SolidsenSe Gas Sensors

Specification Sheet OXYGEN Micro

| Sensor Type |
|----------------------|
| Detectable Gases |
| Part Number |
| Measuring Principle |
| Specific Sensor Data |
| Connector |

O2 Sensor Micro O2 Oxygen 01-27-30-01 Amperometric 3-electrode sensor no 3 gold contacts with pins



| Standard Range | 0.0 – 30.0 Vol.% | |
|---|----------------------|--|
| Lower Detectable Limit (LDL) | 0.1 Vol.% | |
| Maximum Range | 50 Vol.% | |
| Bias voltage | -400600 mV | |
| MAK/TLV | | |
| Long Term Sensitivity Drift | < 0.1 Vol. % / month | |
| Deviation from linearity at standard range | < 5 % FS | |
| Current at 21 Vol.% Oxygen | 6 - 11 µA | |
| Sensitivity | ~ 0,04 nA / ppm | |
| Response time at target level | | |
| Т50 | < 5 s | |
| Т90 | < 15 s | |
| Sensor warm up time typically (pre-sourced) | 10 min (10 s) | |
| Operating conditions | - 20°C +50°C | |
| | 15 90 % r. h. | |
| Temperature dependence | < 0,3 % / °C | |
| Sensor life time | 3 years expected | |
| Sensor dimensions | 6,5 x 11,4 x 14,4 mm | |



Specification Sheet Oxygen Micro

Cross Sensitivity

| Gas | Formula | Test Gas Concentration | Reading in % |
|-----------------------------|---------|---------------------------|--------------|
| Ammonia | NH3 | 100 ppm | 0.0 |
| Carbon Dioxide | CO2 | 5000 ppm | 0.0 |
| Carbon Monoxide | CO | 60 ppm | 0.0 |
| Chlorine | CI2 | 1.0 ppm | 0.0 |
| Hydrocarbons unsaturated | - | 1 % | 0.0 |
| Hydrogen | H2 | 100 ppm | 0.0 |
| Hydrogen Sulphide | H2S | 10 ppm | 0.0 |
| Isopropanol | C3H7OH | 1000 ppm | 0.0 |
| Nitric Oxide | NO | 20 ppm | 0.0 |
| Nitrogen Dioxide | NO2 | 10 ppm | 0.0 |
| Ozone | O3 | 0.5 ppm | 0.0 |
| Sulphur Dioxide | SO2 | 20 ppm | 0.0 |

Please 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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