



FP®, FT®

Universal Filter Series FP®, FT®

Version FP, FT, FS, FSS

Special Features

- Universal in use
- Modular construction
- High variety of materials
- Deep-acting filter element
- Reliable separation of solids
- Wall mounting
- Easy maintenance

Application

M&C Universal Filters reliably separate solids, in particular extremely fine particles, occurring in analysis techniques in gas filtration, using very fine, deep-acting filter elements. Thanks to their universal design, the filters can also be used as separators (without a filter element), liquid filters or, with adsorption cartridges, as an adsorption filter.

For ambient or medium temperatures up to 180 °C, a stainless steel version FSS or FT-H version can be offered.

Description

The modular construction of the filters and the compatibility of the mounting components – filter head, filter body and filter element – enable the ease of mounting, perfectly adaptable to local mounting situations of each particular process.

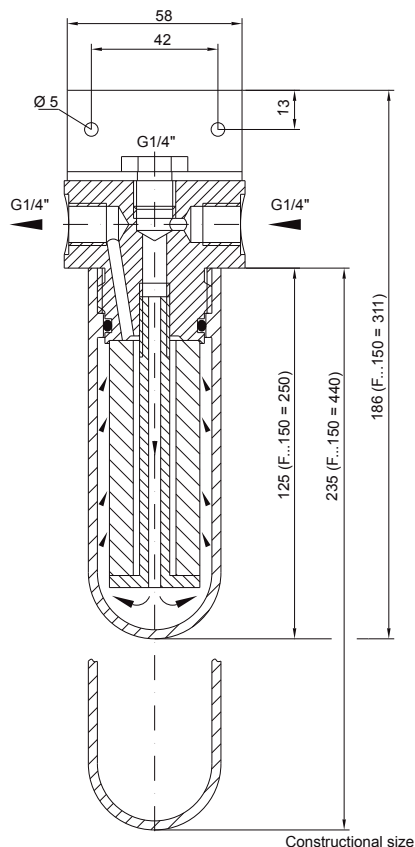
Filter elements of various materials and porosities are available. The extent of soiling and filtering condition of the element can be seen from outside, without the filter housing to be opened (except in the case of FSS filters).

No tools are needed to replace the element and the optimum positioning of the o-ring always ensures that the filter body is reliably sealed with respect to the filter head.

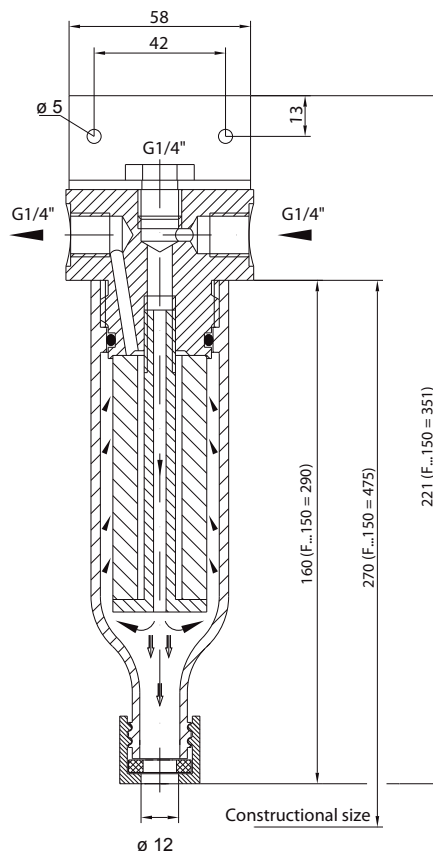
The filters are designed so that only liquid free gas flows through the filter elements when condensation occurs.

With the F.../D series, a condensate trap or a liquid in- and outlet can be turned 180° on the mounting bracket to achieve ease of mounting and flexible adaptation to local circumstances.

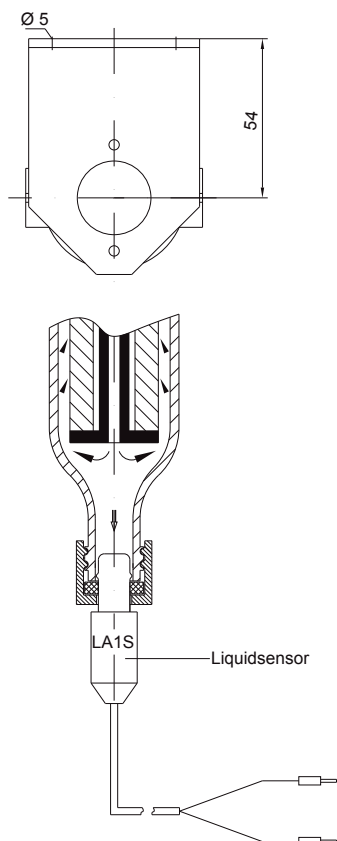
FP, FT, FS, FSS



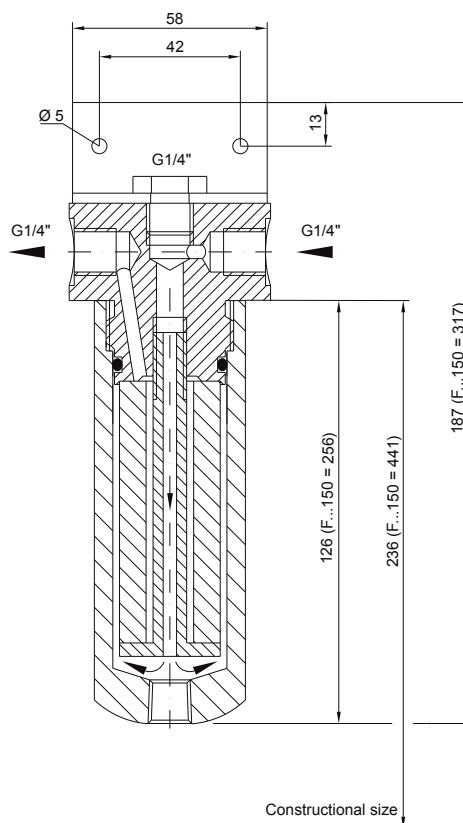
FP-D, FT-D, FS-D



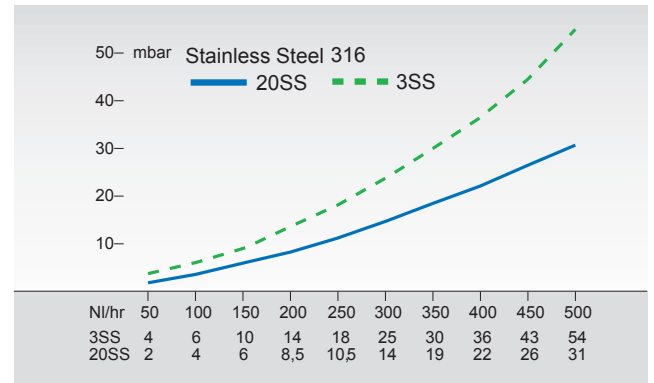
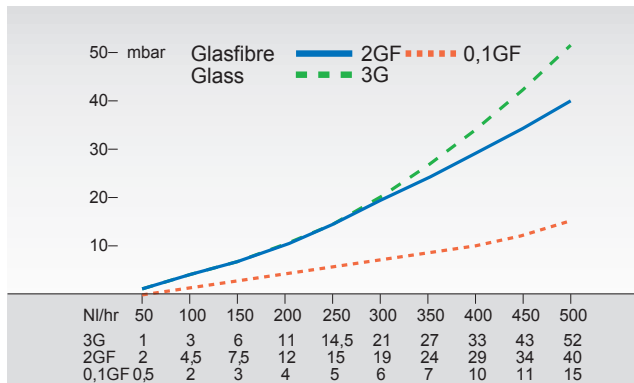
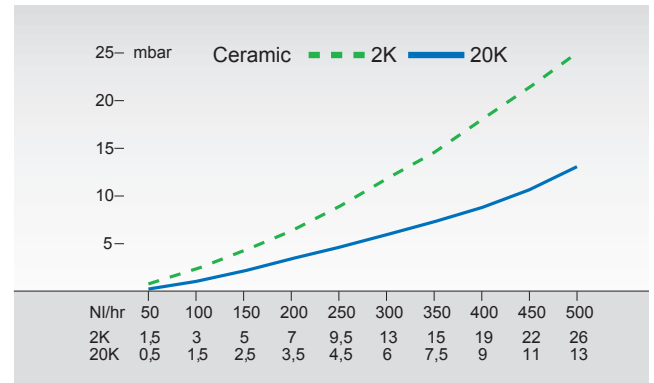
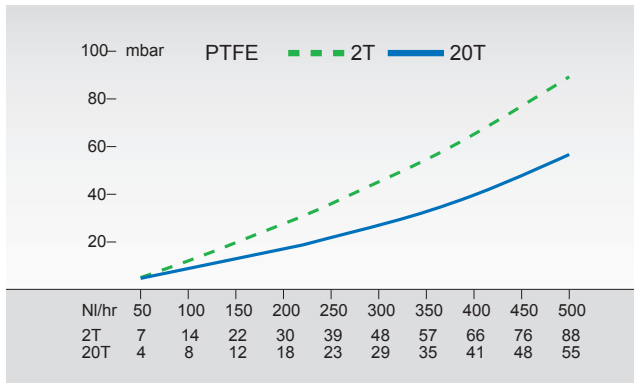
FP-D, FT-D, FS-D with LA1



FSS-D



Flow rate in NI/hr air and Differential pressure in mbar with clean filter elements



Technical Data

	FP, FT, FT-H, FS	FP-D, FT-D, FS-D	FSS, FSS-D
Length of filter element	75 mm, Option: F...150 = 150 mm		
Sample connections: Gas inlet/-outlet	3x G1/4i (1x closed) DIN ISO 228/1 FS, FSS, FSS-D: optional NPT		
Condensate connection		GL25 - ø12 mm	FSS-D = G1/4i, optional NPT
Pressure at 20 °C	max. 5 bar abs.	max. 2 bar abs.	250bar*, F...150 = 200 bar*
Pressure with GL-connection adapter		5 bar abs.	
stagnant space	65 cm³, F...150 = 180 cm³	75 cm³, F...150 = 190 cm³	40 cm³, F...150 = 70 cm³
Filter surface	70 cm², F...150 = 140 cm²		
Materials: Filter head	PVDF, PTFE, PTFE-ko, stainless steel 316Ti		stainless steel 316Ti
Filter body	Glass		stainless steel 316Ti
Filter element	PTFE, glass, glass fibre, ceramic, stainless steel, wire cloth stainl. steel		
Seals: O-ring	FP/-D, FT-H, FS/-D = FPM, FT/-D = FEP		FPM
...-D-connection	PTFE/Silikon		
Temperature of ambient or sample max.	80 °C PVDF, 100 °C PTFE, 180 °C PTFE-ko, stainless steel, glass (fibre), ceramics		
Method of mounting	Wall mounting		
Weight approx.	0,4-1,0 / F...150 = 0,5-1,2 kg		1,5 / F...150 = 2,0 kg

* at 180 °C, 50 bar

All filter units are also available with double-size element F-3G 150, F-2K 150 and F-0,1GF 150, and types FS, FSS with NPT thread. To avoid damage of gas analysers by faulty pre-installed gas drying systems M&C recommends a liquid alarm. Liquid sensors incl. electronics, on request see 5-5.1.1/5-5.1.2/5-5.3.

Panel mounting filters 5-0.1, heated filters 5-2.1.1/5-2.1.5, separators 3-6.1.1/3-6.2.1/3-6.2.3, liquid filters 5-4.1, adsorption cartridges 5-1.10.1, washing bottles 5-1.10.3, fluid particle filters 5-1.10.7/5-1.10.8.

Perspex cover type PS incl. threading PVDF and mounting on the filter glass F-120G Part No. 90F0032

constructional size min. 335

209

150

50

60

filter FPFT.FS

Pos. 2 at filter glass to glue with Silicone