Product Data Sheet

P/N : DceL O2

DceL O2

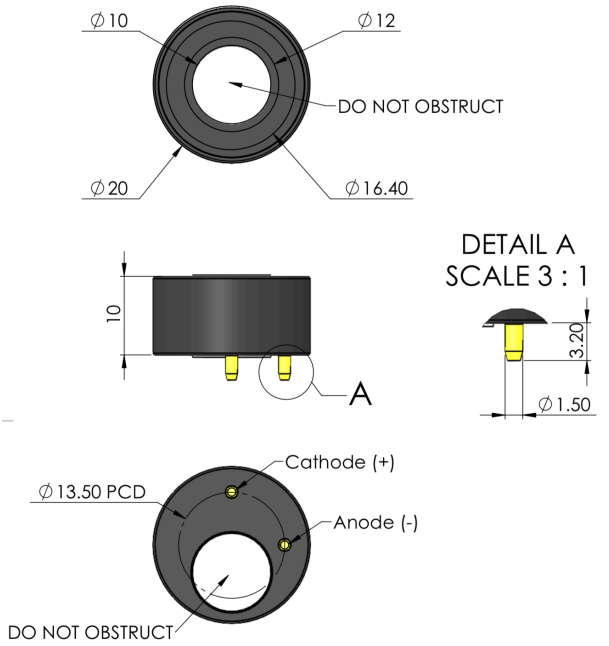
Oxygen Sensor (O_2)

Introduction The DceL O2 is a low profile industrial safety oxygen sensor, ideal for fixed and portable gas detectors.

Key Features: Resilient to challenging environments, guaranteed life performance, fast response

Performance Characteristics	
Output signal	40 ± 12 uA
Zero Current (Offset)	< 0.6% vol. O2 (typically <0.3% vol. O2)
T90 Response Time	< 10 seconds (typically <5 seconds)
Measurement Range	0 - 25% Oxygen
Maximum Overload	30% Oxygen
Linearity	Linear
Recommended Load Resistor	100 ohms

Environmental Details	
Temperature Range Continuous	-20°C to +50°C
Pressure Range	800 to 1200 mbar
Operating Humidity Range	5% to 95% RH



Product Dimensions in mm

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.

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Lifetime Details	
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 O2)	0.01 A
Maximum o/c Voltage (10 to 100% O2)	0.9 V
Maximum s/c Current (10 to 100% O2)	0.5 A

Temp data to be added

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%.

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