

# Sensor Data Sheet

# SENSALERT PLUS



**Oxygen**  
**(0 – 25.0 %vol)**  
**Part No. 823-0240-22**  
**FM Performance Certified <sup>1, 2</sup>**

Minimum Indicated Concentration .....	0.8 % O <sub>2</sub>
Minimum Indicated Conc. Change .....	0.1 % O <sub>2</sub>
Accuracy <sup>3</sup> .....	± 0.2% O <sub>2</sub> @ 20.9 % O <sub>2</sub>
.....	± 0.4 % O <sub>2</sub> @ 18 % O <sub>2</sub>
Span Drift .....	< 10% change per year (typical)
Response Time (Rise) <sup>4</sup> .....	T <sub>50</sub> : < 10 seconds
.....	T <sub>90</sub> : < 15 seconds, successive exposures
Temperature Range .....	-20° to 50°C (-4° to 122°F)
Humidity Range .....	0–90 %RH, non-condensing
Pressure Range .....	Ambient atmospheric, ± 1 psi
Expected Sensor Life .....	Up to 2 years from Shipping Date <sup>5</sup>
Recommended Calibration Flow Rate .....	500 to 1000 cc/min
SensAlert 4-Channel Controller.....	Compatible

<sup>1</sup> For use in an FM Approved SensAlert Plus Transmitter

<sup>2</sup> Certified through 21 %vol maximum reading

<sup>3</sup> When Calibrated at 20.9 % O<sub>2</sub>

<sup>4</sup> Room Temperature

<sup>5</sup> Sensor is always operating; long-term storage is not recommended

**Note:** These are capillary style oxygen sensors optimized for use on oxygen/nitrogen atmospheres. Gases that alter the ambient gas density will produce erroneous oxygen readings, e.g. 5 % helium in the ambient will produce a false high oxygen reading. This is a gas density/diffusion effect rather than a chemical effect. These sensors are not recommended for atmospheres other than oxygen/nitrogen.

## Special Calibration Considerations:

### **Oxygen Sensor (PN° 823-0240-22)**

#### Zeroing The Sensor

Ambient Oxygen sensors do not normally require zeroing and cannot be zeroed through the Calibration menu.

#### Span Calibration

It is recommended that this sensor be calibrated at 20.9 %vol. There are no special calibration considerations for this sensor. Complete span calibration instructions are provided in Section 3.2 of the SensAlert<sup>Plus</sup> User Manual.

#### Test-on-Demand Cell

There is no Test-On-Demand cell available for this sensor.