



Gas Analysis





# 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, inlet filter and weather hood

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

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 suitable for use in explosive areas

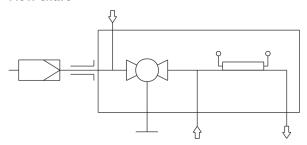


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## GAS 222.31 Ex2

### Flow chart



### **Technical Data**

### Gas Probe Technical Data

Ambient temperature without accessories:	-20 to +80 °C			
Ambient temperature for accessories:	Component	Ambient temperature range		
	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 -20 °C < T <sub>amb</sub> < +70 °C		
	Junction box:			
Max. gas inlet temperature:	+195 °C (T3)/+130 °C (T4)			
Medium temperature (blowback):	Component	Medium temperature range		
	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 Simple electrical equipment according to			
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:

-						_	/ \		٠.	^	Λ.	^ /		ct characteristics
														on box
0													No	
1													Yes	
													Flange	
	0	1											Flange	DN65 PN6
	0	2											Flange	2 DN3"-150
													Hazaro	dous area Outside and Inside
			2	9									Ex-Zor	ne 2 outside, none inside
			2	2									Ex-Zor	ne 2 outside and inside
													Tempe	erature class
					3								T3	
					4								T4	
													Power	supply sample probe
						3							115/230	0 V
													Low te	mperature alarm
							1						Opene	er (open at operating temperature) (marked with "ic")
							2						Closer	(closed at operating temperature) (marked with "ic")
													Calibra	ation gas port
								0					No	
								1					6 mm	
								2					6 mm	with check valve
								3					1/4"	
								4					1/4" w	ith check valve
													Capac	itive vessel *
									0				No.	
									1				Yes	
													Valve 1	for pressurized air *
										0			Ball va	•
										1			Solenc	oid valve 110 V (marked with "mb")
										2				oid valve 230 V (marked with "mb")
										3				oid valve 24 V (marked with "mb")
										9			none	( )
										_				natic actuator for internal ball valve
											0		No	
											1			stable depressurized open
											2			stable depressurized closed
											-			switch for pneumatic actuator
												0	No	The production accuration
												1	Yes	
												1		oid valve for pneumatic actuator
												(	No	The value for price made actuator
														arked with "mb")

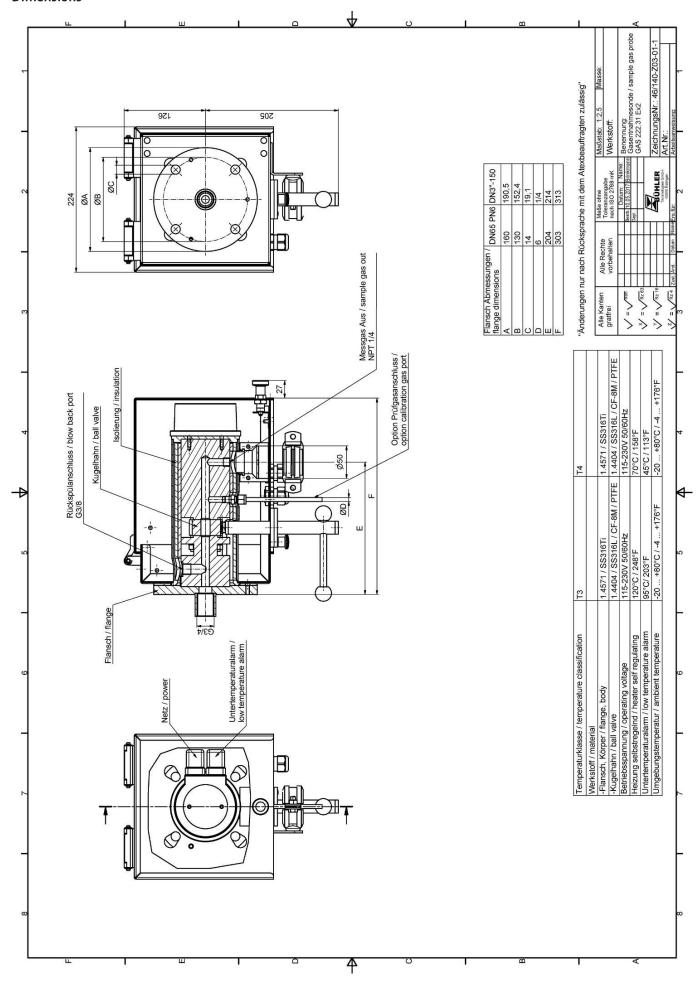
<sup>\*</sup> Blowback of explosive atmosphere prohibited.

### **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**



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