

# Product Data Sheet

P/N : S+2OX LL / LLN

## S+2OX LL / LLN Oxygen Sensor (O<sub>2</sub>)

**Introduction** The S+2OX LL is a highly reliable, environmentally robust oxygen sensor designed for trace O<sub>2</sub> measurements

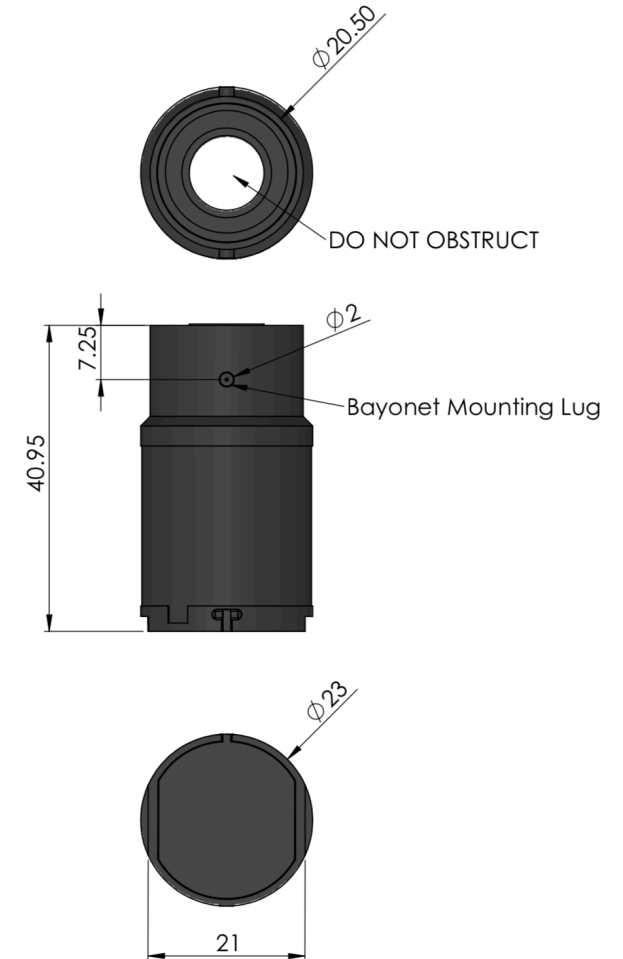
**Key Features:** High activity electrode, fast response, low ppm measurement

Performance Characteristics	
Output signal	50-90mV in air (with 10ohm resistor)
Measurement Range	0 - 10ppmO <sub>2</sub>
Maximum Overload	1000ppmO <sub>2</sub>
Purge Time to <1000ppmO <sub>2</sub> <100ppmO <sub>2</sub> <10ppmO <sub>2</sub>	<5mins <2hours <6hours
T90 Response Time	< 10 seconds
Linearity	S=Klog 1/1-C

Environmental Details	
Temperature Range Continuous	-20°C to +50°C
Temperature Coefficient	0.2 % signal / °C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	<0.02% signal / mBar
Operating Humidity Range (non-condensing)	0% to 99% RH

**Important Note:**

All performance data is based on conditions at 20°C, 50%RH and 1 atm, using DD Scientific recommended circuitry  
Sensor is designed to measure at trace O<sub>2</sub> levels and is not recommended for storage or use in ambient air. It is also recommended to store sensor off load to maximise operational life of sensor



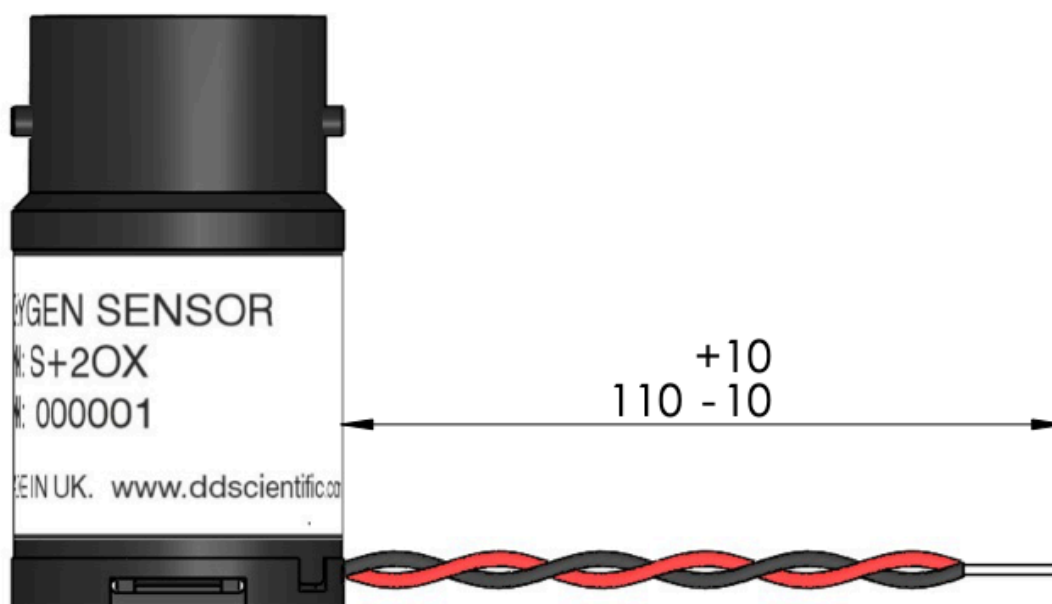
**Product Dimensions**  
All dimensions in mm  
All tolerances ±0.15 mm

Lifetime Details	
Expected Operating Life	See below
Long Term Output Drift *	< 5% over operating life <small>(measurement range)</small>
Recommended Storage Temp	0°C to 20°C (Off load) in DD packaging
Standard Warranty	1 month in air
Recommended Load	Max 10ohms

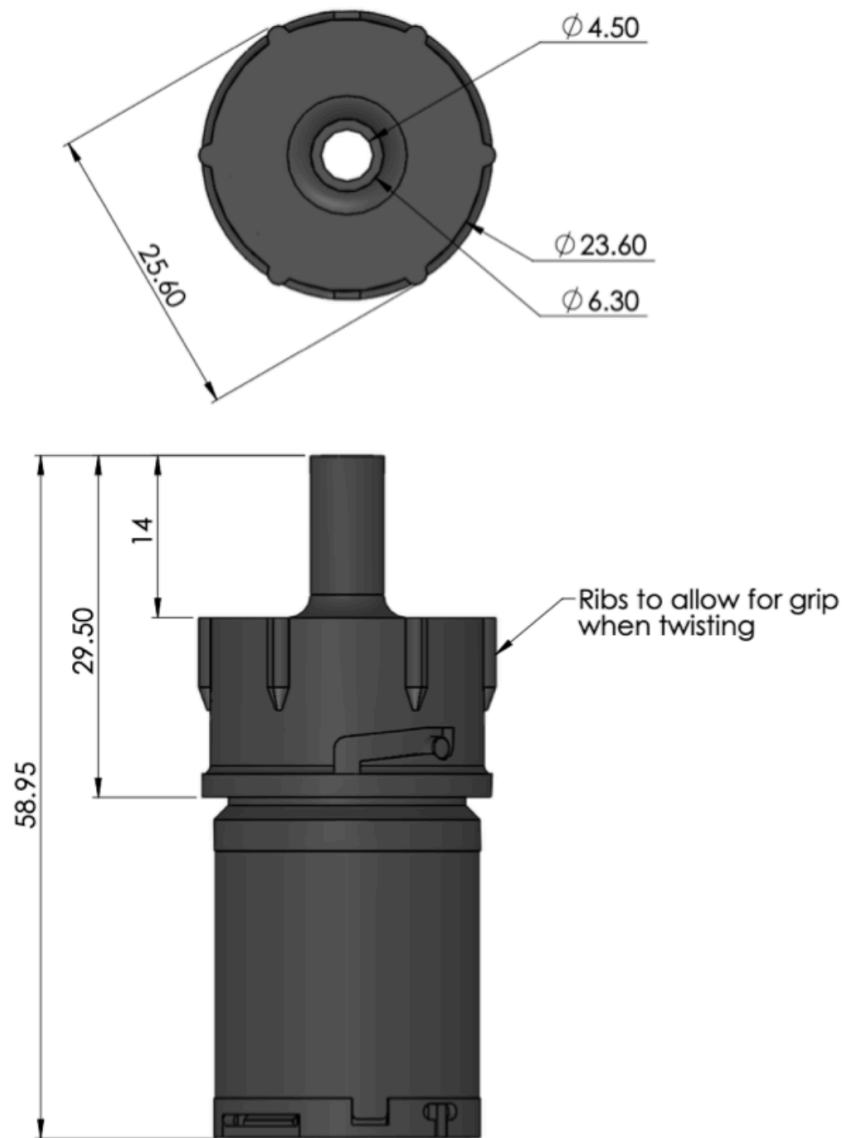
- \* Expected sensor life will be dependent on the amount of O2 sensor consumed. Life time will be increased when operated within measurement range and if sensor load is removed during periods when not used. Storage on load in ambient air will result in shortened operational life
- \* Due to high current generated by sensor, a higher signal drift will be evident when operated/stored in ambient air conditions. Drift in typical ppm measurement range will be minimal

**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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Sensor supplied with flying leads



The S+2OX LL sensor can be supplied with a bayonet fit nose adaptor. It is essential to provide a good mechanical seal to face of sensor for accurate trace O<sub>2</sub> level measurement. This part is designated S+2OX LLN