# 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 purge control unit (option)

# **TECHNICAL DATA**

Description	tion stationary gas sampling probe for pre-filter back flush						
	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 $-20^{\circ}\text{C}$ to $60^{\circ}\text{C}$ for continuous operation $-30^{\circ}\text{C}$ to $60^{\circ}\text{C}$						

#### Construction

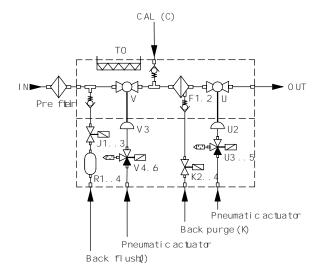
Dimensions over all (W x H x D)	375 x 418 x 449 mm
Dimensions connection box (W x H x D)	120 x 160 x 90 mm
Filter element	2 μm ceramic or 0,2 μm ceramic surface coated
Active filter surface	170 cm <sup>2</sup>
Mounting flange	DN 65, PN6; form A according to EN 1092-1; SS316L or 2" ANSI 150 lbs; according 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**

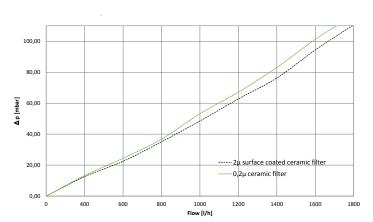
Power supply	230 VAC 50 Hz or 115 VAC 60 Hz
Power consumption	approx. 805 VA
Temperature controller / sensor	electronic / Pt100 (IEC-751)
Electrical connection	spring type terminals, clamping range 0,08 to 2,5 mm <sup>2</sup>
Switching capacity status contact (volt free)	230 VAC / 2 A, min. 5 VDC / 5 mA

# **FLOW CHART**

This flow chart inlcudes all possible variants

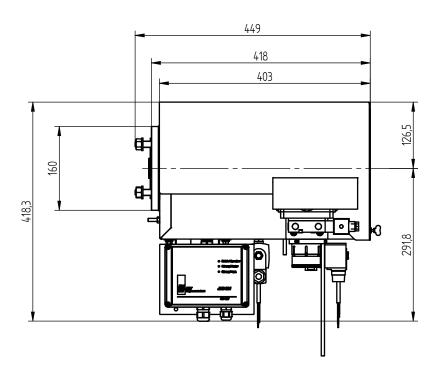


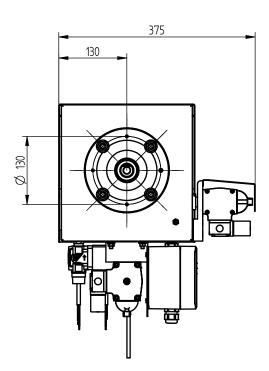
# Pressure characteristics in dependence of the gas flow (for new filter element and 20 $^{\circ}\text{C})$



### **DIMENSIONS**

Dimensions in mn





# **ORDER CODE**

**Basic model** Pre-filter back flush with non return valve (not for option V0)

includes Weather protection housing

Temperature controller 180 °C (adjustable)

#### **Available Features**

Flange	DN65/PN6	Z1										
	2" ANSI	Z2										
ilter	2 µm ceramic		F:									
	0,2 µm ceramic surface coated		F.	2								
Power supply	230 VAC 50/60 Hz with temperature controller			X1								
	115 VAC 50/60 Hz with temperature controller			X2								C
	230 VAC 50/60 Hz with junction box			Х3								
	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							
	with manual operation				V2							
	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							2
	with electric actuator, 230 VAC				V7							
Back purge valve/port sample probe filter	without					KO						
	back purge port with non return valve					K1						
	back purge port with non return valve 24 VDC					K2						
back purge poi	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					
	230 VAC 50/60 Hz						J3					
solation ball valve probe outlet	without							U0				
	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	without								R0			
	air accumulator 2 l								R1			
	air accumulator 5 l								R2			
	air accumulator heated 2 l								R3			
á	air accumulator heated 5 l								R4			
Fitting aperture 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											С
	back purge controller											K
		<b>V</b>	$\psi$	$\downarrow$	$\mathbf{\Psi}$							
Order code		ES-360. Z	F	Х	V	K	J	Ü	R	M	Α	-

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

 $\ensuremath{\textbf{JCT}}$  Analysentechnik GmbH offers a wide range of accessories.

Please refer to seperate data sheets for further information.



Subject to change without notice page 4 PDS\_E\_JES360\_v4.3