

Specifications

- Frame material Welded Steel
 - Frame colour Black powder coat
 - Weight (kg) 21
 - Voltage (V) 110-120V
 - Mains frequency (Hz) 50
 - Supply (no. of phases) 1
 - Power, input, max. (W) 220
 - Current, nominal (A) 2
 - Isolation on/off switch ✓
 - Electrical Protection 6A MCB
 - Noise level, max. (dBA) 45
- Measured at 1m distance*
- Pump flow rate, max. (L/min) 18
 - Temperature max. liquid (°C) 77
 - Filter bottles 2
 - Microfibre filter cartridges 1x 25µm & 1x 5µm
 - Frame length, A (mm) 311
 - Frame width, B (mm) 356
 - Frame height, C (mm) 463

Certification

- All units are electrical certified;
- All units comply with BS EN 8520-2:2009 Equipment used in the controlled removal of asbestos-containing materials (ACMs);
- All appliances comply with BS EN 60335-2-69 Household and similar appliances;
- The units are manufactured at an ISO 9001 quality assured site.

Model Variants

- PFS 18 230V

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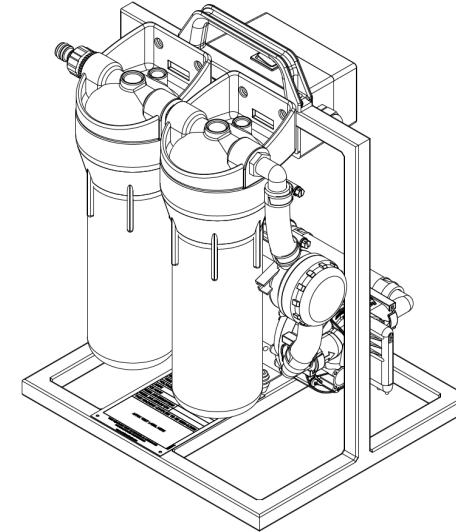
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PFS 18

Operating Instructions

Pump Filter System



Thank you for purchasing this product. Please read these operating instructions carefully before using the product and follow it for correct use.

Please keep these operating instructions for future reference.

Please read the “Safety Precautions” section before use.

The PFS 18 is designed for medium scale pumping jobs, where its portability and high flow rate play to its advantage. The unit has a flow rate of 18 liters per minute and is fitted with two wound cartridge filters, which filter water of particles down to 25µm and 5µm.

SMH's pump filter systems (PFS) are compact and portable water filtration systems for use in the removal of contamination from water sources and industrial grade water transfer.

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Safety Precautions

Precautions to be observed are categorised using the following symbols:



WARNING Failure to follow these instructions properly may result in personal injury or loss of life.



CAUTION Failure to follow these instructions properly may result in property damage or personal injury, which may be serious depending on the circumstances.



Never attempt.



Make sure to follow the instruction.



WARNING User's must refer to local safety regulations applicable to the materials you are working with - in the U.K. if you are working with material containing asbestos observe the requirements of the Control of Asbestos Regulations 2012, its supporting guidance ACOP L143 Work with Materials containing Asbestos, and HSG 247 The licensed contractors' guide.



WARNING Observe in order to prevent fire, electric shock or severe injury.

□ Concerning the power supply plug and chord



- **Do not unplug while the unit is in operation.** (Fire due to overheating or electric shock may result)
- **Do not plug in or unplug with wet hands.** (An electric shock may result)
- **Do not use in such a way that the ratings of the power socket or wiring appliances are exceeded or use a voltage outside of the range AC 110-120V.** (Fire may result from overheating if the ratings of the multi-socket power adapters, etc., are exceeded)
- **Do not pull on the power supply cord when unplugging.** (Overheating or fire may result from wire breakage)
- **Do not perform actions that might break the power supply plug and cord.**
- Such actions including damaging, modifying, forcibly bending, pulling, twisting, bundling up, placing heavy objects on the power supply plug or cord.
- If the power supply plug is damaged, it must be replaced by our company (the manufacturer), a service centre authorised by us, or a similar qualified person in order to avoid a hazard. (An electric shock, short circuiting, or fire may result from use while damaged)



- **Insert the power supply plug firmly all the way in.**
- Do not use a damaged power supply plug or a loosely fitted power socket. (Electric shock, short circuiting or fire due to overheating may result if the power supply plug is not firmly inserted)
- **Periodically wipe dust off the power supply plug with a dry cloth**
- If the unit is not to be used for a prolonged period, unplug the power supply. (Fire may be caused by defective insulation resulting from dust build-up with moisture, etc.)
- **When moving the unit, make sure to turn off and unplug the unit.** (An electric shock or injury may result)

□ Do not use in the following places



- **Places where oil or flammable gases are used or may leak.** (Fire or smoke may result from ignition or suction into the unit, or injury may result from degradation or cracking of plastic)
- **Places where temperature and humidity levels are high or water may scatter, such as a bathroom.** (Fire or an electric shock may result from electrical leakage)
- **Places accessible to small children.** (An electrical shock or injury may occur)

□ During use



- **Do not dry run the filter pump** Make sure the suction hose is fully submerged in water before operating the Filter Pump.
- **Do not use to pump acidic liquids.** (Injury may result from degradation or cracking of plastic parts, or harm may be caused to health from the production of toxic gases)
- **Do not attempt to disassemble, reconstruct or repair the unit yourself.** (Fire, an electric shock or injury may result) For repairs, please contact the place of purchase.
- **The appliance is not suitable for continuous pump operation** (e.g. continuous circulation in a pond) or as a stationary installation. Caustic, slightly inflammable and other explosive substances such as petrol, petroleum, diluted nitrogen, greases, oils, waste-water from toilets as well as sludgy water that has a slower flow capacity than water, should not be transported using the pump. The temperature of the transported fluids should not exceed 77°C.



CAUTION Using these Units for other purposes is considered contrary to their intended use. The manufacturer accepts no liability for any damage or injury resulting from such use.



WARNING Observe in order to prevent fire, electric shock or severe injury.

□ Immediately turn off and unplug the unit if there are any signs of abnormality and malfunction



➤ **Examples of abnormality and malfunction.** (Contact the place of purchase.)

- The unit does not operate even if the switch is turned on.
- Current passes through the cord or fails to pass through if the cord is moved.
- There are abnormal sounds or vibrations during operation.
- The frame of the unit has become deformed or is abnormally hot.
- There is a burnt smell. (Malfunction, an electric shock, smoke, fire, etc., may result if the abnormality is not addressed and the unit continues to be used).



CAUTION Observe in order to prevent electrical leakage, injury or property damage.



➤ **If the unit is placed within reach of a pet, be careful that the pet does not urinate on the unit or chew on the power supply cord.** (Fire, an electric shock or injury may result)

□ Concerning the unit body



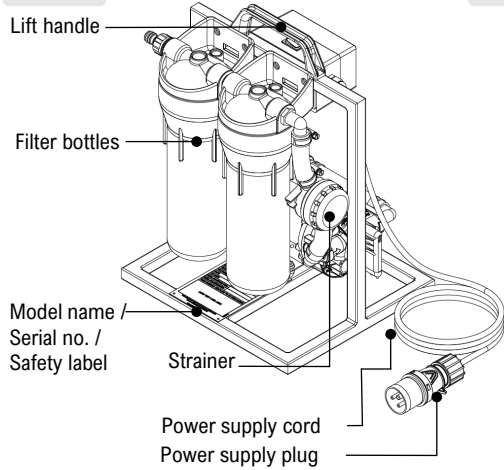
- **Do not block the water inlet or water outlet.** (Overheating or fire may result)
- **Do not climb, sit or lean on the unit.** (Injury may result from falling or toppling)

□ When moving the unit

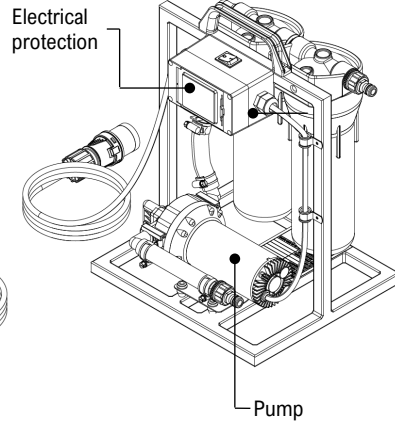


- **When picking up the unit to move it, handle the unit with caution.**
- Be sure to always hold the unit using the correct handle location.

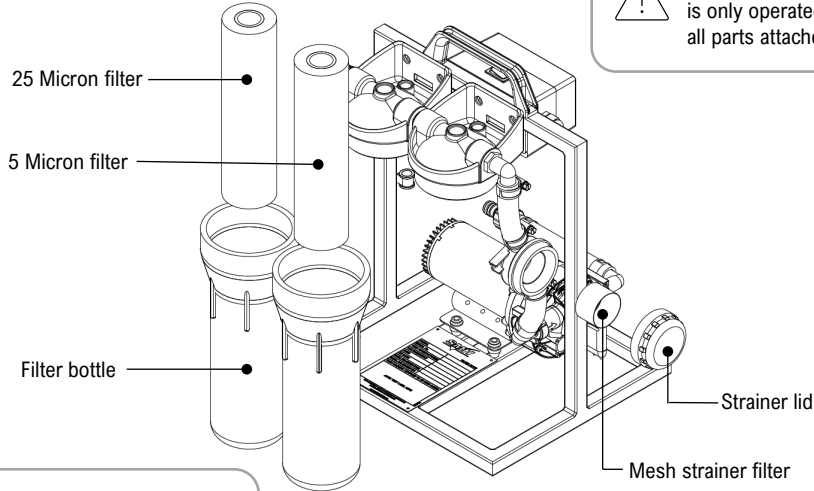
Front



Back



Main Removable Parts



CAUTION
Make sure the unit
is only operated with
all parts attached.



CAUTION
Running pump without
filters will cause pump
seizure.

Functional Components

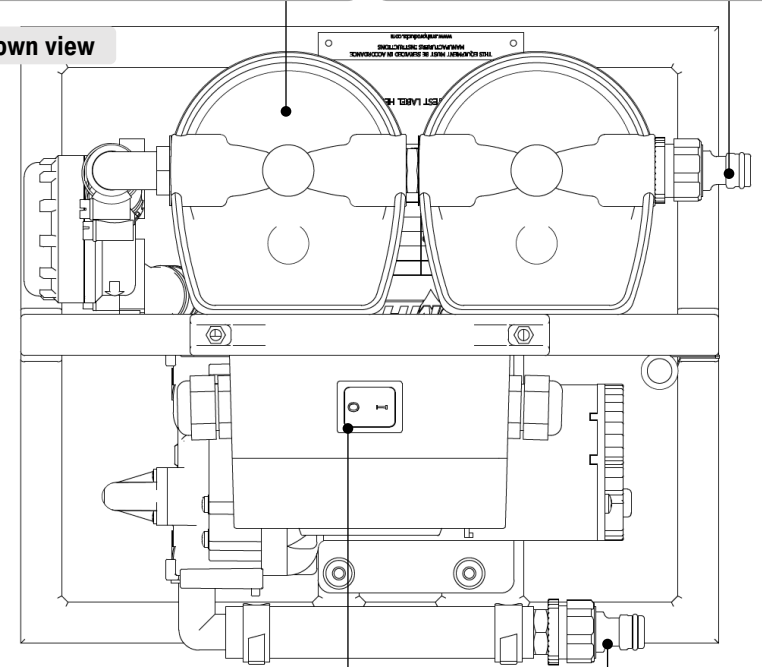
WASTE WATER FILTER BOTTLE

Housing for 10" filters

WASTE WATER INLET

Suction hose connector for contaminated water.

Top-down view



On/Off Switch

Instantly cuts power to pump.

WASTE WATER OUTLET

Evacuates filtered waste water.

Using the Unit

1 POSITION THE UNIT

- Place the unit on a stable surface. If the unit is placed on an unstable surface, vibrations from the unit may be amplified.
- Ensure the area is clear of obstructions that could damage power cable or hose.

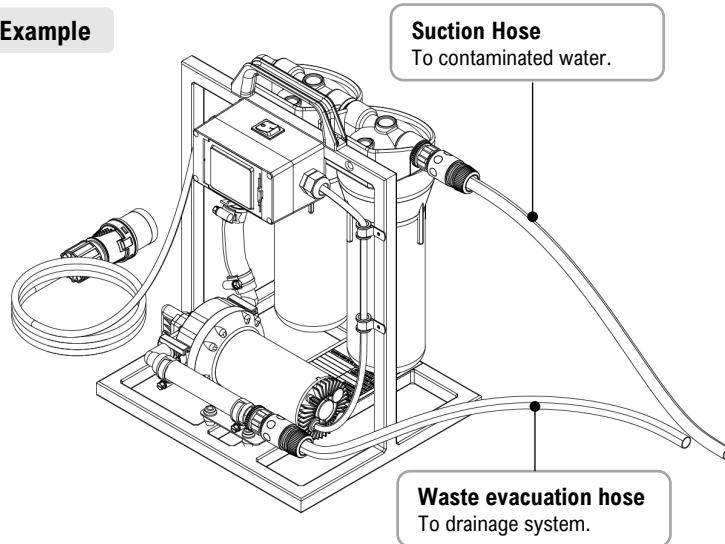
2 CONNECTING THE HOSES

- Connect the suction hose to the water inlet located on the side of the filter bottle.
- Submerge the suction hose into waste water.
- Attach the waste water hose to the waste water outlet.
- Place the hose end into suitable waste disposal system.

3 POWERING THE UNIT

- Insert the power supply plug into a 110v outlet.
- Press the power switch to the **On** position to switch on the unit.

Working Example



Maintenance

CLEANING

When dirt becomes an issue

- Switch off the unit.
- Wipe up dirt with a soft damp cloth.
- When dirt build-up is severe, wet a cloth with kitchen-use neutral detergent and wipe up the dirt.
- Follow procedures for decontamination.



WARNING

Filters and associated equipment may be contaminated with hazardous substances! Follow company procedures for safe removal and disposal.

CHANGING THE FILTERS

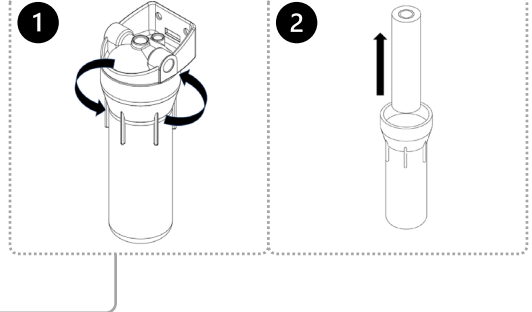
Replace filters daily

Step 1: Grip the filter bottle with two hands, and turn anticlockwise until separation.

Step 2: Remove the old filter cartridge and dispose, and replace with the new filter.

Then reverse Steps 1 – 2 to reassemble.

Note: Follow decontamination procedures.



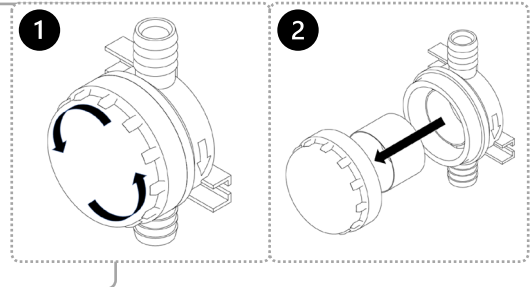
CLEANING THE STRAINER

Check daily

Step 1: Grip the strainer and turn anticlockwise.

Step 2: Remove mesh and clean under running water.

Then reverse Steps 1 – 2 to reassemble.



SERVICABLE COMPONENTS

PAT TEST every 12 months or on return from hire

Please contact your nearest SMH branch or approved service centre for replacement parts associated equipment.

This must be carried out by trained and authorised personnel.

 **WARNING** Do not attempt to replace the pump; serious injury may occur.