

Internal Wall Mounted Oxygen Sensor

Features

- 4-20mA Output
- Wide supply voltage range
- Tamperproof lid



Specification

Output ranges	15 to 25%
Output	4-20mA
Supply voltage	10 to 30Vdc
Maximum load	700Ω @ 20mA, 24Vdc
Output drift	<1% @ 3 months
Temperature range	-30 to +60°C
Pressure range	80 to 120kPa
RH range	15 to 90%RH non-condensing
Element life	2 years
Response time	t ₉₀ (s) from 20.9% to 0% O ₂ <15
Zero current	<2 mA in N ₂
Storage	6 months @ 3 to 20°C
Protection	IP65 (housing only, suitable for internal mounting only)
Dimensions	55mm x 90mm dia.
Country of origin	UK

Product Codes

GS-S-OX25

15 to25% Concentration oxygen sensor



The **GS-S-OX** is designed for monitoring purposes, and should not be used in safety applications.

Technical Overview

The GS-S-OX25 wall mounting Oxygen (O₂) sensor is 4-20mA current loop powered, over the range of 15 to 25% Oxygen concentration. The sensor has a normal working life of 2 years in air, and needs to be powered up within 6 months of purchase.

Installation

1. Select a location which will give a representative sample of the prevailing space condition. The GS-S is not suitable for external mounting.

Avoid mounting the sensor in direct sunlight.

2. It is recommended that the unit be mounted with the cable entry at the bottom.
3. Remove the front cover by removing the tamperproof screw and twist the lid and separating from the main body.
4. Using the base of the housing as a template mark the hole centres. Drill two pilot holes at 85mm centres in the surface to which the sensor is to be mounted.
5. Fix the sensor to the wall using appropriate screws.
6. The housing is designed to make it easy for an electrical screwdriver to be used if desired.
7. Feed the cable through the gland and terminate. Leaving some slack inside the housing, tighten the cable gland onto the cable.
8. Replace the lid after the electrical connections have been made, and re-fit the tamperproof screw.

Connections

Red: 10 to 30Vdc
Black: 4-20mA output

Trend Scaling

(15-25%)

Brange 0
Trange 25
Upper 25
Lower 15
Exp 2

Calibration

The GS-S-OX transmitter is shipped pre-calibrated. Using the information below it is possible to periodically re-calibrate the transmitter if required in ambient air (13.44mA) @ 25°C.

If the 4-20mA output is less than 12.7mA or greater than 14.1mA, recalibration is not possible.

1. Power the sensor with 10 to 30Vdc and leave for about 1 hour.
2. Pump or allow clean air to diffuse the sensor for 10 minutes.
3. Adjust the zero potentiometer, until a reading is within ± 0.05 mA of the air calibration point shown below.

	Full scale % Oxygen	(20.9% Oxygen) Air Calibration point (mA)
GS-S-OX25	25	13.44

