



JCT
Analysentechnik

JES-301V

Gas Sampling Probe with Process Shut-off Valve



Gas Sampling Probes

Heated Sample Lines

Sample Gas Coolers

Condensate Treatment

Accessories

Gas Conditioning Systems

Sample Gas Converters

Images are representative

APPLICATION

- Representative continuous gas sampling in processes containing dust and humidity
- Hazardous gases
- Pressurized processes
- Extractive gas analysis
- Emission (CEMS) and process monitoring
- Removal of dust from the sample gas

BENEFITS

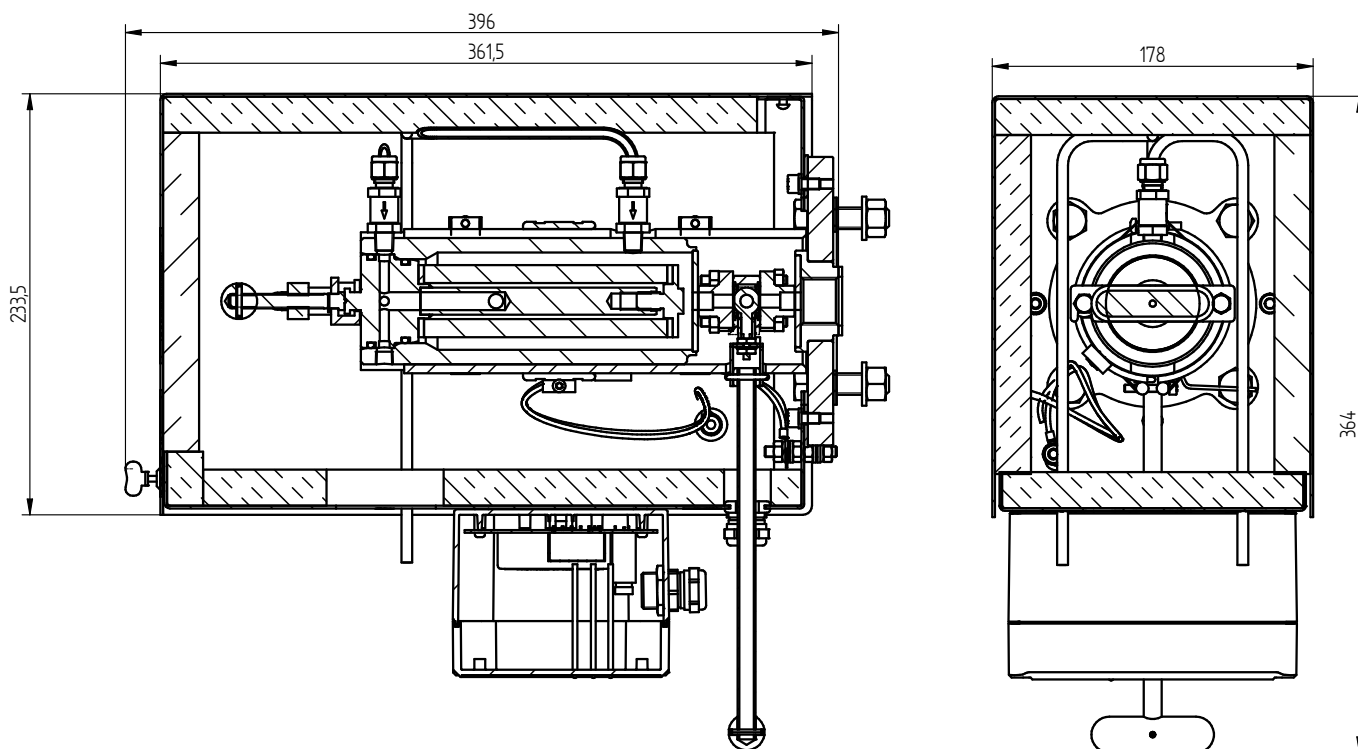
- Safety for operator
- No clogging of ball valve
- Efficient use of calibration gas
- No condensation or chemical reactions of sample gas
- Convenient filter replacement
- Low maintenance
- Safe unattended operation
- Easy start-up
- Even for high dust concentrations
- Reliable protection of the analyzer system

FEATURES

- Full bore ball valve for process shut-off
- Manual and actuator operation of ball valve
- Homogeneous heating without cold spot
- 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

DIMENSIONS

Dimensions in mm



ORDER CODE

Model	Filter		Options			Power supply and Flange			
	2 µm ceramic	0,2 µm ceramic coated	Back purge port *1	Calibration port *1	Temperature controller	Power supply 230 VAC Flange DN65/PN6	Power supply 230 VAC Flange 2" ANSI (Z)	Power supply 115 VAC (X) Flange DN65/PN6	Power supply 115 VAC (X) Flange 2" ANSI (Z)
JES-301V	X				X	35.00230	35.00265	35.00280	35.00288
JES-301BV		X	X		X	35.00232	35.00266	35.00281	35.00289
JES-301CV	X			X	X	35.00260	35.00228	35.00282	35.00290
JES-301BCV		X	X	X	X	35.00272	35.00267	35.00283	35.00291
JES-301HV	X					35.00261	35.00268	35.00284	35.00292
JES-301BHV		X	X			35.00262	35.00269	35.00285	35.00293
JES-301CHV	X			X		35.00263	35.00270	35.00286	35.00294
JES-301BCHV		X	X	X		35.00264	35.00271	35.00287	35.00295

Scope of delivery: sampling probe, mounting material, flange gasket, gasket for sampling pipe, operating manual
*1...with non-return valve

TECHNICAL DATA

Model

JES-301V

Description	stationary gas sampling probe with process shut-off valve
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Operation

Temperature	180 °C (ex works), adjustable 5 °C to 200 °C
Low temperature alarm / excess temperature limit	-30 K /+20 K fix 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	40 min
Ambient temperature	for start-up -20 °C to 60 °C for continuous operation -30 °C to 60 °C

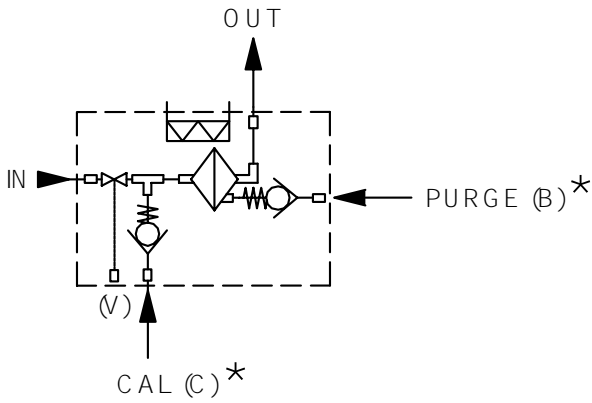
Construction

Dimensions over all (W x H x D)	178 x 364 x 396 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 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
Process shut-off valve	temperature max. 200 °C at 7 bar
Sample gas inlet	G 3/4" female thread
Sample gas outlet	1/8" NPT female thread
Calibration gas connection (option)	pipe 6 mm, SS316
Back purge connection (option)	pipe 6 mm, SS316
Gas wetted materials	SS316L, ceramic, Viton®
Protection class	connection box IP65, probe IP43
Weight	12,5 kg
Weather protection housing	SS304, thermal insulated, colour stainless steel natural
Approvals / signs	CE

Electrics

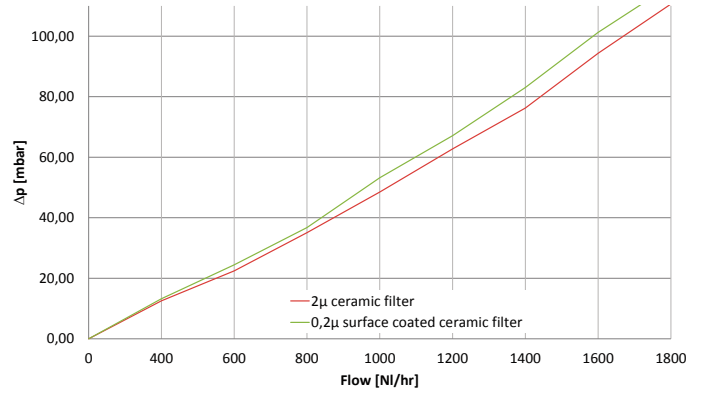
Power supply	230 VAC 50 Hz or 115 VAC 60 Hz
Power consumption	approx. 505 VA
Temperature controller / sensor	electronic / PT100
Electrical connection	spring type terminals, clamping range 0,08 to 2,5 mm ²
Switching capacity status contact (volt free)	230 VAC / 2 A, min. 5 VDC / 5 mA

GAS FLOW DIAGRAM



*... not included in all models

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



UPGRADE OPTIONS AND ACCESSORIES

Put together a sampling probe exactly according to your requirements by choosing additional modules, eg. solenoid valves, controllers and air accumulators. Please refer to this separate product data sheet for further information:

- **Upgrade Options for JES-301 Gas Sampling Probes**

- Filter elements in various materials
- Dilution units
- Back purge control valves
- Ball valves for sample gas inlets and outlets
- Air accumulators
- High temperature versions
- Temperature display for temperature controller

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

- **JER Sampling Pipes and JHD Pre-Filters**

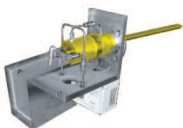
- Sampling pipes in various materials and lengths
- In-Situ pre-filter in various materials
- Extension pipes in various materials

- **JES-301K Back Purge Control Unit**

- **JES-301 Accessories**

- Flange adapters
- Accessories for gas connections
- Accessories for heated sample pipes

Gas Sampling **Probes**



Heated Sample **Lines**



Sample Gas **Coolers**



Gas Conditioning **Systems**



NOx **Converter**



and **solutions** for

