

## NITROGEN DIOXIDE *Micro* Technical Specification

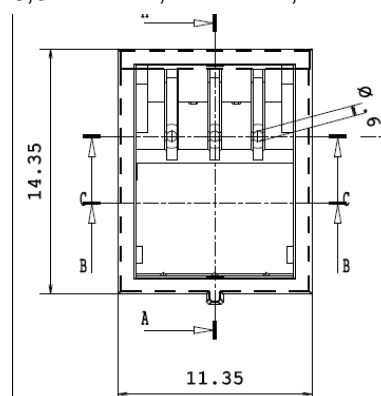
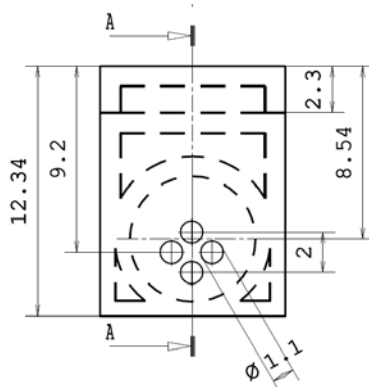
Sensor Type	NO <sub>2</sub> Sensor Micro
Detectable Gases	Nitrogen Dioxide
Part Number	01-27-50-01
Measuring Principle	Amperometric 3-electrode sensor
Contact	3 pins * non solderable



Standard Range	0 – 100 ppm
Lower Detectable Limit (LDL)	200 ppb
Maximum Range	500 ppm
MAK/TLV	3 ppm
Long Term Sensitivity Drift	< 1 % / month
Linearity at standard range	linear
Repeatability	> 98 % of signal
Zero current at normal conditions	+/- 2 nA
Sensitivity	10 ... 30 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	5 years

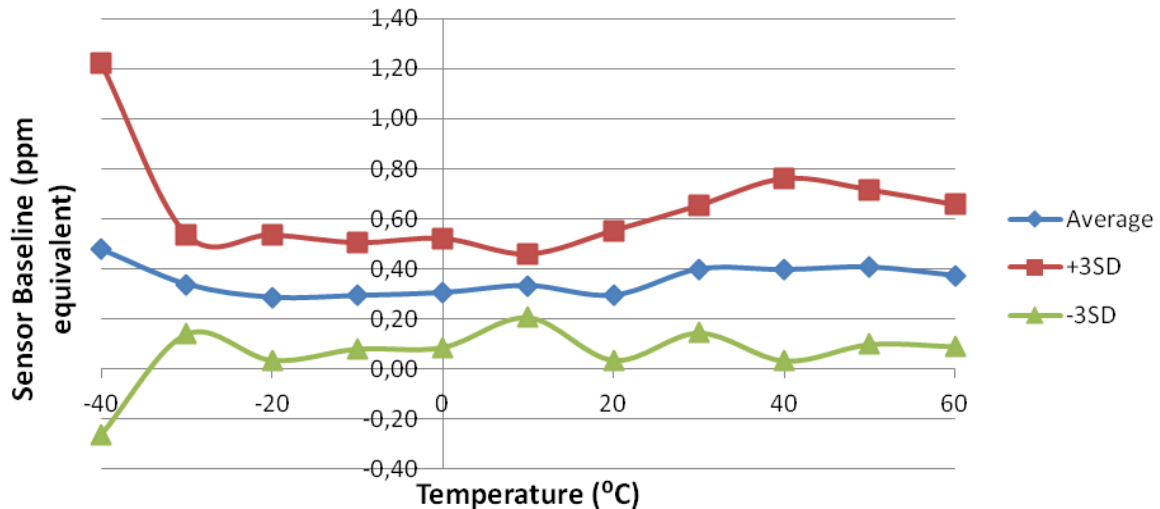
## NITROGEN DIOXIDE *Micro* Dimensional Drawing

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

**NITROGEN DIOXIDE *Micro* Temperature Dependency**



**NITROGEN DIOXIDE *Micro* Cross Sensitivity**

Gas	Formula	Test Gas Concentration	Reading in ppm
Ammonia	NH <sub>3</sub>	25 ppm	0
Carbon Dioxide	CO <sub>2</sub>	5000 ppm	0
Carbon Monoxide	CO	30 ppm	0
Chlorine	Cl <sub>2</sub>	1.0 ppm	1.0
Hydrocarbons unsaturated	-	1 %	0
Hydrogen	H <sub>2</sub>	3800 ppm	0
Hydrogen Sulphide	H <sub>2</sub> S	10 ppm	-7
Isopropanol	C <sub>3</sub> H <sub>7</sub> OH	1000 ppm	0
Nitric Oxide	NO	20 ppm	0
Chlorine Dioxide	ClO <sub>2</sub>	1 ppm	1
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 Krailing, Germany**  
**Tel: +49 89 893 255 21 – Fax: +49 89 850 9374 – info@solidSense.de – www.solidSense.de**