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WASSERAUFBEREITUNG



Backwash Filter

with Integrated Pressure Reducing Valve

Installation Instructions

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Notes and Product Description

Before installing and commissioning your backwash filter, read this manual carefully and make sure that you understand its contents.

The backwash filter is designed to remove fine particles, impurities, dirt, rust and sediment from the water.

This protects the downstream domestic water installation against suspended particles. We guarantee that the backwash filter you receive is complete and reliable.

The product must not be installed without a qualified installer. We accept no liability for damage to the product, personal injury or damage to property resulting from incorrect commissioning or operation.

The product may only be installed indoors in a dry location.

This product is intended for use on the municipal water supply only (5-40 °C). Do not use it on drain lines or in combination with corrosive liquids.

Observe the correct direction of flow during installation. An arrow on the flange body indicates the direction of flow.

Install the backwash filter directly downstream of the water meter, in an easily accessible position.

Depending on the water quality, it is recommended to backwash the filter once a month.
Take care not to damage any parts during maintenance.



Safety Precautions

Safety precautions:

- Only operate the product when all components have been installed correctly.
- Observe the locally applicable regulations on drinking water protection, accident prevention and occupational safety.
- Do not make any modifications, conversions or extensions to the product. Use only original spare parts for maintenance or repair.
- Keep the installation room locked against unauthorised access in order to protect vulnerable or uninstructed persons from residual risks.
- Observe the maintenance intervals (see section 'Commissioning and Service'). Failure to do so may result in microbiological contamination of your drinking water installation.

Pressure-related hazards:

- Components may be under pressure. There is a risk of injury and damage to property due to escaping water and unexpected movement of components. Check the pressure lines and the product for leaks at regular intervals.
- Before starting any repair or maintenance work, make sure that all affected components are depressurised.

Product safety information:

Fouling of the filter.
Health hazard due to contamination of the drinking water.
Observe the intervals and recommendations for inspection and maintenance of the filter.

Intended use:

- The backwash filter is intended for the filtration of drinking water.
- The backwash filter with pressure reducing valve is additionally suitable for setting the outlet pressure on the consumer side, in order to comply with the maximum permissible operating pressure in accordance with DIN EN 806-2. Backwashing and setting of the outlet pressure on the consumer side only function when the unit is operated under supply pressure.
- The filters can be used under both positive and negative pressure.
- The filters are designed in accordance with DIN EN 13443-1 and DIN 19628 and are intended for installation in drinking water installations to DIN EN 806-2 (directly downstream of the water meter).
- They protect the water pipes and the connected water-carrying system components against malfunctions and corrosion damage caused by undissolved impurities (particles) such as rust particles, sand, etc.

Personnel Requirements

During the individual life-cycle phases of the product, different persons carry out work on the product. This work requires different qualifications.

Personnel qualifications

Personnel	Requirements
User	- No special expertise required - Knowledge of the assigned tasks - Knowledge of possible hazards resulting from improper conduct - Knowledge of the required protective devices and protective measures - Knowledge of residual risks
Owner	- Specialist knowledge - Knowledge of statutory regulations on occupational safety and accident prevention, specific to the product
Specialist	- Technical training - Knowledge of the relevant standards and regulations - Knowledge of how to recognise and avoid potential hazards - Electronics - Sanitary engineering
Transport	- Knowledge of how to recognise and avoid potential hazards - Knowledge of statutory accident prevention regulations
Customer service	- Extended product-specific expertise

Personnel Authorisations

The following table describes which activities may be carried out by whom.

Activity	User	Owner	Specialist	Customer service
Transport and storage		x	x	x
Installation and assembly			x	x
Commissioning			x	x
Operation and use	x	x	x	x
Cleaning	x	x	x	x
Inspection	x	x	x	x
Maintenance semi-annually		x	x	x
annually			x	x
Troubleshooting		x	x	x
Repair			x	x
Decommissioning and recommissioning			x	x
Dismantling and disposal			x	x

Scope of Delivery

Component	Size and quantity
Backwash filter:	1 x
Threaded adapter:	2 x 1" and 1 ¼"
Gaskets:	2 x
Mounting bracket:	1 x
Filter housing wrench:	1 x
Housing O-ring:	1 x
¼" hose:	1 x
Flushing connection:	5/8" x 110 cm
Screws:	2 x
Pressure gauge:	2 x
Manual:	1 x

Validity of These Instructions

These instructions apply to the following products:

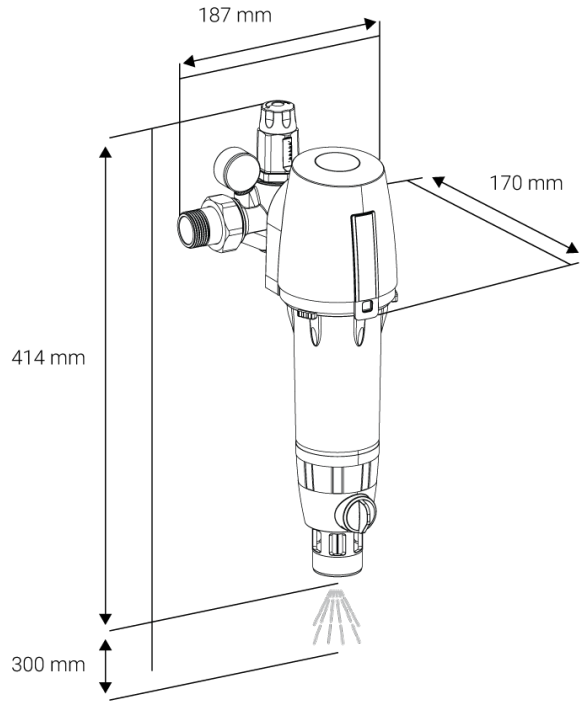
- AQMOS backwash filter (1", DN 25)

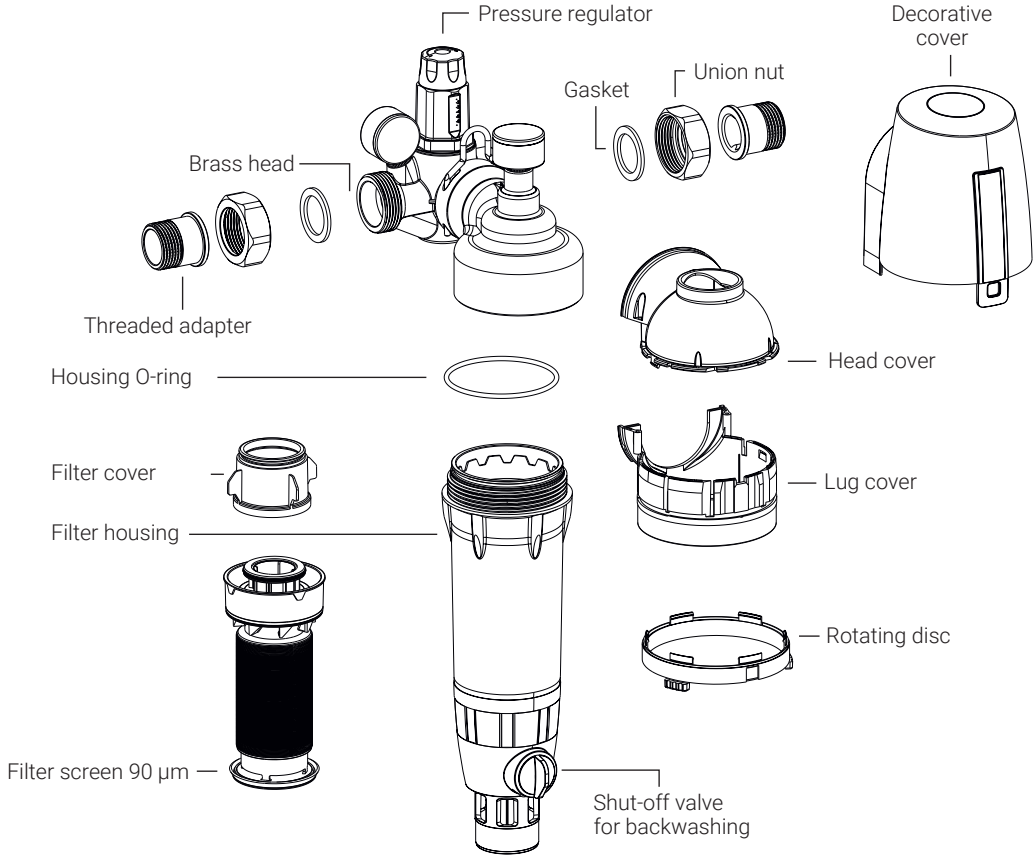
Technical Data

Technical data	
Name:	Backwash filter with integrated pressure reducing valve
Filtration rating:	90 µm
Connection:	1" or 1 ¼"
Nominal flow rate:	5-8 m^3/h
Pressure loss:	0.2 bar
Water temperature:	5-40 °C
Water supply:	Municipal
Water pressure:	1-10 bar

Drawing

Product dimensions:





Description and Function

Pressure reducing valve:

The product reduces and stabilises the water pressure. This effectively prevents damage to the pipework caused by excessive water pressure. If the pressure control settings need to be adjusted, proceed as follows:

1. Using a flat-head screwdriver, loosen the screw in the pressure adjustment knob by turning it anticlockwise.

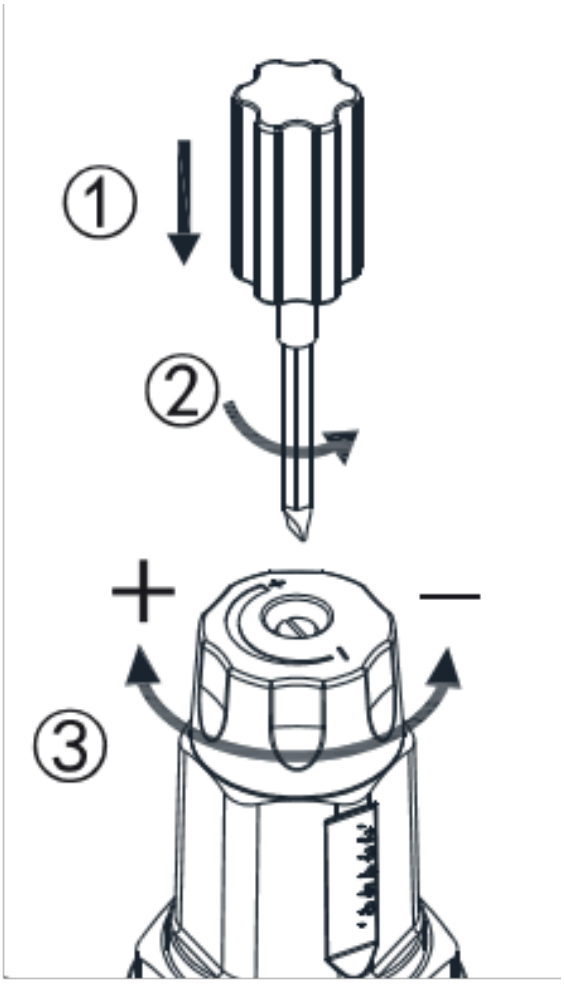
2. Turn the pressure adjustment knob clockwise to increase the outlet pressure. Make sure, however, that the outlet pressure always remains lower than the inlet pressure.

3. After adjustment, retighten the screw by turning it clockwise.

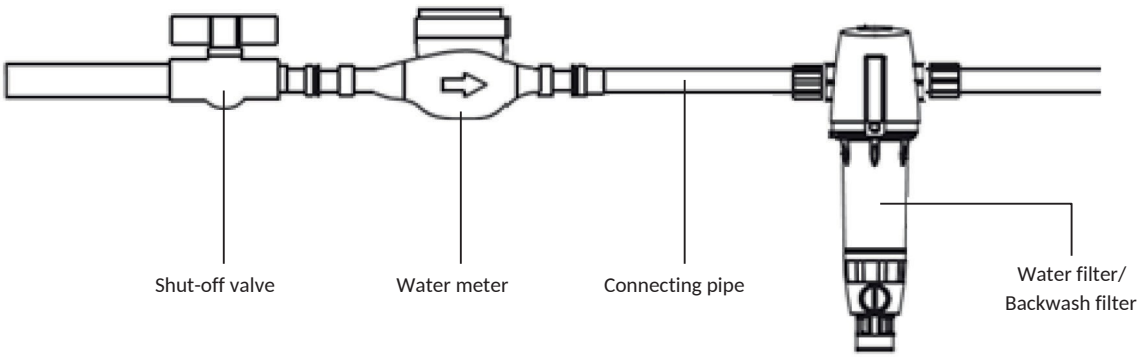
Notes:

Before adjusting the pressure, make sure that the water supply is shut off.

During pressure adjustment, open and close the drain ball valve several times and check the pressure gauge reading with the valve closed.



Installation Instructions



1. Close the shut-off valve and relieve the pressure in the pipework.

   Install the backwash filter as shown above.

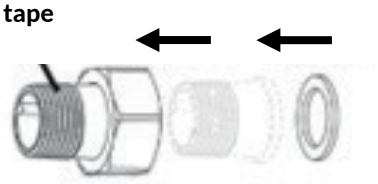
   Observe the correct direction of flow during installation. An arrow on the brass head indicates the direction of flow.

   Install the backwash filter with its main axis in a vertical position.

2. The backwash filter must be installed by a qualified person. Before installation, check that the scope of delivery is complete.

   Use sufficient thread seal tape and make sure that it is wound evenly.

Wrap thread seal tape



After completing the installation work, check the plumbing thoroughly to make sure that there are no leaks.

Maintenance

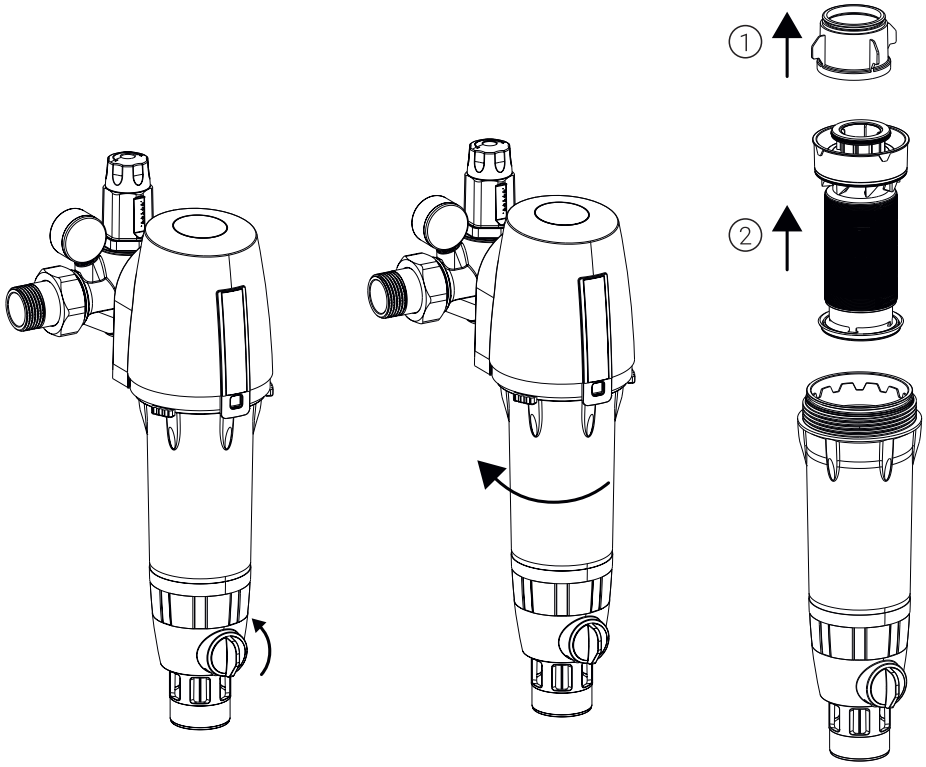
If normal backwashing does not remove the dirt from the filter, it is recommended to remove and wash the filter assembly.

Close the main water inlet valve (shut-off valve) and turn the backwash valve 90° anticlockwise to drain the residual water from the unit.

Use the filter wrench supplied with the unit (insert it from the bottom of the filter housing) and unscrew the filter housing in the direction of the arrow.

Pull the seal cover and the filter assembly out upwards and clean them.

After cleaning, reassemble in the reverse order and put the unit back into operation.



Commissioning and Service

The backwash filter must be flushed after installation (see Figure 1).

Before flushing the backwash filter, make sure that the drain pipe is connected to a drain, or provide a suitable container to collect the waste water.

During flushing, turn the lower part 3 to 4 turns clockwise and anticlockwise to clean the filter screen and the filter housing effectively (see Figure 2).

Depending on the water quality, the backwash filter must be flushed for 1-2 minutes at least once a month.

As the backwash filter is in continuous use, the filter screen must be dismantled and cleaned approx. once a year (this should be carried out by a qualified person).

All components should be cared for during cleaning or maintenance. Only original spare parts may be used for maintenance.

Figure 1

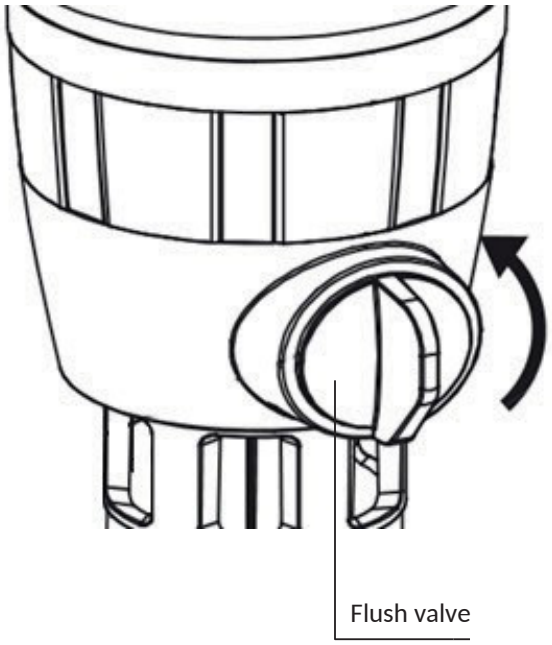
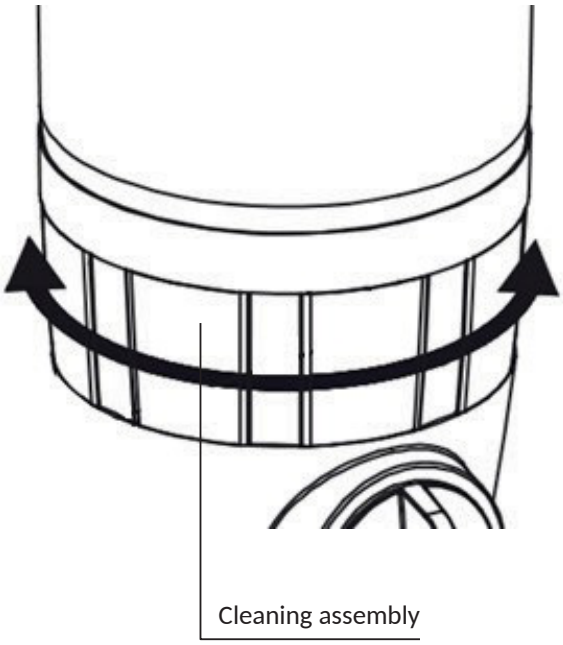


Figure 2



Troubleshooting

Problem	Possible causes	Remedy
No water flow	1. Water supply is shut off. 2. Inlet valve is not open.	1. Wait until the water supply has been restored. 2. Open the inlet valve.
Insufficient water flow	1. The inlet valve is not fully open. 2. The water supply is not available. 3. Filter is clogged.	1. Open the inlet valve fully. 2. Wait until the water supply has been restored. 3. Flush and clean the filter screen assembly and remove the residues.
Leak at the connection	1. The connection has not been installed correctly. 2. The connection has not been tightened. 3. Filter is clogged. 4. The gasket is aged and/or damaged.	1. Check that the gasket is flat and not compressed. 2. Tighten the connection using the filter wrench. 3. Use sufficient thread seal tape and make sure that it is wound evenly. 4. Replace the gaskets.

Pressure Loss Diagram

