

## SEC Gas Sensor

### HYDROGEN SULFIDE 500 HS Micro

### Technical Specification

Sensor Type	H <sub>2</sub> S 500 HS Sensor Micro
Detectable Gases	Hydrogen Sulfide
PN single sensor	01-27-20-02
Measuring Principle	Amperometric 3-electrode sensor
Contact	3 pins * non solderable



Standard Range	0 – 200 ppm
Lower Detectable Limit (LDL)	1 ppm
Maximum Range	500 ppm
MAK/TLV	10 ppm
Long Term Sensitivity Drift	< 1 % / month
Linearity at standard range	linear
Repeatability	> 98 % of signal
Zero current at normal conditions	+/- 20 nA
Sensitivity	60 ... 160 nA/ppm
Response time at target level	
T50	< 10 s
T90	< 30 s
Sensor warm up time typically	60 s
Operating conditions	- 20°C ... +60°C 10 ... 95 % r. h.
Expected sensor life time	3 years

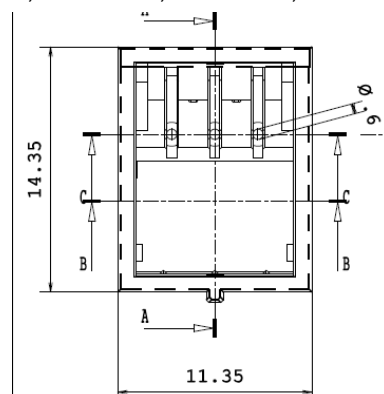
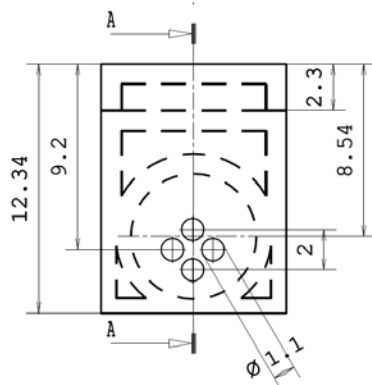
### HYDROGEN SULFIDE 500 HS Micro

### Dimensional Drawing

Sensor dimensions

6,5 mm x 11,4 mm x 14,4 mm

± 0,15 mm tolerance



\* Soldering to the pins will damage the sensor

**SEC Gas Sensor****HYDROGEN SULFIDE 500 HS Micro****Temperature Dependency**

3%/°C (October 2010)

Will be updated soon

**HYDROGEN SULFIDE 500 HS Micro****Cross Sensitivity**

<i>Gas</i>	<i>Formula</i>	<i>Test Gas Concentration</i>	<i>Reading in ppm</i>
Ammonia	NH <sub>3</sub>	25 ppm	0
Carbon Dioxide	CO <sub>2</sub>	5000 ppm	0
Carbon Monoxide	CO	50 ppm	3
Chlorine	Cl <sub>2</sub>	1.0 ppm	n/a
Hydrocarbons unsaturated	-	1 %	0
Hydrogen	H <sub>2</sub>	100 ppm	3
Isopropanol	C <sub>3</sub> H <sub>7</sub> OH	1000 ppm	0
Nitric Oxide	NO	20 ppm	?
Nitrogen Dioxide	NO <sub>2</sub>	10 ppm	-2
Ozone	O <sub>3</sub>	0.5 ppm	n/a
Sulphur Dioxide	SO <sub>2</sub>	20 ppm	n/a

**Note:**

Test conditions at 20°C/ 1013 hPa, Flow Rate > 500 qcm/min  
 Cross sensitivity gases are not target gases. Relation can change with aging.

Solidsense GmbH believes the data contained herein are factual, and the opinions expressed are of qualified experts regarding the results of tests conducted, the data are not to be taken as warranty or representation which Solidsense assumes legal responsibility. The data are offered solely for consideration, investigation, and verification. Any use of these data and information must be determined by the user to be in accordance with federal, state, and local laws and regulations. Specifications are subject to change without notice.

**Solidsense GmbH - Felix-Wankel-Str. 5 - 82152 Krailling, Germany****Tel: +49 89 893 255 21 – Fax: +49 89 850 9374 – [info@solidsense.de](mailto:info@solidsense.de) – [www.solidsense.de](http://www.solidsense.de)**