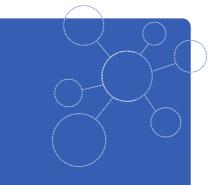
# smartGAS.



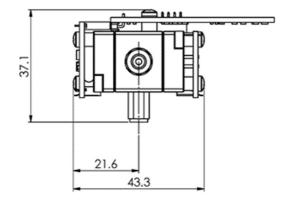
# **FLOW**<sup>EVO</sup>

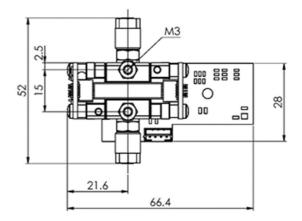
MADE IN GERMANY

Infrared gas Sensor Sulfuryl Flouride SO<sub>2</sub>F<sub>2</sub> 6 Vol.-% smartGAS item number: F3-412606-05000

- Pre calibrated
- Compact Design
- 3/5 mm gas line connector
- 3.3–6 V DC supply voltage
- Modbus ASCII or RTU
- Status indicated by LED
- Low drift







Application examples Fumigation monitoring Pest control Process control Available equipment Gas cooler Particle filter Gas pump Calibration Software Mounting equipment

Available design in support Mechanical Installation Data communication Gas pre-treatment

# smartGAS.

## FLOW<sup>EVO</sup> I Sulfuryl Flouride SO<sub>2</sub>F<sub>2</sub> I F3-412104-05000

Measurement principle:	Non-Dispersive Infra-Red (NDIR), dual wavelength
Measurement range:	0 6 Vol% Full Scale (FS)
Gas supply:	by flow (nearly atmospheric pressure)
Flow rate:	0.1 1.0 l / min
Mounting dimensions:	70 mm x 60 mm x 40 mm (L x W x H)
Warm-up time:	< 2 minutes (start-up time)
	< 30 minutes (full specification)

# Measuring response\*

Digital resolution:	0.001 Vol%	
Response time @ 0.7 I / min**:	Standard:	Fast:
t <sub>90</sub> (10 to 90 % FS):	≤ 12.6 s	≤ 1.2 s
t <sub>on</sub> (0 to 90 % FS):	≤ 15.9 s	≤ 2.0 s
Detection limit (3 $\sigma$ ):	≤ 0.02 Vol%	≤ 0.04 Vol%
Repeatability:	≤±0.03 Vol%	
Linearity error (straight line deviation):	≤ ± 0.08 Vol%	
Long term stability (zero):	≤ ± 0.025 Vol% over 1000 h period	
Long term stability (span):	$\leq$ ± 0.050 Vol% over 1000 h period	

## Influence of T, P, flow rate, other\*

Temp. dependence (zero):	≤ ± 0.01 Vol% per °C
Temp. dependence (span):	≤ ± 0.015 Vol% per °C
Pressure dependence:	+ 0.100 % of actual reading / hPa
Flow rate dependence:	≤ ± 0.005 Vol% per 0.1 I / min
Cross sensitivity (zero) other gases:	consult factory
Gas dew point requirement:	< + 5°C dew point (stable), particle free and clean sample gas

## **Electrical parameters**

Supply current (peak): < 4	400 mA @ 3.3 V, < 240 mA @ 5.0 V
Inrush current: < 6	600 mA
Average power consumption: < 8	800 mW
Digital output signal: Me	Nodbus ASCII / RTU via UART, autobaud, autoframe
Calibration: ze	ero and span by SW

#### **Climatic conditions**

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.

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For more information, please visit www.smartgas.eu or contact us at sales@smartgas.eu

Please consult smartGAS sales for parts specified with other temperature and measurement ranges. At first initiation and depending on application and ambient conditions recalibration is recommended. Recurring cycles of recalibration are recommended.