



# **Universal Adsorption Filter Series FP®**

Versions FP-240-D/F, FP-120-D/F and FP-AP, FT-AP, FS-AP for adsorption material

FP-AP

### **Special Features**

- Can be filled with a variety of adsorption materials
- Easy change of filling materials
- Condition of filling material visible from outside
- Various materials available
- Wall-mounting

#### Application

The M&C Universal Filters FP-240-D/F, FP-120-D/F and FP-AP, FT-AP, FS-AP are used in analytical technology for the adsorption of interfering components.

### Description

The M&C filter assembly FP-...-D/F for larger filling quantities consists of the standard filter head FP and a special, approx. 200 mm long glass body F-240G-D/F in the case of version FP-240-D/F, or an approx. 100 mm long glass body F-120G-D/F in the case of version FP-120-D/F. The glass bodies are equipped with a pre-filter in the lower section, where upon the filling can be entered. The flow direction to these fittings is from below via the GL 25-6 glass connection upwards to the filter head.

The M&C filter assembly F...-AP for small filling quantities consists of the standard filter head FP, FT or FS, in which an empty cartridge F...-AP for adsorbents is screwed in. The sample gas is directed downwards in the filter housing and flows through the cartridge from the bottom to the top, thereby ensuring a long contact with the adsorbent over the entire length of the cartridge. The design of this M&C filter assembly guarantees that only liquid-free gas flows through the cartridge when condensate droplets occur.

The condition of the filling material can be assessed from the outside without having to open the filter housing. No tools are required to change the filling, whereby the optimum positioning of the O-ring always ensures a secure sealing between the filter body and the filter head. Filter inlet and outlet can be rotated 180° on the wall bracket so that flexible adaptation to local conditions is possible during installation.

Downstream of the adsorption filter, an ultrafine particle filter should still be used.

## Universal Filter FP-240(120)-D/F



(255) mm at FP-120-D/F

## **Universal Filter F...-AP**



\* constructional size 290 [ $\approx$  11.4"]

Dimensions in mm [Inches]

## **Technical Data**

Universal filter	FP-240-D/F	FP-120-D/F	FP-AP	FT-AP	FS-AP
Part number	03F5600	03F5650	03F5000	03F5200	03F5100
Material of medium-contacting parts: filter head, cartridge, o-ring, glass body	PVDF, FKM, glass		PVDF, PVC, FKM, glass	PTFE, PVDF, FEP, glass	1.4571, PVC, FKM, glass
Stagnant space	190 cm <sup>3</sup>	75 cm <sup>3</sup>	65 cm <sup>3</sup>		
Operating temperature	-20 to +80 °C [-4 to 176 °F]		0 to +55 °C [32 to 131 °F]	-20 to +80 °C [-4 to 176 °F]	0 to +55 °C [32 to 131 °F]
Storage temperature	-30 to +110 °C [-22 to 230 °F]		-15 to +65 ℃ [5 to 149 °F]	-30 to +110 °C [-22 to 230 °F]	-15 to +65 °C [5 to 149 °F]
Operating pressure, at 20 °C [68 °F]	Max. 2 bar abs.		Max. 5 bar abs.		
Operating pressure with GL adapter	Max. 5 bar abs., at 20 °C [68 °F]				
Method of mounting	Wall-mounting, position of mounting: vertical				
Adsorption material	Standard scope of supply without material				
Connection	GL 25 - 6, G1/4" female	e*	G 1/4" female*		
Weight	0.5 kg [≈ 1.1 lbs]	0.3 kg [≈ 0.7 lbs]			0.5 kg [≈ 1.1 lbs]

\* The dimensions and designation of the screw-in threads correspond to the respective applicable standard. The tolerances of the thread standards are matched to metal threads and cannot be applied to plastic threads.

## Selection of adsorption material

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Adsorption material	Interfering component to be removed	Cross-sensitive against
Active charcoal	Oil and solvent vapours	$SO_{2'}$ $CO_{2'}$ $CL_{2'}$ $NH_{3}$
Stuttgarter Masse	Aerosols	HF
Silica gel	Water vapor	SO <sub>2</sub> , NH <sub>3</sub> , HCL, CO <sub>2</sub> , C <sub>n</sub> H <sub>m</sub>
Potassium hydroxide	CO <sub>2</sub>	SO <sub>2</sub> , CL <sub>2</sub> , H <sub>2</sub> O
Sodium-calcium	CO <sub>2</sub>	SO <sub>2</sub> , CL <sub>2</sub> , H <sub>2</sub> O
Purafil Select	SO <sub>2</sub> , SO <sub>3</sub> ,CS <sub>2</sub> , H <sub>2</sub> S	$C_2H_2$ , $C_2H_4$ , $CH_4O$

