Unilift AP35B, AP50B

Installation and operating instructions





Other languages

http://net.grundfos.com/qr/i/96004693



be think innovate

Original installation and operating instructions

These installation and operating instructions describe Grundfos Unilift AP35B and AP50B.

Sections 1-4 give the information necessary to be able to unpack, install and start up the product in a safe way.

Sections 5-9 give important information about the product, as well as information on service, fault finding and disposal of the product.

CONTENTS

		Page
1.	General information	2
1.1	Hazard statements	2
1.2	Notes	3
2.	Receiving the product	3
2.1	Inspecting the product	3
3.	Installing the product	3
3.1	Location	3
3.2		4
3.3		6
3.4	Checking the direction of rotation	6
4.	Starting up the product	7
5.	Product introduction	7
5.1	Intended use	7
5.2	Pumped liquids	7
5.3	Identification	8
6.	Servicing the product	9
6.1	Maintaining the product	9
6.2	Oil	9
	Construction	9
	Service kits	9
6.5	Contaminated pumps	9
7.	Fault finding the product	10
8.	Technical data	11
8.1	Storage temperature	11
8.2	Operating conditions	11
8.3	Sound pressure level	11
9.	Disposing of the product	11



Read this document before installing 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



Daue

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. General information

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 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 explosion-proof 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

WARNING

Falling objects

Death or serious personal injury

- Keep the product in a stable position during unpacking.
- Wear personal protective equipment.

2.1 Inspecting the product

Check that the product received is in accordance with the order.

Check that the voltage and frequency of the product match voltage and frequency of the installation site.

3. Installing the product

CAUTION

Toxic material



Minor or moderate personal injury - The product will be classified as

- contaminated if it has been used for a liquid which is injurious to health or toxic.
- Wear personal protective equipment.



Installation must be carried out by specially trained persons and according to local regulations.



According to EN 60335-2-41/A2:2010, this product with 5 m of mains cable may be used only for indoor applications.

3.1 Location

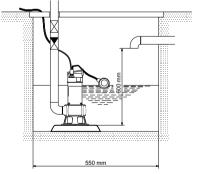


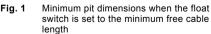
Always have at least 3 m free cable above liquid level. This limits the installation depth to 7 m for pumps with 10 m cable and to 2 m for pumps with 5 m cable.

3.1.1 Minimum space

The pit, basin or tank must be sized according to the relation between the water flow to the pit, basin or tank and the pump performance.

When the pump is installed in a permanent installation with a float switch, the minimum dimensions of the pit, basin or tank must be as shown in fig. 1 to ensure free movability of the float switch. The float switch is set to the minimum free cable length. See section 3.2.7 Adjusting the float switch cable length.





TM03 4190 1806

3.2 Mechanical installation

DANGER

Electric shock

Death or serious personal injury

- Switch off the power supply before

- starting any work on the product.
- Make sure that the power supply cannot be accidentally switched on.

CAUTION

Sharp element

Minor or moderate personal injury

- Wear personal protective equipment.
- Make sure that persons cannot come into contact with the pump impeller.



Do not install the pump hanging from the electric cable or the outlet pipe.

3.2.1 Foundation

Place the pump on a plate or on bricks so that the inlet strainer is free of sludge, mud or similar materials. See fig. 2.

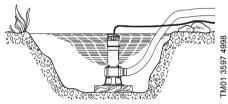


Fig. 2 Place the pump on a plate

3.2.2 Lifting the pump

Do not pull or lift the product by the power cable.

Lift the pump using the pump handle. Do not lift the pump by the power cable or by the outlet pipe or hose.

If the pump is installed in a well or tank, lower and lift it by means of a wire or chain fastened to the pump handle.

3.2.3 Positioning the pump

The pump can be used in vertical or horizontal position. See fig. 3.

During continuous operation, the motor and the pump inlet must always be completely covered by the pumped liquid.

During intermittent operation, the motor must always be half submerged into the pumped liquid.

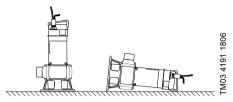


Fig. 3 Position of the pump

When the pipe or hose has been connected, place the pump in its operating position.

Position the pump so that the pump inlet will not be blocked or partly blocked by sludge, mud or similar materials.

In the case of permanent installation, the pit must be cleared of sludge, pebbles, etc. before the pump is installed.

3.2.4 Pipe connection

For permanent installation, we recommend that you fit a union, a non-return valve and an isolating valve in the outlet pipe.

3.2.5 Installation on auto coupling

See figs A and B in Appendix.

Pumps for permanent installation can be installed on a stationary auto coupling and operated completely or partially submerged in the pumped liquid.

- Drill mounting holes for guide rail bracket on the inside of the pit and fasten the guide rail bracket provisionally with two screws.
- Place the auto coupling base unit on the bottom of the pit. Use a plumb line to establish the correct positioning. Fasten with heavy-duty expansion bolts. If the bottom of the pit is uneven, the auto-coupling base unit must be supported so that it is level when being fastened.
- Assemble the outlet line in accordance with the generally accepted procedures and without exposing the line to distortion or tension.

- 4. Knock the guide rails on to the spigots of the bottom part of the auto coupling. Bevel the inside of the guide rails to facilitate installation. The guide rails must fit tightly on the spigots. We recommend 3/4" medium size pipes as guide rails.
- 5. Adapt the length of the guide rails to fit precisely the bracket at the top.
- Unscrew the provisionally fastened guide rail bracket, fit it on top of the guide rails and finally fasten it firmly to the pit wall.



The guide rails must not have any axial play as this would cause noise during pump operation.

- Clean out debris from the pit before lowering the pump into the pit.
- 8. Fit the auto-coupling half on to the outlet of the pump. Then slide the guide bar of this coupling half between the guide rails and lower the pump into the pit by means of a chain. When the pump reaches the auto-coupling base unit, the pump will automatically connect tightly.
- 9. Hang up the end of the chain on a suitable hook at the top of the pit.
- 10. Adjust the length of the motor cable by coiling it up on a relief fitting, so the cable is not damaged during operation. Fasten the relief fitting to a suitable bracket at the top of the pit. Make sure that the cables are not sharply bent or pinched.

The end of the cable must not be submerged, as water may penetrate through the cable into the motor.

3.2.6 Free-standing installation

See fig. C in Appendix.

For free-standing installation of the pumps, fit a 90 $^\circ$ elbow to the outlet. The pump can be installed with a hose or rigid pipe and valves.

In order to facilitate service of the pump, fit a flexible union or coupling to the outlet pipe for easy separation.

If a hose is used, make sure that the hose does not buckle and that the inside diameter of the hose matches that of the outlet.

If a rigid pipe is used, the union or coupling, nonreturn valve and isolating valve must be fitted in the sequence mentioned, as seen from the pump side.

Lower the pump into the liquid.

If the pump is installed in muddy conditions or on uneven ground, we recommend that you support the pump on bricks.

3.2.7 Adjusting the float switch cable length

For pumps supplied with a float switch, the difference in level between start and stop can be adjusted by changing the free cable length between the float switch and the pump handle.

- An increased free cable length will result in fewer starts and stops and a large difference in level.
- A reduced free cable length will result in more frequent starts and stops and a small difference in level.

The stop level must be above the pump inlet to prevent the pump from taking in air.

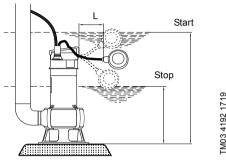


Fig. 4 Start and stop levels

The start and stop levels vary according to the cable length.

Unilift AP B start and stop levels [mm]					
Cable le min. 1		Cable length (L) max. 300 mm			
Start	Start Stop		Stop		
500	300	550	150		

Intermittent operation

During intermittent operation, the motor must always be half submerged into the pumped liquid.

The pump is allowed to run for maximum 5 minutes per 30 minutes without the motor being submerged in the liquid.

Continuous operation

During continuous operation, the motor and the pump inlet must always be completely covered by the pumped liquid.

3.3 Electrical connection

DANGER

Electric shock

Death or serious personal injury

Switch off the power supply before

- starting any work on the product.
- Make sure that the power supply cannot be accidentally switched on.

DANGER

Electric shock



Death or serious personal injury The installation must be fitted with a residual current device (RCD) with a tripping current less than 30 mA.

DANGER

Electric shock

Death or serious personal injury

Make sure that the power supply plug



delivered with the product is in compliance with local regulations. The plug must have the same protective earth (PE) connection system as the power outlet. If not, use a suitable

adapter if allowed by local regulations.

DANGER

Electric shock

Death or serious personal injury Power cables without a plug must be connected to a supply disconnecting device incorporated in the fixed wiring according to the local wiring rules.



All electrical connections must be carried out by a qualified person in accordance with local regulations.



Depending on local regulations, a pump with minimum 10 m of mains cable must be used if the pump is used as a portable pump for different applications.

Make sure that the product is suitable for the supply voltage and frequency available at the installation site. Voltage and frequency are marked on the pump nameplate.

The pump must be connected to an external main switch. If the pump is not installed close to the switch, the switch must be of a lockable type.

Three-phase pumps must be connected to an external motor-protective circuit breaker with differential release. The rated current of the motorprotective circuit breaker must correspond to the electrical data marked on the pump nameplate.

If a level switch is connected to a three-phase pump. the motor-protective circuit breaker must be magnetically operated.

Single-phase pumps incorporate thermal overload protection and require no additional motor protection.



If the motor is overloaded, it will stop automatically. When the motor has cooled to normal temperature, it restarts automatically.

3.4 Checking the direction of rotation

Three-phase pumps only

Check the direction of rotation every time the pump is connected to a new installation.

- 1. Position the pump so that you can observe the impeller.
- 2. Start the pump for a short period.
- 3. Observe the rotation of the impeller. The correct direction of rotation is indicated by an arrow on the top of the motor (clockwise when seen from the bottom). If the impeller rotates in the wrong direction, reverse the direction of rotation by interchanging two of the phases to the motor.

If the pump is connected to a pipe system, check the direction of rotation in this way:

- 1. Start the pump and check the quantity of water or the pressure.
- 2. Stop the pump and interchange two of the phases to the motor.
- 3. Start the pump and check the quantity of water or the pressure.
- 4. Stop the pump.
- 5. Compare the results taken under points 1 and 3. The largest quantity of water indicates the correct direction of rotation.

4. Starting up the product

DANGER

Electric shock



Death or serious personal injury

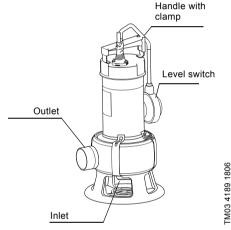
 Do not use the pump in swimming pools, garden ponds or similar places if there are people in the water.

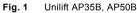


The pump may be run briefly to check the direction of rotation without being submerged in the pumped liquid.

- 1. Before starting the pump, submerge the pump inlet in the pumped liquid.
- 2. Open the isolating valve, if fitted, and check the level switch setting.

5. Product introduction





5.1 Intended use

The Grundfos Unilift AP pump is a single-stage submersible pump designed for pumping wastewater.

The pump is capable of pumping water which contains a limited quantity of solids, however not stones and similar materials, without being blocked or damaged.

The pump is available for automatic as well as manual operation and can be installed in a permanent installation or used as a portable pump.

Permanent installation can be on a stationary auto coupling or as a free-standing pump.

Applications	Unilift AP35B	Unilift AP50B
Drainage of flooded cellars or buildings	•	•
Groundwater lowering	•	•
Pumping of water from drain water collecting pits	•	•
Pumping of water from surface water pits with inflow from roof gutters, shafts, tunnels, etc.	•	•
Emptying and filling of swimming pools, ponds, pits etc.	•	•
Pumping of wastewater from washing machines, baths, sinks etc. from low-lying parts of buildings up to sewer level	•	•
Pumping of fibre-containing wastewater from laundries and light industries	•	•
Pumping of domestic wastewater from septic tanks and sludge treating systems	•	•
Pumping of domestic wastewater without discharge from toilet rooms	•	•
Pumping of domestic wastewater with discharge from toilet rooms		•*

 Unilift AP50B is approved according to EN 12050-1 and can be used for toilet discharge if local regulations allow the usage of a 50 mm free passage Vortex pump.

Incorrect application of the pump, for example resulting in blocking of the pump, and wear are not covered by the warranty.

5.2 Pumped liquids

The pump is capable of pumping water containing a limited quantity of spherical particles. Pumping of spherical particles exceeding the maximum particle size for the pump may block or damage the pump. Maximum particle size: See section 8. *Technical data*.

The pump is not suitable for these liquids:

- liquids containing long fibres
- inflammable liquids (oil, petrol, etc.)
- aggressive liquids.
- liquids containing solids exceeding the pump's recommended maximum particle size.

English (GB)

5.3 Identification

5.3.1 Nameplate

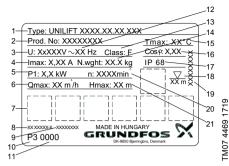


Fig. 2 Nameplate example

Pos.	Description
1	Product type
2	Product number
3	Supply voltage [V]
4	Maximum current [A]
5	Power input [kW]
6	Maximum flow rate [m ³ /h]
7	Approvals
8	ID number for EN standards
9	ID number for Safety Instruction
10	Factory code
11	Production code (YYWW)
12	Frequency [Hz]
13	Insulation class
14	Net weight [kg]
15	Maximum liquid temperature [°C]
16	Cosinus phi
17	Enclosure class
18	Maximum installation depth [m]
19	Nameplate layout
20	Speed [min ⁻¹]
21	Maximum head [m]

5.3.2 Type key

Example	Unilift AP	35	в.	50.	08.	Α	1	۷.
Type range								
Maximum se	olids size [mm]						
Pump type:			-					
[]= AP Pun	np							
B = AP Bas	ic							
Nominal diameter of outlet port								
Power output, P ₂ / 100 [W]								
Level control:								
A = Automatic operation with float switch								
[] = Manual operation without float switch								
Motor:								
1 = Single-phase								
3 = Three-phase								
Impeller:								-
V = Vortex	mpeller							

6. Servicing the product

DANGER

Electric shock

Death or serious personal injury



Switch off the power supply before

- starting any work on the product.
- Make sure that the power supply cannot be accidentally switched on.

CAUTION



Sharp element

Minor or moderate personal injury

Wear personal protective equipment.

CAUTION

Toxic material

Minor or moderate personal injury



The product will be classified as contaminated if it has been used for a liquid which is injurious to health or

toxic Wear personal protective equipment.

CAUTION

Biological hazard

Minor or moderate personal injury



Flush the product thoroughly with clean water and rinse the parts in water after

- dismantling. Wear personal protective equipment.



If the power cable or the level switch is damaged, it must be replaced by a service workshop authorised by Grundfos.



Service must be carried out by specially trained persons. Furthermore, all rules and regulations

covering safety, health and environment must be observed.

- 1. If the pump has been used for liquids other than clean water, flush the pump thoroughly with clean water before carrying out maintenance and service.
- 2. Rinse the pump parts in water after dismantling.

6.1 Maintaining the product

Check the pump and replace the oil once a year. If the pump is used for pumping liquids containing abrasive particles or it is operating continuously, the pump must be checked at shorter intervals.

If the drained oil contains water or other impurities, we recommend that you replace the shaft seal.

6.2 Oil

In the case of long operating time or continuous operation, the oil must be replaced as follows:

Liquid temperature	The oil must be replaced after
20 °C	4500 operating hours
40 °C	3000 operating hours

The pump contains 78 ml non-poisonous oil. Used oil must be disposed of in accordance with local regulations.

6.3 Construction

The construction of the pump will appear from the table below and fig. D in Appendix.

Pos.	Description				
50	Pump housing				
37a O-ring					
49	Impeller				
150	Motor with flange				
66	Washer				
84	Base				
67	Lock nut				
6	Inlet part				
105a	Shaft seal				
182	Level switch				

6.4 Service kits

Service kit	Part number
Shaft seal, standard	96429307
Shaft seal, FKM	96429308
Oil	96010646

6.5 Contaminated pumps

CAUTION

Biological hazard



Minor or moderate personal injury

- Flush the product thoroughly with clean water and rinse the parts in water after dismantling.
- Wear personal protective equipment.

The product will be classified as contaminated if it has been used for a liquid which is injurious to health or toxic.

If you request Grundfos to service the product, contact Grundfos with details about the pumped liquid before returning the product for service. Otherwise, Grundfos can refuse to accept the product for service.

Any application for service must include details about the pumped liquid.

Clean the product in the best possible way before you return it.

Costs of returning the product are to be paid by the customer.

7. Fault finding the product

DANGER

Electric shock

Death or serious personal injury Switch off the power supply before

starting any work on the product.

Make sure that the power supply cannot be accidentally switched on.

CAUTION



Sharp element

Minor or moderate personal injury _

Wear personal protective equipment.

CAUTION

Toxic material

Minor or moderate personal injury _



- The product will be classified as contaminated if it has been used for a liquid which is injurious to health or toxic.
- Wear personal protective equipment. -

Fault		Cause		Remedy	
1.			No power supply.	Connect the power supply.	
	start.	b)	The pump was stopped by the level switch.	Adjust or replace the level switch.	
		c)	The fuses have blown.	Replace the fuses.	
		d)	The motor protection or thermal relay has tripped.	Wait until the motor protection trips in again or reset the relay.	
		e)	The impeller is blocked by impurities.	Clean the impeller.	
		f)	Short circuit in the cable or motor.	Replace the defective part.	
2.	The motor protection or thermal relay trips after a short time of	a)	The liquid temperature is too high.	Use another pump type. Contact your local Grundfos supplier or sales support.	
	operation.	b)	The impeller is blocked or partly blocked by impurities.	Clean the pump.	
		c)	Phase failure.	Call an electrician.	
		d)	Too low voltage.	Call an electrician.	
		e)	The overload setting of the motor- protective circuit breaker is too low.	Adjust the setting.	
		f)	Incorrect direction of rotation. See section 3.4 Checking the direction of rotation.	Reverse the direction of rotation.	
3.	The pump runs constantly or gives too little water.	a)	The pump is partly blocked by impurities.	Clean the pump.	
		b)	The outlet pipe or valve is partly blocked by impurities.	Clean the outlet pipe or valve.	
		c)	The impeller is not properly fixed to the shaft.	Tighten the impeller.	
		d)	Incorrect direction of rotation. See section 3.4 Checking the direction of rotation.	Reverse the direction of rotation.	
		e)	Incorrect setting of the level switch.	Adjust the level switch.	
		f)	The pump is too small for the application.	Replace the pump.	
		g)	The impeller is worn.	Replace the impeller.	

Fault		Ca	use	Remedy	
4.	The pump runs but gives no water.	a)	The pump is blocked by impurities.	Clean the pump.	
		b)	The outlet pipe or valve is blocked by impurities.	Clean the outlet pipe or valve.	
		c)	The impeller is not properly fixed to the shaft.	Tighten the impeller.	
		d)	There is air in the pump.	Vent the pump and the outlet pipe.	
		e)	The liquid level is too low. The pump inlet is not completely submerged in the pumped liquid.	Submerge the pump in the liquid or adjust the level switch.	
		f)	Pumps with float switch: The float switch does not move freely.	Adjust the float switch. See section 3.2.7 Adjusting the float switch cable length.	

8. Technical data

8.1 Storage temperature

Down to -30 °C.

8.2 Operating conditions

Minimum liquid temperature	0 °C
Maximum liquid temperature	40 °C
Installation depth	Maximum 7 m below liquid level
pH value	4-10
Density	Maximum 1100 kg/m ³
Viscosity	Maximum 10 mm ² /s
Maximum particle size	Max. spherical diameter: Unilift AP35B: 35 mm Unilift AP50B: 50 mm
Technical data	See the pump nameplate.

Always have at least 3 m free cable above liquid level. This limits the installation depth to 7 m for pumps with 10 m cable and to 2 m for pumps with 5 m cable.

8.3 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.

9. 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.



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

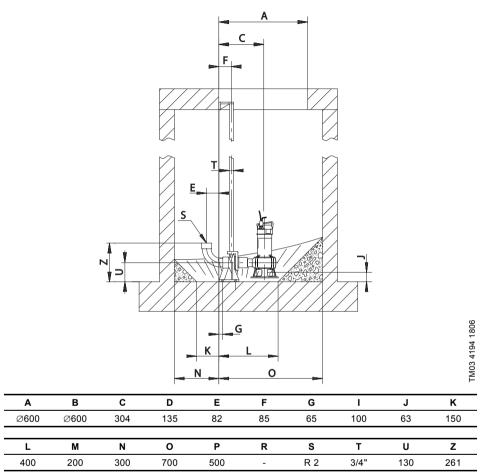
waste disposal authorities. The separate collection and recycling of such products will help protect the environment and human health.

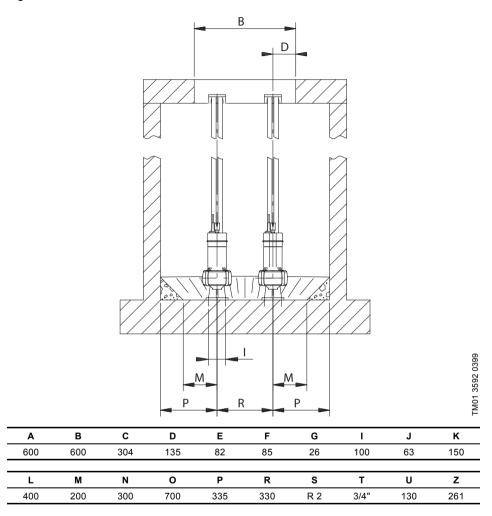
See also end-of-life information at www.grundfos.com/product-recycling.

Appendix

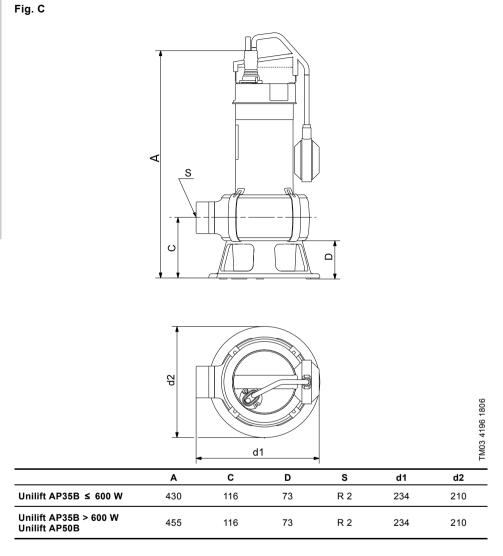
1-pump installation on auto-coupling

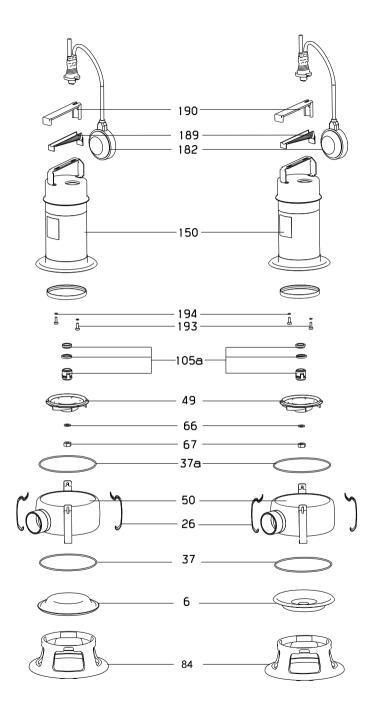
Fig. A





Free-standing Installation





TM03 4209 1806

Argentina

Bombas GRUNDFOS de Argentina S.A. Ruta Panamericana km. 37.500 Centro Industrial Garin 1619 Garín Pcia. de B.A. Phone: +54-3327 414 444 Telefax: +54-3327 45 3190

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. Grundfosstraße 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. Шафарнянская, 11, оф. 56, БЦ «Порт» Тел.: + 7 (375 17) 286 39 72/73 Факс: +7 (375 17) 286 39 71 Е-mail: minsk@grundfos.com

Bosnia and Herzegovina

GRUNDFOS Sarajevo Zmaja od Bosne 7-7A, BH-71000 Sarajevo Phone: +387 33 592 480 Telefax: +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 Phone: +55-11 4393 5533 Telefax: +55-11 4343 5015

Bulgaria

Grundfos Bulgaria EOOD Slatina District Liztochna 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 Pumps (Shanghai) Co. Ltd. 10F The Hub, No. 33 Suhong Road Minhang District Shanghai 201106 PRC Phone: +86 21 612 252 22 Telefax: +86 21 612 253 33

COLOMBIA

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

Croatia

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

GRUNDFOS Sales Czechia and

Slovakia s.r.o. Čajkovského 21 779 00 Olomouc Phone: +420-585-716 111

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 Peterburi 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

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

GRUNDFÖS 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: +852-27851706 / 27861741 Telefax: +852-27858664

Hungary

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

India

GRUNDFOS Pumps India Private Limited 118 Old Mahabalipuram Road Thoraipakkam Chennai 600 096 Phone: +91-44 2496 6800

Indonesia

PT. GRUNDFOS POMPA Graha Intirub Lt. 2 & 3 Jln. Cililitan 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.I. Via Gran Sasso 4 I-20060 Truccazzano (Milano) Tel.: +39-02-95838112 Telefax: +39-02-95309290 / 95838461

Japan

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

Korea

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

Latvia

SIA GRUNDFOS Pumps Latvia Deglava biznesa centrs Augusta Deglava ielä 60, LV-1035, Rīga, Tālr.: + 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

Brundfos companies

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 Veluwezoom 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 Pumper 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 90 Telefax: +351-21-440 76 90

Romania

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

Russia

ООО Грундфос Россия ул. Школьная, 39-41 Москва, RU-109544, Russia Ten. (+7) 495 564-88-00 (495) 737-30-00 Факс (+7) 495 564 8811 Е-mail grundfos.moscow@grundfos.com

Serbia

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

Singapore

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

Slovakia

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

Slovenia

GRUNDFOS LJUBLJANA, d.o.o. Leskoškova 9e, 1122 Ljubljana Phone: +386 (0) 1 568 06 10 Telefax: +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 F-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 Telefax: +34-91-628 0465

Sweden

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

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 Ihsan 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 Е-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 9300 Loiret Blvd. Lenexa, Kansas 66219 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 TenedpoH: (+998) 71 150 3290 / 71 150 3291 Φarc: (+998) 71 150 3292

Addresses Revised 15.01.2019

96004693 0719

ECM: 1260503



www.grundfos.com