

SEC Gas Sensor

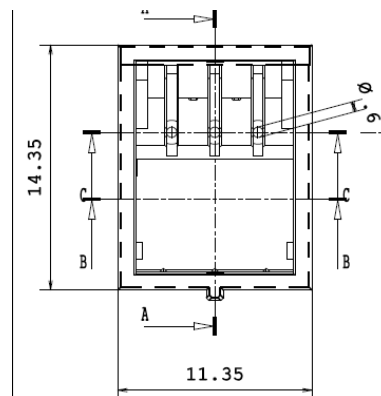
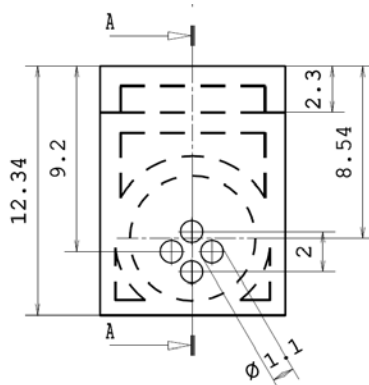
OXYGEN Micro Technical Specification

Sensor Type	O ₂ Sensor Micro
Detectable Gases	Oxygen
Part Number	01-27-30-01
Measuring Principle	Amperometric 3-electrode sensor
Contact	3 pins* non solderable
Standard Range	0.0 – 30.0 Vol. %
Lower Detectable Limit (LDL)	0.1 Vol. %
Maximum Range	50 Vol. %
Bias Voltage	- 400 to -600 mV
Long Term Sensitivity Drift	< 0.1 Vol. % / 6 month
Linearity at standard range	linear
Repeatability	> 98 % of signal
Current at 21 Vol. % Oxygen	7 – 11 µA
Sensitivity	~ 0,04 nA/ppm
Response time at target level	
T50	< 5 s
T90	< 15 s
Sensor warm up time typically	15 s
(Pre-powered)	(10) s
Operating conditions	- 20°C ... +50°C 10 ... 95 % r. h.
Pressure dependence	linear
Expected life time	> 3 years



OXYGEN Micro Dimensional Drawing

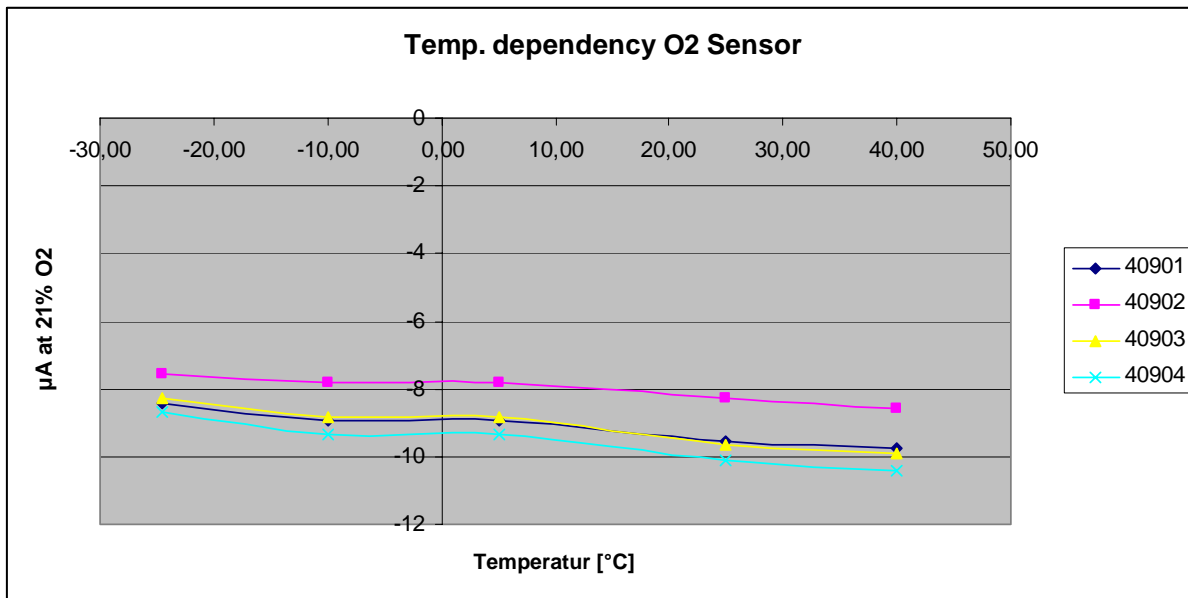
Sensor dimensions without pins 6,5 mm x 11,4 mm x 14,4 mm ± 0,15 mm tolerance



Sensor Datasheet O2 Micro_Rev 2012-03-15.doc * soldering to the pins will damage the sensor

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OXYGEN *Micro* Temperature Dependence



OXYGEN *Micro* Cross Sensitivity

N.A.

Note:

The sensor can be used in applications of high CO₂ level due to the fact that it contains an acid electrolyte.

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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