

**Operating Instructions**  
**for**  
**Magnetic Filter**

**Model: MFR-00**



## 1. Contents

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1. Contents.....	2
2. Note .....	3
3. Instrument Inspection.....	3
4. Regulation Use .....	3
5. Operating Principle .....	4
6. Mechanical Connection.....	4
6.1 Mounting/Disassembly.....	4
6.2 Mounting with threaded connection .....	5
7. Maintenance .....	7
7.1 Cleaning of the mesh.....	7
8. Technical Information.....	8
9. Order Codes .....	8
10. Dimensions .....	9

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## **2. Note**

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Please read these operating instructions before unpacking and putting the unit into operation. Follow the instructions precisely as described herein.

The devices are only to be used, maintained and serviced by persons familiar with these operating instructions and in accordance with local regulations applying to Health & Safety and prevention of accidents.

When used in machines, the measuring unit should be used only when the machines fulfil the EWG-machine guidelines.

**as per PED 97/23/EG**

## **3. Instrument Inspection**

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Instruments are inspected before shipping and sent out in perfect condition.

Should damage to a device be visible, we recommend a thorough inspection of the delivery packaging. In case of damage, please inform your parcel service / forwarding agent immediately, since they are responsible for damages during transit.

### **Scope of delivery:**

The standard delivery includes:

- Magnetic Filter model: MFR
- Operating Instructions

## **4. Regulation Use**

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Any use of the Magnetic Filter, model: MFR, which exceeds the manufacturer's specification may invalidate its warranty. Therefore, any resulting damage is not the responsibility of the manufacturer. The user assumes all risk for such usage.

## 5. Operating Principle

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KOBOLD magnetic filters are used in many applications, including central system filters, where it is necessary to protect devices from dirt and contamination. They are used to catch and remove contaminants from industrial cooling and lubrication circuits, especially where residue and sediment from assembly (such as chips from thread-cutting) and normal operation (such as scale and residue from frictional wear) can be carried along in the medium being filtered. Contaminants of these types can form deposits that can cause pitting and corrosion in highly sensitive measuring and control devices. Regular maintenance and cleaning of the magnetic filter inserts will effectively prevent system and device failure and the resulting downtime.

## 6. Mechanical Connection

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### **Before mounting:**

- Remove all transport safety devices. Observe that there won't be any parts of the package in the armature.
- Satisfy yourself that the armatures/vales will only be used within their admissible limiting value (see technical data).
- After the mechanical connection check the tightness of the connection screw connection/tube, if possible.

### **6.1 Mounting/Disassembly**

The mechanical mounting is identical in all variants. It differs only by the type of connection.

Observe the flow direction which is specified on the valve body. The installation of the screw joint should take place downwards, that the pollution will fall out of the body by the cleaning of the y-strainer.

We recommend the installation of a gate valve in front and behind the y-strainer, to clean the mesh without emptying of the device.

Remove all transport safety devices (e.g. plugs or caps). Observe that there won't be any parts of the package or other pollution in the armature.

Before mounting the y-strainer clean up the pipes.

Avoid stress on the body by non align pipes.

## 6.2 Mounting with threaded connection

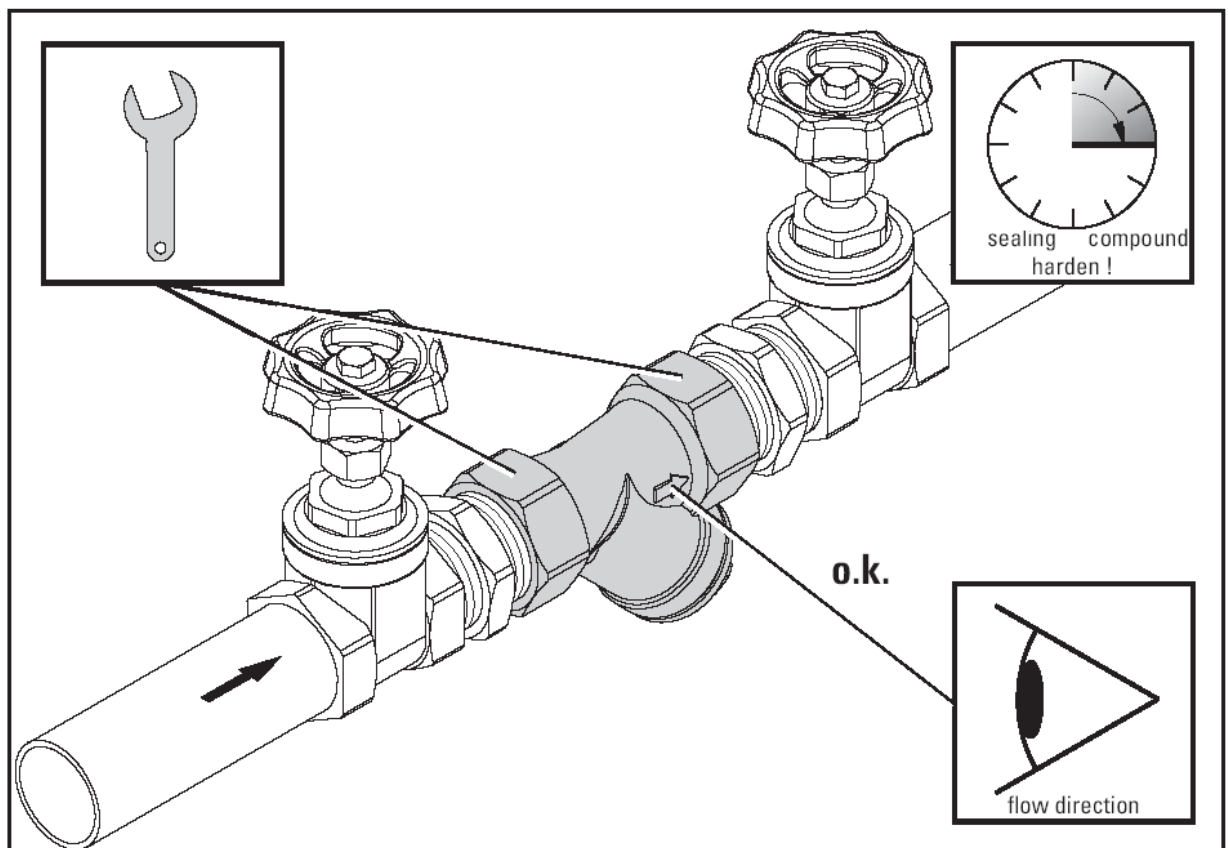
Before lay on sealing compounds, check the hardly screwing of the pipes into the valve body.

Lay on the correct sealing compounds on the pipe's end. By using PTFE-ribbon or hemp sealings observe the screw direction. Don't use sealing compounds which are not prescribed for your employment.

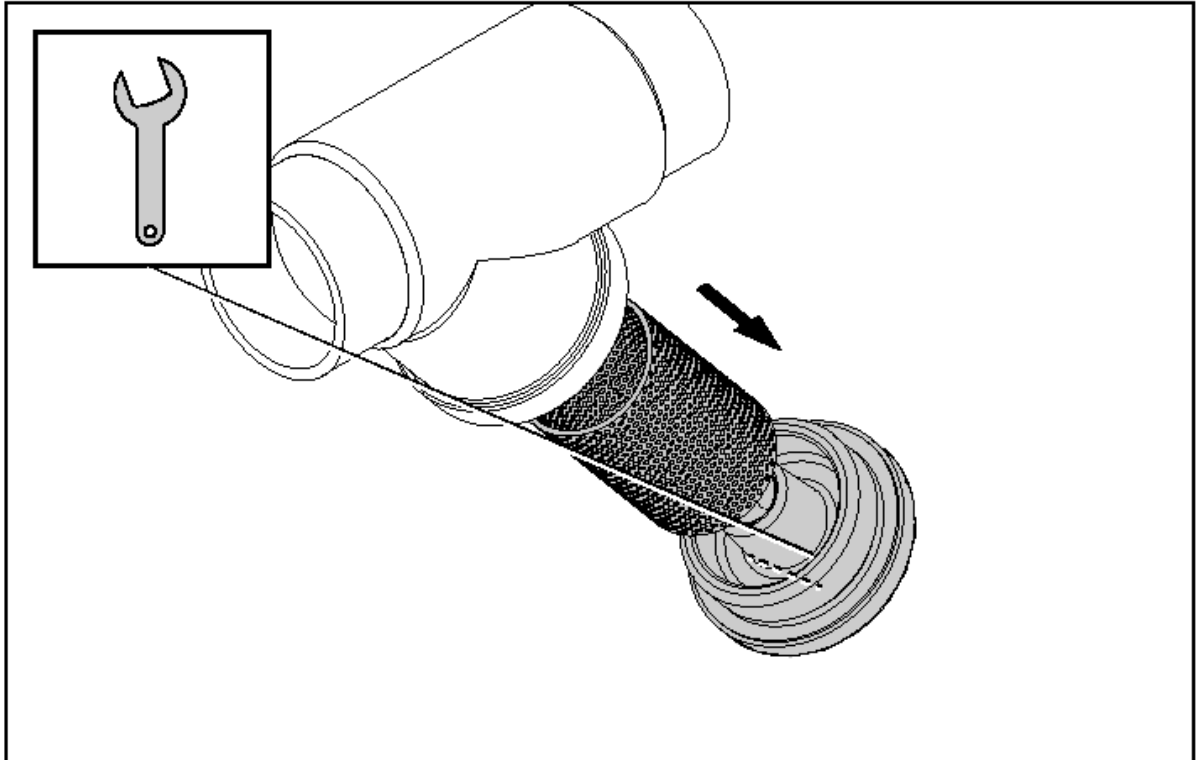
Screw the pipes into the connection ends of valve.

Strike up the pipes with pressure after that time the manufacturer of the sealing compounds pretends for harden it.

Check the tightness of all connections.



Y-strainer, mounting with threaded connection



Y-strainer, disassemble of the bonnet

## 7. Maintenance

Depending on the used media and the employment of the y-strainer you have to do the following:

- Cleaning of the mesh

### 7.1 Cleaning of the mesh

Cut of the media flow and relieve the media pressure.

Keep ready some fit tanks to catch up leaking liquids.

Loosen the bonnet of the strainer. Catch up the running out liquid. Take the bonnet aside and pull the mesh out of the body.

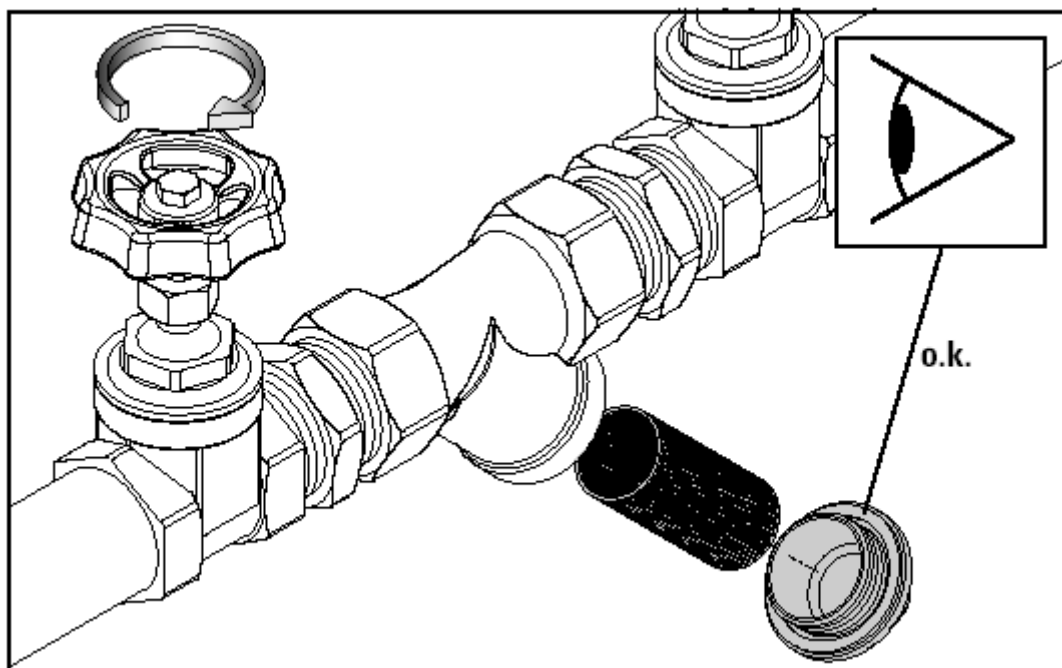
Clean the body and the mesh or exchange the mesh for a new one.

Insert the mesh into the body of the y-strainer.

Screw the bonnet into the body. Observe the correct placement of the seals in the bonnet and take care that there will be no pollution on the seals or the seat.

Tighten the bonnet with a fit spanner.

Check the tightness of all connections.



Y-strainer, cleaning of the mesh

## 8. Technical Information

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### MFR-00 (brass version)

Thread connection: Female thread G ½...G 3

### Nominal pressures

Screw-on magnetic filter: PN 16

### Max. temperature

Screw-on magnetic filter: 200 °C  
Filter size: see table

Mounting position: Cover toward bottom,  
note specified direction of flow

### Materials

Body: Brass Ms 58  
Cover: Brass Ms 58  
Mesh: Stainless steel 1.4301  
Gasket: Klinger Sil<sup>®</sup> C-4300

Mesh size: 280 µm up to G 2"  
530 µm up to G 3"

## 9. Order Codes

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Dimensions and order details (example: **MFR-0015**)

Version	Connection	kV-value [m³/h]	Filter size [µm]	Size of filter cartridge [mm]	L [mm]	h [mm]	Weight [kg]	ID no.
Female thread	G 1/2	6.2	280	19/32	58	44	0.3	MFR-0015
	G 3/4	7.7	280	25/38	69	47	0.3	MFR-0020
	G 1	12.4	280	29/46	82	56	0.4	MFR-0025
	G 1 1/4	13.9	280	37/55	98	68	0.5	MFR-0032
	G 1 1/2	18.5	280	43/61	109	78	0.9	MFR-0040
	G 2	31	280	58/75	131	98	2.2	MFR-0050
	G 2 1/2	56	530	66/9	151	114	2.8	MFR-0065
G 3	80	530	80/130	172	129	4.8	MFR-0080	



## 10. Dimensions

Magnetic filter, female thread, MFR-

