4OxLL

Oxygen (O_2) Gas Sensor
Part Number: AA783-33H

Product Data Sheet Draft

Key Features and Benefits

- **Long Life**
- **Improved field reliably**
- **Superior environmental performance**
- **Enhanced response time in extreme conditions**

Technical Specifications

MEASUREMENT

Technology	Electrochemical
Measurement Range	0-25% vol. O_2
Maximum Overload	30% vol. O_2
Output Signal	80 - 130 µA in Air
T90 Response Time	<15 Seconds
T97 Response Time	<35 Seconds
Zero Current (Offset) (after 3 minutes N_2)	<0.3% vol. O_2
Warm-Up Time	20 minutes
Linearity	S = K $\log_e$ 1/ (1-C)

ELECTRICAL

Bias Voltage	-600 ± 10 mV
Power Rating at 20.9%O_2	0.5 mW

MECHANICAL

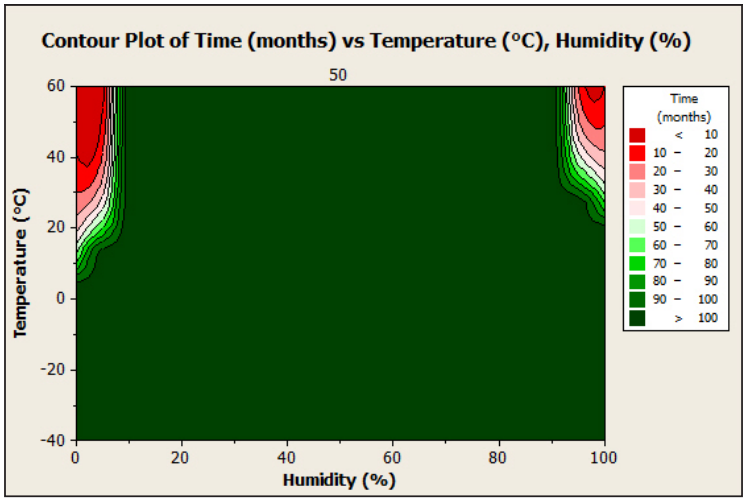
Casing Material	Noryl
Weight	5 ± 0.2 g
Orientation Sensitivity	<0.2%vol. O_2 equivalent

ENVIRONMENTAL

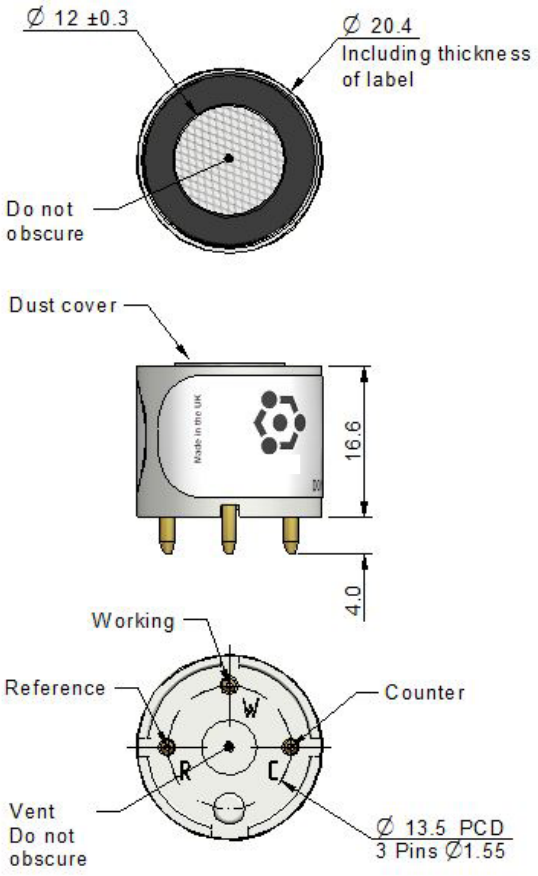
Recommended Storage Temp	0°C to 20°C in original packaging
Thermal Transient (Temp. plunge +22°C to -20°C)	<23.5% vol. O_2
Operating Pressure Range	Atmospheric ± 20%
Pressure Coefficient	<0.02% signal/mbar
Pressure Transient (60 cm H_2O step change)	<150% signal change

LIFETIME

Long Term Output Drift	<5% signal loss over operating life
Expected Operating Life	5 years in air



Product Dimensions



All tolerances ±0.15 mm unless otherwise stated.
DO NOT solder to pins.

IMPORTANT NOTES

Instrumentation incorporating 4OxLL must be vented

Vent Cross Sectional Area = 3.608x10-2 x V

Where V = Internal 'free' Instrument volume (ml)

(based on Gore L32224 membrane material used by manufacturing)

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Typical Applications
General purpose, portable or fixed life safety and emissions.

Poisons
Sensors are designed for operation in a wide range of environments and harsh conditions. However it is important that exposure to high concentrations of solvent vapours is avoided, both during storage, fitting into instruments, and operation. When using sensors with printed circuit boards (PCBs), degreasing agents should be used before the sensor is fitted. Do not glue directly on or near the sensor as the solvent will attack the plastic.

SAFETY NOTE
This sensor is designed to be used in safety critical applications. To ensure that the sensor and/or instrument in which it is used, are operating properly, it is a requirement that the function of the device is confirmed by exposure to target gas (bump check) before each use of the sensor and/or instrument. Failure to carry out such tests may jeopardise the safety of people and property.