

# Specification Datasheet - 0110381

## Sumner WGA-O2 Oxygen Sensor



### Specifications

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