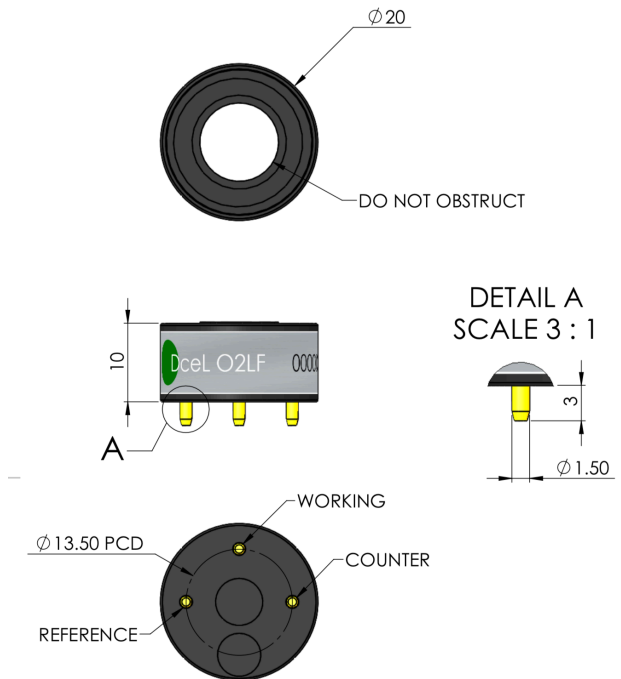


Introduction The DceL O2 LF is a low profile, long life, lead free oxygen sensor designed for portable safety applications

Key Features: More than 5 years life. Exceptional stability, resilient to challenging environments, high performance.

Performance Characteristics	
Output signal	0.1 ± 0.03 mA in air
Zero Current (Offset)	< 0.6% vol. O ₂ (typically <0.3% vol. O ₂)
T90 Response Time	< 10 seconds (typically <5 seconds)
Measurement Range	0 - 25% Oxygen
Maximum Overload	30% Oxygen
Linearity	$S = K \log_e (1/1-C)$
Warm Up Time	See Note 1
Electrical Bias Voltage	-600 ± 10 mV

Environmental Details	
Temperature Range Continuous	-40°C to +60°C
Pressure Range	800 to 1200 mbar
Operating Humidity Range (non-condensing)	15% to 90% RH (continuous) 0 - 99% RH (short tem)



ALL TOLERANCES UNLESS STATED: ±0.15mm

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.

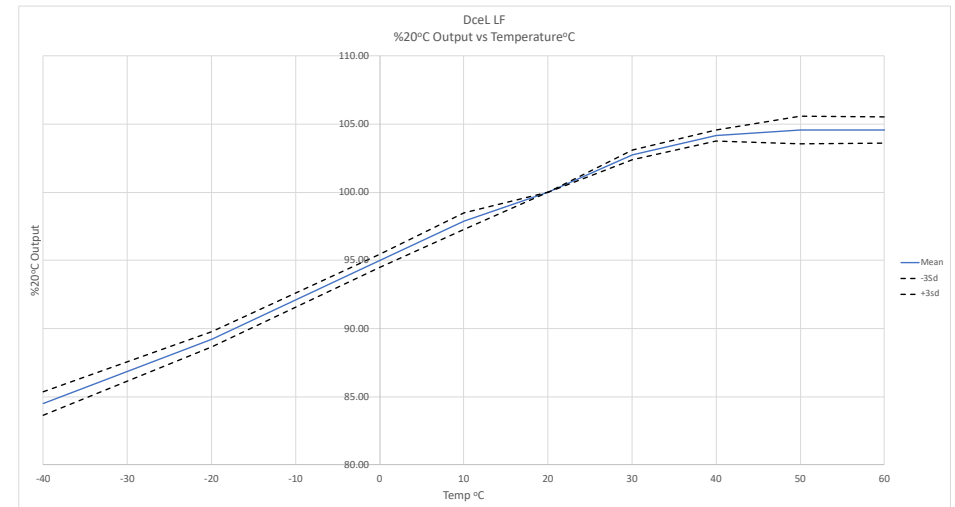
Product Dimensions
All dimensions in mm
All tolerances ±0.15 mm

Lifetime Details

Long Term Output Drift	< 5% over operating life
Recommended Storage Temp	0°C to 20°C
Expected Operating Life	> 60 months in air
Standard Warranty	36 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



Note 1: When bias is not applied to the sensor, it will become saturated with oxygen gas which is consumed when the bias is reapplied. This results in a settling time, which can be up to 60mins depending on how long bias potential was removed. During this time, the sensor may not meet all of the performance parameters provided in this datasheet.

Note 2: In order to function correctly, the rear of the sensor must not be blocked and adequate venting must be available when the sensor is fitted to an analyser or detector.

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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