

# SEC Gas Sensor

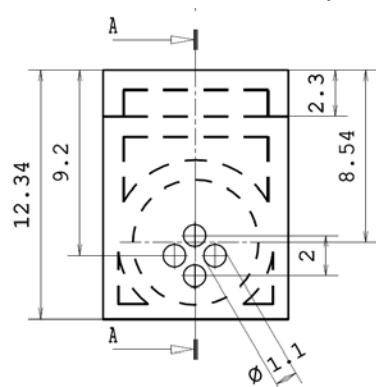
## CARBON MONOXIDE *Micro* Technical Specification

Sensor Type	CO Sensor Micro
Detectable Gases	Carbon Monoxide
Part Number	01-27-40-01
Measuring Principle	Amperometric 3-electrode sensor
Contact	3 pins non solderable *
Standard Range	0 – 1000 ppm
Lower Detectable Limit (LDL)	2 ppm
Maximum Range	2000 ppm
MAK/TLV	30 ppm
Long Term Sensitivity Drift	< 1 % / month
Linearity at standard range	linear
Repeatability	> 98 % of signal
Zero current at normal conditions	+/- 100 nA
Sensitivity	30 ... 50 nA/ppm
Response time at target level	
T50	< 10 s
T90	< 30 s
Sensor warm up time typically	60 s
Operating conditions	- 20°C ... +50°C 10 ... 95 % r. h.
Expected life time	5 years

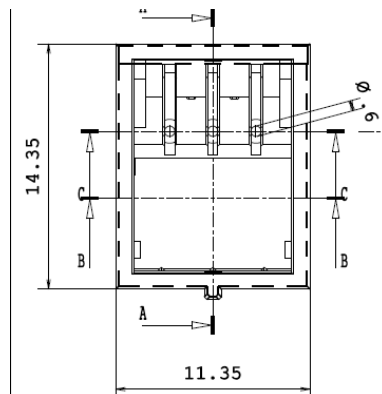


## CARBON MONOXIDE *Micro* Dimensional Drawing

Sensor dimensions without pins



6,5 mm x 11,4 mm x 14,4 mm ± 0,15 mm tolerance

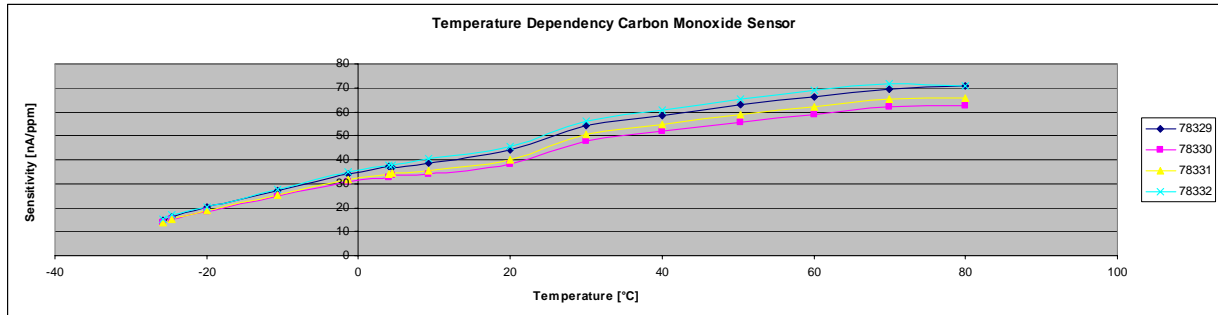


\*soldering to the pins will damage the sensor

## SEC Gas Sensor

### CARBON MONOXIDE *Micro*

### Temperature Dependence



### CARBON MONOXIDE *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
Chlorine	Cl <sub>2</sub>	1.0 ppm	0
Hydrocarbons unsaturated	-	1 %	0.0
Hydrogen	H <sub>2</sub>	100 ppm	30
Hydrogen Sulphide	H <sub>2</sub> S	10 ppm	30
Isopropanol	C <sub>3</sub> H <sub>7</sub> OH	1000 ppm	0
Nitric Oxide	NO	20 ppm	0
Nitrogen Dioxide	NO <sub>2</sub>	10 ppm	0
Ozone	O <sub>3</sub>	0.5 ppm	0
Sulphur Dioxide	SO <sub>2</sub>	20 ppm	0

#### 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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