



# Aerosol Filter

## AF and AF-LS

### Application

The aerosol filters series **AF** are used for continuous extractive gas analytics. They are usually installed directly upstream the analyser and serve for fine liquid particle (aerosol) separation from the sample gas to protect the analyser from damage. Typical applications for the filters series **AF** are burning processes with high content of sulfur in the burning material like brown coal and heavy oil.

### Technology

The aerosol filters series **AF** are designed particularly corrosion resistant and easy to maintain. Filter head and holder are made of PVDF, body is made of glass and sealing is made of FKM. The glass fibre filter element has 2 layers with different porosity 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 G1/4"-thread the sample gas connections can be determined variably by means of an appropriate screw fitting. Version **AF-LS** additionally has a liquid stop with semipermeable membrane integrated in the filter outlet.

### Functions

With the 2-layer glass fibre filter element 99,9999% of fine liquid particles up to a size of 0,1µm are separated reliably. The filtration happens from inside the filter element to the outside via the inner layer with higher porosity than the outer layer. This way the very fine liquid particles can combine to bigger liquid drops on the way through the filter element and will drop down to the bottom due to gravity. The glass body allows quick and easy to assess the condition of the filter element.

- ✓ Reliable protection of the analyser against aerosols
- ✓ Safe separation of 99,9999% liquid particles up to 0,1µm
- ✓ Durable corrosion resistant materials: PVDF, Duran-glass, FKM, glass fibre, PTFE
- ✓ Integrated liquid stop for AF-LS
- ✓ Quick and easy change of filter element
- ✓ Easy mounting and integration
- ✓ Low dead volume for fast response time
- ✓ Optical control of filter element condition
- ✓ Wall mounting

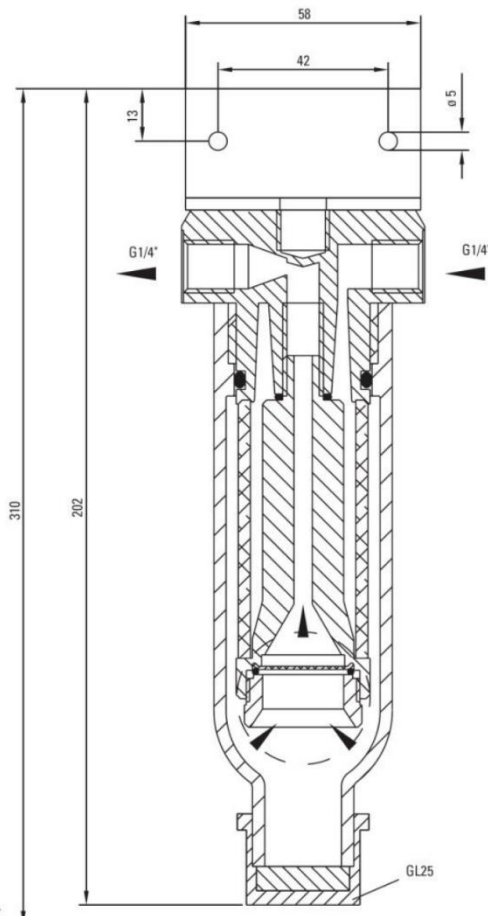




### Technical Data

		AF	AF-LS
Part No.		<b>30000981</b>	<b>30000991</b>
With integrated liquid stop		no	yes
Sample gas / condensate connections		G1/4" f / GL25 blind cap	
Ambient temperature	°C	0...+60	
Max. Gas temperature	°C	+80	
Separation rate	%	99,9999	
Max. medium temperature	°C	+120	
Materials media wetted parts		glass fibre, glass, PVDF, FKM, PTFE	
Max. operating pressure	bar abs.	0,2 – 2 Δp max. 1 bar	0,3 – 3 Δp max. 0,5 bar
Max. flow rate V <sub>n</sub>	l/hr	300	200
Dead volume	ml	65	
Max. liquid volume	ml	20	
<b>Design data</b>			
Dimensions	mm	58 x 202	
Weight	kg	0,3	
Mounting		wall mounting with mounting bracket	
<b>Options</b>			
Straight connector DN4/6		G1/4" m – DN4/6 PVDF	

### Dimensions in mm



\* Constructional size