Acid filter

Application and description

The acid filter is used in the gas conditioning system. Its purpose is to collect the sulfuric acid aerosols entrapped in the sample gas. The acid filter may always be required where the SO_3 content in the sample gas is greater than 1 mg/m³ or the SO_2 content is greater than 1000 mg/m³ – for example in flue gas from heavy-oil or hard coal firings.

The filter element is made up of borosilicate fibers. An influencing and “hang-up” of the measuring component in the sample gas is not detectable with this material.

Technical data

Flow rate (air)
Max. 250 l/h

Gas pressure
p_{abs} = 50–200 kPa (0.5–2 bar)

Sample gas temperature
Max. 150 °C

Sample gas dew point
Max. 70 °C

Retention rate
99.99 % for particles ≥ 0.1 µm

Pressure drop
10 hPa at 250 l/h, 50 hPa at 250 l/h

Dead time
Approx. 20 s

Materials of gas-conducting parts
Connection cap: PVDF; vessel: glass; filter element: borosilicate glass micro fiber

Dead volume
Approx. 130 ml

Dimensions
See dimensional drawing

Weight
Approx. 0.57 kg

Mounting
Wall mounting with mounting bracket, mounting orientation vertical

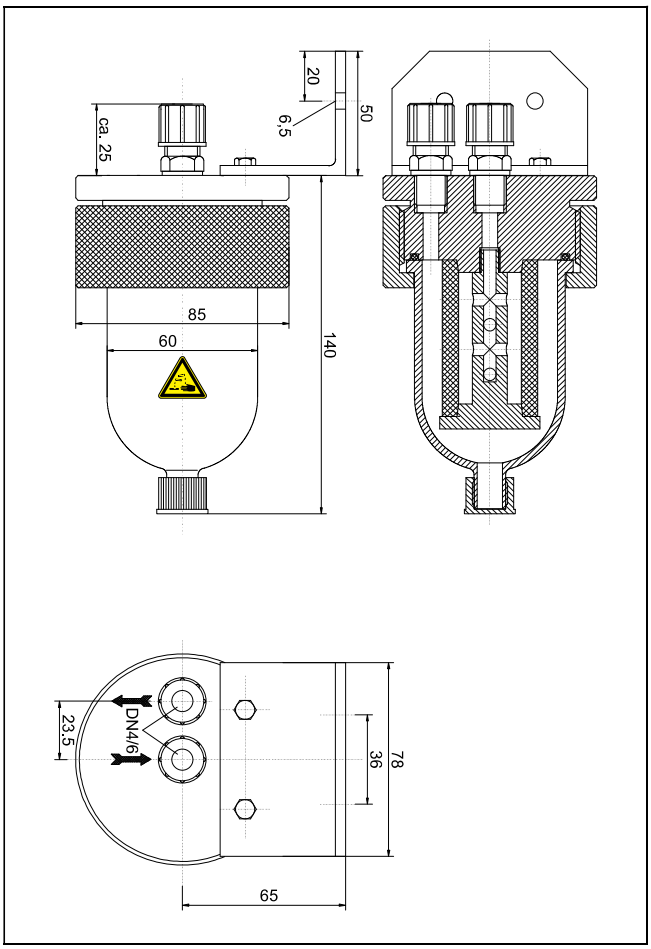
Gas connections
Male fitting (PVDF) for 4/6/1 mm, drainage connection GL14 with terminal fitting 4/6/1 mm (PVDF)

Ambient temperature
+5 to +50 °C

Service life
Change element if there is contamination and perceptibly higher pressure drop

Scope of delivery
Filter vessel with filter element, two male fittings, drainage connection GL14, mounting bracket, mounting and replacement instructions

Dimensional drawing (dimensions in mm)



Ordering information

	Catalog No.
Acid filter	**23045-5-8018419**