

Washable water filter presented by Biopur Habitat



Contents

1. Safety instructions	08
2. Technical specifications	08
3. Device structure	09
4. System diagram	09
5. Functions	10
5.1. Pressure reduction	10
5.2. Backwashing	10
5.3. Cleaning the filter housing	11
6. Installation	11
6.1. Cleaning the filter housing	12
6.2. Draining the rinse water into the sewer system	12
7. Installation instructions	12
7.1. Installation steps	12
7.2. Cleaning procedure	13

1. Safety instructions

Please read and follow the assembly instructions.

Please use the appliance in accordance with its intended purpose, taking safety and potential risks into account.

The device is intended solely for the scope of application specified in this manual. Any other use shall be deemed not to be in accordance with the intended purpose.

Installation must only be carried out by a qualified professional. Any fault that could compromise safety must be rectified immediately.

After installing the filter, ensure that the connections are watertight

The 360° design of the filter does not allow for the use of a bracket.

It will be held in place by clamps fitted to the pipes on either side of the filter.



Rinse the cartridge before use

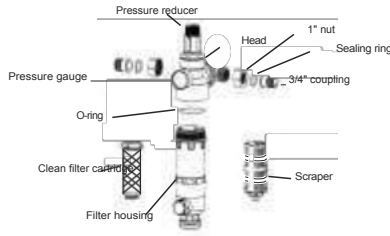
2. Technical specifications.

CODE	
Inlet pressure	max. 8 bar
Outlet pressure	adjustment 2–6
operating pressure	min. 1.5 bar
operating temperature	5 - 30°C
connection size	3/4 and 1" or 20/27 and 26/34
Filter size	90/40 µm
outlet water flow rate	4 m³/h
weight	2,3 kg
size	160 x 95 x 360 mm
connection spacing	95 mm (excluding half-connectors)

3. Device structure

The filter consists of (Fig. 1)

- A brass filter head with a pressure gauge and pressure reducer
- Brass swivel connector in two sizes: $\frac{3}{4}$ " GW and 1" GZ
- Transparent filter housing
- 90/40-micron stainless steel mesh filter cartridge
- Ball valve for backflushing
- Filter cleaning mechanism



(Fig. 1)

Additional equipment:

steel spanner for unscrewing the housing, 2 1"-3/4" half-couplings with seals, 1/4" pipe coupling, 1/4" drain pipe, spare seal, spare O-ring for the filter housing, 2 expansion plugs with screws. **The** steel mounting bracket is intended solely for the spanner or accessories.

4. System diagram (Fig. 2)

This filter consists of a backwash filter and a pressure regulator with a pressure gauge. The filter provides a continuous supply of filtered water whilst maintaining a constant pressure.

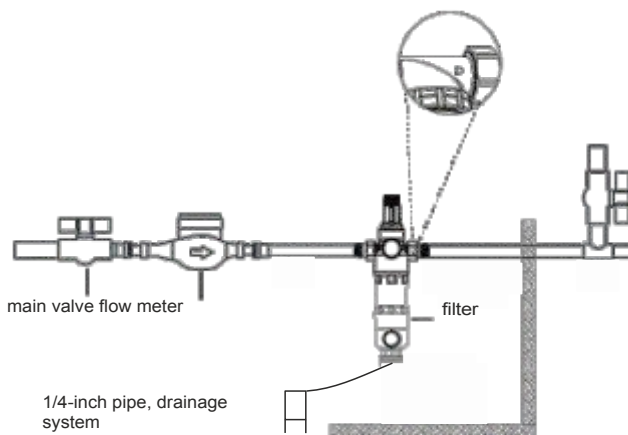
The mesh filter removes solid particles such as rust particles, grains of sand and other solids larger than 40 μm .

The pressure regulator protects the system against overpressure and reduces water consumption.

The filter can be installed either horizontally or vertically.

The backwash system is quick and allows the filter to be cleaned using a small amount of water. The filter's transparent housing, made from a durable material, makes it easy to monitor the degree of clogging in the cartridge.

The integrated system allows the housing to be cleaned from the inside. The filter can be used for drinking water supply. When used in technical installations, the filter's efficiency must be verified on a case-by-case basis.



(Fig. 2)

5. Functions

5.1 Pressure reducer (Fig. 3)

Caution! The pressure on the pressure gauge does not change during adjustment. Under no circumstances should you loosen or tighten the regulator all the way.

Adjustment is carried out as follows:

- Turn off the water supply and switch off all other appliances to stop the flow of water
- Adjust the setting by turning it +/- a few degrees (no more than a quarter turn!)
- Reopen the water supply and then turn on one appliance.
- Turn everything off again to check the new pressure reading on the pressure gauge
- Repeat these steps to continue adjusting the pressure.

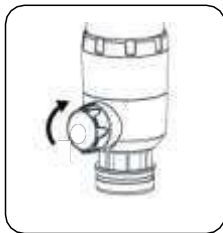


(Fig. 3)

5.2. Backwashing (Fig. 4)

This filter uses the backwash technique. Before backwashing, place a container under the bottom of the filter or fit a permanent drain pipe. Once you have turned the knob at the bottom of the filter to the 'on' position, backwashing begins. The special design of the filter cartridge allows the direction of the water flow to be reversed from the inside of the mesh to the outside.

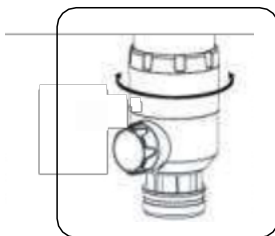
Impurities are removed from the net. The valve must be set to the 'on' position for a few seconds, then closed for a few seconds. The cycle must be repeated at least three times. Rinsing should be carried out every two weeks, or more frequently depending on water quality.



0
(Fig. 4)

5.3. Cleaning the filter housing (Fig. 5)

The filter is fitted with a system for cleaning the inside surface of the housing, known as a scraper. If impurities appear on the filter's transparent housing, they can be removed without dismantling the housing or turning off the water supply. To clean, turn the lower part of the filter several times. The scraper inside the filter will remove any impurities from inside the housing.



(Fig. 5)

6. Installation

The filter must be installed indoors and protected from frost. The unit must not be exposed to adverse environmental conditions or harmful substances such as paints, solvents and other chemicals. Installation is carried out on a horizontal or vertical pipe, with the filter housing facing downwards. Shut-off valves must be provided. Ensure that the filter is easily accessible for maintenance, so that you can see the pressure gauge and the transparent filter housing, and have sufficient space beneath the filter to unscrew the housing.

The unit must be installed immediately after the water meter.

6.1 Cleaning the filter housing (Fig. 5)

Rinse the connecting pipe thoroughly.

The filter can be fitted directly onto the threaded connection on the valve head.

The supplied union nuts allow for connections of the following sizes: 1" GW and ¾" GZ.

Observe the direction of flow indicated by the arrow on the head. Connect the unit, then fit the filter with the seal onto the connection.

Threaded connections without a seal must be sealed with Teflon tape or another suitable material.

Tighten the fixing nuts (7 Nm).

Screw on the drain fitting: connector and ¾" pipe.

6.2 Discharge of backwash water into the sewerage system

Backwash water must be discharged into the sewer to prevent backflow. There are three options for doing this:

1. Direct connection to the mains drainage system
2. Free drainage into the floor drain
3. Drainage into an open tank (at an inlet pressure of 4 bar and only during backwashing).

7. Installation instructions

7.1. Installation steps

- Tighten the filter cartridge using a spanner.
- Following the installation sequence diagram, fit the hexagonal nut and the plastic seal, then place the assembly onto the filter and tighten using a spanner.
- Turn off the main water tap and drain any remaining water from the pipe.
- Connect the pre-filter to the water supply pipe in accordance with the installation diagram.
- Screw the plastic connector onto the bottom of the pre-filter and connect the PE pipe to the drain pipe.

Note 1:

During installation, please note that the direction of water flow through the pre-filter is the same as the direction of water flow within the building. All connections must be tightened to ensure a watertight seal. Once installation is complete, the filter cartridge must be in a vertical position.

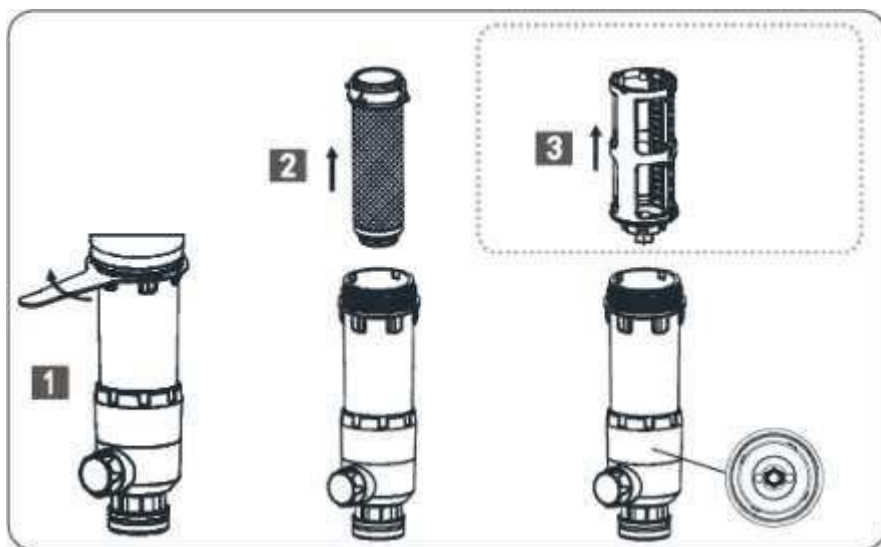
Note 2:

Before adjusting the pressure, ensure that all domestic water taps are turned off; open and close the outlet several times whilst adjusting the pressure, then check the pressure gauge with the outlet closed.

7.1. Cleaning procedure (Fig. 6)

Close the main inlet valve, open the tap and drain off any remaining water. Follow steps 1, 2 and 3 as indicated and unscrew the filter cartridge using a special spanner to remove the filter elements from the mesh, as well as the scrapers and cleaning elements from the drainage system.

Clean the mesh and the surface of the drain element using a brush and clean water. After cleaning, replace the scraper and the filter elements from the mesh into the filter cartridge in reverse order (note: the drainage system components must be secured using the hexagonal nut located at the bottom of the filter cartridge), insert the filter cartridge and tighten it using a spanner.



(Fig. 6)

Please note:

If you only need to clean the filter, there is no need to remove the scraper.

This filter is **manufactured in Europe and complies with all applicable standards.**
The choice of **materials and the technologies** used ensure that this filter is of a very high overall quality.