

# **Operating Instructions** for flange filters

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#### 1. Introduction

Flange filters are used to capture impurities in the piping for hot and cold water, steam, non-aggressive liquids, air and gases.

#### 2. Safety Instructions

Installation, operation and maintenance may only be performed by properly trained and instructed staff.

For detailed safety regulations see the separate document, which must be read carefully before installation.

## 3. Identification of flange filters

The DN and PN data and the direction of flow (arrow) are marked on the filter body. The direction must be observed!

### 4. Transportation and Storage

The filters are transported and stored in the packaging from the manufacturer.

They must be stored indoors in dry and dust-free environment at normal temperatures.

## 5. Installation into Pipes

The procedure is graphically described in the document **Installation Instructions**.

Gaskets are inserted between the filter body and flanges; it is therefore necessary to use flanges with flat sealing strips, e.g. A or B shape according to EN 1092.

The filter must be attached with the drain plug or drain flange down!

Before installation it is necessary to examine

- Whether the PN, DN and materials of the supplied filter correspond to the intended use,
- Whether no damage occurred during transportation. **Do not use damaged filters!**
- Counter-flanges must be aligned and parallel; any impurities and solid particles from the flanges and piping must be removed.

The filter must be installed so that the arrow on the body coincides with the direction of flow!

The flanges may not be welded with an installed filter!



# 6. Pipe Pressure Test

The filter is pressurized by the manufacturer.

In case of new welded piping the piping must be properly cleaned (rinsed) before the filter installation.

After assembly, the entire section is pressurised at 1.5 times the PN.

# 7. Operation and Maintenance

The filter requires special attention mainly at the beginning of its operation when the piping contains excessive amount of mechanical impurities. In operational conditions the screen has to be cleaned at such intervals so that its clogging does not exceed a half of its capacity. Regular maintenance has to be determined by the user according to the operating conditions. Information on the screen clogging can also be derived from the pressure difference before and after the filter. Discard any damaged parts. Replace all gaskets with new ones. Use only original spare parts.

#### Cleaning a screen of a filter with a drain plug:

- The pipe must be free of pressure, the user decides on the need for its drainage before commencing work,
- Loosen the drain plug and remove it, expect draining of residual material,
- Remove the old gasket and clean (wash, vacuum) the screen and gasket sealing surfaces,
- Replace the plug sealing with a new one and screw it in the lid, lubricate the drain plug thread with suitable grease (e.g. for drinking water...)
- Check the joint tightness.

#### Cleaning or replacing filter screen by removing the lid:

- The pipe must be free of pressure, the user decides on the need for its drainage before commencing work,
- Release the connection of the lid and body, expect draining of material residue,
- Loosen and remove the nuts, bolts and remove the lid.
- Remove the screen, clean and check it (or replace with an original spare part),
- Remove the old sealing from the lid, clean the sealing surfaces of the body and lid and install a new sealing!!!
- Insert the screen into the slot in the body and fit the lid with sealing,
- Place the lid in the recess in the drain flange, insert screws, washers and nuts, lubricate the screw threads with grease, tighten the nuts in a "criss-cross pattern", repeating the tightening process once.
- Check the joint tightness.



## 8. Troubleshooting.

In case of failure and repair it is necessary to observe all safety rules – see the separate document **Safety Regulations**.

Assembly and disassembly of the filter is described in previous chapters. Only original spare parts from the manufacturer can be used for repairs.

#### 9. Other Information

These regulations as well as other above-mentioned documents and further information – also in other languages – are available at <a href="https://www.abovalve.com">www.abovalve.com</a> or at the following address:

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