

1900
04.17

SANIFLO

Wastewater pumping station

SANIPUMP®



Operating / installation manual

CONTENTS

1. SAFETY pg.2

- 1.1 Identifying the warnings pg.3
- 1.2 General information pg.3
- 1.3 Intended use pg.3
- 1.4 Qualification and training of staff..... pg.4
- 1.5 Safety instructions for maintenance, pg.4
inspection and installation
- 1.6 Consequences and risks of non-compliance pg.4
with the operating manual

2. TRANSPORT / TEMPORARY STORAGE RETURN / DISPOSAL pg.4

- 2.1 Receiving inspection pg.4
- 2.2 Transport pg.4
- 2.3 Disposal pg.5

3. DESCRIPTION pg.5

- 3.1 General description and method of operation..... pg.5
- 3.2 Scope of supply pg.5
- 3.3 Rating plate..... pg.5
- 3.4 Technical specifications pg.6
- 3.5 Pumped fluids pg.7
- 3.6 Installation of the SANIPUMP® pumping station pg.7
- 3.7 Electrical connection pg.8

4. COMMISSIONING pg.8

- 4.1 Prerequisites for commissioning pg.8
- 4.2 Application limits pg.8
- 4.3 Starting and stopping pg.9
- 4.4 Starting frequency pg.9
- 4.5 Operations required for commissioning pg.9
- 4.6 Decommissioning pg.9

5. MAINTENANCE pg.10

6. INSPECTION AND MAINTENANCE CHECKLIST pg.11

Glossary

ND (Nominal Diameter)

Parameter used to characterise parts that are suitable for each other, for example: pipes, connections, sleeves.

Wastewater

Water changed by the use that was made of it (for example: domestic wastewater).

Noise level

Expected sound emissions, expressed in sound pressure level L_pA in dB(A).

Separator

Equipment which prevents, by gravity, the penetration of harmful substances into the discharge system by separating them from wastewater, for example: grease trap.

Wastewater pumping station

Installation for the automatic pumping of wastewater and blackwater above the back-flow level.

Inlet piping

Pipe through which wastewater from sanitary fixtures is routed to the pumping station.

Discharge piping

Piping for raising wastewater above the back-flow level and routing it to the sewer.

Clearance

The clearance is the space that needs to be provided for interventions.

1. SAFETY

All personnel involved with the installation, operation, servicing and inspection of the SANIPUMP® must be suitably qualified for this work and must have studied the installation manual to ensure that they are conversant with the pump installation and safety regulations.

If the personnel do not have the necessary skills they should not attempt to install, operate, service or inspect this pump.

This pump cannot be installed, operated, serviced or inspected by Children or by people with reduced physical, sensory or mental capacity.

If you have any questions, contact : 02088420033.

ELECTRICAL CONNECTIONS:

The electrical installation must be carried out by a qualified electrical engineer.

The device's power supply must be connected to ground (class I) and protected by a high sensitivity differential circuit breaker (30 mA). Devices without plugs must be connected to a main switch on the power supply which disconnects all poles (contact separation distance of at least 3 mm). The connection must be used exclusively to provide the power to the product.

If the power cord is damaged, to prevent possible danger, it must be replaced by the manufacturer, customer service team or a similarly qualified individual.



The SANIPUMP® pumping station is fitted with blades.
It is not permitted to handle it when it is switched on to prevent personal injury and damage to property.
When it is switched off, it must be handled with caution.

1.1 Identification of warnings



Danger

This term defines a high risk of danger, which can lead to death or serious injury, if not avoided.



Warning

This term defines a hazard which could cause a risk to the machine and its operation, if it is not taken into account



Dangerous area

This symbol, in combination with a keyword, characterises hazards that could lead to death or injury.



Dangerous voltage

This symbol, in combination with a keyword, characterises dangers associated with the voltage and provides information on voltage protection.



Property damage

This symbol, in combination with the keyword **ATTENTION**, characterises dangers to the machine and its proper operation.

1.2 General points

This operating and installation manual contains important instructions to follow for the fitting, operation and maintenance of the SANIPUMP® pumping station. Following these instructions guarantees safe operation and prevents injury and property damage.

Please follow the safety instructions in every section.

Before fitting and commissioning the pumping station, qualified staff/the operator concerned must read and understand all these instructions.

1.3 Intended use

Only use the pumping station in the fields of application described in this documentation.

- The pumping station must only be operated in technically perfect condition.
- The pumping station must only pump the fluids described in this documentation.
- The pumping station must never operate without pumped fluid.
- Never exceed the usage limits defined in the documentation.
- The safe use of the pumping station can only be ensured when its use is compliant (as described in this manual).

1.4 Qualification and training of staff

Commissioning and maintenance of this device must be performed by a qualified professional (ask us).

1.5 Safety instructions for maintenance, inspection and installation

- Any alteration or modification of the pumping station will render the warranty void.
- Use only genuine parts.

The use of other parts may void the manufacturer's liability for any resulting damage.

- The operator must ensure that all maintenance, inspection and installation work is carried out by qualified, authorised staff having previously studied this operating and installation manual.

Before working on the pumping station, switch it off and disconnect the power supply.

- You must follow the procedure for switching off the pumping station described in this operating manual.
- The pumping station that discharges fluids harmful to health must be cleaned before restarting, observe the operating instructions. (paragraph 4, page 8)
- Keep unauthorised people (children, for example) away from the pumping station.
- Never exceed the usage limits defined in the documentation.
- Follow all the safety precautions and instructions in this operating and installation manual.

This operating manual must always be available on the website so it can be accessed by qualified staff and the operator.

These operating instructions must be retained by the operator.

1.6 Risks and consequences of non-compliance with the operating manual

Failure to comply with this operating and installation manual will result in the loss of warranty rights and rights to damages.

2. TRANSPORT / TEMPORARY STORAGE / RETURNS / DISPOSAL

2.1 Receiving inspection

- When receiving goods, check the condition of the pumping station delivered.
- In case of damage, note the exact damage and immediately notify the retailer in writing.

2.2 Transport



Pumping station falling over.

Risk of injury if the pumping station falls!

- Transport the pumping station in a vertical position.
- Never hang up the pumping station by the electric cable.
- Use a suitable means of transport.
- The pumping station has been inspected to make sure there is no damage due to transport.
- Choose a suitable means of transport according to the weight table.

Weight of the pumping station

	Weight
SANIPUMP® with 10 meters of cable and float	13 kg

2.3 Disposal

At the end of its life, this product must be returned to a dedicated collection point.

- It cannot be treated as household waste.
- Ask your local council about where to take the old appliance so that it can be recycled or destroyed.

3. DESCRIPTION

3.1 General description and method of operation

SANIPUMP® is a waste water pumping station specially developed for private and commercial use.

It is not intended for pumping rainwater.

It can be installed in an outdoor sump (pumping grey water and black water) or inside a building (pumping of grey water only).

Its operating principle is as follows: when the level of effluents contained in the sump where the SANIPUMP® is installed is sufficient, the float switch starts up the pumping station.

The effluent is then shredded by the SFA system and automatically pumped to then drain into the sewer pipe.

Waste water is discharged by a DN 40 (ext. diameter 50).

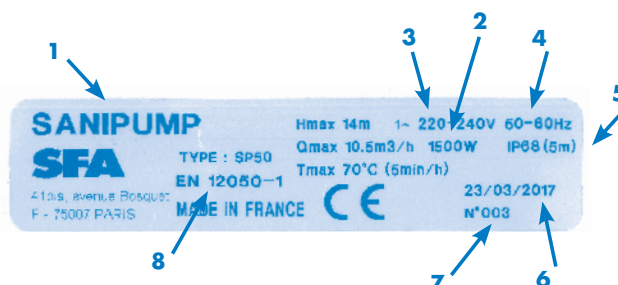


3.2 Scope of supply

Submersible SANIPUMP® pump with float switch, mounting base and pump power supply cable H05VV-F-3G type 1.5 mm², with a length of 10 metres.

3.3 Rating plate

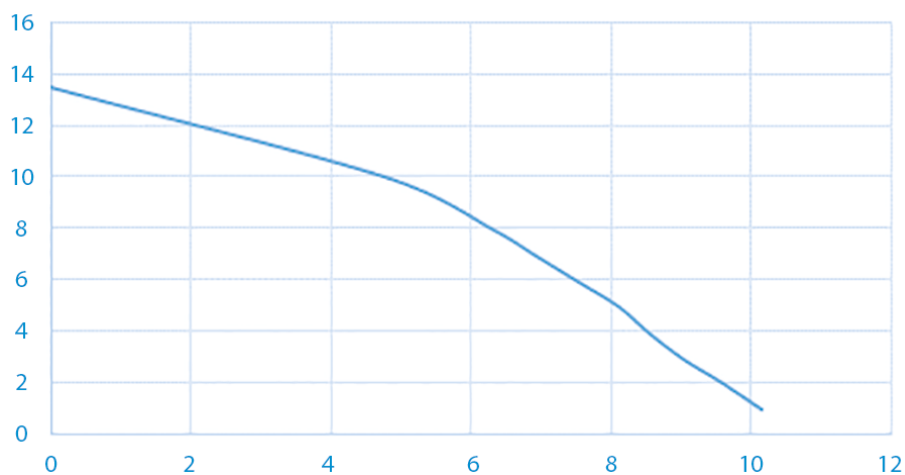
1	Name of the pumping station
2	Power consumption of motors
3	Power supply voltage
4	Frequency
5	Protection index
6	Production date
7	ID number
8	Type of certification



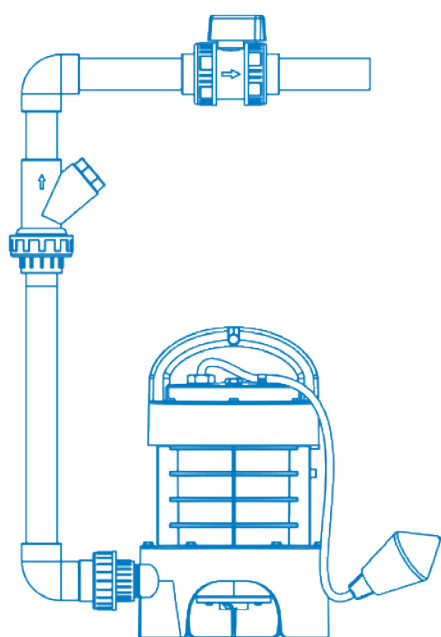
3.4 Technical specifications SANIPUMP®

Pump specifications	
Flow rate (H = 1 m)	10.5 m ³ /h
Max Height (Q = 0)	14 m
ON/OFF level	400/100 mm
Maximum immersion height	5 m
Activation system	Float
Thermal overload protection	Yes
Power	Single phase 220-240 V / 50-60 Hz
Motor consumption	1 x 1,500 W
Maximum current consumption	6 A

SANIPUMP® pump curve



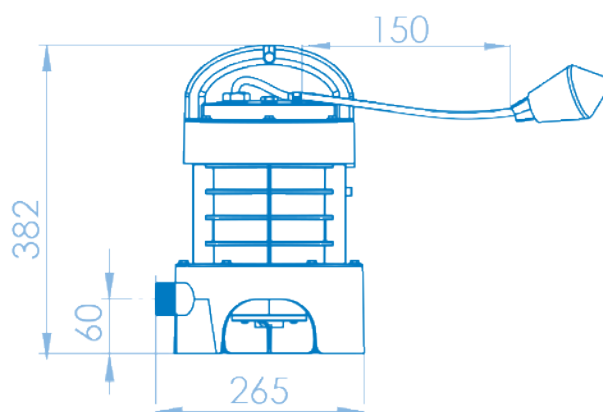
Product dimensions



G 1-1/4"

Noise level

The noise level depends on the fitting conditions and operating point. This sound pressure level L_p is less than 70 dB (A).



3.5 Pumped fluids



WARNING



Pumping unauthorised fluids

Dangerous for people and the environment!

→ Only discharge authorised pumped fluids into the public sewerage network.

Authorised pumped fluids:

The following liquids are allowed in discharge systems:

- Water contaminated by domestic use, human excrement, toilet roll.

Unauthorised pumped fluids:

The following liquids and substances are banned:

- Solid materials, fibres, tar, sand, cement, ash, coarse paper, hand towels, wipes, cardboard, rubble, rubbish, slaughterhouse waste, oils, hydrocarbons, greases, etc.
- Wastewater containing harmful substances (for example, untreated greasy waste from restaurants). Pumping these liquids and substances requires the fitting of a compliant grease trap.
- Rain water.

3.6 Installation of the SANIPUMP pumping station®

- The characteristics shown on the rating plate have been compared with those on the order and installation (supply voltage, frequency).
- The SANIPUMP® pumping station cannot be immersed in water of more than 5 m deep.
- The minimum height of the entries into the sump must be 500 mm with respect to the bottom of the manhole.
- The installation room must be protected against frost.
- The installation room is adequately lit.
- The plant room where the SANIPUMP® pumping station will be installed must be large enough to allow a 600 mm clearance around and above the device to facilitate any maintenance operations.
- Stop valves must be fitted on the effluent inlet as well as on the discharge line, as close as possible to the pumping station.
- Install a non-return valve on the pumping station outlet to prevent unintended start-up.
- The discharge line must be designed to prevent any back-flow of sewage.
- By fitting a non-return loop, located above the back-flow level, back-flow is avoided.

3.7 Electrical connection

PLEASE NOTE: Unless otherwise specified locally, the back-flow level is the level of the highway (roads, pavement, etc.). Extend this line after the non-return loop through a larger diameter pipe.

- The pumped fluid is appropriate and authorised by this documentation (paragraph 3.5).
- In case of discharge of greasy effluents, the use of a degreasing tank is essential.

Wastewater other than those mentioned above, for example, of artisanal or industrial origin, must not be discharged into the pipes without prior treatment.



DANGER



Electrical connection work performed by an unqualified individual. Risk of death by electric shock!

→ The electrical connection must be carried out by a qualified and licensed electrician.

→ The electrical installation must meet the current standards in the country.

ATTENTION



Wrong supply voltage. Damage to the pumping station!

→ The supply voltage must not differ by more than 6% of the rated voltage specified on the rating plate.

Only carry out the electrical connections after the final connections have been completed.

The device must be connected to an earthed junction box. The power supply circuit must be protected by a 30 mA differential circuit breaker rated at 16 A.

The connection must be used exclusively to provide the power to the product.

If the power cord is damaged, to prevent possible danger, it must be replaced by the manufacturer, customer service team or a similarly qualified individual.

4. ACTIVATION

4.1 Prerequisites for commissioning

Before commissioning the pumping station, make sure that the electrical connection of the pumping station has been carried out correctly.

- The safety instructions have been followed.
- The operating characteristics have been checked.
- The regulations in force at the place of installation are complied with.
- The operating instructions for the submersible pump are complied with.

4.2 Application limit

- Observe the operating specifications in the documentation.
- Avoid running the pump with the valve closed.
- Dry running, without pumped fluid, must be avoided.

When in use, observe the following parameters and values:

Parameter	Value
Max. authorised temperature of the fluid	40°C up to 70°C for 5 minutes max. Max. room temperature. 50°C
Operating mode	S3 30%

4.3 Starting and stopping

The automatic control starts and stops the pump when a defined level is reached.

The length of the float is set at the factory.

Never change this setting.

When changing the float, please observe this setting.

4.4 Starting frequency

To prevent engine overheating and excessive stress on the engine, seals and bearings, limit the number of starts to 10 per hour.

4.5 Operations required for commissioning

Check the various points on the check-list (described in paragraph 3.6).

- Check the sump for cleanliness (no debris and foreign matter).
- Check that the discharge diameter is appropriate for the installation.
- Check that the power supply circuit is earthed and protected by a 30 mA differential circuit breaker.
- Check that the power cable is not cut or damaged.
- Check that the connection is only used to supply the pump.
- Carry out a functional test (switching on/off).
- Check the freedom of movement of the float.
- Check the correct functioning of the non-return valve.
- Check that the gravity flow of wastewater into the sump is correct.
- Check the correct functioning and ease of operation of the shut-off valves.
- Check the flow at the discharge outlet.
- If the sump is sealed, ventilation must be installed so that it is always at atmospheric pressure. Air must flow in both directions.

4.6 Decommissioning

1. Close the valves on the supply pipes.
2. Drain the tank.
3. Close the discharge valve.
4. Switch off the electrical power supply and record the installation.



- The power supply is not cut. Risk of electric shock.
- Unplug the plug or disconnect the electrical conductors and take the steps required to avoid inadvertent operation.

5. Inspect the hydraulic parts and shredding blades. Clean them if necessary.
6. Clean the tank.



WARNING



- Pumped fluids harmful to health. Dangerous for people and the environment!
 - The pumping station used to discharge fluids harmful to health must be decontaminated.
- If necessary, wear a mask and protective clothing.

5. MAINTENANCE



WARNING



- Work carried out on the pumping station by unqualified staff. Risk of injury!
- Repairs and maintenance must be performed by specially trained staff
 - Observe the safety and basic instructions.



WARNING



- Pumped fluids harmful to health. Dangerous for people and the environment!
- Pumping stations used to discharge fluids that may be harmful to health must be decontaminated.
- If necessary, wear a mask and protective clothing.



WARNING



- Work on the pumping station without adequate preparation. Risk of injury!
- Properly stop the pumping station and secure it against inadvertent operation.
 - Close the inlet and discharge valves.
 - Drain the sump in which the pumping station is installed.
 - Allow the pumping station to cool to room temperature.

The pumping station must be maintained in such a way as to ensure proper discharge of wastewater and to detect and eliminate malfunctions at an early stage. The proper functioning of the pumping station must be checked by the user once a month by observing at least two operating cycles.

The interior of the sump should be checked from time to time and deposits should be disposed of as necessary.

Maintenance of the pumping station must be carried out by qualified personnel. The following intervals should not be exceeded:

- 6 months for pumping stations for commercial use.
- 1 year for pumping stations for domesticated use.



NOTE:

Setting up a maintenance plan avoids costly repairs, minimizes maintenance work and achieves correct and reliable operation.

6. INSPECTION AND MAINTENANCE CHECKLIST

Inspection and maintenance:

- Turn off the power supply.
- Close the supply and discharge shut-off valves.
- Drain the sump.
- Unscrew the connection connecting the drain to the bottom of the pump.
- Remove the pumping station from the tank.
- Check the general condition of the pump, electrical cables, float (switching on, tripping) and the shredding blade. (Contact SFA Technical Service if a replacement element is faulty).
- Clean the pump and float switch.
- Replace the pump and reconnect the discharge pipe to the pump base.
- Switch back on and open the shut-off valves.
- Perform several operating tests (switching on/off).

List of possible incidents with causes and remedies

Abnormalities observed	Possible causes	ACTION TO BE TAKEN
Does not start up	The pump is not connected to a power supply	Switch on the pump
	Float blocked in low position	Unblock the float
	Float out of service	Consult SFA after-sales service
	Motor out of service	Consult SFA after-sales service
Does not turn - buzzing	Defective capacitor	Consult SFA after-sales service
	Blocked blade	Clean the blade
Turns but does not discharge	Closed discharge valve	Check that the valve is open
	Non-return valve defective	Consult SFA after-sales service
	Hydraulic problem	Consult SFA after-sales service

FRANCE**SOCIÉTÉ FRANÇAISE
D'ASSAINISSEMENT**

41 Bis Avenue Bosquet - 75007 Paris
Tel. + 33 1 44 82 39 00

UNITED KINGDOM**SANIFLO LTD.,**

Howard House, The Runway
South Ruislip Middx.,
HA4 6SE
Tel. +44 208 842 0033
Fax +44 208 842 1671

IRELAND**SANIRISH LTD**

IDA Industrial Estate
Edenderry - County Offaly
Tel. + 353 46 9733 102
Fax +353 46 97 33 093

AUSTRALIA**Saniflo (Australasia) Pty Ltd**

Unit 9-10, 25 Gibbes Street
Chatswood
NSW 2067
Tel. +61,298,826,200
Fax +61 298 826 950

DEUTSCHLAND**SFA SANIBROY GmbH**

Waldstr. 23 Geb. B5
63128 Dietzenbach
Tel. (060 74) 30928-0
Fax +060 74 30928 90

ITALIA**SFA ITALIA spa**

Via del Benessere, 9
27010 Siziano (PV)
Tel. 03 82 61 81
Fax +03 82 61 8200

KOREA

www.sfa.biz
sales@saniflo-korea.kr

ESPAÑA**SFA SI**

C/ Vinyalets, 1 - P.I. Can Vinyalets
08130 Santa Perpètua de Mogoda
Barcelona
Tel. +34 93 544 60 76
Fax +34 93 462 18 96

PORTUGAL**SFA, Lda.**

Sintra Business Park, ed. 01-1°P2710-089
SINTRA
Tel. +35 21 911 27 85
Fax. +35 21 957 70 00

SUISSE SCHWEIZ SVIZZERA**SFA SANIBROY AG**

Vorstadt 4
3380 Wangen a.A
Tel: +41 (0)32 631 04 74
Fax: +41 (0)32 631 04 75

BENELUX**SFA BENELUX B.V.**

Voltaweg 4
6101 XK Echt (NL)
Tel. +31 475 487100
Fax +31 475 486515

SVERIGE**SANIFLO AB**

BOX 797
S-191 27 Sollentuna
Tel. +08-404 15 30
info@saniflo.se

POLSKA**SFA POLAND Sp. z O.O.**

ul. Białołęcka 168
03-253 Warszawa
Tel. (+4822) 732 00 32
Fax (+4822) 751 35 16

РОССИЯ**SFA РОССИЯ**

101000 Москва - Колпачный переулок 9а
Тел. (495) 258 29 51
факс (495) 258 29 51

ČESKÁ REPUBLIKA**SFA-SANIBROY, spol. s r.o**

Sokolovská 445/212, 180 00 Praha 8
Tel: +420 266 712 855
Fax: +420 266 712 856

ROMANIA**SFA SANIFLO S.R.L.**

145B Foisorului Street District 3
31177 BUCURESTI
Tel. +40 256 245 092
Fax +40 256 245 029

TÜRKİYE**SFA SANIHYDRO LTD ŞTİ**

Mecidiye Cad No:36-B Sevanca Apt.
34394 MECIDIYEKOY - ISTANBUL
Tel: +90 212 275 30 88
Fax: +90 212 275 90 58

CHINA**SFA 中国**

上海市静安区石门二路333弄3号振安广
场恒安大厦27C室 (200041)
Tel. +86(0)21 6218 8969
Fax +86(0)21 6218 8970

BRAZIL**SFA Brasil Equipamentos Sanitários**

Rua Maria Figueiredo 595,
CEP: 04002-003 São Paulo, SP
Tel: (11) 3052-2292
sanitrit@sanitrit.com.br
www.sanitrit.com.br

SOUTH AFRICA**Saniflo Africa (PTY) Ltd**

Unit A6 , Spearhead Business Park
Cnr. Freedom Way & Montague Drive
Montague Gardens, 7441
Tel: +27 (0) 21 286 00 28
info@saniflo.co.za
www.saniflo.co.za

NEW ZEALAND**Saniflo New Zealand Ltd**

PO Box 383 Royal Oak,
Auckland 1345
Tel: 09 390 4615
Fax: +61 2 9882 6950

SERVICE HELPLINES**France**

Tel. 01 44 82 25 55
Fax. 03 44 94 46 19

United Kingdom

Tel. 08457 650011
(Call from a land line)
Fax. 020 8842 1671

Ireland

Tel. 1850 23 24 25
(LOW CALL)
Fax. + 353 46 97 33 093

Australia

Tel. +1300 554 779
Fax. +61.2.9882.6950

Deutschland

Tel. 0800 82 27 82 0
Fax. (060 74) 30928-90

Italia

Tel. 0382 6181
Fax. +39 0382 618200

España

Tel. +34 93 544 60 76
Fax. +34 93 462 18 96

Portugal

Tel. +35 21 911 27 85
Fax. +35 21 957 70 00

Suisse Schweiz Svizzera

Tel. +41 (0)32 631 04 74
Fax. +41 (0)32 631 04 75

Benelux

Tel. +31 475 487100
Fax. +31 475 486515

Sverige

Tel. +08-404 15 30

Norge

Tel. +08-404 15 30

Polska

Tel. (+4822) 732 00 33
Fax. (+4822) 751 35 16

Россия

Tel. (495) 258 29 51
Fax. (495) 258 29 51

Česká Republika

Tel. +420 266 712 855
Fax. +420 266 712 856

România

Tel. +40 256 245 092
Fax. +40 256 245 029

Türkiye

Tel. +90 212 275 30 88
Fax. +90 212 275 90 58

Brazil

Tel. (11) 3052-2292

中国

Tel. +86(0)21 6218 8969
Fax. +86(0)21 6218 8970

South Africa

Tel. +27 (0) 21 286 00 28