



**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. 45°
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 <sup>2</sup>
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

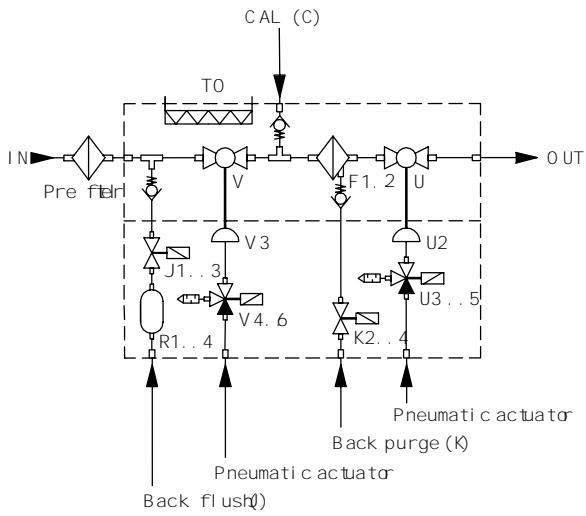
### Electrics

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

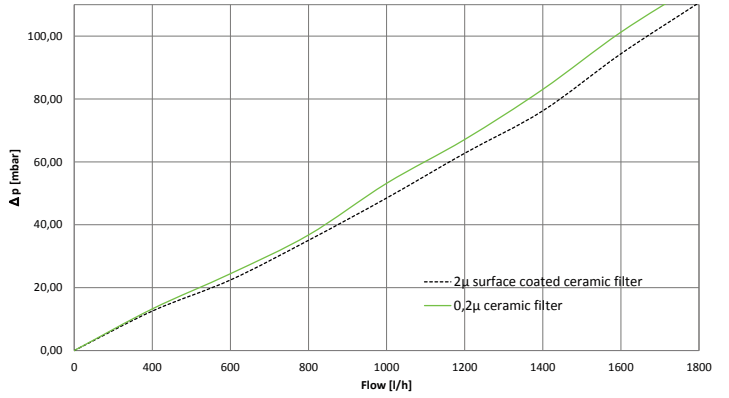
Scope of delivery: sampling probe, mounting material, flange gasket, gasket for sampling pipe, operating manual

## FLOW CHART

This flow chart includes all possible options.

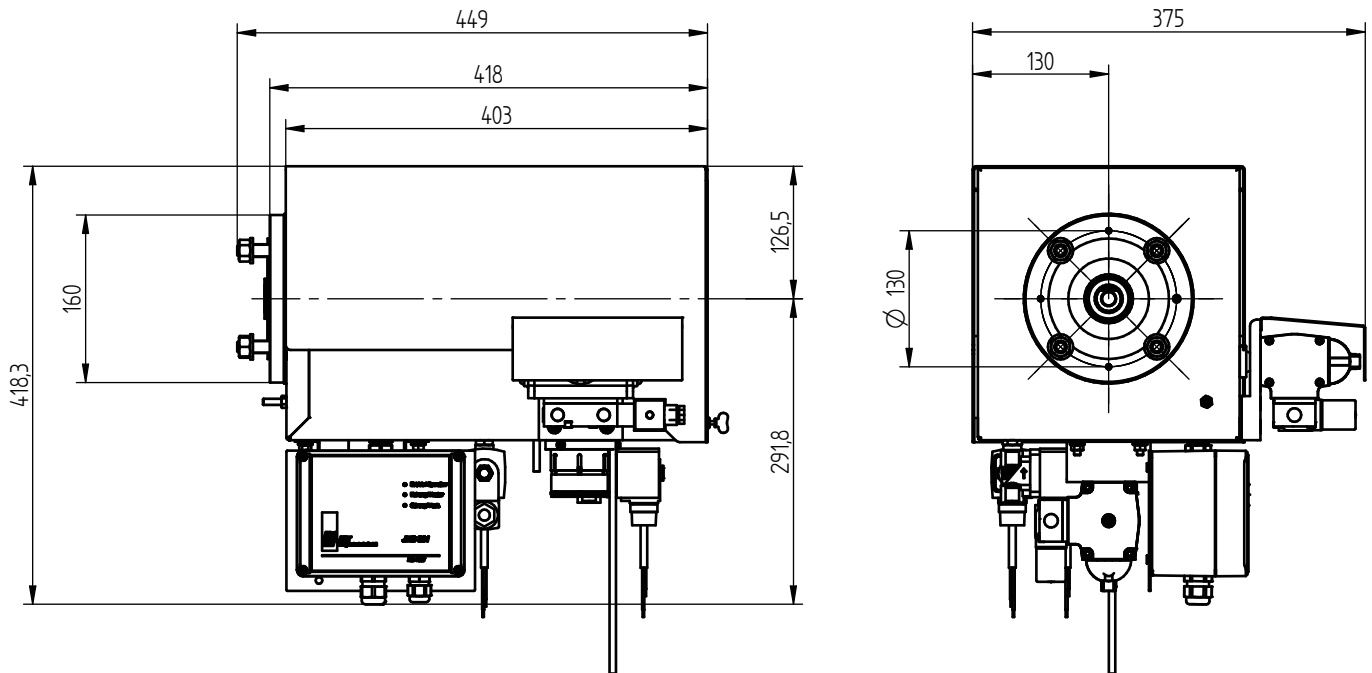


Pressure characteristics in dependence of the gas flow  
(for new filter element and 20 °C)



## DIMENSIONS

Dimensions in mm



## ORDER CODE

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

<b>Basic model</b>	Pre- filter back flush with non return valve (not for option V0)
includes	Weather protection housing
	Self-limiting heater

**Available Features**

Flange	<b>DN65/PN6</b>	<b>Z1</b>																			
	2" ANSI	<b>Z2</b>																			
Filter	<b>2 µm ceramic</b>		<b>F1</b>																		
	0,2 µm ceramic surface coated		<b>F2</b>																		
Process shut off ball valve	without shut off ball valve and without pre-filter back flush					<b>V0</b>															
	without shut off ball valve					<b>V1</b>															
	<b>with manual operation</b>					<b>V2</b>															
	with pneumatic actuator					<b>V3</b>															
	with pneumatic actuator and pilot valve 24 VDC ATEX					<b>V8</b>															
	with pneumatic actuator and pilot valve 115 VAC ATEX					<b>V9</b>															
	with pneumatic actuator and pilot valve 230 VAC ATEX					<b>V10</b>															
Heating (ATEX)	<b>Temperature class T3, 1 heater</b>										<b>S0</b>										
	Temperature class T3, 2 heaters										<b>S1</b>										
	Temperature class T4, 1 heater										<b>S2</b>										
	Temperature class T4, 2 heaters										<b>S3</b>										
Back purge valve/port sample probe filter	<b>without</b>											<b>K0</b>									
	back purge port with non return valve											<b>K1</b>									
	ATEX 24 VDC											<b>K5</b>									
	ATEX 115 VAC 50/60Hz											<b>K6</b>									
	ATEX 230 VAC 50/60Hz											<b>K7</b>									
Pre filter Back Flush valve	without												<b>J0</b>								
	ATEX 24 VDC												<b>J4</b>								
	ATEX 115 VAC 50/60Hz												<b>J5</b>								
	<b>ATEX 230 VAC 50/60Hz</b>												<b>J6</b>								
Isolation ball valve probe outlet	<b>without</b>													<b>U0</b>							
	with manual operation													<b>U1</b>							
	with pneumatic actuator													<b>U2</b>							
	with pneumatic actuator and pilot valve 24 VDC ATEX													<b>U7</b>							
	with pneumatic actuator and pilot valve 115 VAC ATEX													<b>U8</b>							
	with pneumatic actuator and pilot valve 230 VAC ATEX													<b>U9</b>							
Air accumulator	<b>without</b>																				
	air accumulator 2l														<b>R0</b>						
	air accumulator 5l														<b>R2</b>						
Fitting aperture for heated sample line	<b>for mounting clamp diameter 35-50mm</b>																				
	for mounting clamp diameter 58-61mm																				
Connection ports	inch																				
	<b>metric</b>																				
<b>Additional Options</b>																					
Others	calibration port with non return valve																			<b>C</b>	
	low temperature status contact																			<b>O</b>	

**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**





**JCT**  
Analysentechnik

Gas Conditioning **Systems**



NOx **Converter**



and **solutions** for



fixed installation  
portable