SB, SBA

Installation and operating instructions





SB, SBA

English (GB)		
Installation and operating instructions	4	ł

English (GB) Installation and operating instructions

Table of contents

1. 1.1 1.2	General Information 5 Hazard statements 5 Notes 5
2. 2.1 2.2	Receiving the product. 6 Inspecting the packaging 6 Scope of delivery 6
 3.1 3.2 3.3 3.4 3.5 3.6 	Installing the product 6 Location 6 Mechanical installation 8 Pump position 9 Connecting the outlet hose or pipe 9 Non-return valve for SB pumps 9 Electrical connection 10 Starting up the product 11
4.1	SBA starting and stopping conditions 11
5. 5.1 5.2 5.3	Handling and storing the product 12 Handling the product 12 Storing the product 12 Frost protection 12
 6.1 6.2 6.3 6.4 6.5 6.6 6.7 	Product introduction12Product description12SB pumps12SBA pumps12SBA dry-running protection12Intended use13Pumped liquids13Identification13
7.	Maintaining the product
8. 8.1 8.2 8.3 8.4 8.5	Fault finding the product
9. 9.1 9.2 9.3	Technical data
10.	Further product information
11.	Disposing of the product
12.	Document quality feedback

1. General Information



Read this document before you install the product. Installation and operation must comply with local regulations and accepted codes of good practice.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children shall not play with the appliance.

Cleaning and user maintenance shall not be made by children without supervision.

1.1 Hazard statements

The symbols and hazard statements below may appear in Grundfos installation and operating instructions, safety instructions and service instructions.



DANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious personal injury.



WARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious personal injury.



CAUTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate personal injury.

The hazard statements are structured in the following way:



SIGNAL WORD

Description of the hazard

Consequence of ignoring the warning

Action to avoid the hazard.

1.2 Notes

The symbols and notes below may appear in Grundfos installation and operating instructions, safety instructions and service instructions.



Observe these instructions for explosionproof products.



A blue or grey circle with a white graphical symbol indicates that an action must be taken.



A red or grey circle with a diagonal bar, possibly with a black graphical symbol, indicates that an action must not be taken or must be stopped.



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



Tips and advice that make the work easier.

2. Receiving the product

2.1 Inspecting the packaging

On receipt of the product, do the following:

- 1. Check that the product is as ordered. If the product is not as ordered, contact the supplier.
- Check that no visible parts have been damaged. If any visible parts have been damaged, contact the transport company.

2.2 Scope of delivery

The box contains the following items:

- 1 pump
- 1 adapter
- 1 installation and operating instructions
- 1 quick guide
- 1 floating inlet strainer, for side inlet variant only
- 1 non-return valve, for SB only.

3. Installing the product



Make sure that the system in which the pump is incorporated is designed for the maximum pump pressure.



This pump has been evaluated for use with water only.



Observe local regulations concerning limits for manual lifting or handling.



Crushing of feet Minor or moderate personal injury - Use safety shoes when handling the pump.

DANGER

CAUTION



Electric shock Death or serious personal injury

Switch off the power supply before you start any work on the product. Make sure that the power supply cannot be accidentally switched on.

3.1 Location

Install the pump in a frost-free location.

Before the pump is submerged in the well or tank, make sure that the well or tank does not contain sand or solid sediment.

Install the pipe so that the pump is not exposed to mechanical stress.

3.1.1 Maximum installation depth

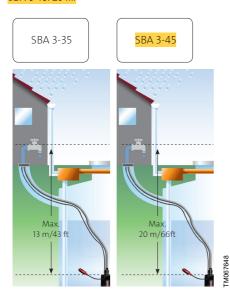
Read the label on the product.

Product	Maximum installation depth [m]	
SB	10	
SBA	<mark>10</mark>	

3.1.2 Highest tapping point for SBA pumps

Install SBA pumps so that the height between the pump and the highest tapping point does not exceed these values:

SBA 3-35: 13 m. SBA 3-45: 20 m.



Highest tapping point for SBA

Related information

8.4 Frequent starts and stops

3.1.3 Minimum space

Pumps installed with a float switch require a free space between the float switch and the wall to ensure free movability.

Pumps with side inlet require a free space between the floating inlet strainer and the wall.

If you install the pump in a well or tank, the minimum free space must be as shown in the figure below.

Pumps installed without a float switch require a space that corresponds to the physical dimensions of the pump.

SB and SBA pump with a float switch and side inlet



Minimum space for SB and SBA pump in a well or tank

3.1.4 Adjustment of the float switch

To make sure that the float switch can start and stop the pump, adjust the start and stop level by changing the free cable length between the float switch and the lifting handle.

A reduced free cable length results in more starts and stops and a small difference in level. The minimum free cable length is 10-18 cm. See fig. *Minimum free cable length for float switch*.

 An increased free cable length results in fewer starts and stops and a large difference in level.

Make sure that the float switch can move freely.

Make sure that the stop level does not fall below the pump inlet strainer.



Minimum free cable length for float switch

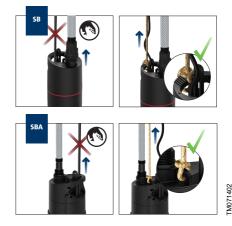
3.2 Mechanical installation

3.2.1 Lifting the product

Lift the pump by the lifting handle. Never lift the pump by the power cable. Tie a rope to the lifting handle or lifting eye instead.



Do not lift the product by the power cable. Lift the product by means of a rope.



Lifting the pump

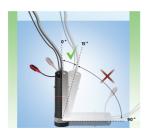
Related information

3.3.1 Pump position of SB and SBA

3.3 Pump position

3.3.1 Pump position of SB and SBA

Use the pump in the vertical position as shown in fig. *Position of SB, SBA pumps.*



TM082310

Position of SB, SBA pumps

Related information

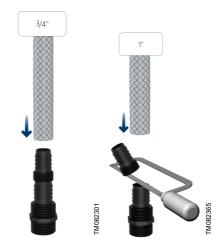
3.2.1 Lifting the product

3.4 Connecting the outlet hose or pipe

Product	External pipe thread [inch]
SB	G 3/4" or 1"
SBA	G 3/4" or 1"

The outlet hose or pipe can be connected to the pump outlet port by means of an adapter. You can also connect a pipe directly to the pump outlet.

SB and SBA pumps include an adapter. Cut off the adapter so that it matches the outlet port diameter.



3.5 Non-return valve for SB pumps

Connect the non-return valve to the SB pump outlet. The non-return valve has G 1" threads for connection to the adapter or the pipe.



TM082297

Non-return valve

3.6 Electrical connection

DANGER

Electric shock

Death or serious personal injury



Switch off the power supply before you start any work on the product. Make sure that the power supply cannot be accidentally switched on.

- The pump must be earthed.

DANGER Electric shock

Death or serious personal injury



The protective earth of the socket outlet must be connected to the protective earth of the pump. The plug must therefore have the same PE connection system as that of the socket outlet. If not, use a suitable adapter.



We recommend that you fit the permanent installation with a residual-current circuit breaker, RCCB, with a tripping current less than 30 mA.

DANGER Electric shock

Death or serious personal injury



If the pump is used for cleaning or other maintenance of swimming pools, garden ponds or similar places, make sure that the pump is supplied through a residual-current circuit breaker, RCCB, with a tripping current of 30 mA.

DANGER Electric shock



Death or serious personal injury

Connect pumps that are delivered without cable and/or plugs to an external main switch with a minimum contact gap of 3 mm in all poles.



Make sure that there is at least 3 m free cable above the liquid level.

Check that the supply voltage and frequency correspond to the values stated on the pump nameplate.

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

3.6.1 Thermal protection

The pump has a built-in thermal switch and requires no additional motor protection. If the pump is running without water, or if it is otherwise overloaded, the built-in thermal switch will cut out. When the motor has cooled to normal temperature, it will restart automatically.

3.6.2 Connecting to external controller

SB

SB pumps must be connected to an external controller. We recommend a Grundfos Pressure Manager: *net.grundfos.com/qr/i/97506325*

SBA

SBA pumps have an integrated control unit.

Related information

6.2 SB pumps

6.3 SBA pumps

3.6.3 Power supply failure

In case of a power supply failure, the pump restarts automatically when power returns and runs for at least 10 s.

4. Starting up the product

WARNING

Flammable material

Death or serious personal injury

Do not use the pump for flammable liquids, such as diesel oil, petrol or similar liquids.

DANGER Electric shock

Death or serious personal injury

Do not use the pump in swimming pools, garden ponds or similar places if there are people in the water.

- 1. Open a tap in the system.
- 2. Switch on the power supply.
- 3. Check that the pump is running and water is coming out of the tap.
- Check that the pump is running and pressure is being built up in the system.
- 5. Close the tap.
- Check that pressure has been built up in the system.
- 7. Check that the pump stops after 10 seconds.

Water is accumulated between the motor housing and cover during submersion. When the pump is stopped and lifted from a submerged position, so the drain holes are above water level, the water is drained from the drain holes located under the red ring.





M083090



Connect SB pumps to an external controller.

Related information

8.5 Leaking water from the drain holes

4.1 SBA starting and stopping conditions

When water is consumed in the water supply system, the pump starts when the starting conditions are fulfilled. This happens for example when a tap is opened which makes the pressure in the system drop. The control unit stops the pump again when consumption stops, that is when the tap is closed.

Starting conditions

The pump starts when one of the following conditions is fulfilled:

- The flow rate is higher than the minimum flow rate.
- The pressure is lower than the start pressure.

Stopping conditions

The pump stops with a time delay of 10 s when the flow rate is lower than the minimum flow rate.

The start pressure and minimum flow rate values are shown in sections Pressure and Flow rate.

Automatic restart of SBA pumps

SBA pump models with a float switch automatically restart when water is added. Models without a float switch will attempt to restart every 24 hours.

Related information

9.1.1 Flow rate 9.1.4 Pressure

5. Handling and storing the product

5.1 Handling the product



Do not lift the product by the power cable. Lift the product by means of a rope. Do not drop or shake the product.

5.2 Storing the product

Store the product indoors in a dry and dust-free environment. Protect the product from vibrations. Storage temperature: -10 to +40 $^{\circ}$ C.

5.3 Frost protection

It the pump is not used during periods of frost, drain the pump and the pipe system before you take the pump out of operation.

6. Product introduction

6.1 Product description

The pumps are submersible booster pumps available in two main versions:

- pump with integrated inlet strainer with 1 mm mesh
- pump with side inlet, which includes a flexible inlet hose with floating inlet strainer with 1.8 mm mesh.

Both versions are available with or without float switch. The float switch can be used for automatic operation or dry-running protection of the pump.

6.2 SB pumps

The SB submersible booster pump is available with integrated inlet strainer or floating inlet strainer. The SB pump must be connected to an external controller, see section Connecting to external controller.

Related information

3.6.2 Connecting to external controller

6.3 SBA pumps

The SBA pump is a complete submersible booster pump available with integrated inlet strainer or floating inlet strainer.

SBA has a built-in control unit, eliminating the need for a controller.

The pump has built-in protection against overheating.

Related information

3.6.2 Connecting to external controller

6.4 SBA dry-running protection

The built-in control unit incorporates dry-running protection that automatically stops the pump in case of dry running.

The dry-running protection functions differently during priming and operation.

6.4.1 Dry running during priming

If the control unit does not detect any pressure and flow within 5 min after it has been connected to a power supply and the pump has started, the dryrunning function is activated and the pump stops.

6.4.2 Dry running during operation

If the control unit does not detect any pressure and flow within 40 s during normal operation, the dryrunning function is activated and the pump stops.

6.4.3 Resetting of dry-running alarm

If a dry-running alarm has been activated, you can restart the pump manually by switching off the power supply, wait for 2 min and reconnect power. If the control unit does not detect any pressure and flow within 40 s after restarting, the dry-running alarm is reactivated.

6.5 Intended use

Grundfos SB and SBA pumps are designed for pumping clean water. The pumps are especially suitable for rainwater applications and small private wells.

Typical applications:

- traditional wells
- shallow wells
- rainwater collection in tanks
- boosting of public water
- emptying of garden ponds
- irrigation.

6.6 Pumped liquids

The pumps are designed for fresh water with a maximum chloride content of 300 ppm and a free chlorine content below 1 ppm.

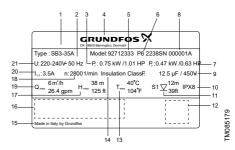
The product is suitable for pumping clean, thin, nonaggressive and non-explosive liquids without solid particles or fibres.

The pumps are not suitable for these liquids:

- liquids containing long fibres
- inflammable liquids (oil, petrol, etc.)
- aggressive liquids.

6.7 Identification

6.7.1 Nameplate



Example of nameplate

Pos.	Description
1	Product type
2	Frequency [Hz]
3	Power input
4	Manufacturer
5	Product number
6	Production code (year and week)
7	Motor output
8	Serial number
9	Capacitor data
10	Enclosure class
11	Max. installation depth
12	QR code
13	Max. liquid temperature
14	Motor insulation class
15	Country of origin
16	Approvals
17	Max. head
18	Speed [rpm]
19	Max. flow rate
20	Full-load current
21	Supply voltage

7. Maintaining the product

DANGER

Electric shock

Death or serious personal injury



-

If the power supply cable is damaged, it must be replaced by the manufacturer, his service agent or similarly qualified persons in order to avoid hazard.

Clean the strainer every fall with a brush and a water jet when needed. In normal operation, the pump does not require any specific maintenance.

8. Fault finding the product

See also the quick guide.

<u>_1</u>	

DANGER Electric shock

Death or serious personal injury

- Switch off the power supply before you start any work on the product. Make sure that the power supply cannot be accidentally switched on.

8.1 The pump does not run

Cause	Remedy
The fuses in the electrical installation are blown.	Replace the fuses. If the new fuses blow too, check the electrical installation and the power cable.
The residual-current circuit breaker, RCCB, has tripped.	Cut in the circuit breaker.
No power supply.	Contact the power supply company.
The motor protection has cut off the power supply due to overload.	 Check if the pump is blocked. Switch off the power supply to the pump. Remove the rubber plug. Try to turn the pump shaft with a screwdriver. If the pump shaft is stuck, follow the instructions below in The pump is blocked.
	Note: Remember to refit the rubber plug.
The pump or the power cable is defective.	Repair or replace the pump or cable.
The float switch is in dry-running position.	Check the water level and the float switch for free movability. Note: If the tank is empty, and the float switch is often in
	this position, install a larger tank.
SBA: The dry-running protection of the pump has stopped the pump.	Check the water level. Switch off the power supply and wait 2 min before switching it back on.
The pump is blocked.	 Check and clean the pump. Switch off the power supply to the pump. Remove the screws at the bottom of the pump with a cross-head screwdriver. Remove the pump base. Clean the inlet strainer and hydraulic parts with a brush and a water jet. Reassemble the pump.

8.2 The pump runs but gives no water

Cause	Remedy
The outlet valve is closed.	Open the valve.
No water or too low water level in the tank.	Increase the installation depth of the pump. Reduce the pump performance, or replace the pump by a pump with a lower performance.
The non-return valve is stuck in its closed position.	Pull out the pump, and clean or replace the valve.
The inlet strainer is clogged.	Pull out the pump, and clean the inlet strainer with a brush and a water jet.
The pump is defective.	Repair or replace the pump.

8.3 The pump runs at reduced performance

Cause	Remedy
The valves in the outlet pipe are partly closed or blocked.	Check and clean or replace the valves.
The outlet pipe is partly blocked by impurities.	Clean or replace the pipe.
The non-return valve in the outlet pipe is partly blocked.	Clean or replace the valve.
The pump and outlet pipe are partly blocked by impurities.	Pull out the pump. Check and clean or replace the pump. Clean the pipes.
The inlet strainer is clogged.	Clean the inlet strainer.
The pump is defective.	Repair or replace the pump.
Leakage in the pipes.	Check and repair the pipes.
The outlet pipe is defective.	Replace the outlet pipe.
Undervoltage has occurred.	Check the power supply.

8.4 Frequent starts and stops

Cause	Remedy
The float switch has not been adjusted correctly.	Adjust the float switch to ensure suitable time between the cutting-in and cutting-out of the pump.
The non-return valve is leaking or stuck half-open.	Clean or replace the non-return valve.
The supply voltage is unstable.	Check the power supply.
The motor temperature is too high.	Check the water temperature.
The pump is blocked.	Check and clean the pump.
	 Switch off the power supply to the pump.
	2. Remove the screws at the bottom of the pump with a cross-head screwdriver.
	3. Remove the pump base.
	 Clean the inlet strainer and hydraulic parts with a brush and a water jet.
	5. Reassemble the pump.
Leakage in the pipes.	Check and repair the pipes.

Related information

3.1.2 Highest tapping point for SBA pumps

8.5 Leaking water from the drain holes

Cause	Remedy
The water is drained from the drain holes located under the red ring when the pump is stopped and the drain holes are above water level.	This is normal behaviour.

Related information

4. Starting up the product

9. Technical data

9.1 Operating conditions

9.1.1 Flow rate

Max. flow rate	[m ³ /h]
SB	3
SBA	<mark>3</mark>
Min. flow rate	[l/min]
SBA 3-35	1.0
SBA 3-45	<mark>1.0</mark>

Related information

4.1 SBA starting and stopping conditions

9.1.2 Max. head

	[m]
SB 3-35	35
SB 3-45	45
SBA 3-35	35
<mark>SBA 3-45</mark>	<mark>45</mark>

9.1.3 Temperature

id temperature [°C]	
0 to 40	
0 to 40	
<mark>0 to 40</mark>	

Storage temperature	[°C]
SB	-10 to +40
<mark>SBA</mark>	-10 to +40

9.1.4 Pressure

Start pressure	[bar]	[MPa]
SBA 3-35	1.5	0.15
SBA 3-45	2.4	<mark>0.22</mark>

Related information

4.1 SBA starting and stopping conditions

9.1.5 Frequency of starts and stops

Maximum starts per hour		
SB	20	
SBA	<mark>20</mark>	

9.2 Mechanical data

Cable length	[m]
SB	15
SBA	15
Max. installation depth	[m]
SB	10
SBA	10
Protection class	
Enclosure class	IPX8
Insulation class	F

9.3 Electrical data

<u></u>	Voltage [V]	Frequency [Hz]	P1	P2	I _{1/1}
SB			[kW]	[kW]	[A]
3-35	— 1 × 230	50	0.75	0.47	3.5
3-45		50	0.90	0.55	4.0
3-35	1 ~ 115		0.75	0.45	7.0
3-45	— 1 × 115	60	1.00	0.62	9.5
3-35		00	0.75	0.47	3.5
3-45	— 1 × 230		0.90	0.55	4.0
SBA	Voltogo IV/I	Frequency [Hz]	P1	P2	I _{1/1}
JDA	Voltage [V]	riequency [nz]	[kW]	[kW]	[A]
3-35	— 1 × 230	50	0.75	0.47	3.5
3-45	— 1×230	50	0.90	0.55	4.0
3-35	1 ~ 115		0.75	0.45	7.0
<mark>3-45</mark>	— <u>1 × 115</u>	<u>co</u>	1.00	0.62	9.5
3-35	4 000	<mark>60</mark>	0.75	0.47	3.5
3-45	— 1 × 230		0.90	0.55	4.0

9.3.1 Speed

Speed	50 Hz [min ⁻¹]	<mark>60 Hz</mark> [min ⁻¹]
SB	2800	3400
SBA	2800	3400

10. Further product information

For further product documentation, see product-selection.grundfos.com.

11. Disposing of the product

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.

12. Document quality feedback

To provide feedback about this document, scan the QR code using your phone's camera or a QR code app.



Click here to submit your feedback



The crossed-out wheelie bin symbol on a product means that it must be disposed of separately from household waste. When a product marked with this symbol reaches its end of life, take it to a collection point designated by the local waste disposal authorities. The separate collection and recycling of such products will help protect the environment and human health.

See also end-of-life information at www.grundfos.com/product-recycling.

Argentina

Bombas GRUNDFOS de Argentina S.A. Ruta Panamericana km. 37.500industin 1619 - Garín Pcia. de B.A. Tel.: +54-3327 414 444 Fax: +54-3327 45 3190

Australia

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

Austria

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

Belgium

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

Bosnia and Herzegovina

GRUNDFOS Sarajevo Zmaja od Bosne 7-7A BiH-71000 Sarajevo Tel.: +387 33 592 480 Fax: +387 33 590 465 www.ba.grundfos.com 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 Tel.: +55-11 4393 5533 Fax: +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 E-mail: bulgaria@grundfos.bg

Canada

GRUNDFOS Canada inc. 2941 Brighton Road Oakville, Ontario L6H 6C9 Tel.: +1-905 829 9533 Fax: +1-905 829 9512

China

GRUNDFOS Pumps (Shanghai) Co. Ltd. 10F The Hub, No. 33 Suhong Road Minhang District Shanghai 201106 PRC Tel.: +86 21 612 252 22 Fax: +86 21 612 253 33

Columbia

GRUNDFOS Colombia S.A.S. Km 1.5 via Siberia-Cota Conj. Potrero Chico, Parque Empresarial Arcos de Cota Bod. 1A. Cota, Cundinamarca Tel.: +57(1)-2913444 Fax: +57(1)-8764586

Croatia

GRUNDFOS CROATIA d.o.o. Buzinski prilaz 38, Buzin HR-10010 Zagreb Tel.: +385 1 6595 400 Fax: +385 1 6595 499 www.hr.grundfos.com

Czech Republic

GRUNDFOS Sales Czechia and Slovakia s.r.o. Čajkovského 21 779 00 Olomouc Tel.: +420-585-716 111

Denmark

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

Estonia

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

Finland

OY GRUNDFOS Pumput AB Trukkikuja 1 FI-01360 Vantaa Tel.: +358-(0) 207 889 500

France

Pompes GRUNDFOS Distribution S.A. Parc d'Activités de Chesnes 57, rue de Malacombe F-382:90 St. Quentin Fallavier (Lyon) Tel.: +33-4 74 82 15 15 Fax: +33-4 74 94 10 51

Germany

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

Greece

GRUNDFOS Hellas A.E.B.E. 20th km. Athinon-Markopoulou Av. P.O. Box 71 GR-19002 Peania Tel.: +0030-210-66 83 400 Fax: +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 Tel.: +852-27861706 / 27861741 Fax: +852-27858664

Hungary

GRUNDFOS Hungária Kft. Tópark u. 8 H-2045 Törökbálint Tel.: +36-23 511 110 Fax: +36-23 511 111

India

GRUNDFOS Pumps india Private Limited 118 Old Mahabalipuram Road Thoraipakkam Chennai 600 097 Tel:: +91-44 2496 6800

Indonesia

PT GRUNDFOS Pompa Graha intirub Lt. 2 & 3 Jln. Cillitan Besar No.454. Makasar, Jakarta Timur ID-Jakarta 13650 Tel.: +62 21-469-51900 Fax: +62 21-460 6910 / 460 6901

Ireland

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

Italy

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

Japan

GRUNDFOS Pumps K.K. 1-2-3, Shin-Miyakoda, Kita-ku Hamamatsu 431-2103 Japan Tel.: +81 53 428 4760 Fax: +81 53 428 5005

Kazakhstan

Grundfos Kazakhstan LLP 7' Kyz-Zhibek Str., Kok-Tobe micr. KZ-050020 Almaty Kazakhstan Tel.: +7 (727) 227-98-55/56

Korea

GRUNDFOS Pumps Korea Ltd. 6th Floor, Aju Building 679-5 Yeoksam-dong, Kangnam-ku, 135-916 Seoul, Korea Tel.: +82-2-56317 600 Fax: +82-2-5633 725

Latvia

SIA GRUNDFOS Pumps Latvia Deglava biznesa centrs Augusta Deglava ielä 60 LV-1035, Rīga, Tel.: + 371 714 9640, 7 149 641 Fax: + 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 Tel.: +60-3-5569 2822 Fax: +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 Tel.: +52-81-8144 4000 Fax: +52-81-8144 4010

Netherlands

GRUNDFOS Netherlands Veluwezoom 35 1326 AE Almere Postbus 22015 1302 CA ALMERE Tel.: +31-88-478 6336 Fax: +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 Tel.: +64-9-415 3240 Fax: +64-9-415 3250

Norway

GRUNDFOS Pumper A/S Strømsveien 344 Postboks 235, Leirdal N-1011 Oslo Tel.: +47-22 90 47 00 Fax: +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

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

Romania

GRUNDFOS Pompe România SRL S-PARK BUSINESS CENTER, Clădirea A2, etaj 2 Str. Tipografilor, Nr. 11-15, Sector 1, Cod 013714 Bucuresti, Romania Tel.: 004 021 2004 100 E-mail: romania@grundfos.ro

Serbia

Grundfos Srbija d.o.o. Omladinskih brigada 90b 11070 Novi Beograd Tel.: +381 11 2258 740 Fax: +381 11 2281 769 www.rs.grundfos.com

Singapore

GRUNDFOS (Singapore) Pte. Ltd. 25 Jalan Tukang Singapore 619264 Tel.: +65-6681 9688 Faxax: +65-6681 9689

Slovakia

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

Slovenia

GRUNDFOS LJUBLJANA, d.o.o. Leskoškova 9e, 1122 Ljubljana Tel.: +386 (0) 1 568 06 10 Fax: +386 (0)1 568 06 19 E-mail: tehnika-si@grundfos.com

South Africa

GRUNDFOS (PTY) LTD 16 Lascelles Drive, Meadowbrook Estate 1609 Germiston, Johannesburg Tel.: (+27) 10 248 6000 Fax: (+27) 10 248 6002 E-mail: Igradidge@grundfos.com

Spain

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

Sweden

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

Switzerland

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

Taiwan

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

Thailand

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

Turkey

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

Ukraine

ТОВ "ГРУНДФОС УКРАЇНА" Бізнес Центр Європа Столичне шосе, 103 м. Київ, 03131, Україна ТеІ.: (+38 044) 237 04 00 Fax: (+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 Tel.: +971 4 8815 166 Fax: +971 4 8815 136

United Kingdom

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

U.S.A.

Global Headquarters for WU 856 Koomey Road Brookshire, Texas 77423 USA Phone: +1-630-236-5500

Uzbekistan

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

99057358 09.2023

ECM: 1374378



www.grundfos.com