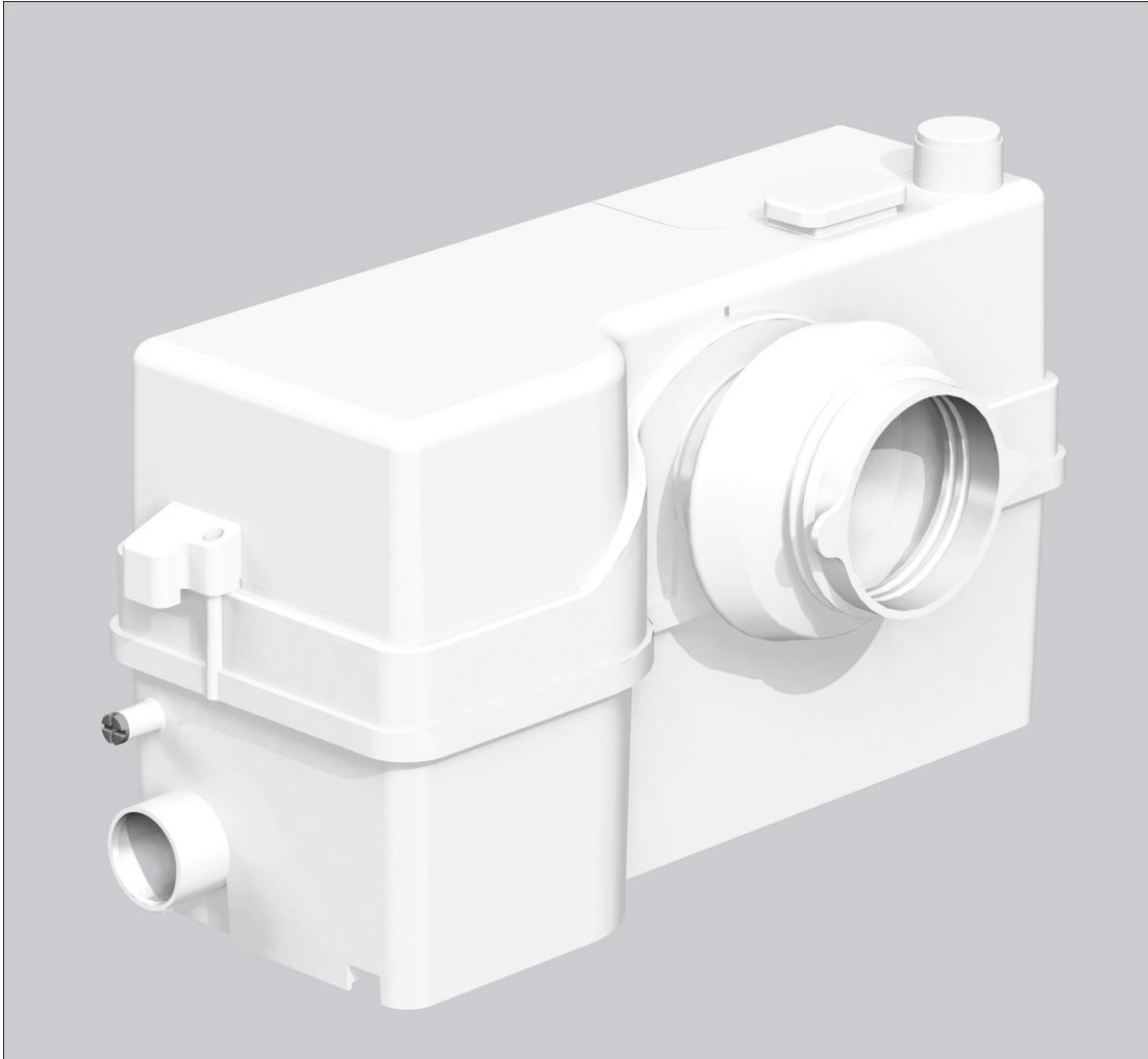


FLOWPRO

FP800 *Easy Service Access* Macerator

Installation Instructions



Warning

Prior to installation, read these installation and operating instructions. Installation and operation must comply with local regulations.



Original installation and operating instructions.

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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. General description

The FP800 are small, compact automatic lifting stations suitable for pumping domestic wastewater and sewage off places in private dwellings where wastewater cannot be led directly to the sewer by means of a natural downward slope.

Caution

If away for a long period (e.g. holidays) we recommend that you turn off the water supply to the toilet served by the unit. This is a domestic unit.

Note

Toilets connected to this unit can be used like any normal toilet, and require minimum maintenance. The unit will operate automatically as soon as the required level of water enters the tank.

Caution

Only the disposal of toilet paper, faecal matter and waste water will be covered by warranty. Any damage due to foreign bodies such as cotton, condoms, sanitary towels, wet wipes, food, hair, metal, wood or plastic objects, will not be covered by warranty. Solvents, acids and other chemicals can also cause damage to the unit, and will invalidate the warranty.

2. Applications

The product is only suitable for pumping wastewater from a cabinet shower, bidet and/or washbasin as well as sewage from a toilet.

Note

Not for public and heavy commercial or industrial use, only limited number of users. Installation with direct connection to toilet and in the same room as sanitary appliances.

A second toilet must be available above the backflow level.

The product must be fastened to the floor to prevent uplift and turning.

3. Pumped liquids

Domestic wastewater and sewage containing toilet paper and faeces. Ordinary liquids for cleaning of the appliances connected. pH value: 4-10.

Caution

The product must not pump harsh chemicals or solvents. See the quick guide. The product is designed for flush volumes of 4, 6 and 9 litres. A 4-litre flush is permissible only if the amount of solids in the pumped liquid is small.

4. Installation

Caution

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

The product must be accessible for maintenance and repair.

The product must be placed in a frost-free room to prevent the pumped liquid from freezing. Make sure that all external pipework is adequately insulated.

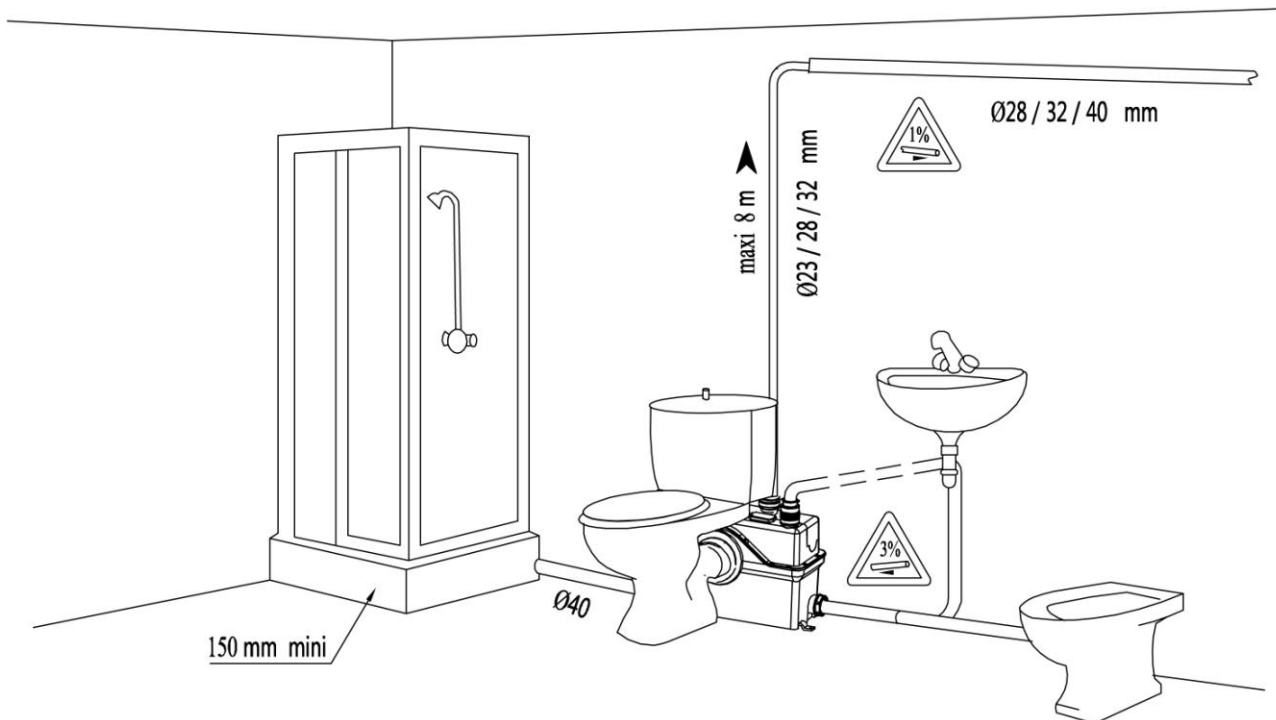
Note

The discharge pipe must be made of rigid material, such as copper, or of rigid PVC with solvent-welded joints. To prevent the transmission of vibrations to buildings, make sure that the pipework is thoroughly fixed and that fittings cannot move and are not in contact with building parts.

An alarm device for acoustic alarm in case of malfunction or high level in the tank is available as an accessory (noise level 75 dB(A)).

Extension pipes between the toilet and lifting station must not be longer than 150 mm due to the increased risk of clogging.

Please check the following drawing to learn how to install:



5. Electrical connection

Make sure that the product is suitable for the supply voltage and frequency available at the installation site. The electrical connection must be carried out in accordance with local regulations.

Warning

The product must be earthed.

The installation must include an earth leakage circuit breaker for protection against earth fault currents. This ensures protection when using a Schuko plug or another plug with earth pin.

The product must be connected to a mains switch with a minimum contact gap of 3 mm in all poles. In case of overtemperature, a thermal switch cuts out the motor and cuts it in automatically when it has cooled sufficiently.

6. Service

Warning

The product must only be serviced by trained service personnel.

If the supply cable is damaged, it must be replaced by the manufacturer, the manufacturer's service partner or a similarly qualified person.

To ensure safe and reliable operation, always use original spare parts from the manufacturer.

Note

The product must be thoroughly cleaned before it is returned for service. Otherwise the warranty will be void.

6.1 Maintenance

The lifting station does not require any special maintenance, but we recommend that you check operation and pipe connections at least once a year.

Change the carbon filter once a year. See section 6.2 Service instructions.

6.2 Service instructions

Thanks to the product design, service is easy in case of malfunction or blocked pump.

Digits in the following sections refer to the pictures in the appendix at the end of this booklet.

Warning

Before carrying out any service work, remove the fuse, pull out the plug, or switch off the power supply. Make sure that the power supply cannot be accidentally switched on.

All rotating parts must have stopped moving.

The product must only be serviced by trained service personnel.

Pressure switch pipe blocked

NOTE

The pressure switch unit can be removed separately.

1.1 If the water level in the tank is above the motor flange, drain the tank by means of the drain hose (accessory). First disconnect the power supply.

1.2 Unscrew the cover.

1.3 Pull out the complete pressure switch.

1.4 Check and clean the pressure switch pipe.

NOTE

Make sure that the little tube in the top of the pipe did not become blocked when you cleaned the pipe!

Caution

Lubricate the sealing area of the pressure switch for easier fitting.

Foreign body in tank

If the water level in the tank is above the motor flange, drain the tank by means of the drain hose (accessory).

See 1.1. First disconnect the power supply.

Unscrew the cover. See 1.2.

2.1 Remove the four screws of the motor flange.

2.2 Lift the motor flange to reduce the compression of the O-ring. Insert a screwdriver into the notch underneath the supply cable and press it down.

2.3 Lift out the complete motor-pump unit by the handles.

Note

Lift the unit vertically before tilting it!

2.4 Check and clean the tank and impeller/grinder.

Warning

Beware of the sharp edges on the grinder. Wear protective gloves.

Carbon filter

3. The carbon filter should be replaced once a year to ensure sufficient filter function.

7. Technical data

Supply voltage: 220-240 V Power consumption: Max. 800 W.

Speed: 2800 min⁻¹. Rated current: 3.0 A.

Insulation class: F. Noise level: < 70 dB(A)

Flow rate: Max. 150 l/min.

System pressure:

Max. pump head: 9.0 m. Max. system head: 6.0 m.

Note

The system pressure should not exceed 6 m head to guarantee a sufficient drain of the connected sanitary appliances.

Net weight: 8.5 kg.

Start and stop levels

Start: 95 mm above bottom. Stop: 55 mm above bottom. Liquid temperature Max. 50 °C.

Ambient temperature: +5 °C to +35 °C.

Marking



8. Fault finding

Warning

Remove the fuse, pull out the plug, or switch off the power supply. Make sure that the power supply cannot be accidentally switched on. All rotating parts must have stopped moving. The product must only be serviced by trained service personnel.

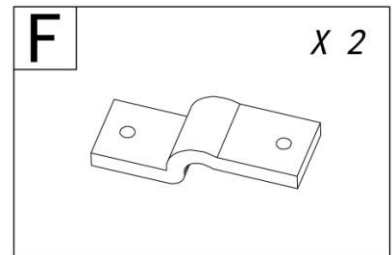
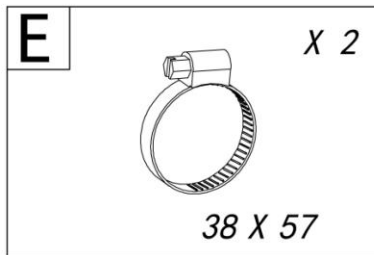
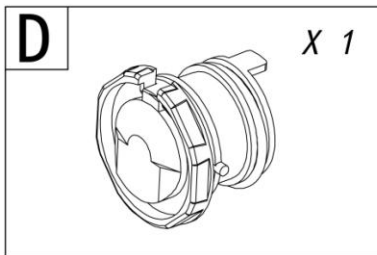
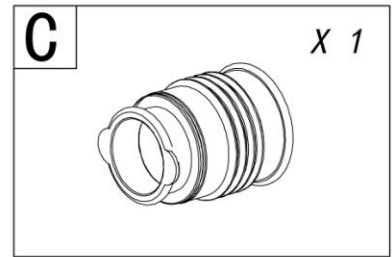
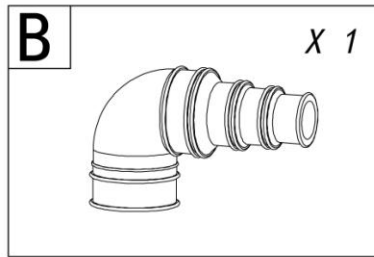
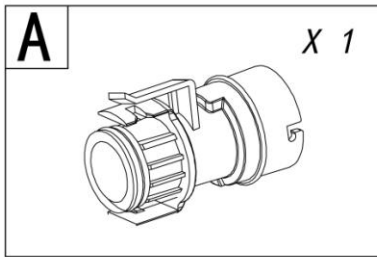
See also section 6.2 Service instructions.

Fault	Cause	Remedy
1. Motor does not start when the level in the tank reaches the start level.	a) Supply failure.	Reestablish the power supply.
	b) Fuse blown. If new fuse blows at once, either cable or motor is faulty.	Replace the fuse. Measure cable and motor. If cable or motor is defective, replace the defective parts.
	c) Impeller/grinder stuck. Thermal switch tripped.	Free the impeller/grinder, and wait until the motor is cooled down and the thermal switch has reset.
	d) Pressure switch pipe blocked.	Remove the pressure switch and clean the pipe.
2. Motor hums but does not operate.	a) Impeller/grinder stuck.	Free the impeller/grinder and check that it can rotate freely.
	b) Motor or capacitor defective.	Replace the motor or capacitor.
	c) Controlboard defective.	Replace the control board.
3. Motor runs continuously or at irregular intervals.	a) Water leaking from inlet into tank.	Check for leaking appliances.
	b) Water leaking back into tank from discharge pipe.	Check the non-return flap.
	c) Pressure switch defective.	Replace the pressure switch unit.
4. Motor runs but does not evacuate water.	a) Pump or tank blocked.	Remove blockage.
	b) Air lock in pump or vent hole in pump housing blocked.	Check operation of vent valve in the tank. Check that the carbon filter is not wet. Check that the vent hole in the pump housing is not blocked.
	c) Discharge port or pipe blocked.	Remove blockage. Check the non-return flap.
5. The lifting station evacuates slowly.	a) Discharge pipe is too long or has an excessive number of bends.	Increase discharge pipe size. Change pipework to reduce number of bends. Change bends to soft bends.
	b) The pump housing is leaky.	Replace the pump housing (service part).
	c) Hydraulics or grinder blocked.	Check and clean the hydraulics and grinder.
6. Rattling noise from the lifting station, but water is evacuated.	a) Foreign body hitting the impeller/grinder.	Remove the foreign body.
7. Odour from the tank.	a) Carbon filter contaminated.	Replace the carbon filter.
8. Water from shower or another appliance connected to the lower inlets drains off slowly. Backflow from the lifting station.	a) Non-return flap in inlet stuck, does not open or does not close sufficiently.	Check the non-return flap.
	b) Hydraulics or grinder blocked.	Check and clean the hydraulics and grinder.
	c) The start level has changed.	Check and clean the pressure switch pipe.
	d) Inlet pipe diameter is too small.	Use a pipe with a larger diameter.

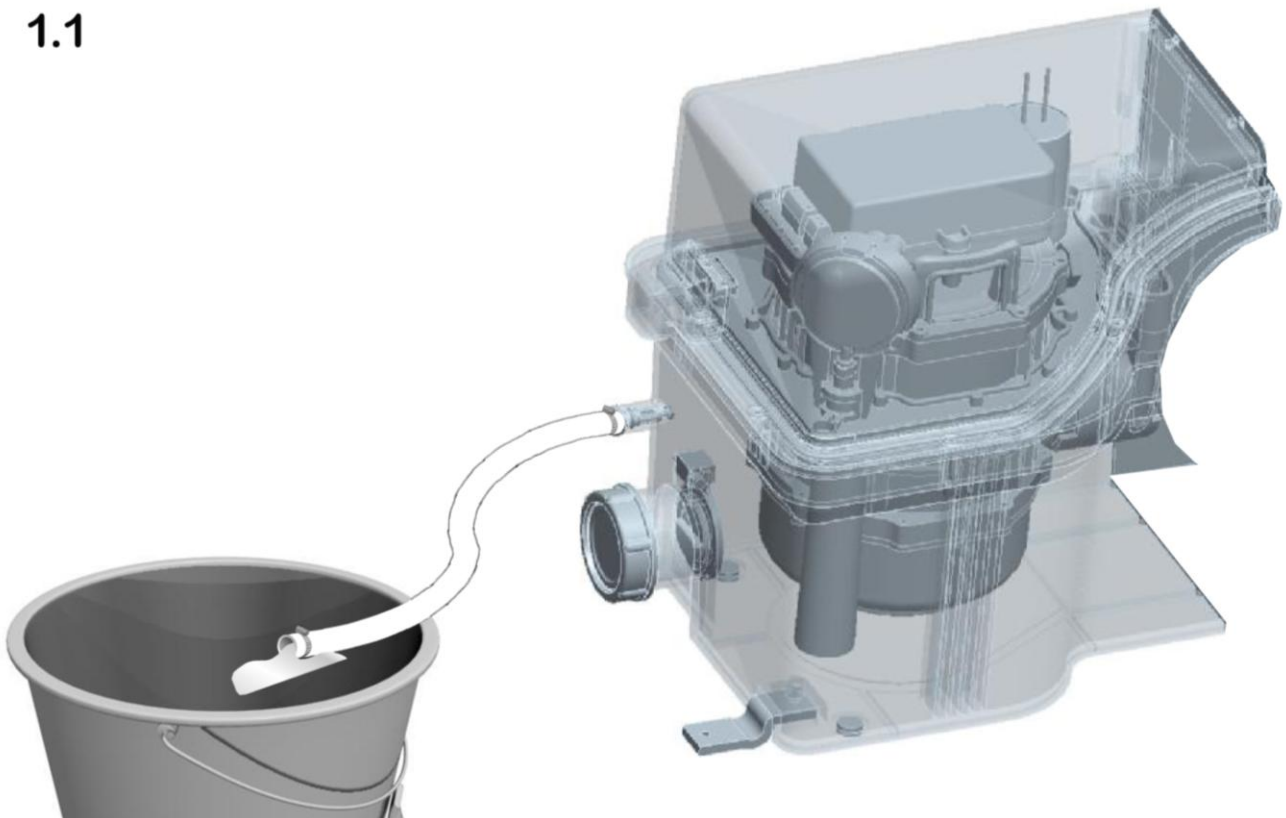
9. Disposal

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

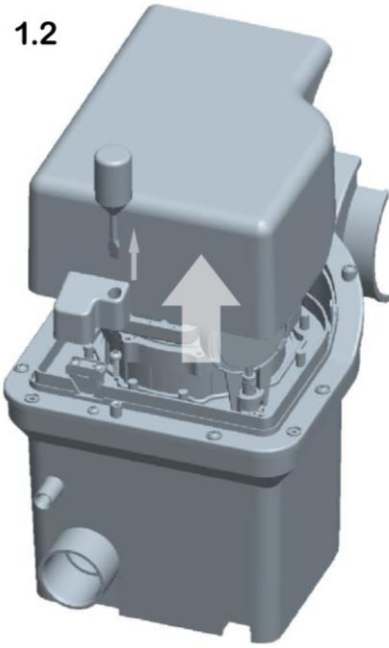
1. Use the public or private waste collection service.
2. If this is not possible, contact the nearest service workshop.



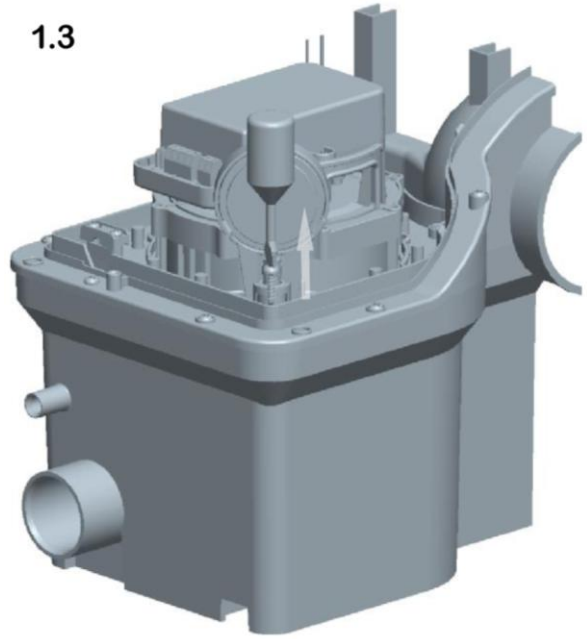
1.1



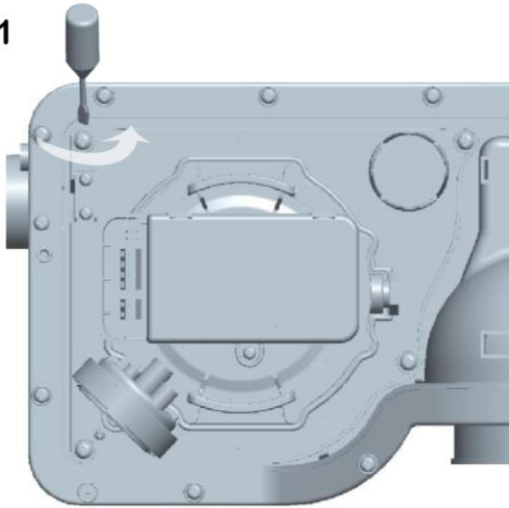
1.2



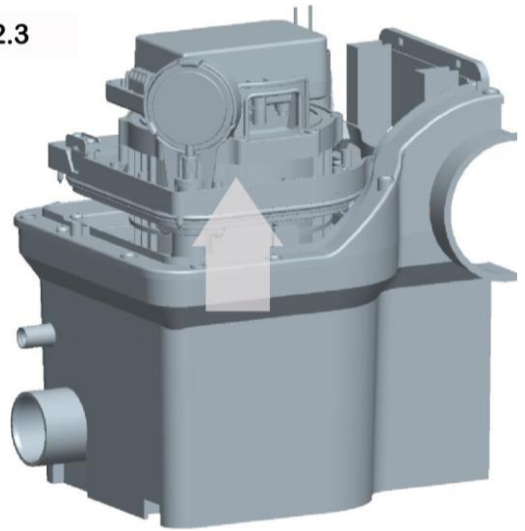
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2.1



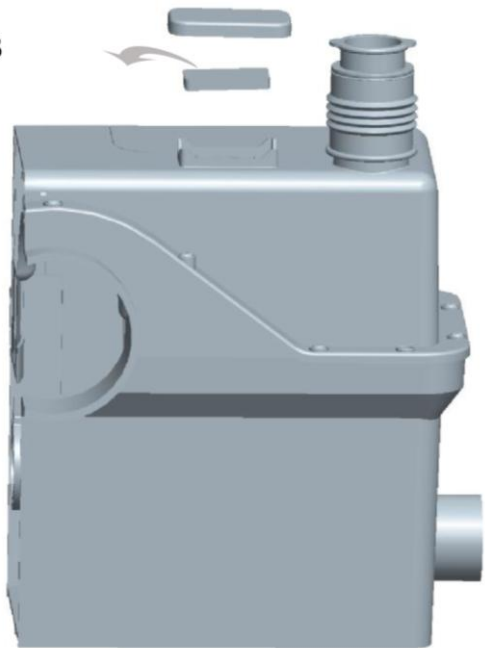
2.3

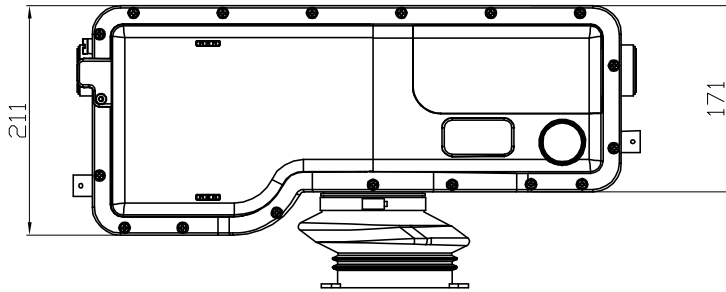
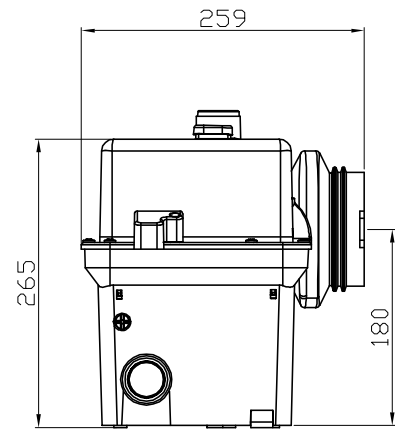
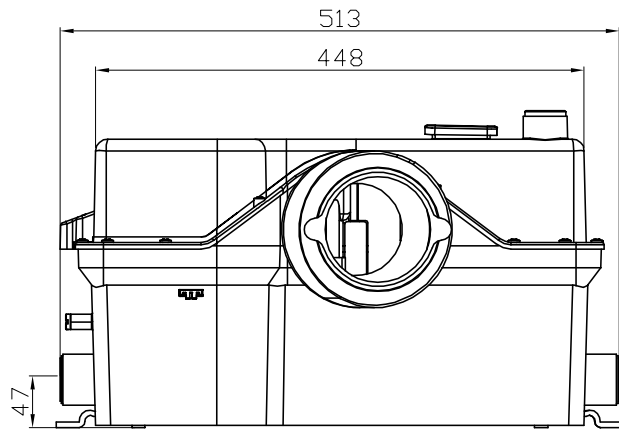


2.4



3





800W

