



## FP800 Easy Service Access Macerator

### Installation Instructions

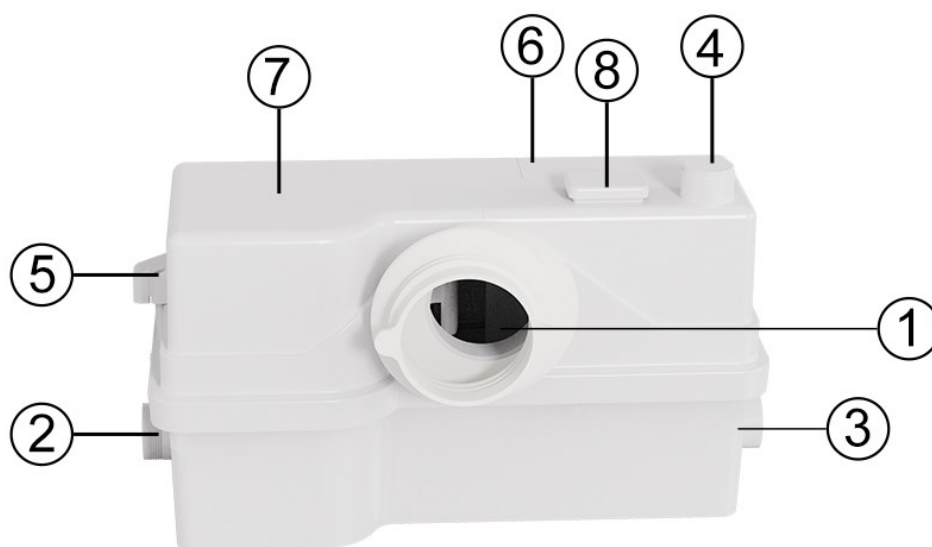


## **WARNING!!!**

1. Please read the manual carefully before installation
2. Avoid chemical solvents, strong acids and alkali entering the machine
3. Only toilet paper, fecal matter and waste water can be disposed Do not throw any other kinds of waste into the toilet
4. Shower waste can be disposed without a cutter
5. Avoid too much hair into the machine
6. When installing the device, placing a check valve is necessary
7. Make sure that waste water flowing from equipment automatically enters the pump
8. Keep the device dry and away from humid environments
9. Do not let children play with the machine
10. Maintenance should only be performed by qualified professionals
11. Disable electrical power and remove the plug from the socket before performing repairs on the device
12. Install a leakage protector socket & earthing conductor

## Technical

Power:	800W	Voltage:	220~240V /50Hz
Horizontal discharge:	90M	Vertical discharge:	9M
Max. Water temperature:	50°C	Thermal protection:	125°C
Max. flow rate:	170L/Min	IP rate:	IPX4



① Inlet for Toilet $\phi$ 100mm	② Inlet $\phi$ 40mm
③ Inlet $\phi$ 40mm	④ Inlet $\phi$ 40mm(Optional)
⑤ Emergency Outlet $\phi$ 10mm	⑥ Outlet $\phi$ 23/28/32/44mm(2pcs)
⑦ Repair Panel	⑧ Air-Vent

Fig 1: Size

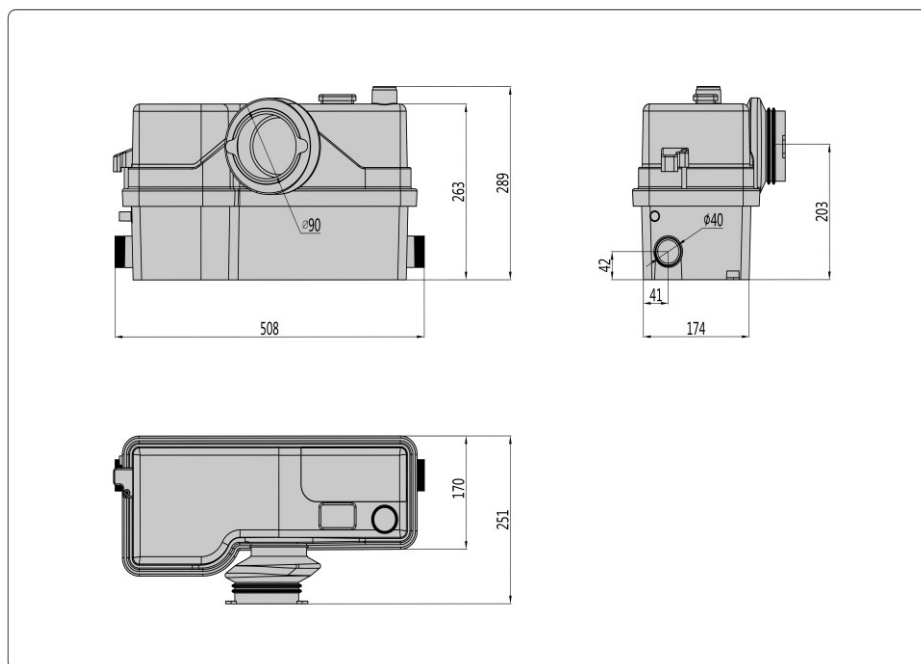


Fig 2: Spare parts



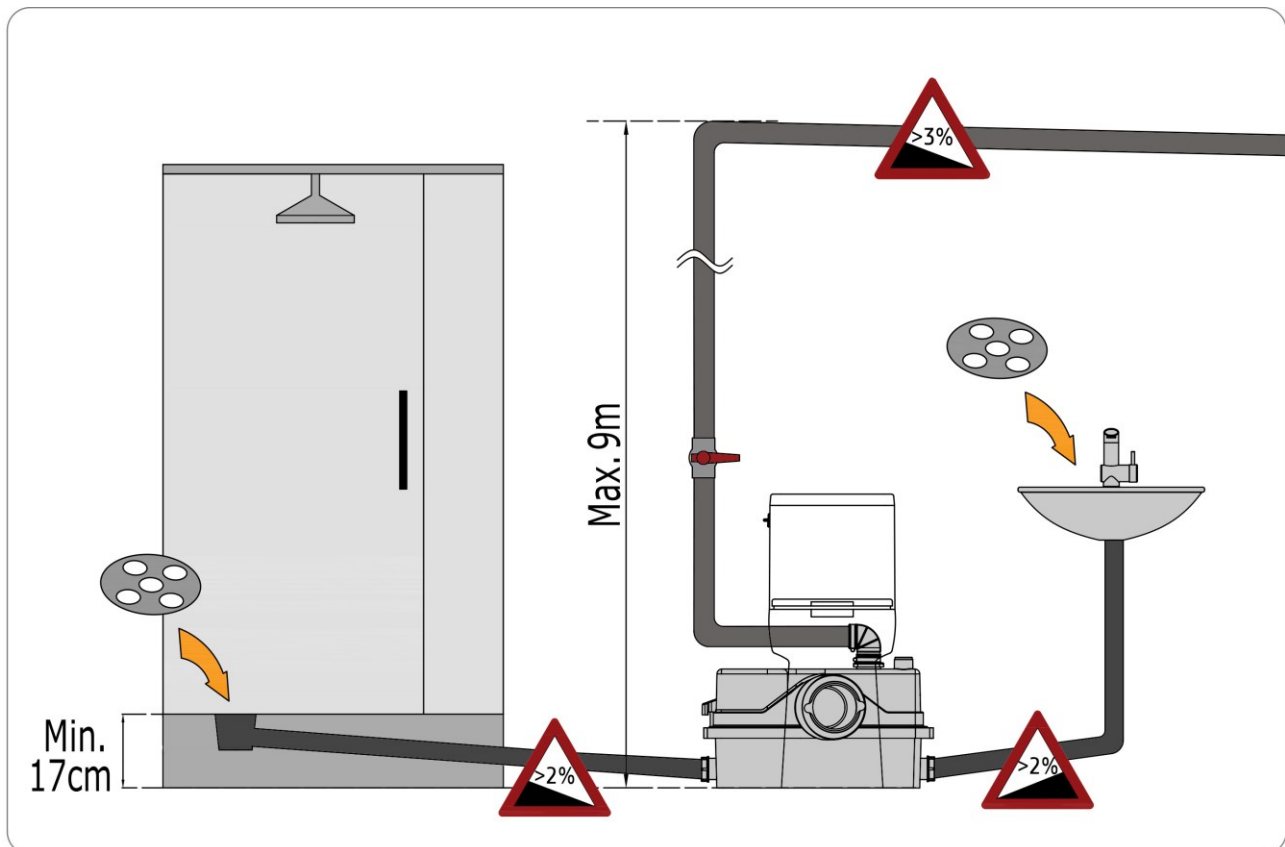
**Fig 3: Equipment**

1, Outlet check valve is necessary

2, Install an extra manual check valve for repair (Suggestion)

3, Lift the shower 17cm high, when you connect the side inlet

4, Using filter in shower & lavatory to reduce hair come into machine



**Fig 4: Connection**

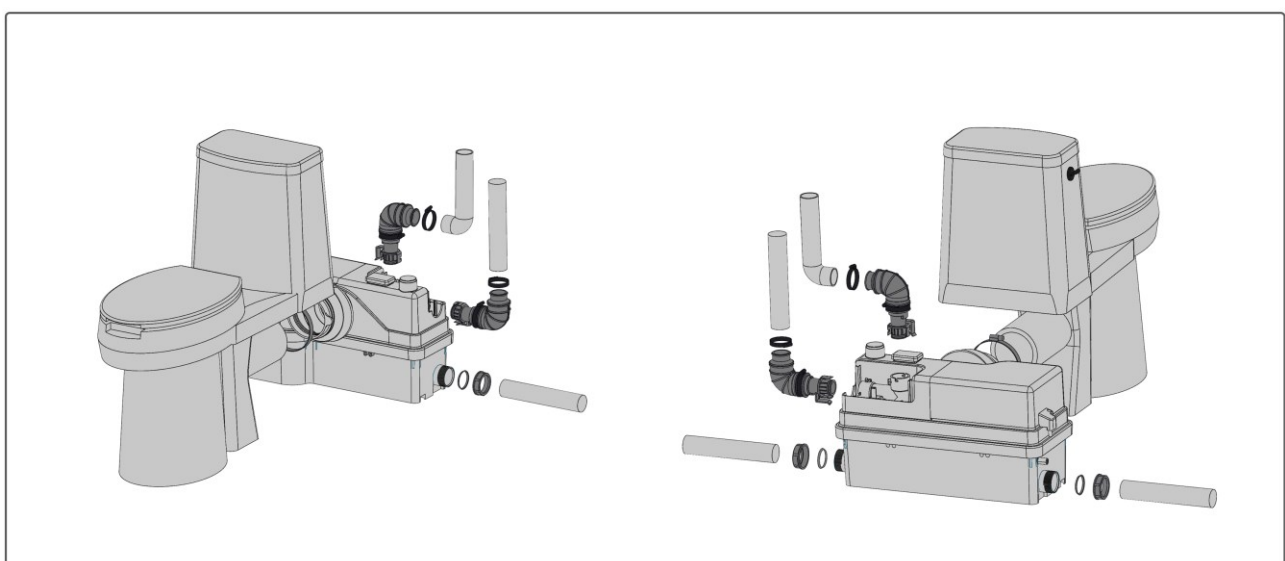


Fig 5: Inlet cover (Cover the inlets for unused)

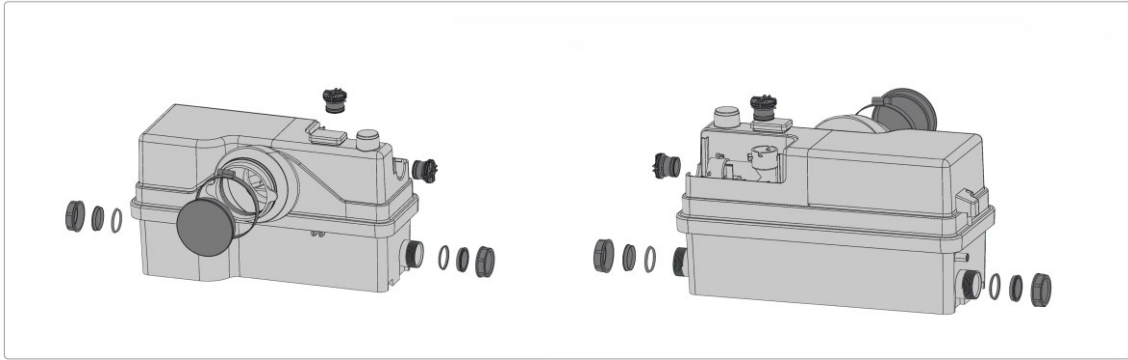


Fig 6: Optional inlet

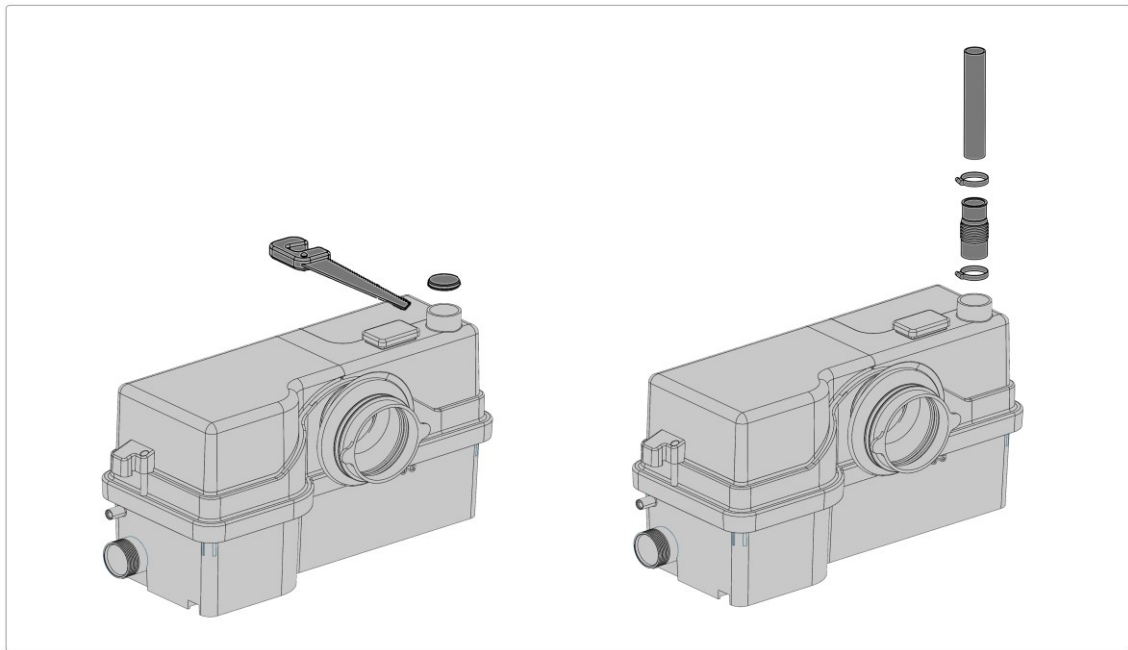
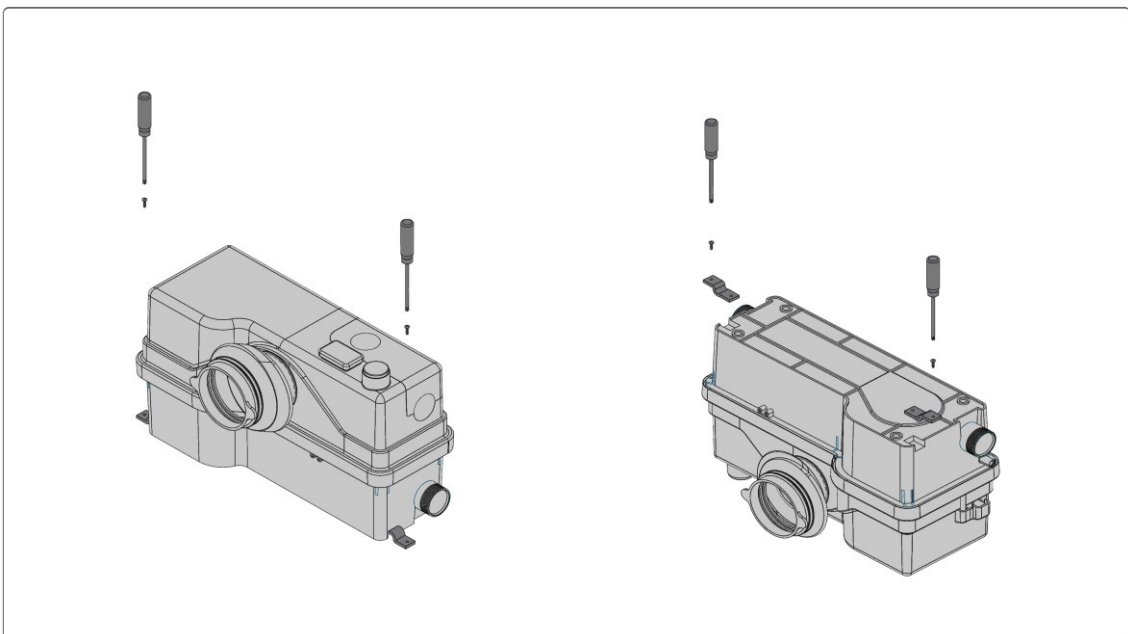
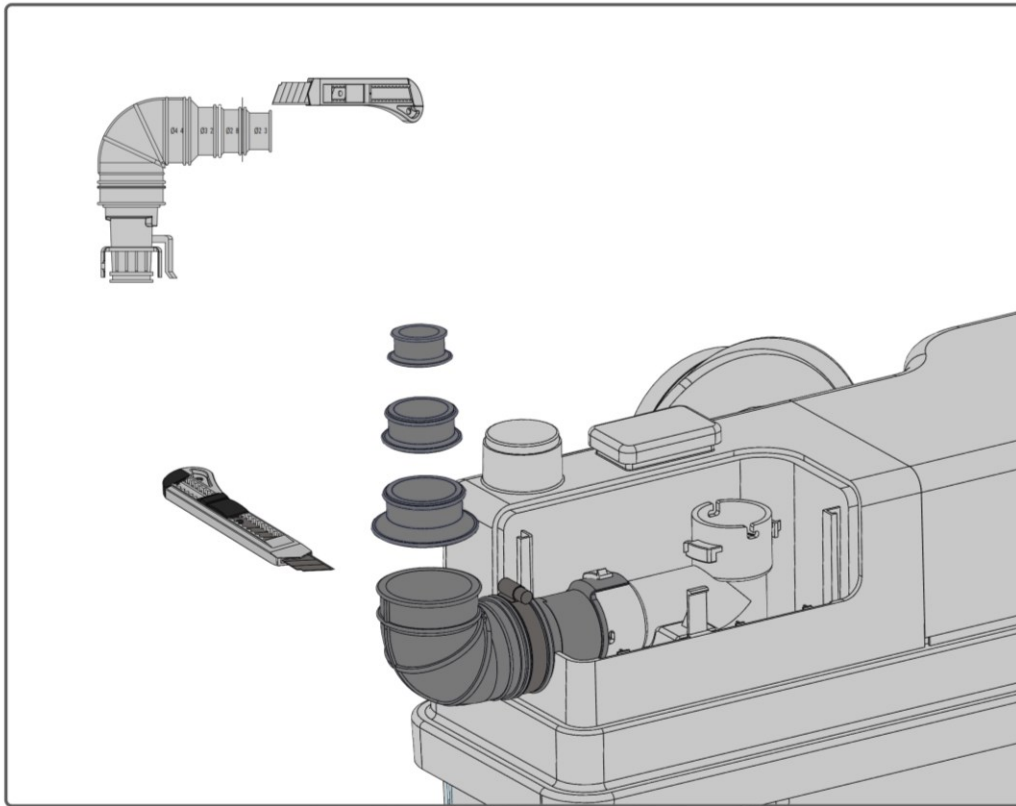


Fig 7: Fixation



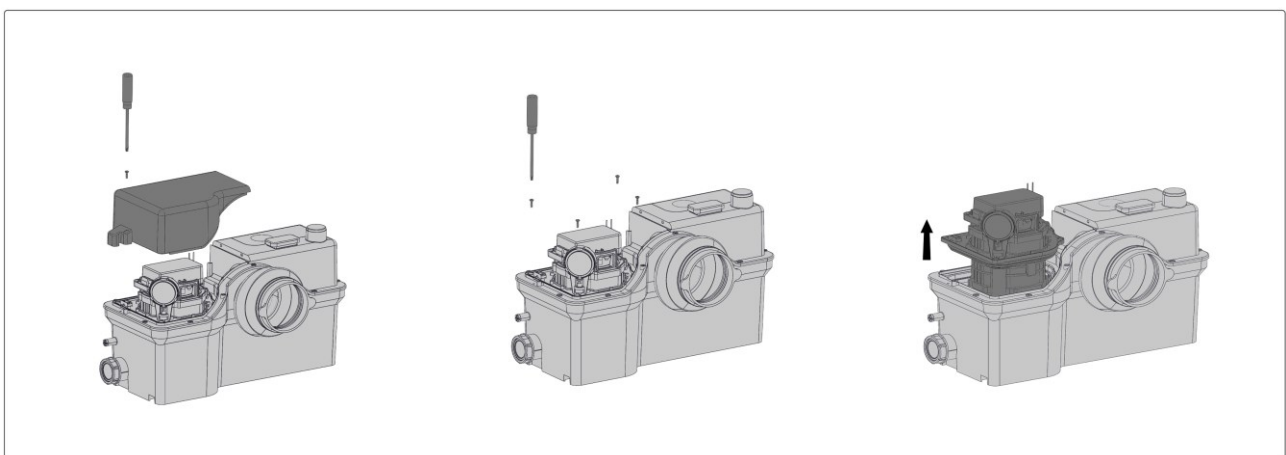
**Fig8: Outlet (Check Valve)**

Discharge pipe insert the check valve is only 1~2CM, avoid too much insert

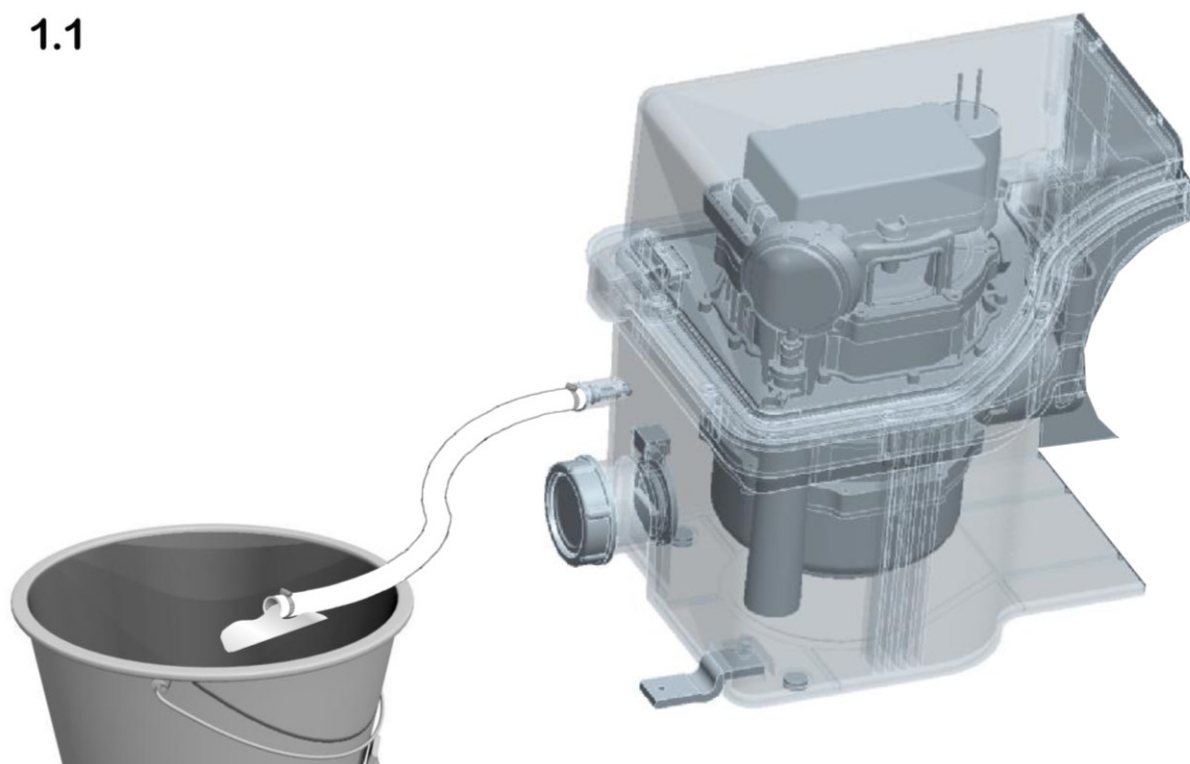


**Fig 9: Repair**

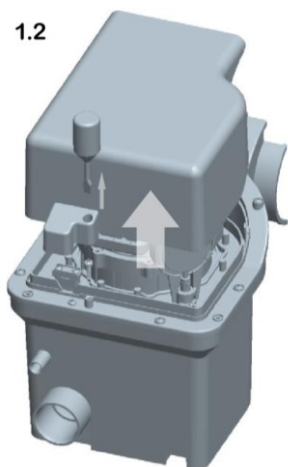
Open the top repair lid can easy to repair the air-switch & take out the block, even can easy to change the whole motor & control system



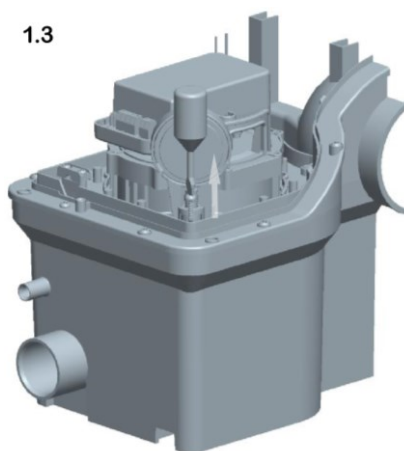
1.1



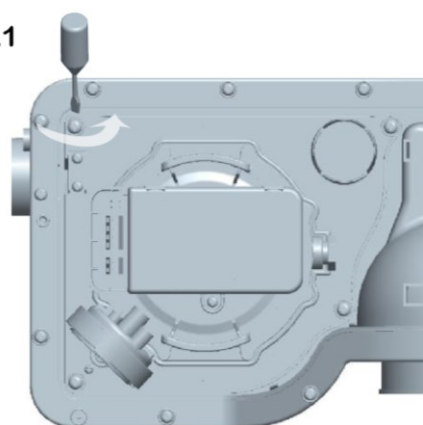
1.2



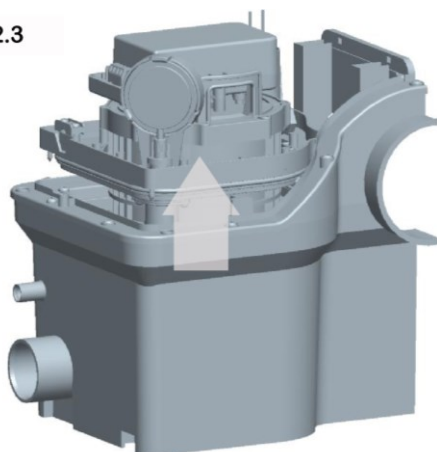
1.3



2.1



2.3



2.4



3

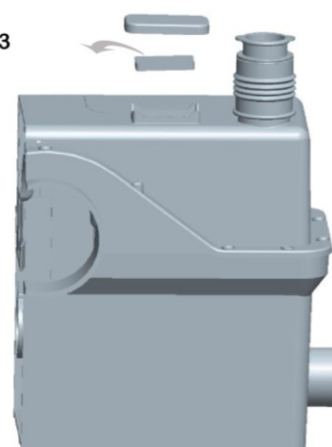




Fig 10: Pumping head

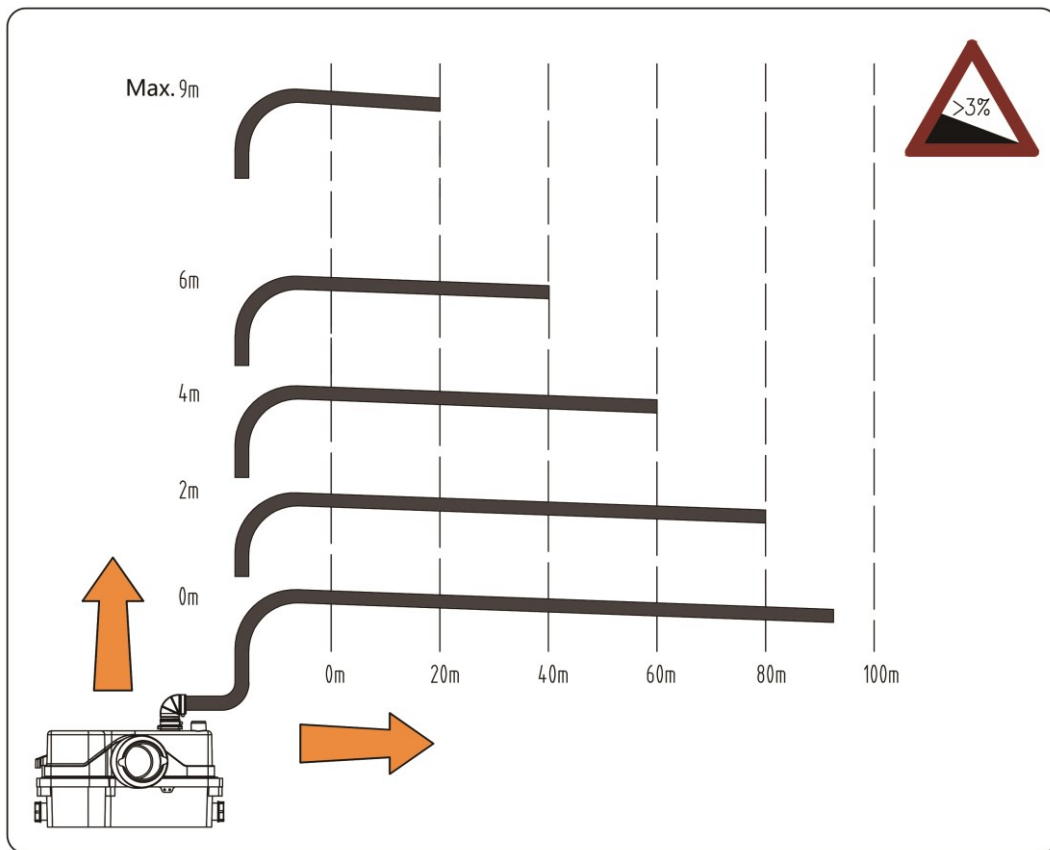


Fig 11: Flow Rate

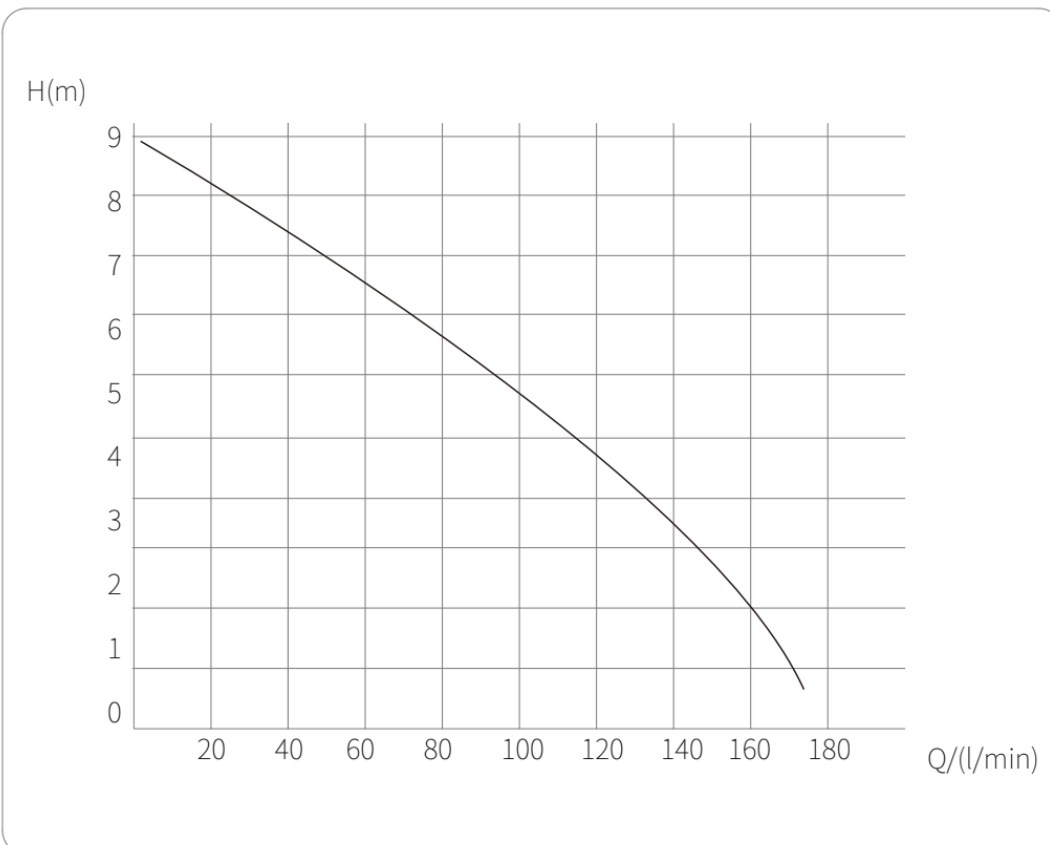


Fig 12: Min Size from toilet outlet to rear wall is 253mm

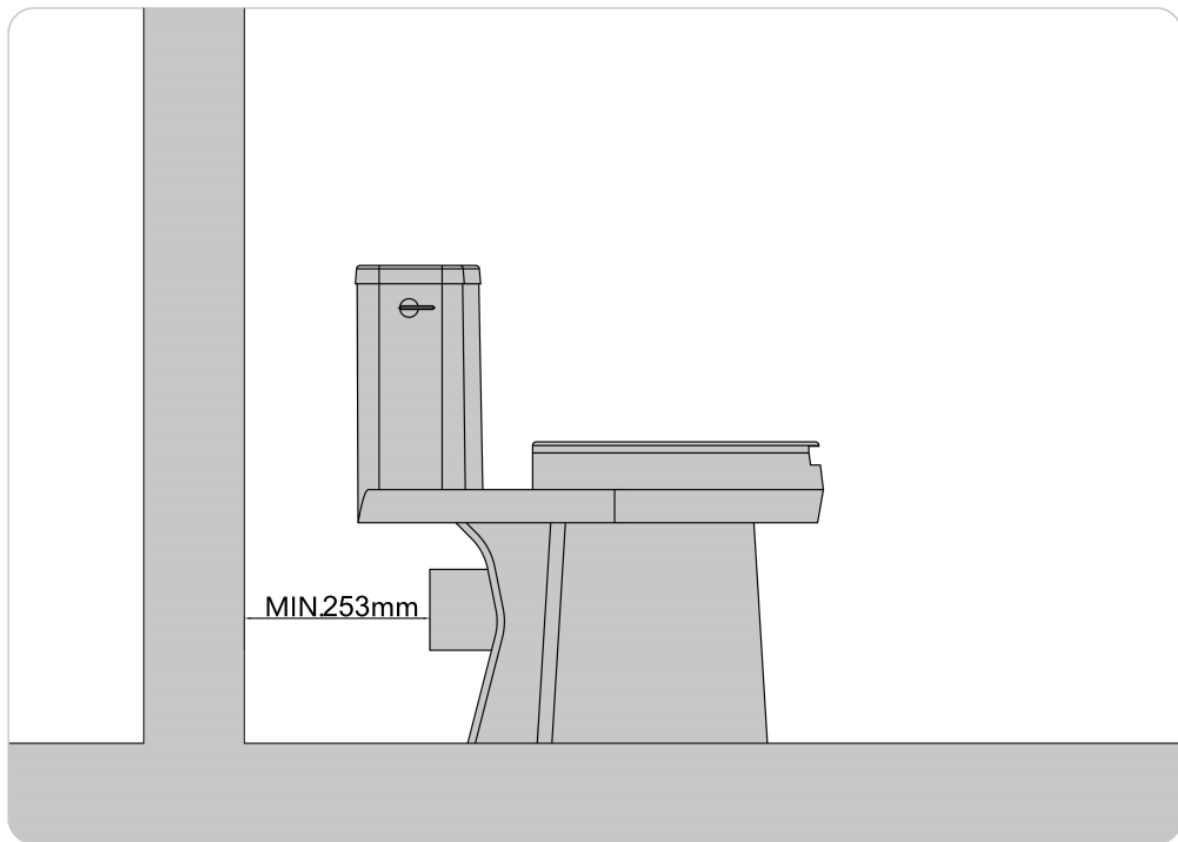


Fig 13: Angle

We suggest to using 2pcs 45' elbow to instead of 1pc 90' elbow

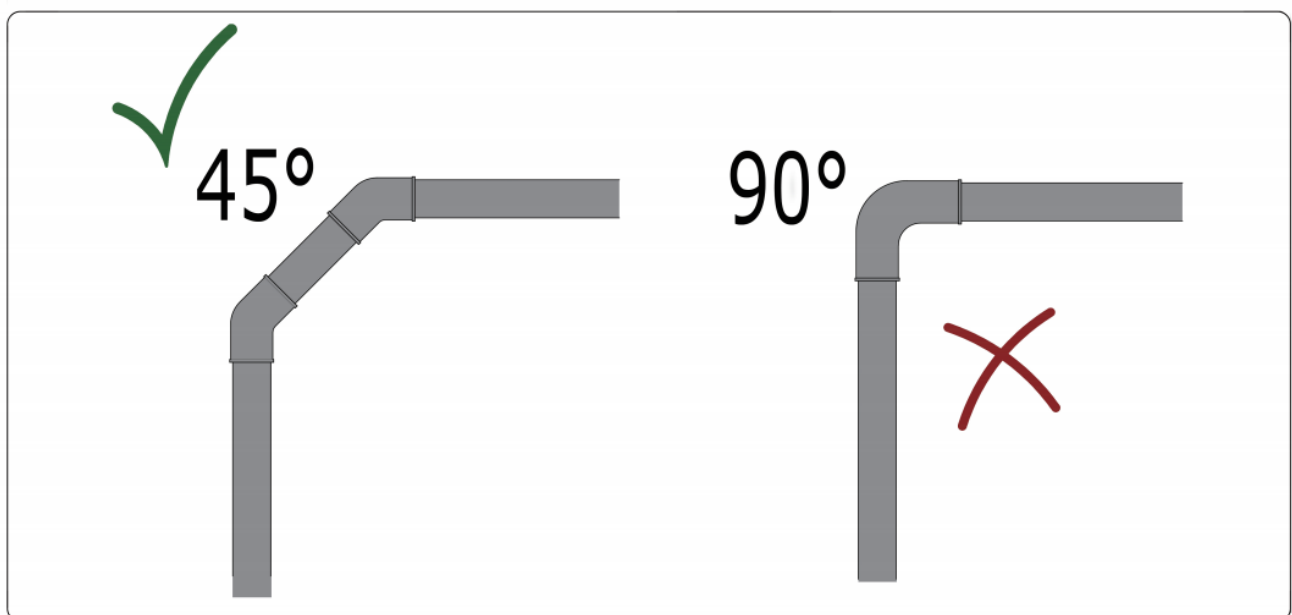
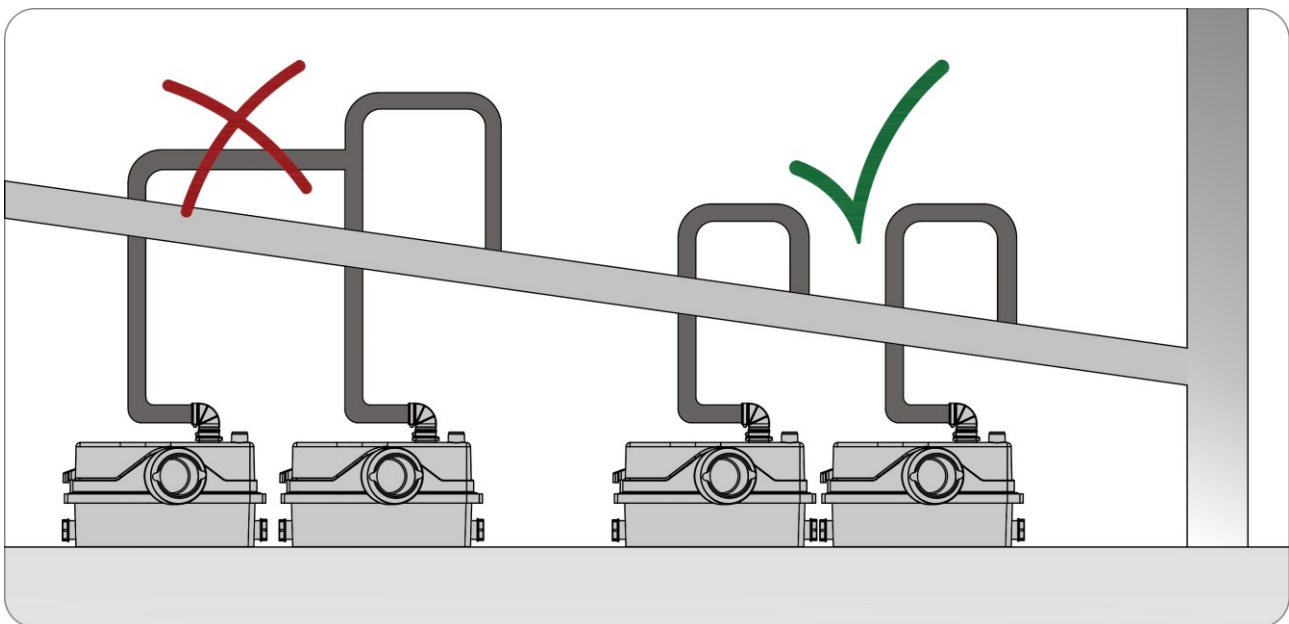
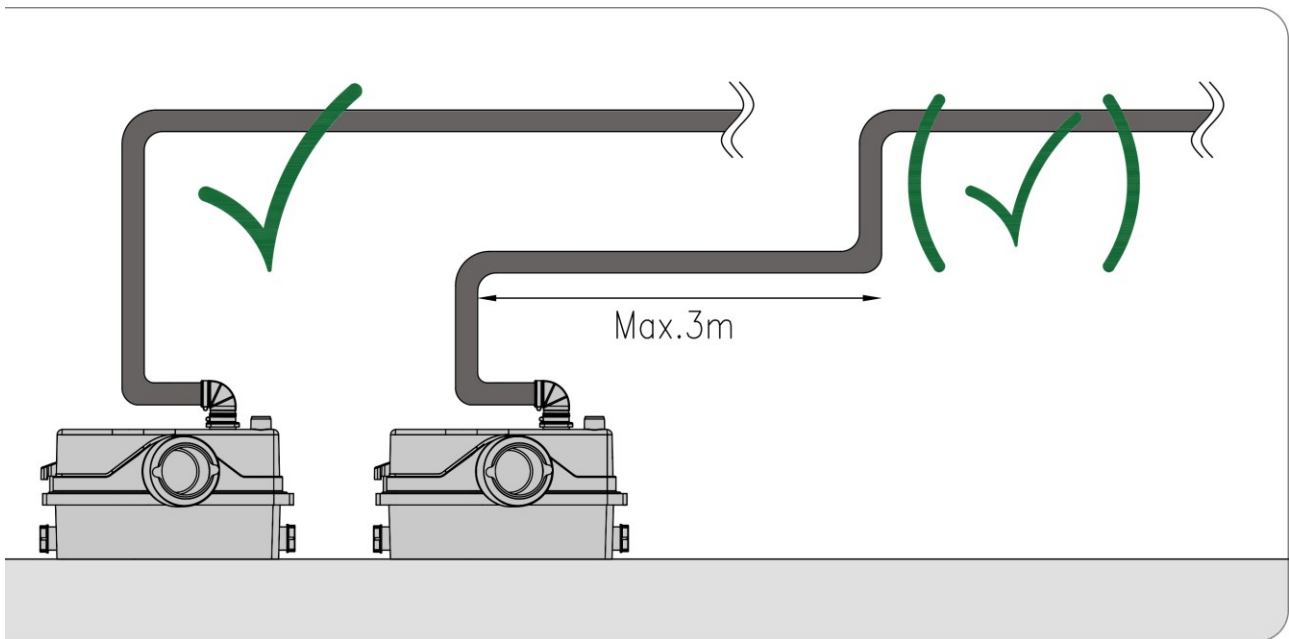


Fig 14&15: Discharge Pipe connection



## **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 FlowPro FP800 are small, compact automatic lifting stations suitable for pumping wastewater and sewage off places in 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.

### **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**

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**

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 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 over temperature, 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 manufacture.

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.

### 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).

### Note

Lift the unit vertically before tilting it!

### 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.

Approvals

## 7. 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.

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.

## 8 MAINTENANCE



**DISCONNECT THE ELECTRICAL POWER SUPPLY, BEFORE ATTEMPTING ANY WORK ON THE UNIT.**

No need of any particular maintenance.

This unit is fitted with an active carbon filter, and requires no external venting.



Correct disposal of this product

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal