telefax: +40 21 200 4101
E-mail: romania@grundfos.ro

Russia

ООО Грундфос
Россия, 109544 Москва, ул. Школьная
39
Тел. (+7) 495 737 30 00, 564 88 00
Факс (+7) 495 737 75 36, 564 88 11
E-mail grundfos.moscow@grundfos.com

Serbia

GRUNDFOS Predstavništvo Beograd
Dr. Milutina Ivkovića 2a/29
YU-11000 Beograd
Phone: +381 11 26 47 877 / 11 26 47
496
Telefax: +381 11 26 48 340

Singapore

GRUNDFOS (Singapore) Pte. Ltd.
25 Jalan Tukang
Singapores 619264
Phone: +65-6681 9688
Telefax: +65-6681 9689

Slovakia

GRUNDFOS s.r.o.
Prievozská 4D
821 09 BRATISLAVA
Phone: +421 2 5020 1426
sk.grundfos.com

Slovenia

GRUNDFOSS LJUBLJANA, d.o.o.
Leskoškova 9e, 1122 Ljubljana
Phone: +386 (0) 1 568 06 10
Telefax: +386 (0) 1 568 0619
E-mail: tehnika-si@grundfos.com

South Africa

Grundfos (PTY) Ltd.
Corner Mountjoy and George Allen
Roads
Wilbart Ext. 2
Bedfordview 2008
Phone: (+27) 11 579 4800
Fax: (+27) 11 455 6066
E-mail: lsmart@grundfos.com

Spain

Bombas GRUNDFOS España S.A.
Camino de la Fuentecilla, s/n
E-28110 Algete (Madrid)
Tel.: +34-91-848 8800
Telefax: +34-91-628 0465

Sweden

GRUNDFOS AB
(Box 333) Lunngårdsgatan 6
431 24 Mölndal
Tel.: +46 31 332 23 000
Telefax: +46 31-331 94 60

Switzerland

GRUNDFOS ALLDOS International AG
Schönmattstrasse 4
CH-4153 Reinach
Tel.: +41-61-717 5555
Telefax: +41-61-717 5500
E-mail:
grundfosalldos-CH@grundfos.com

Switzerland

GRUNDFOS Pumpen AG
Bruggacherstrasse 10
CH-8117 Fällanden/ZH
Tel.: +41-44-806 8111
Telefax: +41-44-806 8115

Taiwan

GRUNDFOS Pumps (Taiwan) Ltd.
7 Floor, 219 Min-Chuan Road
Taichung, Taiwan, R.O.C.
Phone: +886-4-2305 0868
Telefax: +886-4-2305 0878

Thailand

GRUNDFOS (Thailand) Ltd.
92 Chaloem Phrakiat Rama 9 Road,
Dokmai, Pravej, Bangkok 10250
Phone: +66-2-725 8999
Telefax: +66-2-725 8998

Turkey

GRUNDFOS POMPA San. ve Tic. Ltd. Sti.
Gebze Organize Sanayi Bölgesi
İhsan dede Caddesi,
2. yol 200. Sokak No. 204
41490 Gebze/ Kocaeli
Phone: +90 - 262-679 7979
Telefax: +90 - 262-679 7905
E-mail: satis@grundfos.com

Ukraine

Бізнес Центр Європа
Столичне шосе, 103
м. Київ, 03131, Україна
Телефон: +(38 044) 237 04 00
Факс: +(38 044) 237 04 01
E-mail: ukraine@grundfos.com

United Arab Emirates

GRUNDFOS Gulf Distribution
P.O. Box 16768
Jebel Ali Free Zone
Dubai

Phone: +971-4- 8815 166
Telefax: +971-4-8815 136

United Kingdom

GRUNDFOS Pumps Ltd.
Grovebury Road
Leighton Buzzard/Beds. LU7 4TL
Phone: +44-1525-850000
Telefax: +44-1525-850011

U.S.A.

GRUNDFOS Pumps Corporation
17100 West 118th Terrace
Olathe, Kansas 66061
Phone: +1-913-227-3400
Telefax: +1-913-227-3500

Uzbekistan

Grundfos Tashkent, Uzbekistan The
Representative Office of Grundfos
Kazakhstan in Uzbekistan
38a, Oybek street, Tashkent
Телефон: +(998) 71 150 3290 / 71 150
3291
Факс: +(998) 71 150 3292

Addresses revised 25.01.2016

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www.grundfos.com

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