

Fine filter muffler  
FS3 – FS5



Instructions

Revision 01 — 2013

# General Information

Fine filter muffler of the FS series are the result of careful construction and manufacturing.

Fine filter mufflers are applied in all of those sectors where compressed air is relieved from atmospheric pressure. With this tension release, solid particles, condensation and oil content free, represent a high burden at work places together with the noise development when expanding.

Fine filter mufflers reduce the noise level by approx. 40 DB(A) and achieve an effective degree of filtering greater than 99.99%.

# Maintenance and Installation



**Warning against damage by exceeding or falling below operating parameters!**

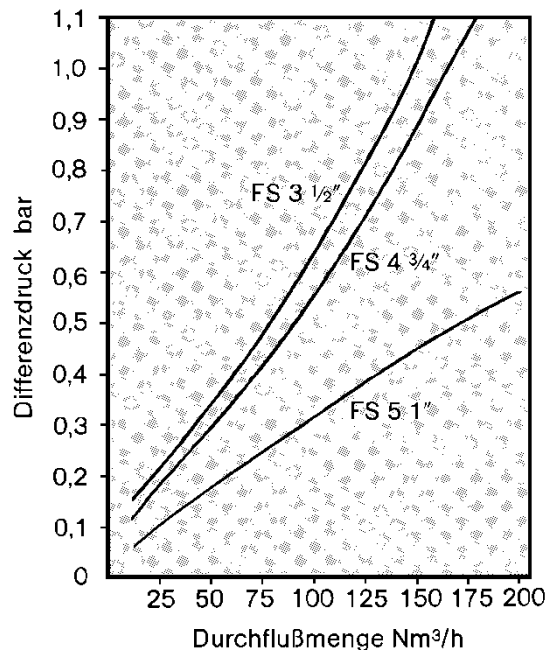
The following data must not be exceeded or fallen below in order to avoid the destruction of the muffler:

**Dam pressure > 0.6 bar change the element.**

**min. inlet temperature and ambient temperature +1 °C.**

**max. inlet temperature of 100 °C.**

The max. performance data listed in the following figure are related to the three different fine filter mufflers must never be exceeded otherwise all claims under the guarantee shall be cancelled.



## Installation

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The fine filter mufflers are screwed vertically into the line direct at the outlet of the compressed air system. . The oil condensate mixture can only be collected in the collecting tray in this installation position. A cock extension including fastening bracket for wall mounting can also be supplied (see dimensional sketch).

## Maintenance

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Take care that the oil or emulsion filtered and that has collected in the collection container is emptied at regular intervals. This must be carried out by turning the knob on the drain by 90° before the fluid level reaches the filter muffler element. After approx. 2,500 operating hours, depending on the solids loading, the element must be replaced by a new one.

## Changing the element

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When changing the element, the housing upper section of the fine filter muffler remains mounted in the line. The collection tray fixed to the housing upper section by a snap-fit connection is released by a slight turning motion. On the base of the filter element there are arrows that mark the direction of rotation, that indicate how to release or tighten.

# Technical information

## Functional principle

Contaminated compressed air containing oil is guided into the conical distribution system via the inlet. This achieves an equal flow of the filter element with concurrent reduction of the flow speed.

Finally the compressed air flows through the filter muffler element where the oil particles are formed to larger droplets due to the coalescing effect and the outer foam jacket. The filtered oil contents collect in the foam jacket and there, flow into the transport collection tray.

Solid materials are stored in the large void volumes of the complex designed filter muffler element. This results in a high service life with low drop in pressure.

## Cross-section and layout inside

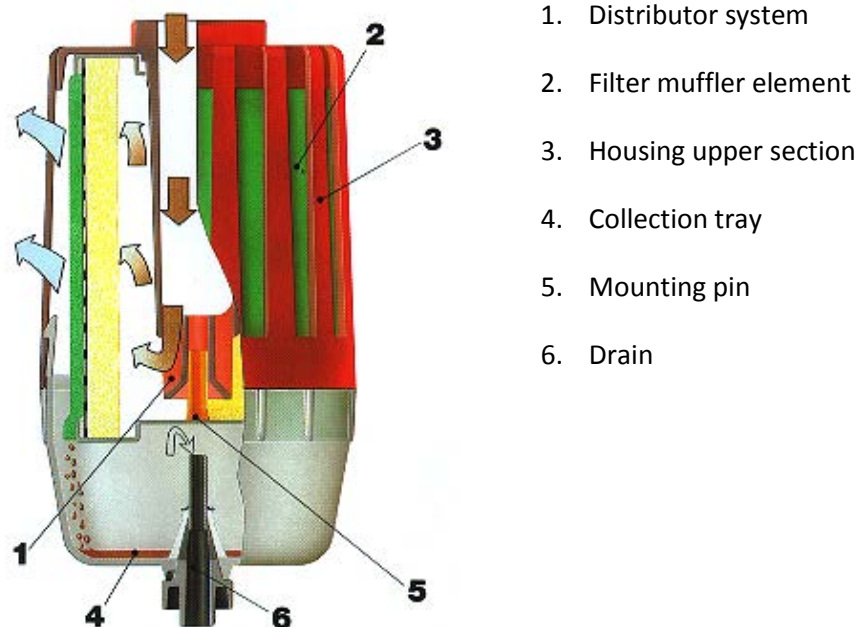
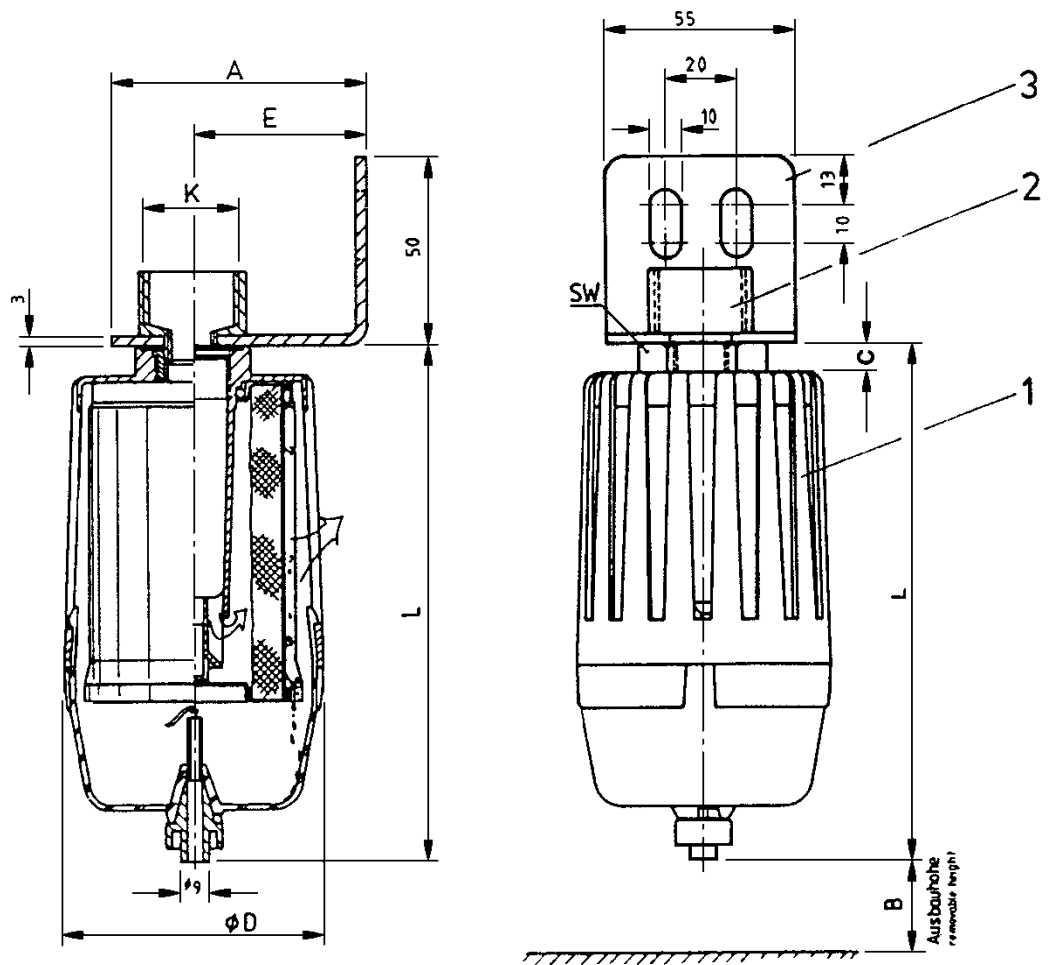


Fig. 1 – Cross-section of a fine filter muffler

## Materials used

<b>Filter element (2)</b>	<ul style="list-style-type: none"><li>– Filter media: micro-fibreglass</li><li>– Steel support sleeve: inside and outside</li><li>– Foam jacket: polyurethane, PVC coated (resistant against synthetic oils)</li></ul>
<b>Upper part (3)</b>	<ul style="list-style-type: none"><li>– Aluminium die-casting, synthetic resin coated</li></ul>
<b>Lower section (4)</b>	<ul style="list-style-type: none"><li>– Polypropylene, transparent</li></ul>
<b>Drain valve (6)</b>	<ul style="list-style-type: none"><li>– Polypropylen</li></ul>

# Dimensional Drawing



## Dimensions

Type	A	B	C	$\phi D$	E	K	SW	L
FS 3	73	90	12	90	50	G ½	41	180
FS 4	73	90	12	90	50	G ¾	41	180
FS 5	83	100	15	110	60	G 1	50	252

## Accessories

Type	Pos.2	Pos.3
FS 3	HVR ½	BF ½ FS
FS 4	HVR ¾	BF ¾ FS
FS 5	HVR 1	BF 1 FS



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