

gasQS™ static Datasheet Multicomponent Gas Mixtures



Metrology
Swiss Made



analogue
4 – 20 mA

Thermal conductivity is precisely identified using a microthermal sensor. For binary gas mixtures (e.g., biogas), it can derive the percentage of the gases as well as calculate various gas properties such as calorific value and density with high accuracy. Unlike the market standard, this robust, compact and inexpensive device requires neither any re-adjustment nor reference gas.

The two-wire connection allows easy integration into the control system without further knowledge of bus systems. The simple screw-in connection causes only minimal interference with the pipe system and does not require an exhaust pipe.



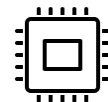
Very Sensitive



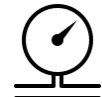
Fast measurements



no complex bus
integration



No moving parts



Wide pressure range

Specifications

Measuring range:	H-Gas or L-Gas or LNG gaseous ¹	
Accuracy:	Calorific value ² (Hs, n)	< ± 2 MJ/m ³
	Relative density ²	< ± 0.02 typ.
Repeatability ³ :	Calorific value (Hs, n)	± 0.2 MJ/m ³
	Relative density	± 0.002
Sensitivity ⁴ :	Calorific value (Hs, n)	± 0.4 MJ/m ³
	Relative density	± 0.004
Measuring time:	1 second	
Measuring interval:	1 second	
Reaction time:	T90 within approximately 10 s ⁵	
Operating/storage temperature:	-20 to +80 °C ⁶	
ATEX Certificate:	Ex II 1G Ex ia IIC T4 Ga (SEV 15 ATEX 0191 X)	

¹ Simultaneous measurement of several types of gas is only possible to a limited extent.

² The specified accuracies apply to binary gas mixtures. For multi-component mixtures, the accuracy varies depending on the gas family or the bandwidth to be covered;

³ Statistical scattering value with 2 sigma of 48 measuring points

⁴ Double value of repeatability

⁵ Strongly depending on the distance between sensor and gas line

⁶ Media and ambient temperature

Media

Media:	dry, neutral gases (10- μ m-filtering)
Inlet pressure range:	0.1 bis 10 bar absolute
Permissible overload / burst pressure:	20 bar absolute

Electrical

Output signal:	4 – 20 mA
Supply voltage (Power supply):	+12 to +28 V _{DC}
Maximum load:	$R \leq \frac{V_{supply} - 12.0 V}{0.02 A} [Ohm]$

Mechanical

Gas connections:	G 3/8 external thread
Dimensions (d x h):	51 x 54 mm
Weight:	0.15 kg
Degree of protection:	IP65

ⁱ Icons by icons8.com