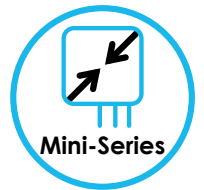




SENSORTECH

An Amphenol Company



SGX-OX-ROHS-Mini

Oxygen sensor

Datasheet

The Mini-series Electrochemical sensors from SGX Sensortech, with a housing dimension of just 8.3x14.4mm offers the smallest package available. A 75% reduction vs the popular SGX-4-series sensors. It gives customers the opportunity to reduce the size of instrument packages. The sensors are RoHS compliant, offer fast response & recovery, high stability and have a 3-pin configuration (Counter, Reference and Working electrodes).



Quality, Safety, Responsibility

PERFORMANCE

Nominal Range	0 - 25% Oxygen
Maximum Overload	30% Oxygen
Output signal	0.07 ± 0.03 mA in air
Response Time (T90)	< 10 s (typically <5 s)
Zero Signal (20°C)	< 0.4% vol O ₂
Linearity	$S = K \log_e (1/1-C)$
Bias Voltage	-600 ± 10 mV
Warm Up Time	See Note 1

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 as long as 15 minutes. During this time, the sensor may not meet all of the performance parameters provided in this datasheet.

OPERATING CONDITIONS

Temperature Range	-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 term)

PHYSICAL CHARACTERISTICS

Housing Material	ABS
Weight (Nominal)	5 g

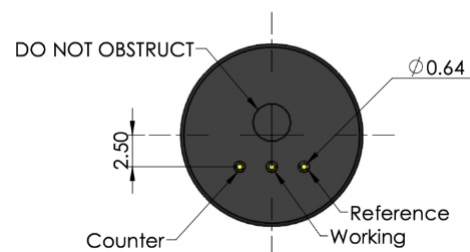
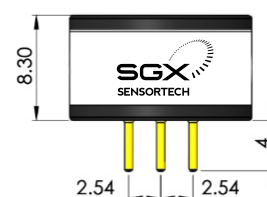
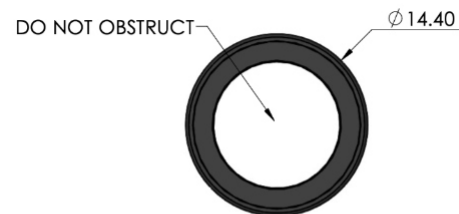
INTRINSIC SAFETY DATA

Max. Current in normal operation (pure O ₂)	0.01 A
Max. O/C Voltage (10 to 100% O ₂)	0.9 V
Max. S/C Current (10 to 100% O ₂)	0.5 A

LIFETIME

Long Term Output Drift	< 5% over operating life
Storage Temp	0°C to 20°C
Expected Operating Life	> 60 months in air (STP)*

*STP - Standard Temperature (0°C) and Pressure (1 atm)



Product Dimensions
All dimensions in mm
All tolerances ±0.15 mm

