



Sample gas probe GAS 222.21 Atex

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 approval

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

The downstream filter can easily be removed by turning the handle 90°

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

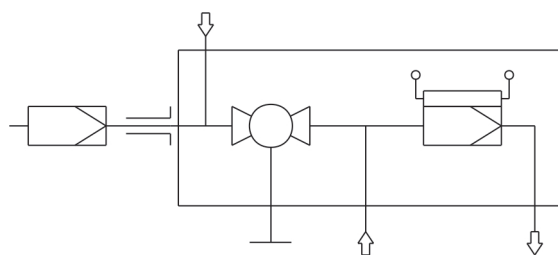
Heater self-regulating to approx. 90 °C

For dust loads up to 2 g/m³ with downstream filter or > 10 g/m³ with upstream filter

This probe is designed for use in explosive areas (Zone 21, 22 and extracting from Zone 20)




Flow chart



Technical Data

Gas Probe Technical Data

Ambient temperature without accessories:	-20 to +50 °C (basic unit without accessories)	
Ambient temperature for accessories:	Component	Ambient temperature range
	Compressed air valve:	-10 °C < T _{amb} < +60 °C
	Limit switch:	-20 °C < T _{amb} < +60 °C
	Solenoid valve for pneumatic drive:	-10 °C < T _{amb} < +55 °C
Permissible gas inlet temperatures:	Outer zone temperature	Permissible gas inlet temperature
	T3	135 °C
	T4	130 °C
Self-regulating heater:	+90 °C	
Electrical data:	Probe: 230 V, 2.0 A, 50/60 Hz 115 V, 3.8 A, 50/60 Hz	External circuit breaker type C: 230 V, 3 A, 50/60 Hz 115 V, 4 A, 50/60 Hz
Max. operating pressure:	6 bar	
Max. flow rate:	1000 L/h	
Material:	1.4571; ball valve 1.4408	
Parts in contact with media:	Seals: PTFE/graphite/1.4404 and see filter	
Marks*:	ATEX:  1GD / 2GD T4 T130 °C	

* Please note, using special accessories may limit the approved applications of the probes.

Ordering instructions

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

4622221	0	X	X	4	X	X	0	0	9	9	X	X	X	X	Product Characteristics
															Flange
															DIN DN65 PN6
															Explosive outdoor areas
															4 Zone 21
															5 Zone 22
															Explosive indoor areas
															3 Zone 20
															4 Zone 21
															5 Zone 22
															Ex temperature classes
															4 T4
															Probe voltage
															1 115 V
															2 230 V
															Calibrating gas connection
															0 No calibrating gas connection
															1 6 mm
															2 6 mm + check valve
															3 1/4"
															4 1/4" + check valve
															Blowback with air reservoir ²⁾
															Compressed air valve / valve voltage information
															0 Manual
															1 115 V (labelled "mb")
															2 230 V (labelled "mb")
															3 24 V (labelled "mb")
															9 None (if no blowback requested)
															Pneumatic drive for ball valve
															0 Manual
															1 Monostable pressure-free open
															2 Monostable pressure-free closed
															Limit switch for pneumatic drive
															1 Yes (labelled "db")
															9 No
															Control valve for pneumatic drive
															3 3/2-way valve
															9 No control valve

¹⁾ Please note, using certain accessories may limit gas probe use in Ex areas! Observe the respective operating manuals, accessory compatibility charts, and data sheets to ensure proper technical product design!

²⁾ For flammable sample gas, always use inert gas for blowback. Probe blowback prohibited when using explosive gases!

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.

