

### Fine filter FS-B

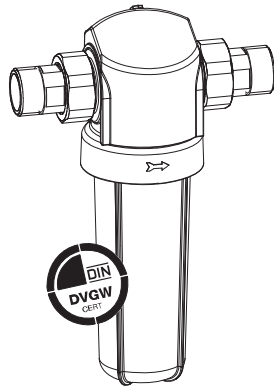


Fig. 1: Fine filter FS-B

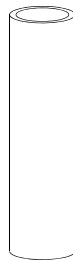


Fig. 2: Filter element

### Designated application

The FS-B filters are designed for the filtration of drinking water. The filters are not suited for circulation water that has been treated with chemicals. Furthermore, they are neither suited for oils, greases, solvents, soaps and other lubricating media nor for the separation of water-soluble materials. The filters may be used in the pressure and negative pressure range.

### Function

#### The filtration process

The unfiltered raw water flows through the inlet into the filter and then passes from the outside to the inside through the filter element and then to the pure water outlet, thus retaining foreign particles > 5 µm, 20 µm, 50 µm, 80 µm (DVGW version), depending on the filter element. Depending on size and weight, the foreign particles either stick to the filter element or fall directly into the filter cylinder.

#### The replacement of filter cartridge

The filter cartridge must be replaced if the water pressure in the pipe system decreases due to the increasing pollution of the filter cartridge.

However, according to DIN 1988-8 the filter cartridge must definitely be replaced every 6 months for hygienic reasons, no matter the degree of pollution. On the top face of the fine filter housing an adjustable maintenance flag is located. During start-up and later on after maintenance took place, the maintenance flag is set to the next maintenance date.

#### Fine filter FS-B

Made of high-strength plastics, for horizontal installation into the drinking water pipe.

### Design

Filter housing made of pressure-resistant, glass fibre reinforced plastic with inseparable, embedded threaded connections made of brass. Filter cylinder made of transparent, high-strength plastic.

Cover with system information and adjustable maintenance flag as a reminder for the required maintenance.

Due to special sealing in the filter head, the filter cartridge can be replaced manually and without any tools. Support layer made of high-quality plastic for continuous use and replaceable filter cartridge above, made of polyester fabric (pore size 80 µm for the standard version; 50 µm, 20 µm and 5 µm available as option).

All water contacting parts comply with the requirements of the Food and Feed Act (LFGB).

Test basics:

KTW, DVGW W 270 (A), DIN 50930-6.

**All materials are recyclable.**

### Installation requirements

Local installation guidelines, general regulations, as well as technical specifications must be observed.

The installation site must ensure the protection of the filter against chemicals, dyes, solvents, vapours and direct sunlight.

### Scope of delivery

- Filter with protective cover and built-in maintenance indicator.
- Screw connections with seals made of LD-PE.
- 80 µm filter cartridge.
- Operation manual.

### Accessories



Differential pressure monitoring of the filter

**Order no. please inquire**

Insert with non-return valve 1"

**Order no. 101 881**

#### Inserts to convert an older Grünbeck filter to an FS-B.

Insert for	Order no.	
FS 1"/Ultra 99 R	101 647e	
FS 1¼"	101 852	
FS 1½"	101 651e	
FS 2"	101652e	
Connection flange A + D (V.2, V.3) 	¾"	101 862
	1"	101 646e
	1¼"	101 864
Connection flange D (V1) supplied until year of const. 06/99 	1"	101 865
	1¼"	101 866

### Spare parts

Replacement filter elements suitable for filter type	FS-B 1"-1¼"	FS-B 1½" 2"
	Order no.	Order no.
Filter elements 80 µm (2 pcs)	103 075	103 077
Filter elements 50 µm (2 pcs)	103 068	103 070
Filter elements 20 µm (2 pcs)	103 071	-
Filter elements 5 µm (2 pcs)	103 081	103 083

Technical specifications		Fine filter FS-B			
<b>Connection data</b>					
Connection diameter		1"	1½"	1½"	2"
Nominal connection diameter	[DN]	25	32	40	50
<b>Performance data</b>					
Flow rate at $\Delta p$ 0.2 (0.5) bar	[m³/h]	3.7 (6.0)	4.0 (6.2)	11.1 (19.9)	13.9 (23.3)
Filter fineness	[µm]	80			
Upper/lower pore size	[µm]	140/80			
Nominal pressure		PN 16			
<b>Dimensions and weights</b>					
A Total height	[mm]	265		508	
B Space required to replace filter element	[mm]	150		390	
C Installation length with/without screw connection	[mm]	182/100	191/100	283/160	277/160
D Min. distance to wall (center of pipe)	[mm]	45		65	
Weight empty, approx.	[kg]	1.2	1.4	3.7	4.4
<b>Test mark/certification mark</b>					
DVGW registration number		NW-9301BT0200			
<b>Environmental data</b>					
Max. water temperature	[°C]	30			
Max. ambient temperature	[°C]	40			
<b>Order no.</b>		<b>101 170</b>	<b>101 175</b>	<b>101 180</b>	<b>101 185</b>

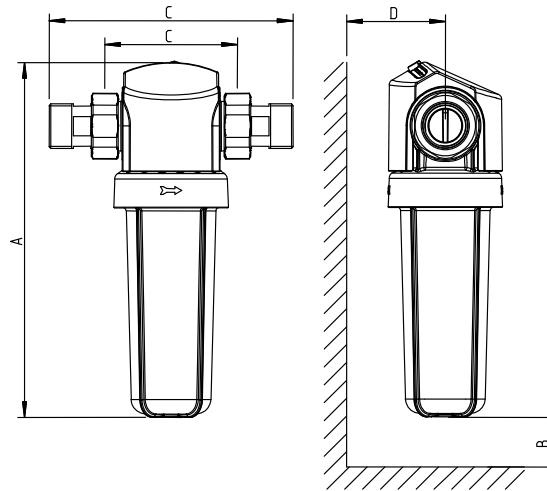


Fig. 3: Installation example for fine filter FS-B

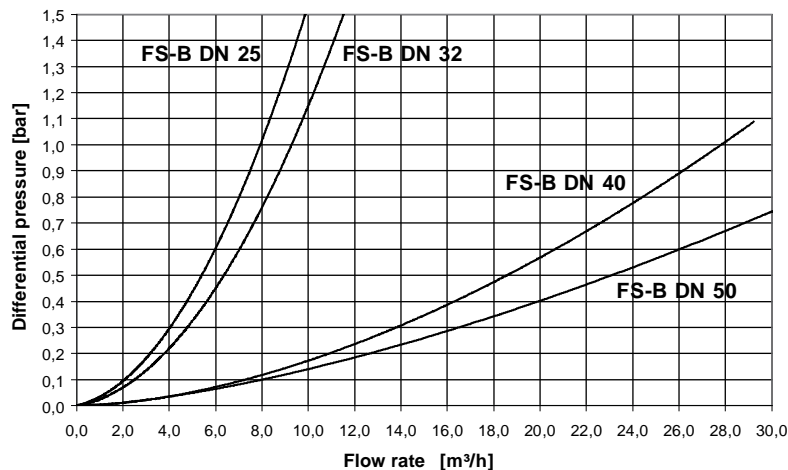


Fig. 4: Pressure loss curve of fine filter FS-B