

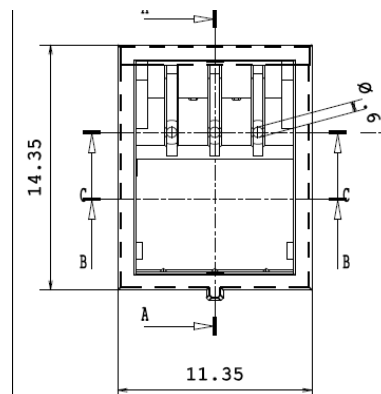
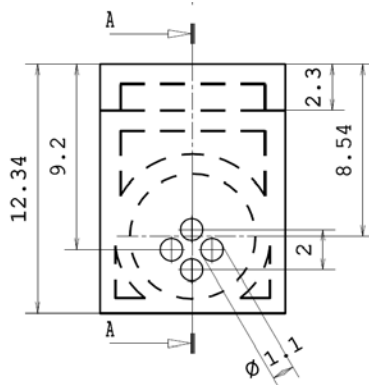
HYDROGEN SULFIDE 500 HS Micro Technical Specification

Sensor Type	H ₂ 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

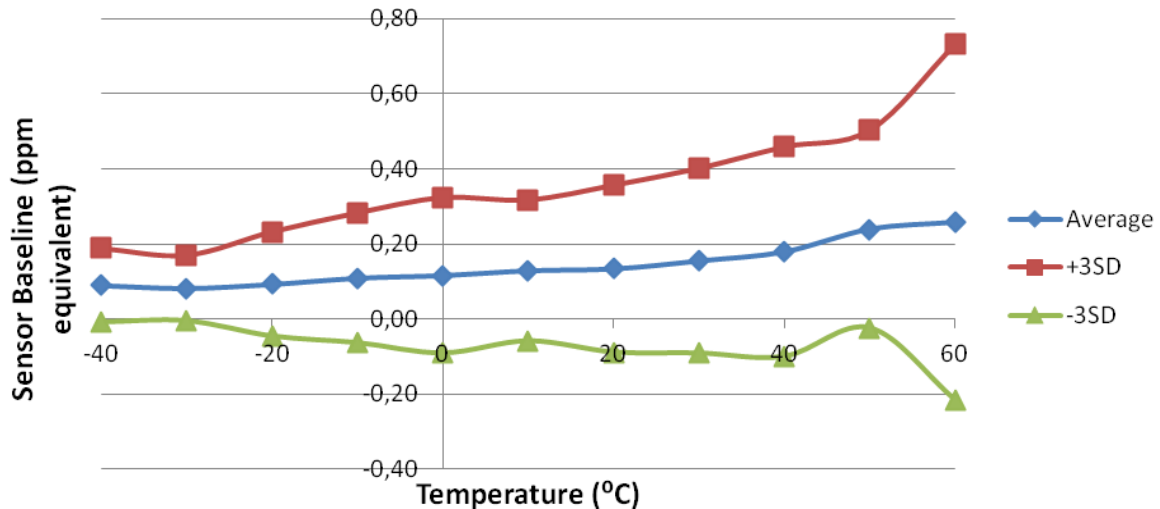


* Soldering to the pins will damage the sensor

HYDROGEN SULFIDE 500 HS Micro Temperature Dependency

Sensor Baseline vs. Temperature

The graph below shows the impact of temperature on the baseline of the sensors (in ppm equivalent).



HYDROGEN SULFIDE 500 HS Micro Cross Sensitivity

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

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