

Specification Datasheet - 0110381

Sumner

WGA-O2 Oxygen Sensor



Specifications

Part number	0110381
Model	WGA-O2
Output in ambient air	7 mV – 13 mV
Output connector/connection	3.5 mm mono phone jack
Input connector/connection	M16 x 1 (5/8-24 UNEF)
Input O ring	Yes
Measurement range	0 – 100% oxygen (at atmospheric pressure)
Repeatability	< 1% volume oxygen at constant temperature and pressure
Influence of pressure	Output proportional to change in oxygen partial pressure
Pressure range	0.6 to 2.0 bar
Linearity error	< 3% relative
Warm up time	< 30 minutes after sensor installed
Zero offset voltage	< 40µV in 100% nitrogen
Cross interference	≤ 0.1% volume oxygen response to: 15% CO ₂ balance N ₂ , 10% CO balance N ₂
Response time (t90)	< 5 s for 90% of final value.
Operating humidity	0 – 99% R.H. (non-condensing).
Influence of humidity	- 0.03% relative per % R.H. at 25 °C.
Influence of mechanical shock	< 1% relative after fall from 1m
Operating temperature range	0 to +50 °C
Storage temperature	-20 to +50 °C
Recommended storage temperature	+5 to +15 °C
Temperature compensation	Integrated NTC thermistor
Temperature compensation error	+20 to +40 °C: 3% relative 0 to +50 °C: 8% relative
Nominal sensor life	≥ 500,000 % oxygen hours
Long term output drift	< 1% volume oxygen per month, typically < -15% over sensor lifetime.
Recommended load	≥ 10 KΩ
Weight (approximate)	28 g
Flow diverter	Not included
Standards	Meets with requirements of EN ISO 21647. Designed and manufactured according to EN ISO 9001:2008 & EN 13485:2007
Packaging	Gas barrier bag – transparent.
Warranty period	12 months from date of sales invoice

All specifications are applicable at standard conditions: 1013 mbar, 25°C dry ambient air.

Specifications subject to change.