

Washable water filter presented by Biopur habitat



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1. Safety instructions

Please read and follow the assembly instructions.

Please use the device in accordance with its intended use being aware of safety and threats.

The device is only intended for the scope of application specified in this manual. Any other and/or additional use will be considered as not in accordance with the intended use.

Installation may only be performed by qualified professional.

All defects that may compromise safety must be removed immediately.

After installing the filter, please make sure the connections are leakproof.



Rinse the cartridge before use

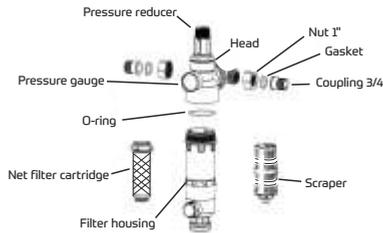
2. Technical parameters.

CODE	
inlet pressure	max. 8 bar
rear pressure	adjustment 2-6
working pressure	min. 1,5 bar
working temperature	5 - 30°C
connection size	¾" i 1"
filtration size	40 µm
output water flow	4 m³/h
weight	2,3 kg
size	160 x 95 x 360 mm
connection spacing	95 mm (without semi-connectors)

3. Device structure

The filter consists of (fig.1)

- Brass filter head with pressure gauge and pressure reducer
- Brass rotary union in two sizes ¾" GW and 1" GZ
- Transparent filter housing
- A mesh filter cartridge with a mesh size of 40 µm with the possibility of rinsing reverse
- Drain ball valve for backwashing
- Filter cleaning mechanism



(fig.1)

Additional equipment:

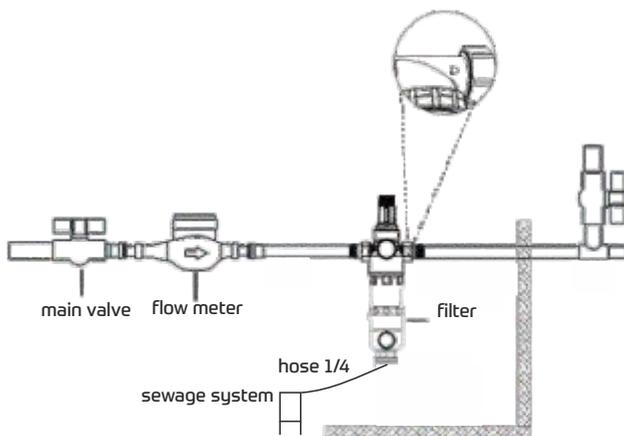
steel wrench to unscrew the housing, 2 pcs of half unions 1"- 3/4" with gaskets, steel mounting bracket, ¼" hose connector, ¼" drain hose, spare gasket, spare o-ring for filter housing, 2 pcs of expansion plugs with screws

4. System diagram (fig.2)

This filter consists of backwash filter and pressure regulator with pressure gauge.

Filter provides continuous supply of filtered water while maintaining constant pressure. Net filter filters solid parts such as rust particles, grains of sand and other solids larger than 40 µm. Pressure regulator protects installation against overpressure and reduces water consumption. Filter can be installed both horizontal and vertical.

Backwash system is quick and allows to clean the filter with a little water. The transparent filter housing made of resistant material allows easy control of cartridge contamination. Built-in system allows for housing cleaning from the inside. Filter can be used for drinking water supply. When used in technological installations, filter effectivity should be checked individually.



(Fig.2)

5. Functions

5.1 Pressure reducer (Fig. 3)

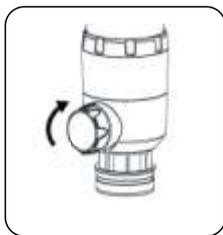
Filter features built-in pressure reducer in the upper part of the head. By turning the grey knob at the top of the filter, you can reduce the pressure in network. Pressure can only be lowered comparing to incoming pressure. Turn the adjustment screw counterclockwise to decrease the pressure and clockwise to increase it. Pressure change can be monitored on the pressure gauge.



(Fig.3)

5.2. Backwash (Fig. 4)

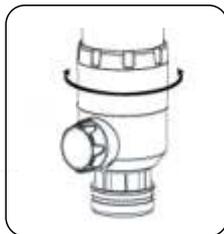
This filter uses backwash technique. Before backwash, place a vessel under the lower part of the filter, or install draining hose permanently. After turning the knob in the lower part of the filter into "on" position, backwash starts. Special design of filter cartridge allows to change water flow direction from inside the net to the outside. Impurities are removed from the net. Valve should be set in the "on" position for a few seconds, then closed for a few seconds. Cycle should be repeated at least three times. Rinsing should be performed every 2 weeks, or more frequently depending on water quality.



(fig.4)

5.3. Filter housing cleaning (Fig. 5)

Filter is equipped with a system for cleaning the inner surface of the housing, the so-called scraper. If impurities appear on the transparent housing of the filter, they can be removed without disassembling the housing and cutting off water supply. To clean, turn the lower part of the filter several times. The scraper located in the filter will remove dirt from the inside of the housing.



(rys.5)

6. Installation

Place of filter installation must be inside a building and protected against frost. Device must not be exposed to the unfavorable influence of the environment and harmful substances such as paints, solvents and other chemicals. Installation is done on horizontal or vertical pipe with the filter housing facing down. Shut-off valves must be provided. Please pay attention to good access to the filter service, so that you can see pressure gauge, transparent filter housing and have enough place under the filter to unscrew the housing.

Device should be installed right after water meter.

6.1 Filter housing cleaning (Fig. 5)

Rinse the connection hose thoroughly.

It is possible to mount the filter directly to the threads in the head.

Attached half-unions enable connection sizes: 1"GW and ¾" GZ.

Please mind flow direction indicated by the arrow on the head.

Connect device, then install the filter with gasket on the fitting.

Thread connections without gaskets should be sealed with Teflon tape or another material.

Tighten the fastening nuts (7 Nm).

Screw in the drain connection: connector and hose ¾".

6.2 Drainage of rinsing water to sewage system

Backwash water must be drained into the sewer so that it does not create backflow.

To provide this there are three options:

1.Direct connection to the sewage system

2.Free drain to the floor drain

3.Drainage into an open tank (at 4 bar inlet pressure and only while backwash is done).

7. Installation instruction

7.1. Installation steps

- Tighten filter cartridge with a wrench.
- According to installation sequence drawing, place hexagonal nut, plastic gasket, then place the entire assembly on the filter and tighten with a wrench.
- Close main water valve and drain remaining water from the hose
- Connect the front filter to water pipe in accordance with the installation diagram.
- Screw on the plastic fitting on the bottom of the pre-filter and connect PE hose to the discharge pipe.

Note 1:

When installing, please note that the water flow direction through the pre-filter is the same as all water flow direction in the building. All fittings must be tightened to ensure leakproof. Once the installation is complete, filter cartridge must be in vertical position.

Note 2:

Before adjusting the pressure, make sure that the domestic water devices are closed, open/close output several times while adjusting the pressure, then check pressure gauge with closed output.

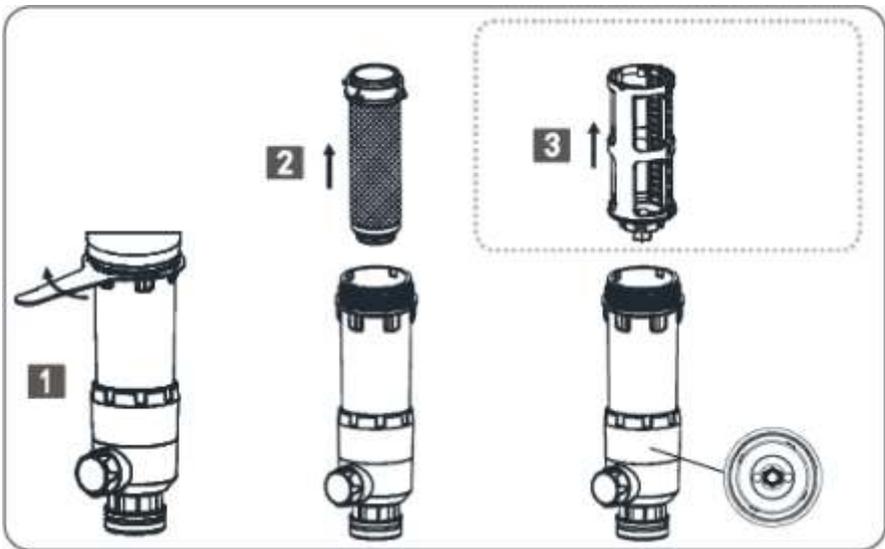
7.1. Cleaning Procedure (Fig. 6)

Close the main input valve, open the tap and drain the rest water.

Follow steps 1, 2 and 3 as shown and unscrew the filter cartridge with a special wrench to remove net filter elements, as well as scrapers and cleaning elements of the sewage system.

Clean the net and the surface of the drain element with a brush and clean water.

After cleaning, put the scraper and net filter elements back into the filter cartridge in the reverse order (note: sewage elements should be secured with hexagonal nut located on the bottom of the filter cartridge), insert the filter cartridge and tighten it with a wrench.



(fig.6)

Attention:

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

This filter is made in Europe and complies with all current standards. The choice of materials and the technologies used give this filter a very high overall quality.