

Depth Filter TF70 / TF90

Application

The depth filters series **TF** are used for continuous extractive gas analytics. They are usually integrated downstream the sample gas cooler and serve for fine dust separation from the sample gas to protect the analyzer from damage.

Technology

The depth filters series **TF** are designed particularly corrosion resistant and easy to maintain. Filter cartridge in PTFE or glass fiber, filter body and holder are made of PVDF, lid is made of glass and sealing is made of FKM. The PTFE filter element has a porosity of $0.1\mu\text{m}$ a large filter surface of 67cm^2 resp. 86cm^2 and an especially low pressure drop of only a few mbar. Regarding design special attention was also paid to an extra low dead volume for fast response time. Due to the G1/8" f-thread the sample gas connections can be determined variably by means of an appropriate screw fitting.

Functions

Due to the PTFE depth filters series **TF** fine dust particles up to a grain size of $0.1\mu\text{m}$ are separated reliably. The glass lid allows quick and easy to assess the degree of contamination of the filter element. The easy-to-loosen PVDF knurled nut enables opening with quick and easy change of the filter element.



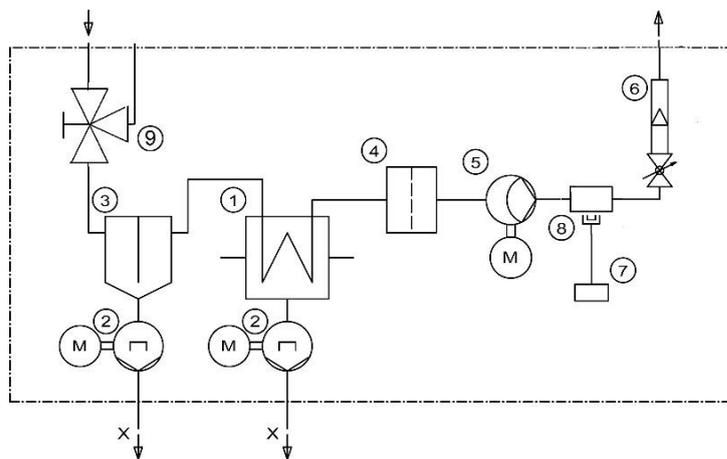
- ✓ Reliable protection of the analyzer against fine dust
- ✓ Safe separation of dust particles up to $0,1\mu\text{m}$
- ✓ Durable corrosion resistant inert filter element
- ✓ Quick and easy change of filter element
- ✓ Two filter sizes available
- ✓ Easy mounting and integration
- ✓ High chemical resistance
- ✓ Low dead volume for fast response time
- ✓ Optical control of degree of contamination
- ✓ Front panel and wall mounting (with optional mounting bracket)

Technical Data

TF		TF70	TF90
Part no.		92300194	92300198
Filter cartridge	mm	70 (Glass fibre)	90 (Teflon)
Sample gas connections		G1/8"i	
Ambient temperature	°C	-20...+80	
Max. medium temperature	°C	120	
Materials media wetted parts		glass, PVDF, FPM, PTFE (filter element)	
Max. operating pressure	bar	6	
Max. flow rate Vn	l/h	500 with filter element / 1000 without filter element	
Dead volume	ml	25	25
differential pressure	mbar	approx. 10 at 200l h and a clean filter element	
Design data			
Dimensions	mm	40 x 40 x 105	40 x 40 x 135
Weight	kg	0,2	0,3
Mounting		Front panel resp. wall mounting with optional mounting bracket	
Options			
Straight connector DN4/6		G1/8"a – DN4/6 PVDF Art. 6353979	

Dimensions in mm

Application example



- ① Heat exchanger
- ② Condensate pump
- ③ Condensate pre-separator (Option)
- ④ **Glass fiber / PTFE depth filter TF**
- ⑤ Sample gas pump
- ⑥ Flow meter
- ⑦ Electronic control
- ⑧ Condensate sensor
- ⑨ Test gas valve