



## Sample gas probe GAS 222.31 Ex2

In many applications gas analysis is the key for safe and efficient control of process flows, environmental protection and quality assurance. In extractive gas analysis the location of the gas sampling point is crucial for the reproducibility and accuracy of the analysis results.

The specific filter capacity, corrosion resistance and functional equipment requirements for the probe arise from the composition of the sample gas.

However, operating costs are also an important criterion in the selection, as the sampling points are frequently located at hard to access points in the system. Effective particle filter backwashing options and low maintenance characterise the extensive GAS probe series.

Versions with Atex and IECEx approval

Heated probe with shut-off valve, upstream filter and weather hood

The probe body and the area around the screw connection for the heated sample gas line are completely insulated

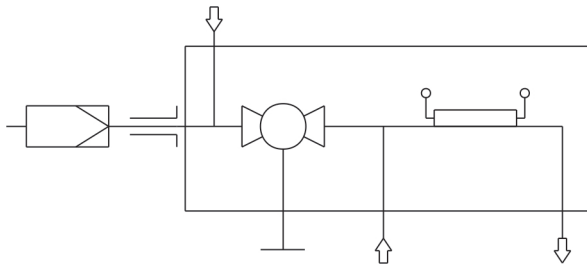
Heater self-regulating to approx. 120 °C (T3)/70 °C (T4) with low temperature alarm

For dust loads up to 200 g/m<sup>3</sup>

This probe is permitted for use in explosive areas



**Flow chart**



**Technical Data**

**Gas Probe Technical Data**

Ambient temperature without accessories:	-20 to +80 °C	
Ambient temperature for accessories:	<b>Component</b>	<b>Ambient temperature range</b>
	Valve for pressurized air:	-30 °C < T <sub>amb</sub> < +55 °C
	Solenoid valve for pneumatic actuator:	-10 °C < T <sub>amb</sub> < +55 °C
	Pneumatic actuator:	-20 °C < T <sub>amb</sub> < +80 °C
	Limit switch:	-25 °C < T <sub>amb</sub> < +60 °C
	Junction box:	-20 °C < T <sub>amb</sub> < +70 °C
Max. gas inlet temperature:	+195 °C (T3)/+130 °C (T4)	
Medium temperature (blowback):	<b>Component</b>	<b>Medium temperature range</b>
	Valve for pressurized air:	-10 °C to +80 °C
	Solenoid valve for pneumatic actuator:	-10 °C to +100 °C
Self-regulating heater:	+120 °C (T3)/+70 °C (T4)	
Low temperature alarm:	Contact switches at < 95 °C (T3) or < 50 °C (T4); Simple electrical equipment according to EN 60079-11; U <sub>i</sub> 30 V, I <sub>i</sub> = 100 mA; C <sub>i</sub> /L <sub>i</sub> ~0	
Electrical data:	230 V, 2.0 A, 50/60 Hz 115 V, 3.8 A, 50/60 Hz	
Max. operating pressure	6 bar	
Material:	1.4571; ball valve 1.4408	
Parts in contact with media:	Seals: Graphite/1.4404 and see filter	
Markings:	ATEX:  II 3G Ex ec ic mb IIC T3/T4 Gc IECEX: Ex ec ic mb IIC T3/T4 Gc	

**Ordering instructions**

The item number is a code for the configuration of your unit. Please use the following model key:

<b>4622231</b>	<b>X</b>	<b>0</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>3</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>Product characteristics</b>
																<b>Junction box</b>
		0														No
		1														Yes
																<b>Flange</b>
		0	1													Flange DN65 PN6
		0	2													Flange DN3"-150
																<b>Hazardous area Outside and Inside</b>
				2	9											Ex-Zone 2 outside, none inside
				2	2											Ex-Zone 2 outside and inside
																<b>Temperature class</b>
								3								T3
								4								T4
																<b>Power supply sample probe</b>
										3						115/230 V
																<b>Low temperature alarm</b>
													1			Opener (open at operating temperature) (marked with "ic")
													2			Closer (closed at operating temperature) (marked with "ic")
																<b>Calibration gas port</b>
													0			No
													1			6 mm
													2			6 mm with check valve
													3			1/4"
													4			1/4" with check valve
																<b>Capacitive vessel *</b>
													0			No
													1			Yes
																<b>Valve for pressurized air *</b>
													0			Ball valve
													1			Solenoid valve 110 V (marked with "mb")
													2			Solenoid valve 230 V (marked with "mb")
													3			Solenoid valve 24 V (marked with "mb")
													9			none
																<b>Pneumatic actuator for internal ball valve</b>
													0			No
													1			Mono stable depressurized open
													2			Mono stable depressurized closed
																<b>Limit switch for pneumatic actuator</b>
													0			No
													1			Yes
																<b>Solenoid valve for pneumatic actuator</b>
													0			No
													1			110 V (marked with "mb")
													2			230 V (marked with "mb")
													3			24 V (marked with "mb")

\* Blowback of explosive atmosphere prohibited.

**Options**

The base unit becomes functional by adding accessories suitable for the application. Please refer to accessory data sheet no. 461099 for information.

Please also refer to data sheet no. 461000 "GAS 222 Gas Probes" for a general description.

Dimensions

