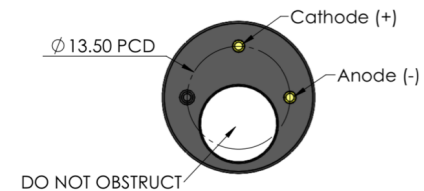
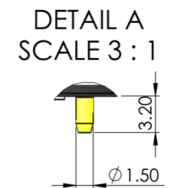
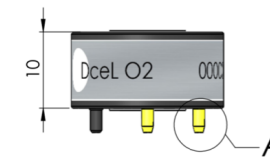
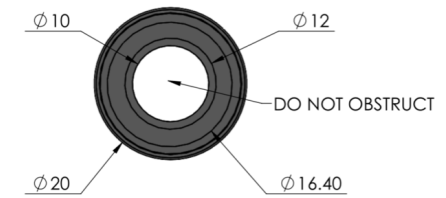


Introduction The DceL O2 is a low profile industrial safety oxygen sensor, ideal for fixed and portable gas detectors.

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

| Performance Characteristics | |
|-----------------------------|------------------------------------------|
| Output signal | 40 ± 10 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 |



ALL TOLERANCES UNLESS STATED: ±0.15mm

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.

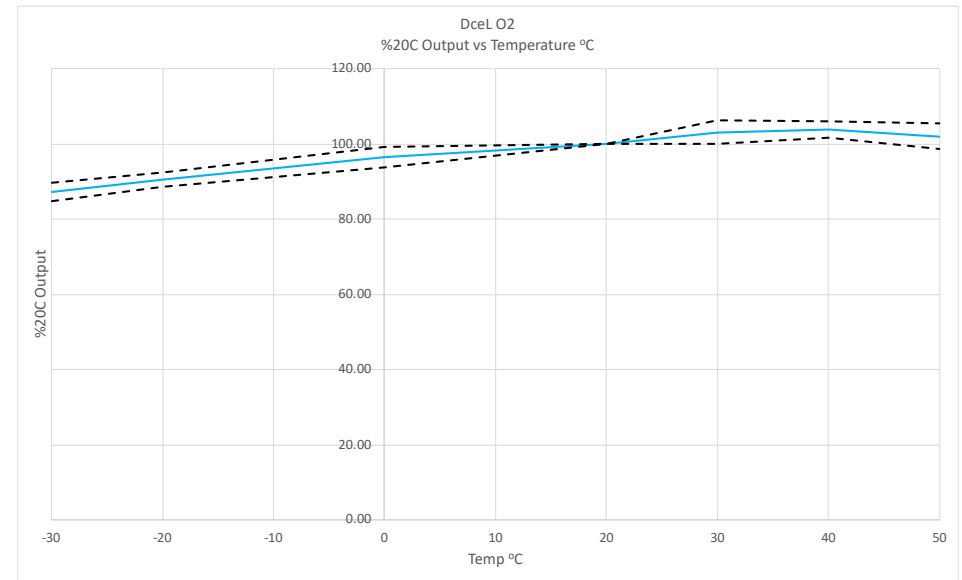
Sensor performance is temperature dependent, and please contact DD Scientific for temperature performance other than 20°C.

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 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 |



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 CO₂ and SO₂ 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% CO₂. DD-Scientific oxygen sensors are not suitable for continuous operation in concentrations of CO₂ above 25%.

WARNING: By the nature of the technology used, any electrochemical gas sensor offered by DD Scientific can potentially fail to meet specification without warning. Although DD Scientific Ltd makes every effort to ensure the reliability of our products of this type, where life safety is a performance requirement of the product, we recommend that all sensors and instruments using these sensors are checked for response to gas before use.

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