

# Sample gas probe GAS 222.35 Ex1

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 downstream filter and weather hood

The filter element 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. 80 °C

For dust loads up to 200  $g/m^3$ 

This probe is suitable for use in explosive areas. Atex: use in zone 1 and 21 and sampling from zone 0 and 20 IECEx: Use in zone 1 and sampling from zone 0



#### **Technical Data**

#### Gas Probe Technical Data

Ambient temperature without accessories:	-40 to +60 °C					
Ambient temperature with accessories:	Component	Ambient temperature range				
	Compressed air valve:	-30 °C < T <sub>amb</sub> < +55 °C				
Permissible gas inlet temperatures:	Outer zone temperature class	Permissible gas inlet temperature				
	Т2	135 °C				
	Т3	135 °C				
	T4	130 °C				
Medium temperature (blowback):	Component	Medium temperature range				
	Compressed air valve:	-10 °C to +80 °C				
Self-regulating heater:	+80 °C					
Electrical data:	Probe:	External circuit breaker type C:				
	230 V, 100 W, 50/60 Hz	230 V, 2 A, 50/60 Hz				
	115 V, 100 W, 50/60 Hz	115 V, 3 A, 50/60 Hz				
Max. operating pressure	6 bar					
Max. flow rate:	1000 L/h					
Material:	1.4571					
Parts in contact with media:	Seals: Graphite/1.4404 and see filter					
Probe marking, depending on the selected options and temperature class:	<b>for zone 0/1:</b> ATEX: 🐼 II 1G/2G Ex db <sup>1</sup> eb mb <sup>2</sup> IIC T5/T6T1/T2 Ga/Gb IECEx: Ex db <sup>1</sup> eb mb <sup>2</sup> IIC T5/T6T1/T2 Ga/Gb					
	<b>for zone 1:</b> ATEX: 🐼 II 2G Ex db <sup>1</sup> eb mb <sup>2</sup> IIC T6T2 Gb IECEx: Ex db <sup>1</sup> eb mb <sup>2</sup> IIC T6T2 Gb					
	for zone 0/21: ATEX: 🐼 II 1G/2D Ex db <sup>1</sup> eb mb <sup>2</sup> 11C T5 T1 Ga Ex tb mb <sup>2</sup> 11IC T80 °C T226 °C Db IECEx: -					
	<b>for zone 20/1:</b> ATEX:					
	<b>for zone 20/21:</b> ATEX:  II 1D/2D Ex ta/tb mb² IIIC T120°C/T80°CT300°C/T226°C Da/Db IECEx: -					
	<b>for zone 21:</b> ATEX: 🐼 II 2D Ex tb mb² IIIC T80°CT226°C Db IECEx: -					
	<sup>1</sup> "db" only for GAS 222.21/31 versions with limit switch <sup>2</sup> "mb" only for versions with solenoid valve					
Applied standards:	IEC 60079-0 (Ed. 6.0); IEC 60079-7 ( EN 60079-0:2012+A11:2013; EN 600					
IECEx certificate number:	IECEx IBE 17.0024X					
ATEX certificate number:	IBExU17ATEX1088X					

## GAS 222.35 Ex1

#### Ordering instructions

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

222351	X	X	X	Х	4	Х	0	Х	X	X	0 0		0	Product Cha	racteristics			
													I	Flange				
	0	1											I	lange DN6	5 PN6			
	0	2											Flange DN3"-150					
	х	х										Other						
												Hazardous area						
				Outside														
			4 Zone 1 (Atex/IECEx)										2	/IECEx)				
			7			Zone 21 (Atex)												
			9										1	none				
					Inside													
				3									Zone 0 (Atex/IECEx)					
				4									Zone 1 (Atex/IECEx)					
				6										Zone 20 (Ate				
				7									2	Zone 21 (Ate	x)			
				9										none				
														•	e class inside/outsi			
														Ga/Gb	Ga/Db	Da/Gb	Da/Db	
					4									Г3/Т4	T3/T130°C	T175°C/T4	T175°C/T130°C	
														•	e class inside/outsi			
														Gb/Gb	Gb/Db	Db/Gb	Db/Db	
					4									Г4/Т4	T4/T130°C	T130°C/T4	T130°C/T130°C	
															ly sample probe			
						1			_		_	_		115 V				
						2								230 V				
								0						Calibration	gas port			
								0			_	-		No				
							1			_			5 mm					
							2			_			5 mm with o	check valve				
								3 4						/4"  /4" with ch	ockupluo			
				4 1/4" with check valve   Pressure vessel *														
									1	_	_			Yes				
									•					Purge valve	*			
										0				Ball valve				
										1	_	-			ve 110 V (marked w	rith "mb")		
										2	_	+			ve 110 V (marked w ve 230 V (marked v			
										2	_	-			ve 24 V (marked v			
										9		-		none				

\* Blowback of explosive atmosphere prohibited.

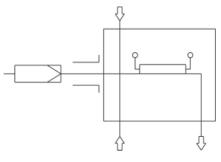
### GAS 222.35 Ex1

#### 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.

#### Flow chart



GAS 222.35 Ex1

#### Dimensions

