JBF-301L Heated Sample Gas Filter



APPLICATION

- · Extractive gas analysis
- · Emission and process monitoring
- · Hot filtration of sample gases
- Removal of dust and contamination from sample gas
- · For protection of the analyzers

BENEFITS

- Reliable continuous dust filtration
- No change of sample gas
- · No cold spots
- · No temperature controller necessary
- · Low and easy maintenance effort
- Filter element change without tools
- Easy mounting and integration in gas analysis systems
- Quick heating up in max. 30 min
- Long service life of the filter elements
- · Low and easy maintenance effort

FEATURES

- For wall mounting
- With protection housing
- · Homogeneous heating without cold spots
- Filter elements out of ceramic, 2 µm or 0,2 µm porosity or pyrex wool
- Large filter surface
- · Filtration from outside to the inside
- Second sample gas outlet (JBF-301LT)
- Low temperature status contact
- Low dead volume
- Low pressure drop
- · Variable connection technology





Gas Sampling Probes

Heated Sample Lines

Sample Gas Coolers

Condensate Treatment

Accessories

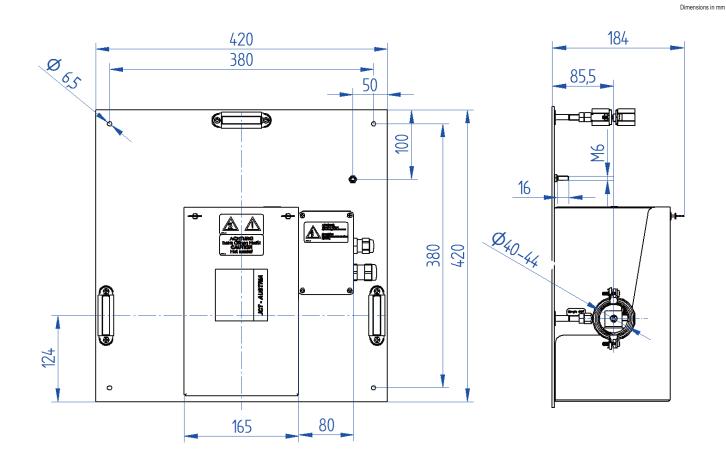
Gas Conditioning Systems

> Sample Gas Converters

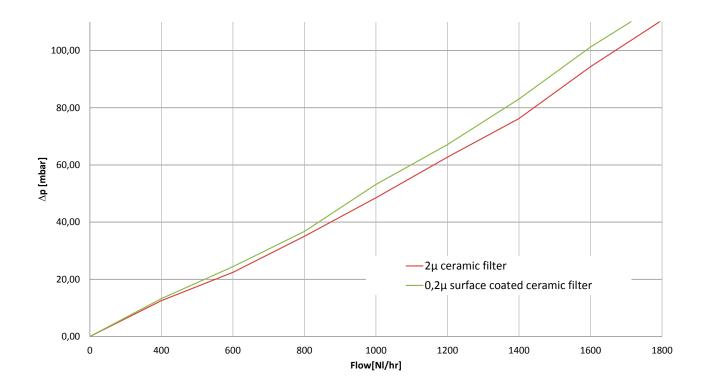
TECHNICAL DATA

Model	JBF-301L	JBF-301LT	JBF-301HL	JBF-301HLT	
Description	heated fine dust filter for analyzer protection				
Number of sample gas outlets	1	2	1	2	
		Operation			
Operation temperature	approx. 180°C		180°C (ex works), adjustable 5° to 315°C		
Dust loading	max. 2 g/m ³ , flow dependent				
Flow	max. 2000 NI/hr				
Ambient temperature	-20°C to +60°C				
Operating pressure	max. 2 bara				
Low temperature limit	150°C		-30K/+20K fix to set point		
Heating-up time	approx. 30 min				
		Construction			
Dimensions over all (W x H x D)	420 x 420 x 184 mm				
Weight	approx. 12 kg				
Filter element	ceramic, 40 / 20 x 66 mm, 2 μm or surface coated 0,2 μm		pyrex wool		
Heating element	PTC self limiting		electronic / PT100		
Connection inlet / outlet		NPT 1/8" fei	male thread		
Gas wetted materials	SS316, ceramic, Viton®		SS316, pyrex wool, Perlast®, Kalrez®		
Dead volume	62 cm ³				
Filter surface	83 cm ²				
Mounting clamps for heated sample lines	Ø 40 to 44 mm				
Protection class	IP 40 (EN60529)				
Protection housing / colour	SS304, thermally insulated / stainless steel natural				
Approvals / signs	CE				
		Electrics			
Power supply	115 to 230 V	115 to 230 VAC 50/60 Hz		230 VAC 50 Hz	
Power consumption	approx. 300 VA		approx. 505 VA		
Status contact	volt free, min. 24 VDC / 50 mA, max. 230 VAC / 5 A, \cos_{ϕ} 0,95		volt free, 230 VAC / 2 A, min. 5 VDC / 5 mA		
Electrical connection	spring type terminals 0,08 to 2,5 mm ²				
Cable entry power supply	cable gland M20 x 1,5; clamping range 7 to 15 mm				
Cable entry status contact	cable gland M16 x 1,5; clamping range 3,5 to 10 mm				

DIMENSIONS / PRESSURE DROP



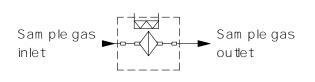
Pressure drop with new filter element and air at 20 $^\circ\text{C}$

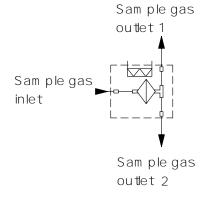


GAS FLOW DIAGRAMS



JBF-301LT





ORDER CODES

Order code	Description
36.00170	JBF-301L, heated filter, ceramic filter element 2 μm , 115 to 230 VAC 50/60 Hz
36.00180	JBF-301L, heated filter, surface coated ceramic filter element 0,2 μ m, 115 to 230 VAC 50/60 Hz
36.00190	JBF-301LT, heated filter, ceramic filter element 2 μ m, 115 to 230 VAC 50/60 Hz, with second sample gas outlet
36.00200	JBF-301LT, heated filter, surface coated ceramic filter element 0,2 µm, 115 to 230 VAC 50/60 Hz, with second sample gas outlet
36.00210	JBF-301HL, heated filter, high temperature version for up to 315°C, pyrex wool filter element, 230 VAC 50 Hz
36.00220	JBF-301HLT, heated filter, high temperature version for up to 315°C, pyrex wool filter element, 230 VAC 50 Hz, with second sample gas outlet

