

# JES-360 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
- 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
- Electronic temperature controller including over temperature protection
- Temperature status contact
- Weather protection housing
- Various options and upgrades
- Wide range of accessories
- Integrated back flush / back purge controller (option)

## TECHNICAL DATA

### Model

**JES-360**

Description	stationary gas sampling probe for pre-filter back flush
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### Operation

Temperature	180 °C (ex works), adjustable 5 °C to 200 °C
Status limiter set values	-30 K /+20 K fixed to set point
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
Ambient temperature	for start-up -20 °C to 60 °C for continuous operation -30 °C to 60 °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
Approvals / Signs	CE

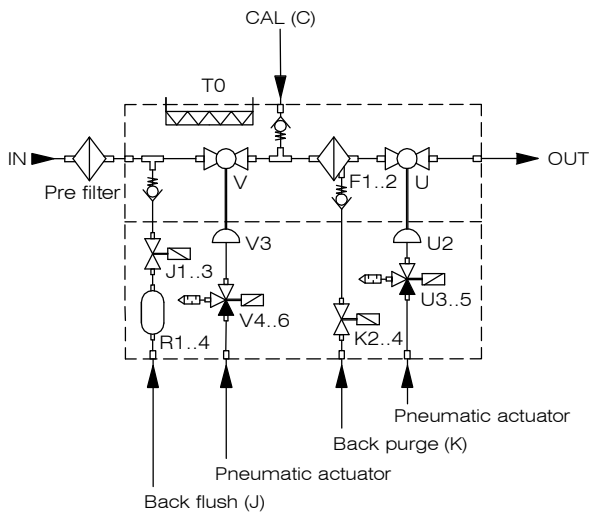
### Electrics

Power supply	230 VAC 50 Hz or 115 VAC 60 Hz
Power consumption	approx. 805 VA
Temperature controller / Sensor	electronic / PT100 (IEC-751)
Electrical connection	spring type terminals, clamping range 0,08 to 2,5 mm <sup>2</sup>
Switching capacity status contact (volt free)	230 VAC / 2 A, min. 5 VDC / 5 mA

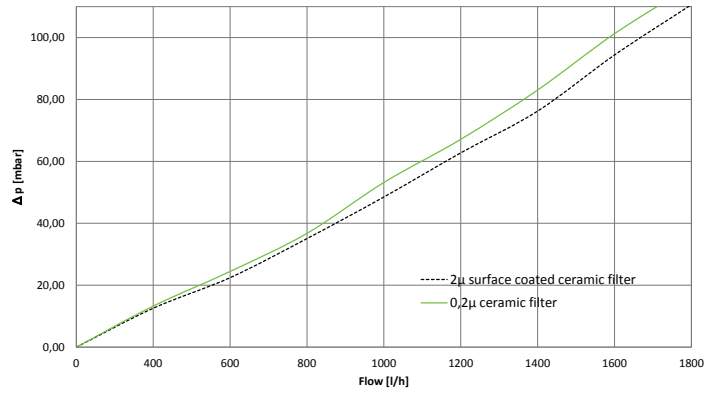
Scope of delivery: sampling probe, mounting material, flange gasket, gasket for sampling pipe, operating manual

## FLOW CHART

This flow chart includes all possible variants

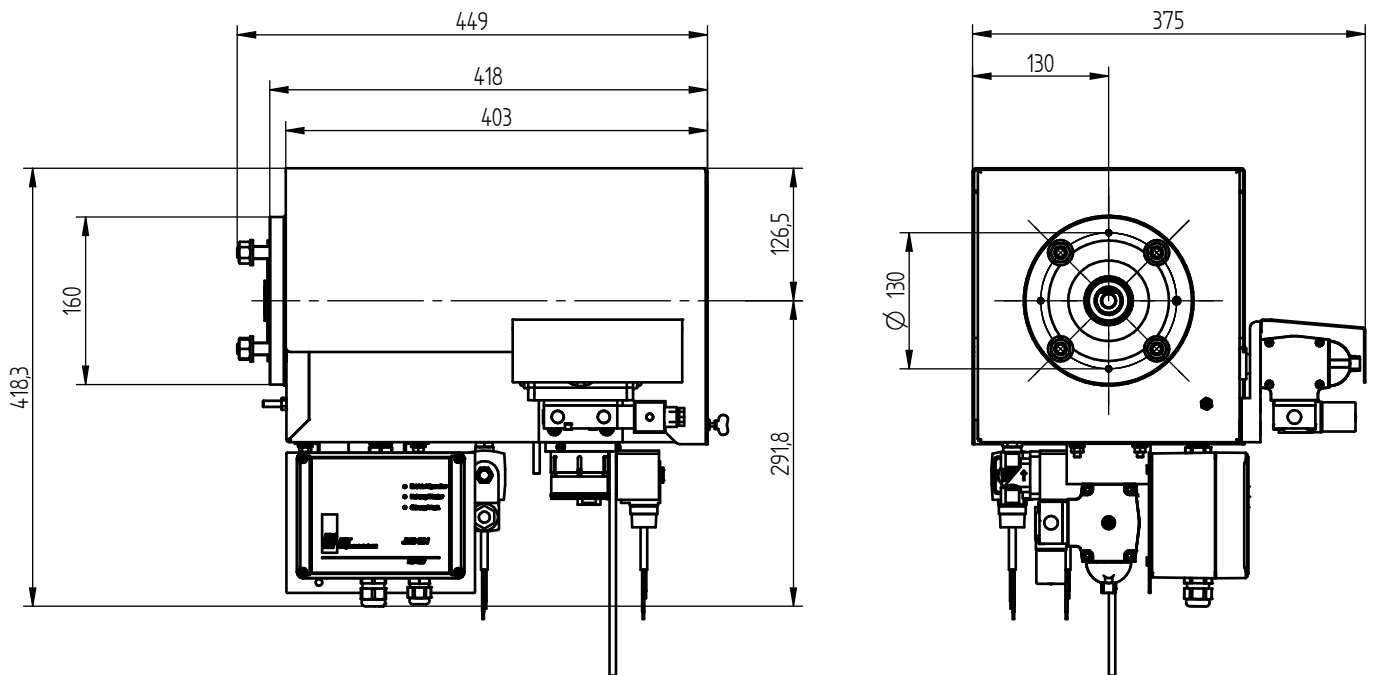


**Pressure characteristics in dependence of the gas flow  
(for new filter element and 20 °C)**



## DIMENSIONS

Dimensions in mm



## ORDER CODE

<b>Basic model</b>	pre-filter back flush with non-return valve (not for option V0)
includes	weather protection housing
	temperature controller 180 °C (adjustable)

**Available Features**

Flange	<b>DN65/PN6 FF</b>	<b>Z1</b>																				
	2" ANSI RF	<b>Z2</b>																				
Filter	<b>2 µm ceramic</b>		<b>F1</b>																			
	0,2 µm ceramic surface coated		F2																			
Power supply	<b>230 VAC 50/60 Hz with temperature controller</b>											<b>X1</b>										
	115 VAC 50/60 Hz with temperature controller											X2										
	230 VAC 50/60 Hz with junction box											X3										
	115 VAC 50/60 Hz with junction box											X4										
Process shut-off ball valve	without shut-off ball valve and without pre-filter back flush																					V0
	without shut-off ball valve																					V1
	<b>with manual operation</b>																					<b>V2</b>
	with pneumatic actuator																					V3
	with pneumatic actuator and pilot valve 24 VDC																					V4
	with pneumatic actuator and pilot valve 115 VAC																					V5
	with pneumatic actuator and pilot valve 230 VAC																					V6
with electric actuator 230 VAC																						V7
Back purge valve / Port sample probe filter	<b>without</b>																					<b>K0</b>
	back purge port with non-return valve																					K1
	back purge port with non-return valve 24 VDC																					K2
	back purge port with non-return valve 115 VAC 50/60 Hz																					K3
	back purge port with non-return valve 230 VAC 50/60 Hz																					K4
Pre-filter back flush valve	without																					J0
	24 VDC																					J1
	115 VAC 50/60 Hz																					J2
	<b>230 VAC 50/60 Hz</b>																					<b>J3</b>
Isolation ball valve probe outlet	<b>without</b>																					<b>U0</b>
	with manual operation																					U1
	with pneumatic actuator																					U2
	with pneumatic actuator and pilot valve 24 VDC																					U3
	with pneumatic actuator and pilot valve 115 VAC																					U4
	with pneumatic actuator and pilot valve 230 VAC																					U5
	with electric actuator 230 VAC																					U6
Air accumulator	<b>without</b>																					<b>R0</b>
	air accumulator 2 l																					R1
	air accumulator 5 l																					R2
	air accumulator heated 2 l																					R3
	air accumulator heated 5 l																					R4
Mounting hole for mounting clamp	<b>for heated sample line 35-50 mm</b>																					<b>M1</b>
	for heated sample line 58-61 mm																					M2
Connection ports	inch																					A1
	<b>metric</b>																					<b>A2</b>
<b>Additional Options</b>																						
Others	calibration port with non-return valve																					C
	with back flush / back purge controller																					K
<b>Order code</b>		↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
		<b>JES-360.</b>	<b>Z</b>	<b>F</b>	<b>X</b>	<b>V</b>	<b>K</b>	<b>J</b>	<b>U</b>	<b>R</b>	<b>M</b>	<b>A</b>	-	↘								

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

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