S+7OX

Oxygen Sensor

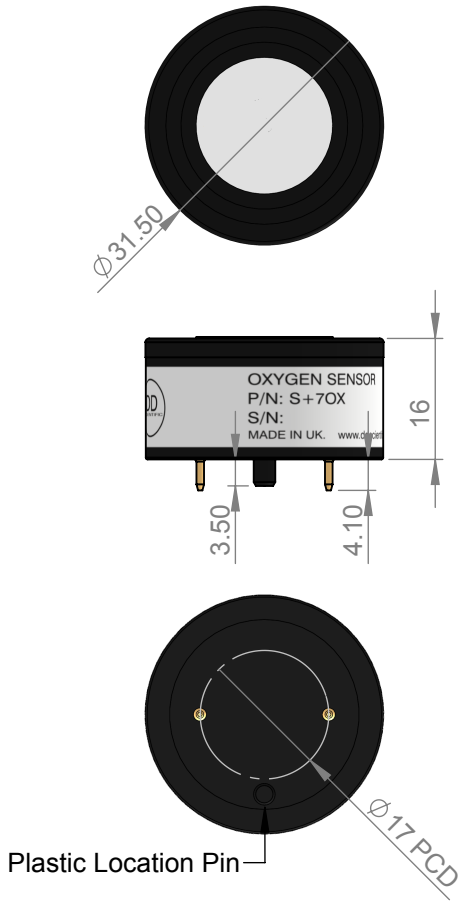
Ideal application:
portable gas detection
fixed gas detection
general purpose

Key Features:

★Robust design
★Proven Reliability
★High performance

Product Dimensions

All dimensions in mm
All tolerances ±0.15 mm



Performance Characteristics	
Output signal	0.20 ± 0.03mA
Zero Current (Offset)	< 0.6% vol. O_2
T90 Response Time	< 15 seconds
Measurement Range	0 - 25% Oxygen
Maximum Overload	30% Oxygen
Linearity	Linear
Recommended Load Resistor	100 ohms
Environmental	
Temperature Range Continuous	-30°C to +50°C
Pressure Range	800 to 1200 mbar
Operating Humidity Range	5% to 95% RH
Lifetime	
Long Term Output Drift	< 5% per annum
Recommended Storage Temp	0°C to 20°C
Expected Operating Life	> 24 months in air
Standard Warranty	24 months from date of dispatch
Intrinsic Safety Data	
Maximum current in normal operation (pure O_2)	0.01 A
Maximum o/c Voltage (10 to 100% O_2)	0.9 V
Maximum s/c Current (10 to 100% O_2)	0.5 A

Important Note:
All performance data is based on conditions at 20°C, 50%RH and 1 atm, using DD Scientific recommended circuitry.

Sensor performance is temperature dependent, and please contact DD Scientific for temperature performance other than 20°C.

Email: info@ddscientific.com Website: www.ddscientific.com

Cross Sensitivity Data

Toxic gases at TLV levels will have no cross-sensitivity effect on DD-Scientific oxygen sensors. At very high levels (i.e. percent levels), highly oxidising gases (e.g. ozone, chlorine) will interfere to the extent of their oxygen equivalent, but most other commonly occurring gases will have no effect.

Acid Gases

IMPORTANT NOTE: Acid gases such as CO_2 and SO_2 will be absorbed by the electrolyte and tend to increase the flux of oxygen to the electrode. This gives an enhanced oxygen signal of approximately 0.3% of signal per 1% CO_2. DD-Scientific oxygen sensors are not suitable for continuous operation in concentrations of CO_2 above 25%.

Poisoning:
DD Scientific sensors are designed to operate in a wide range of harsh environments and conditions. However, it is important that exposure to high concentrations of solvent vapors is avoided, both during storage, fitting into instrument and operation.
When using sensors on printed circuit boards (PCB's), degreasing agents should be used prior to the sensor being fitted.

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