



# JES-370 DENOX Gas Sampling Probe



## Gas Sampling Probes

Heated Sample Lines

Sample Gas Coolers

Condensate Treatment

Accessories

Gas Conditioning Systems

Sample Gas Converters

### APPLICATION

- Extractive gas analysis
- Continuous gas sampling e.g. downstream DENOx plants (SCR)
- Removal of dust and other interfering solids e.g. ammonia salts from the sample gas flow
- Outdoor and indoor installation

### BENEFITS

- Minimum wash out effects
- Easy start-up
- Fast operational readiness
- Very long service life
- Convenient element replacement
- Low maintenance
- Very efficient back purging

### FEATURES

- Homogeneous heating of the sampling probe up to 315 °C without cold spots
- No clogging of probe or connected line
- Self cleaning effect due to dissolving of ammonia salts in accumulated condensate
- Weather protection housing for outdoor installation
- ABS filter with freeze protection or heater (optionally)
- Large active filter surface (170 cm<sup>2</sup>)
- Electronic temperature controller
- Filtration from outside to inside
- Temperature status contact
- Wide range of accessories
- Integrated purge controller (optionally)

## TECHNICAL DATA

### Operational data

Filter element Option	ceramic, pore size 2 µm 40/20 x 135 mm surface coated 0,2 µm
Operating pressure	max. 200 kPa abs.
Sample gas wetted parts	SS316, ceramic; Perlast®
Temperature adjustment range	5 °C to 315 °C
Factory setting	280 °C
Ready for operation	approx. 45 min
Permissible ambient temperature with freeze protection with heated ABS filter	5 °C to +55 °C -5 °C to +55 °C -10 °C to +55 °C
Operating temperature heated air accumulator	+100 °C +/- 5 °C
Control pressure for pneumatic actuator	5 to 10 barg
Flow rate (back purging)	approx. 90 Nm³/h at 4 bar, 160 Nm³/h at 7 bar
Air for back purge	instrument air according to ISO 8573-1 Class 1.2.1
Protection class	Electronic: IP 65, Probe: IP 43

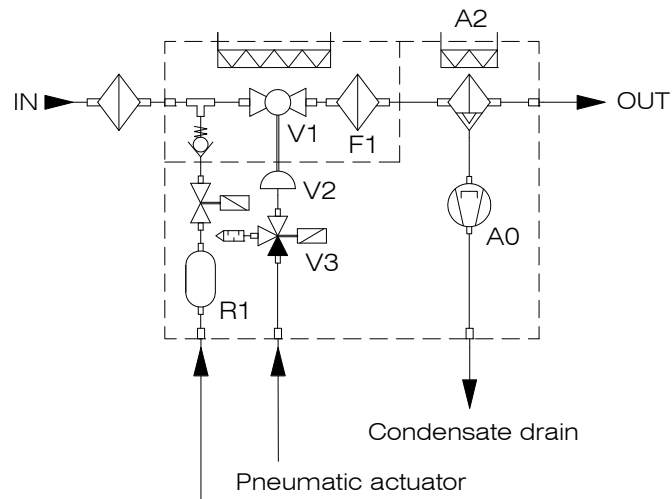
### Construction

Mounting flange Option	DN 65, PN 6, form A according to EN 1092-1; SS316Ti 2" ANSI; 150lbs., hole pattern according to ASME B16.5
Mounting angle	range 5° to 10° with respect to the horizontal, sloping down
Mounting position	torsion angle max. 10°
Dimension over all (WxHxD)	696 x 613 x 443 mm
Weight	approx. 30 kg
Housing material	SS304, brush-finished
Sample gas inlet	G 3/4" female thread
Sample gas outlet	PVDF hose fitting DN 4/6 mm
Calibration port (optional)	6 mm bulkhead union, SS316
Connection condensate drain (option)	PVDF hose fitting DN 4/6 mm
Back purge port	12 mm bulkhead union, SS316
Back purge gas wetted materials	SS316, brass, EPDM
Temperature sensor	PT100 (IEC-751)
Heater element	800 W
Power consumption	approx. 810 VA
Freeze protection / ABS heater (option)	125 / 250 W
Heating air accumulator (option)	200 W
Power supply	230 VAC/50 Hz or 115 VAC/60 Hz
Electrical connection	spring type terminal , clamping range 0,08 to 2,5 mm²
Switching alarm relay of back purge controller	Typ. 230 VAC/2 A/min. 5 VADC/5 mA
Approval / Sign	CE

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

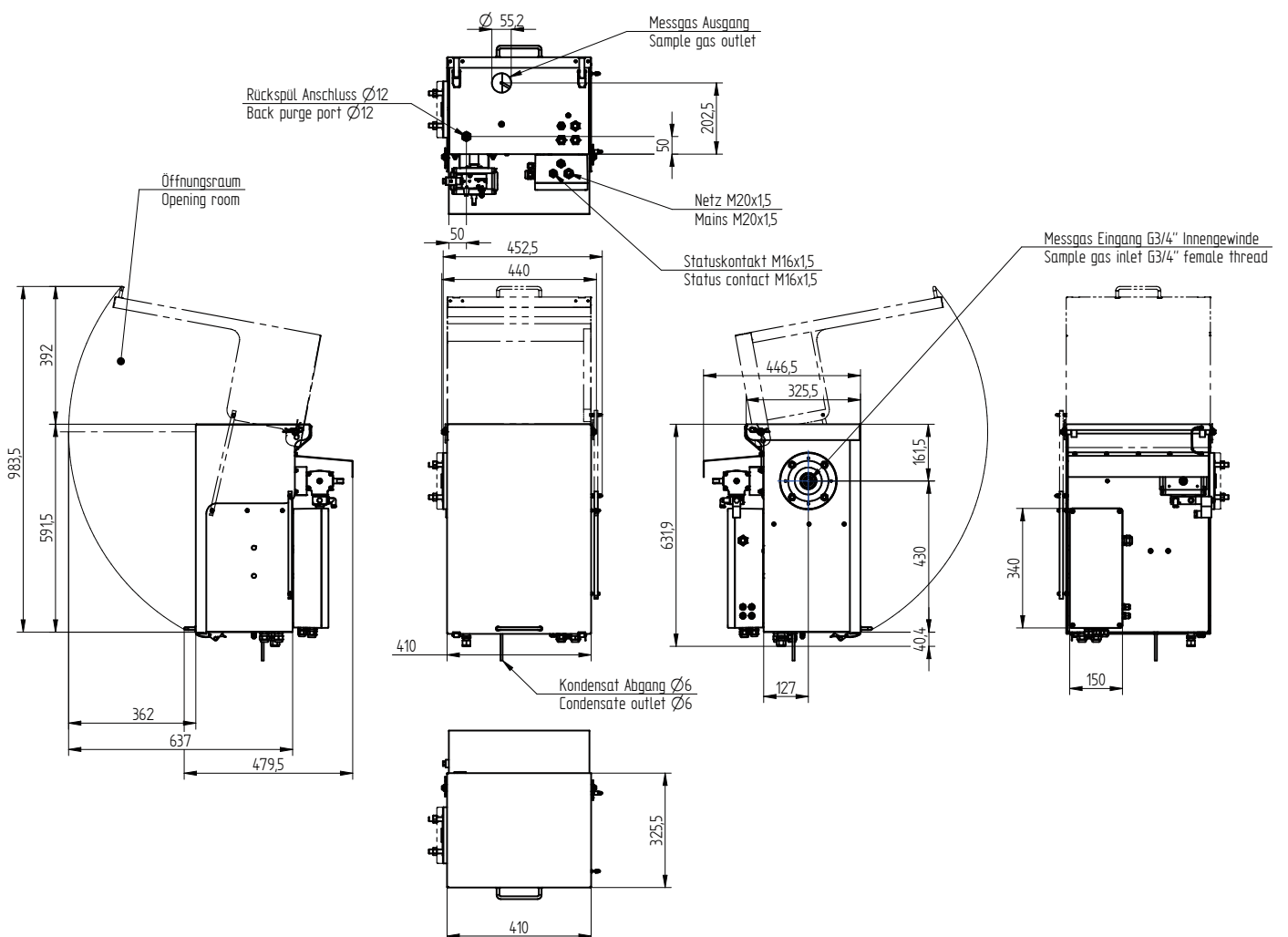
## FLOW CHART

This flow chart includes all possible options



## DIMENSIONS

Dimensions in mm



## ORDER CODE

### Basic model

includes

ABS glass separator filter  
 Weather protection housing  
 Temperature controller 315 °C (adjustable)  
 Pre-filter back purge with cutoff valve & non return valve (not for option V0)

### 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>																		
Power supply	<b>230 VAC 50/60Hz</b>			<b>X1</b>																	
	115 VAC 50/60Hz			<b>X2</b>																	
Process shut-off ball valve	without shut-off ball valve and without pre-filter back purge																				
	<b>with manual operation</b>																				
	with pneumatic actuator																				
	with pneumatic actuator and pilot valve																				
ABS heater	without ABS heater, with condensate pump JSR-25																				
	freeze protection for (ABS) glass separator filter with JSR-25																				
	heater for (ABS) glass separator filter without JSR-25																				
Air accumulator	without air accumulator																				
	air accumulator 5 l																				
	heated air accumulator tank 5 l with thermostat controller																				
Additional Options	Others	process controller for pre-filter back purge																			
	calibration port with non-return valve																				4
	calibration port with non-return valve & 230 VAC cut-off valve																				5
	calibration port with non-return valve & 115 VAC cut-off valve																				6
	calibration port with non-return valve & 240 VDC cut-off valve																				7
																					8
<b>Order code</b>																					

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## ACCESSORIES

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

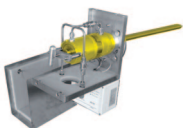
- **JES-301 Accessories**

Flange adapters

Accessories for gas connections

Accessories for heated sample lines

Gas Sampling Probes



Heated Sample Lines



Sample Gas Coolers



Gas Conditioning Systems



NOx Converter



and solutions for

