



JCT
Analysentechnik

JES-360Ex

Gas Sampling Probe for Pre-Filter Back Flush



Gas Sampling Probes

Heated Sample Lines

Sample Gas Coolers

Condensate Treatment

Accessories

Gas Conditioning Systems

Sample Gas Converters

APPLICATION

- Representative continuous gas sampling in processes containing high dust and humidity
- Installation in Ex-zone 1, 2 or 21, 22
- Hazardous gases
- Pressurized processes
- Extractive gas analysis
- Emission (CEMS) and process monitoring
- Removal of dust from the sample gas

BENEFITS

- Cost-optimized solutions
- No condensation or chemical reactions of sample gas
- Convenient filter replacement
- Low maintenance
- Safe unattended operation
- Easy start-up
- Even for high dust concentrations
- Reliable protection of the analyzer system
- Long filter lifetime

FEATURES

- Modular design for custom-tailored applications
- Highly efficient filter cleaning
- Homogeneous heating without cold spots
- Large active filter surface
- Filtration from outside to inside
- Filter element change without tools
- Different material of filter elements
- Self-limiting heater for T3 or T4
- Temperature status contact
- Weather protection housing
- Various options and upgrades
- Wide range of accessories

TECHNICAL DATA

Model





JES-360Ex

Description	stationary gas sampling probe for pre-filter back flush for Ex-zone 1, 2, 21 or 22
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Operation

Temperature (feature S)	temperature class T3: 200 °C, T4: 135 °C
Low temperature status contact (feature O)	temperature class T3: 130 °C, T4: 90 °C
Operating pressure	max. 2 bara (max. 7 bara optional)
Mounting position	5° to 15° incline (recommended), torsion angle max. 15°
Heating-up time	< 1 h
	for options S0, S2: 0 °C to 55 °C for options S1, S3: -20 °C to 55 °C

Construction

Dimensions over all (W x H x D)	375 x 418 x 449 mm
Dimensions connection box (W x H x D)	120 x 160 x 90 mm
Filter element	2 µm ceramic or 0,2 µm ceramic surface coated
Active filter surface	170 cm ²
Mounting flange	DN 65, PN6; form A according to EN 1092-1; SS316L or 2" ANSI 150 lbs; according to ASME B16.5
Sample gas inlet	G 3/4" female thread
Sample gas outlet	1/8" NPT female thread
Calibration gas connection (feature C)	pipe 6 mm, SS316
Back purge connection (feature K)	pipe 6 mm, SS316
Connection pre-filter back flush (feature J)	NPT 3/8" female thread
Gas wetted materials	SS316L, ceramic, Viton®
Protection class	connection box IP65, probe IP43
Weight	approx. 15 kg, depending on options
Weather protection housing	SS304, thermal insulated, colour stainless steel natural
Type of protection	heating:  II 2 G Ex db IIC T4, T3  II 2 D Ex tbIIIC T135°C, T200 °C connection box:  II 2 G Ex em II T6/T5/T4  II 2 D Ex tD A21 IP66 T80 °C, T95 °C
Approvals / Signs	heating: PTB 02 ATEX 1116X ; IECEx PTB 07.0055X connection box: PTB 01 ATEX 1016 ; LCIE 02 ATEX 6240 ; IECEx PTB 06.0046 / CE

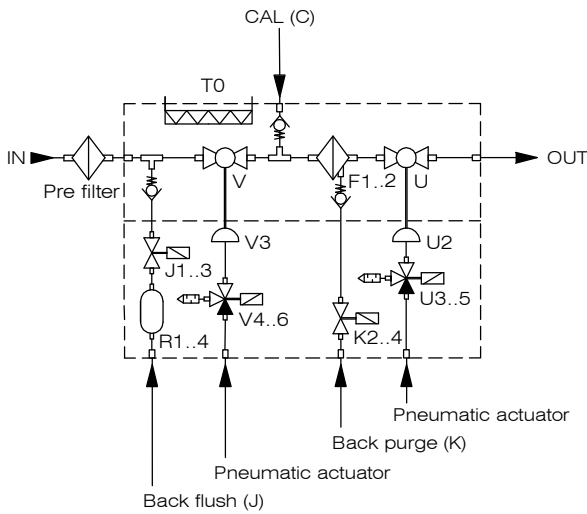
Electrics

Power supply	115 to 230 VAC 50/60 Hz
Power consumption	approx. 150 to 300 VA

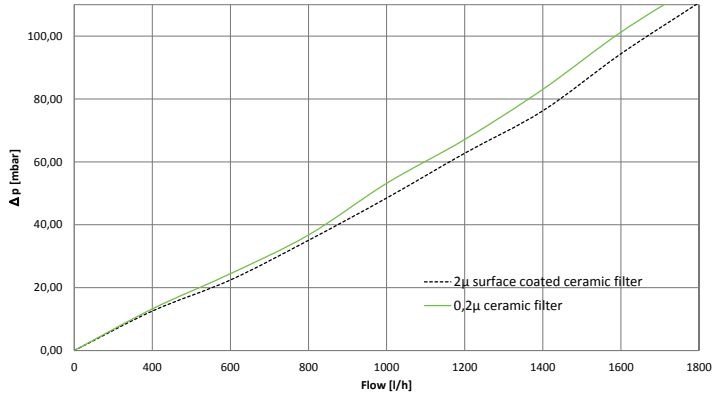
Scope of delivery: sampling probe, mounting material, flange gasket, gasket for sampling pipe, operating manual

FLOW CHART

This flow chart includes all possible options.

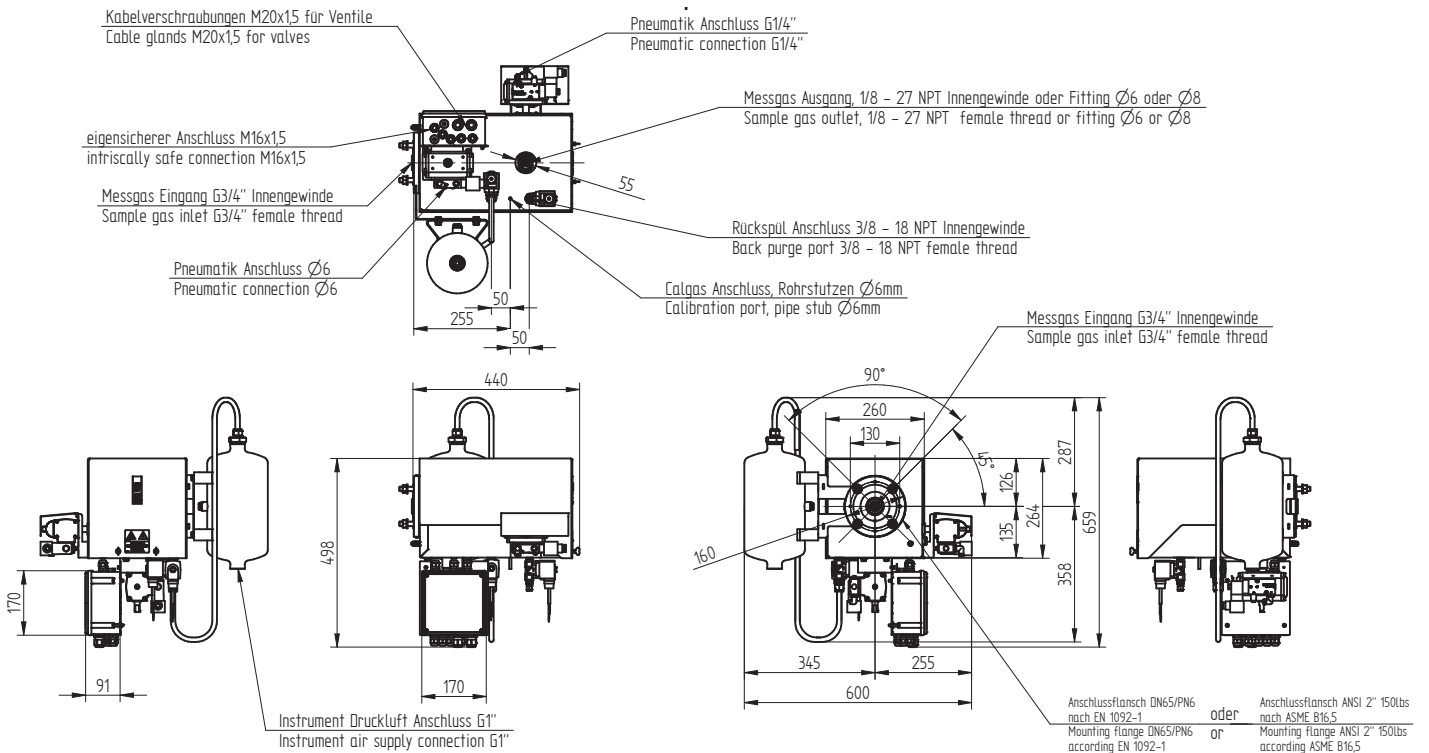


Pressure characteristics in dependence of the gas flow
(for new filter element and 20 °C)



DIMENSIONS

Dimensions in mm



ORDER CODE

Scope of delivery: sampling probe, mounting material, flange gasket, gasket for sampling pipe, operating manual

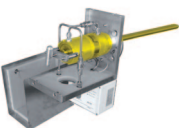
Basic model	pre-filter back flush with non-return valve (not for option V0)
includes	weather protection housing self-limiting heater

Available Features

Flange	DN65/PN6	Z1																	
	2" ANSI	Z2																	
Filter	2 µm ceramic		F1																
	0,2 µm ceramic surface coated		F2																
Process shut-off ball valve	without shut-off ball valve and without pre-filter back flush					V0													
	without shut-off ball valve					V1													
	with manual operation					V2													
	with pneumatic actuator					V3													
	with pneumatic actuator and pilot valve 24 VDC ATEX					V8													
	with pneumatic actuator and pilot valve 115 VAC ATEX					V9													
Heating (ATEX)	Temperature class T3, 1 heater						S0												
	Temperature class T3, 2 heaters						S1												
	Temperature class T4, 1 heater						S2												
	Temperature class T4, 2 heaters						S3												
Back purge valve / Port sample probe filter	without												K0						
	back purge port with-non return valve												K1						
	back purge port with-non return valve ATEX 24 VDC												K5						
	back purge port with-non return valve ATEX 115 VAC 50/60 Hz												K6						
	back purge port with-non return valve ATEX 230 VAC 50/60 Hz												K7						
Pre-filter back flush valve	without													J0					
	ATEX 24 VDC													J4					
	ATEX 115 VAC 50/60 Hz													J5					
	ATEX 230 VAC 50/60 Hz													J6					
Isolation ball valve probe outlet	without															U0			
	with manual operation															U1			
	with pneumatic actuator															U2			
	with pneumatic actuator and pilot valve 24 VDC ATEX															U7			
	with pneumatic actuator and pilot valve 115 VAC ATEX															U8			
Air accumulator	without																	R0	
	air accumulator 2 l																	R1	
	air accumulator 5 l																	R2	
Mounting hole for heated sample line	for mounting clamp diameter 35-50 mm																		M1
	for mounting clamp diameter 58-61 mm																		M2
Connection ports	inch																		A1
	metric																		A2
Additional Options																			
Others	calibration port with non-return valve																		C
	low temperature status contact																		O
Order code																			
		JES-360Ex.	Z	F	V	S	K	J	U	R	M	A							

JCT Analysentechnik GmbH offers a wide range of accessories. Please refer to separate data sheets for further information.

Gas Sampling **Probes**



Heated Sample **Lines**



Sample Gas **Coolers**



Gas Conditioning **Systems**



NOx **Converter**



and **solutions** for

