

*blue performance*



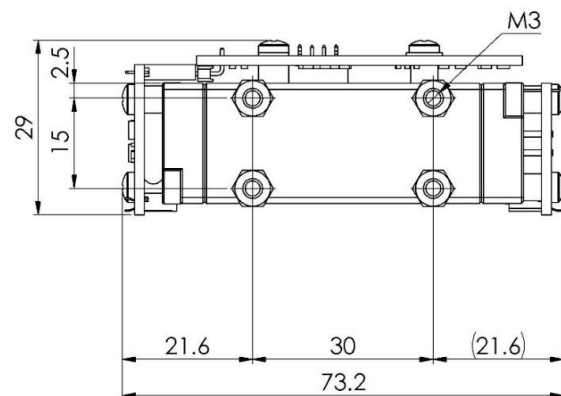
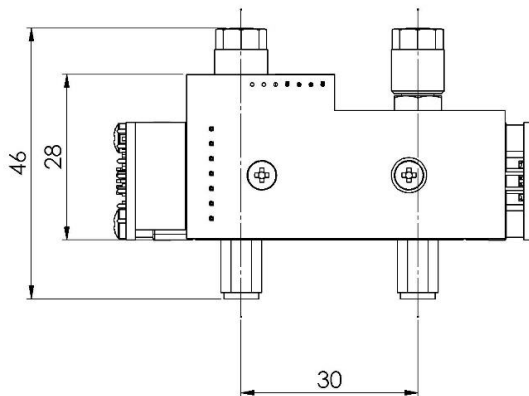
## FLOW<sup>EVO</sup>

Infrared gas sensor

CO // Carbon monoxide // 2 Vol.-%

smartGAS item number: F3-222206-05000

- Pre calibrated
- Compact design
- 3/5 mm gas line connectors
- 3.3 - 6 V DC supply voltage
- Modbus ASCII or RTU
- Status indication by LED
- Low drift



### APPLICATION EXAMPLES

EMISSION MONITORING // ENVIRONMENTAL MONITORING // PROCESS CONTROL // GAS ANALYSING // BIO GAS

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<b>F3-222206-05000</b>	<b>CO // Carbon monoxide // 2 Vol.-%</b>	
<b>General features</b>		
Measurement principle:	Non Dispersive Infra-Red (NDIR), dual wavelength	
Measurement range:	0 ... 2 Vol.-% Full Scale (FS)	
Gas supply:	by flow (nearly atmospheric pressure)	
Flow rate:	0.1 ... 1.0 l / min	
Mounting dimensions:	76 mm x 30 mm x 50 mm (L x W x H)	
Warm-up time:	< 2 minutes (start up time) < 30 minutes (full specification)	
<b>Measuring response*</b>		
Digital resolution:	0.001 Vol.-%	
Response time @ 0.7 l / min**:	<i>Standard:</i>	<i>Fast:</i>
t <sub>90</sub> (10 to 90 % FS):	≤ 9.9 s	≤ 0.7 s
t <sub>on</sub> (0 to 90 % FS):	≤ 16.5 s	≤ 1.8 s
Detection limit (3 σ):	≤ 0.01 Vol.-%	≤ 0.02 Vol.-%
Repeatability:	≤ ± 0.01 Vol.-%	
Linearity error (straight line deviation):	≤ ± 0.02 Vol.-%	
Long term stability (zero):	≤ ± 0.3 Vol.-% over 1000 h period	
Long term stability (span):	≤ ± 0.7 Vol.-% over 1000 h period	
<b>Influence of T, P, flow rate, other*</b>		
Temp. dependence (zero):	≤ ± 0.002 Vol.-% per °C	
Temp. dependence (span):	≤ ± 0.004 Vol.-% per °C	
Pressure dependence:	+ 0.134 % of actual reading / hPa	
Flow rate dependence:	≤ ± 0.002 Vol.-% per 0.1 l / min	
Cross sensitivity (zero) other gases:	consult manufacturer	
<b>Electrical inputs and outputs</b>		
Supply voltage:	3.3 V ... 6.0 VDC	
Supply current (peak):	< 400 mA @ 3.3 V, < 240 mA @ 5.0 V	
Inrush current:	< 600 mA	
Average power consumption:	< 800 mW	
Digital output signal:	Modbus ASCII / RTU via UART, autobaud, autoframe	
Calibration:	zero and span by SW	
<b>Climatic conditions</b>		
Operating temperature:	0 ... + 50 °C	
Storage temperature:	-20 ... + 60 °C	
Air pressure:	800 ... 1150 hPa	
Ambient humidity:	0 ... 95 % relative humidity (not condensing)	
* Typical values related to 1013 hPa, Ta = 22 °C, flow = 0.7 l / min for dry (not condensing) and clean sample gas. Stated values exclude calibration gas tolerance.		
** Adjustable only via smartGAS Calibration-Tool SW.		

At first initiation and depending on application and ambient conditions recalibration is recommended. Recurring cycles of recalibration are recommended.

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