

GENO-fine filter FME/ FME-WW/FME-KW

Intended use

The GENO-fine filters FME are designed for the filtration of drinking and well water.

The FME-WW filters are suitable for the filtration of process and boiler feed water – in partial flow only.

The FME-KW filters are suitable for the filtration of cooling and air conditioning water – in partial flow only.

The filters FME-WW and FME-KW are suitable for water temperatures up to 90 °C.

The filters can be used for positive and negative pressure applications.

The filters are not suitable for circulation water treated with chemicals.

The filters are neither suitable for oils, greases, solvents, soaps and other lubricating media, nor for the separation of water-soluble substances.

The filters are designed according to the stipulations of DIN EN 13443-1 and DIN 19628 and are intended for installation into drinking water system according to DIN EN 806-2 (installation immediately downstream of the water meter).

They protect the water pipes and connected water-carrying system parts from malfunctions and corrosion damage due to undissolved impurities (particles) such as rust particles, sand, etc.

Mode of operation

The unfiltered drinking water flows into the filter from the inlet side and then passes through the filter elements to the pure water outlet.

Thus, foreign particles of > 100 µm in size, subject to the filter element, are retained.

Depending on their size and weight, the foreign particles either stick to the filter element or fall straight down where they accumulate at the lowest point of the filter.

Due to the growing load on the filter elements, the differential pressure between the raw water inlet and the pure water outlet increases.

If the differential pressure of 0.8 bar is exceeded at the flow rate of the filter, the filter elements must be replaced.

The user-friendly locking system of the lid allows for a quick and trouble-free replacement of the filter elements - without any tools.

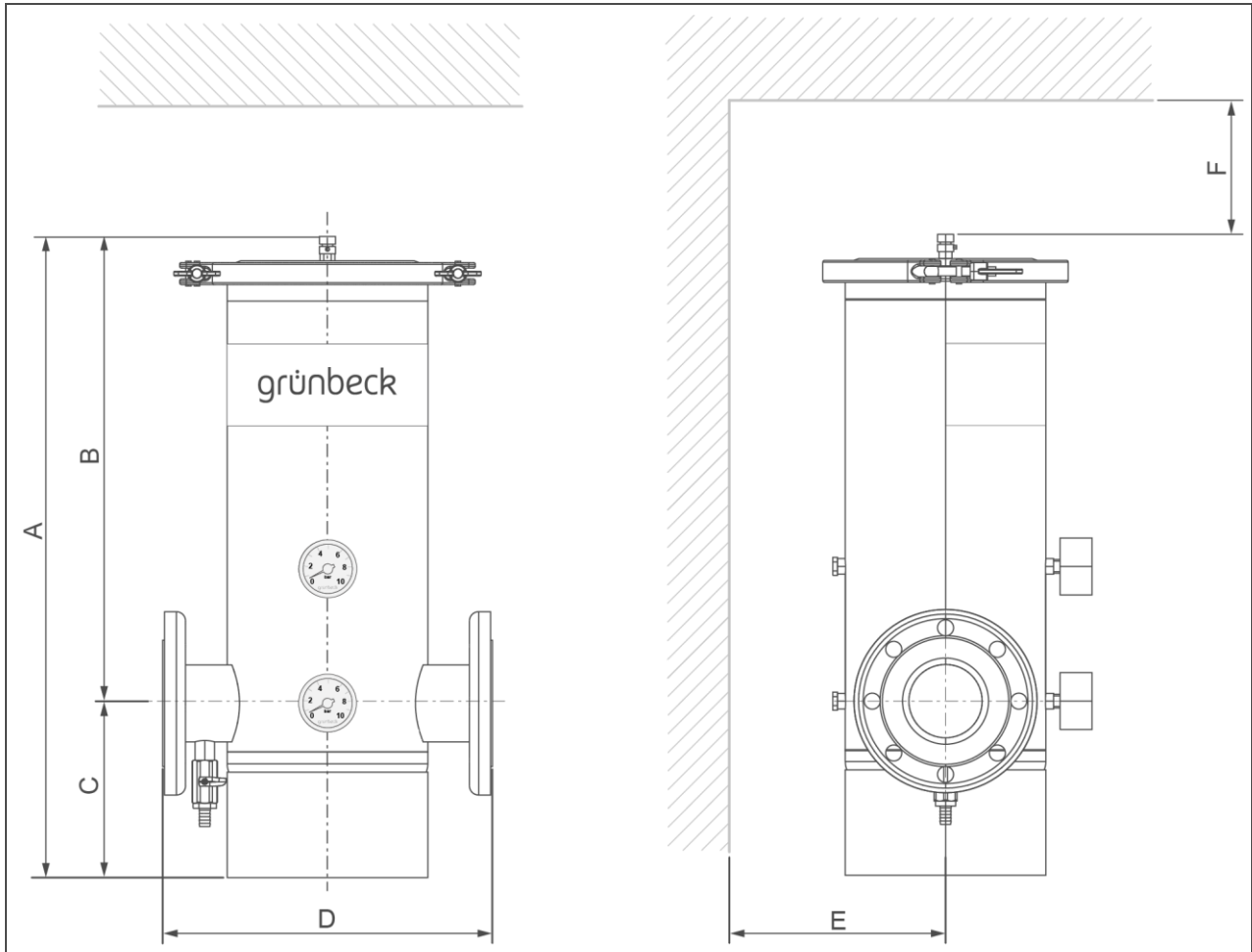
Set-up

- Filter tank made of pure stainless steel (1.4404)
- Filter elements with pressure-resistant support bodies with pore sizes of 100 µm in the standard version for FME/FME-WW and 500 µm for FME-KW.
- User-friendly lid closure
- Flange connection PN 10 acc. to DIN EN 1092-1
- Manually operable air vent
- Draining by means of shut-off valve and hose nozzle
- Pressure gauge for inlet and outlet pressure
- All water contacting parts comply with the German Drinking Water Ordinance

Scope of supply

- GENO-fine filter FME with flange connection
- 2 pressure gauges
- Air vent
- Draining valve
- Operation manual

Technical specifications I



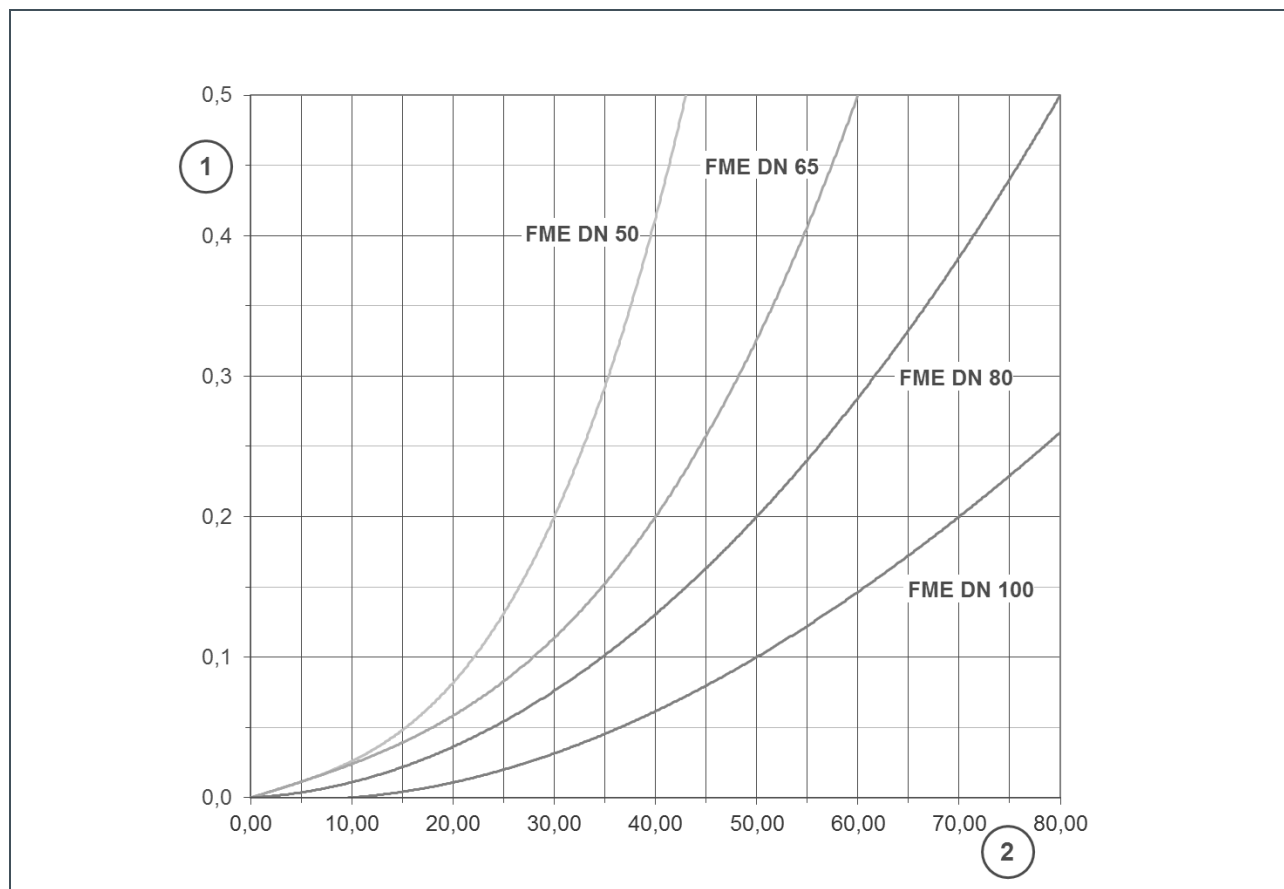
Dimensions and weights			FME/FME-WW/FME-KW			
			DN 50	DN 65	DN 80	DN 100
Nominal connection diameter			DN 50	DN 65	DN 80	DN 100
A	Total height	mm	715	705	680	
B	Overall height above centre of connection	mm	525	515	520	
C	Overall height lower edge of filter to centre of connection	mm		190	160	
D	Installation length without counter-flanges acc. to DIN EN 1092-1	mm		360	485	
E	Min. distance from wall to centre of connection	mm		175	205	
F	Clearance required for replacement of filter element	mm		400		
	Filter elements, quantity	Piece	2		3	5
	Operating weight, approx.	kg	45	46	47	70
	Empty weight	kg	22	23	23.5	32.5

Technical specifications II

Performance data		DN 50	DN 65	DN 80	DN 100
Flow rate at Δp 0.2 bar	m ³ /h	30	40	50	70
Filter pore size Drinking water (FME)	µm	100			
Filter pore size Warm water (FME-WW)	µm	100			
Filter pore size Cooling water (FME-KW)	µm	500			
Max. permissible pressure (PS)	Drinking water (FME)	10			
	Cooling water (FME-KW)	10			
	Warm water (FME-WW)	6			
Allowable differential pressure	bar	≤ 0.8			
Pressure device volume (V)	l	18	18	17	15

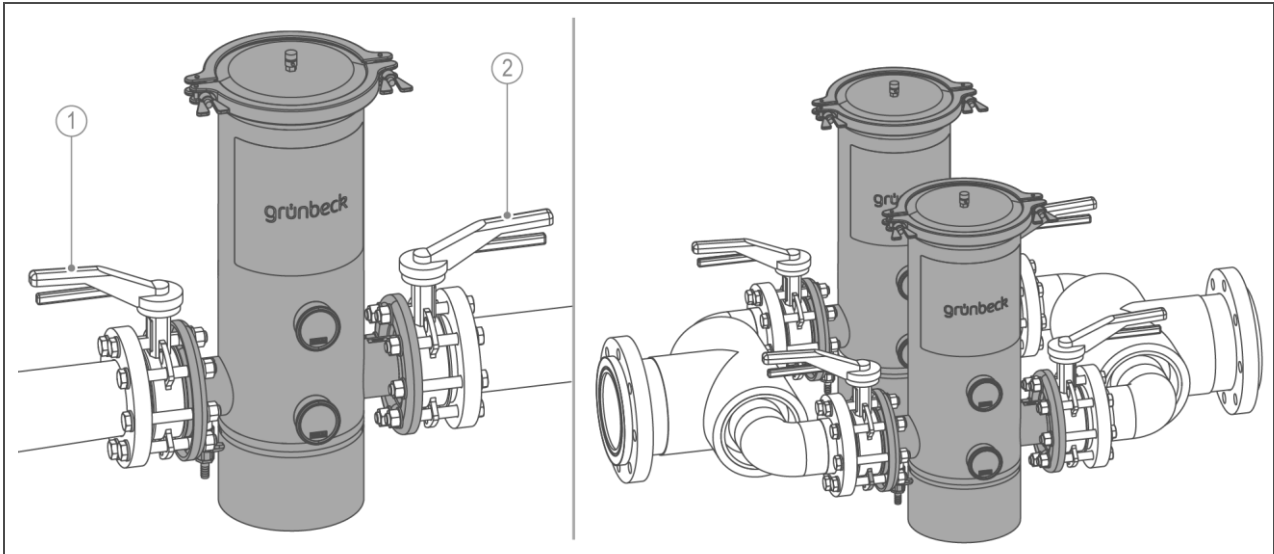
General data		DN 50	DN 65	DN 80	DN 100
Water temperature (TS)	FME °C	≤ 30			
Water temperature (TS)	FME-WW/FME-KW °C	≤ 90			
Ambient temperature	°C	5 – 40			
Order no. (Drinking water)	FME	102 190	102 290	102 390	102 490
Order no. (Warm water)	FME-WW	102 185	102 285	102 385	102 485
Order no. (Cooling water)	FME-KW	102 195	102 295	102 395	102 495

Pressure loss curves of GENO-fine filter FME



Item	Designation	Item	Designation
1	Pressure loss in bar	2	Flow rate in m ³ /h

Installation example



Item	Designation	Item	Designation
1	Inlet shut-off valve	2	Outlet shut-off valve

Installation requirements

Obey the local installation directives, general guidelines and technical specifications.

The installation site must be frost-proof and ensure the filter's protection from chemicals, dyes, solvents, vapours and direct sunlight.

The installation site must be easily accessible for maintenance purposes.

Parallel piping

For the filtration of process, boiler feed, cooling and air conditioning water, two GENO-fine filters can be installed in parallel in order to ensure uninterrupted operation.

For different versions, please inquire.

Accessories

Differential pressure switch Order no. 102 870

With electric contactor, continuously adjustable for visual and acoustic remote signal.

Consumables

As per DIN EN 13433-1, filter elements of 5 µm, 50 µm and 500 µm are not permitted for drinking water installations.

Number of filter elements subject to size of filter.

(Packing unit = 2 pcs each)

Required per filter:

DN 50/DN 65	2 pcs
DN 80	3 pcs
DN 100	5 pcs

10300020001 Filter element 100 µm

103 083 Filter element 5 µm

103 070 Filter element 50 µm

103 111 Filter element 500 µm

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