



# GENESIS INTERNATIONAL, INC.

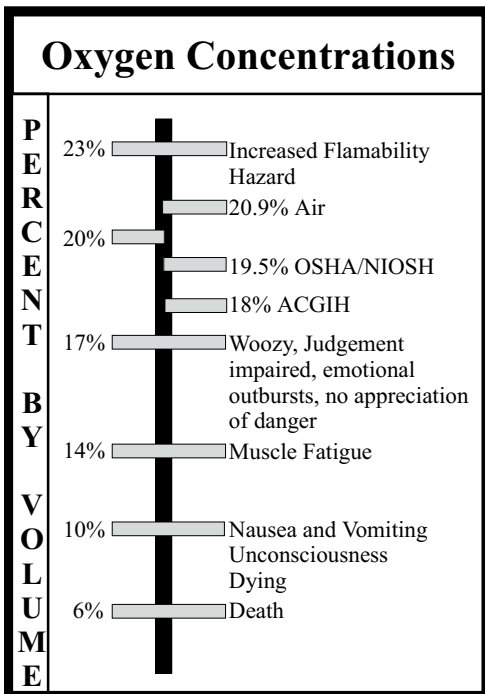
# SHERLOCK

## ELECTROCHEMICAL SENSOR FOR OXYGEN DEPLETION ALARMING



**OXYGEN DEPLETION SENSOR  
PART #82-0108**

Oxygen Concentration chart with agency guidelines for setting alarm levels and danger limits.



### OVERVIEW

The **SHERLOCK** OXYGEN DEPLETION SENSOR (O<sub>2</sub> SENSOR) was designed to monitor concentrations of Oxygen levels within an enclosed space. The sensor is mounted in the space to be monitored and connected by cable to a **SHERLOCK** monitoring control system. Each sensor is factory calibrated to a sea level concentration of 20.9% oxygen clean air base zero level at the factory prior to shipment. The O<sub>2</sub> Sensor should be utilized as a signal source for the **Sherlock** 2-Series or **Sherlock** 4-Series refrigerant gas monitoring systems.

### SPECIFICATIONS

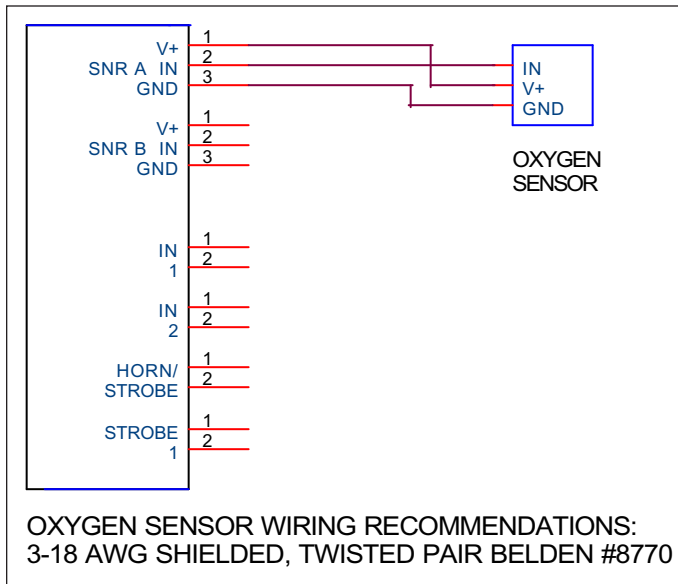
<b>SENSOR TYPE</b>	Electrochemical
<b>ENCLOSURE</b>	NEMA 1
Inches (mm)	4.3 x 3.4 x 1.2 (109 x 86 x 31)
<b>ENVIRONMENT</b>	50 to 95 °F (10 to 35 °C), 0 to 95 % RH non-condensing
<b>POWER INPUT</b>	12VDC, 250 mAmps
<b>OUTPUT SIGNAL</b>	0 to 5VDC
<b>DETECTION RANGE</b>	15% to 25% Oxygen by volume
<b>SENSITIVITY</b>	0.5 % of full scale reading
<b>CALIBRATION</b>	Every 6 Months
<b>WARM-UP TIME</b>	Readings will stabilize after 3 hours.
<b>LIFE EXPECTANCY</b>	Factory Recommendation of Replacing the sensor every 5 years

## Miscellaneous Specifications

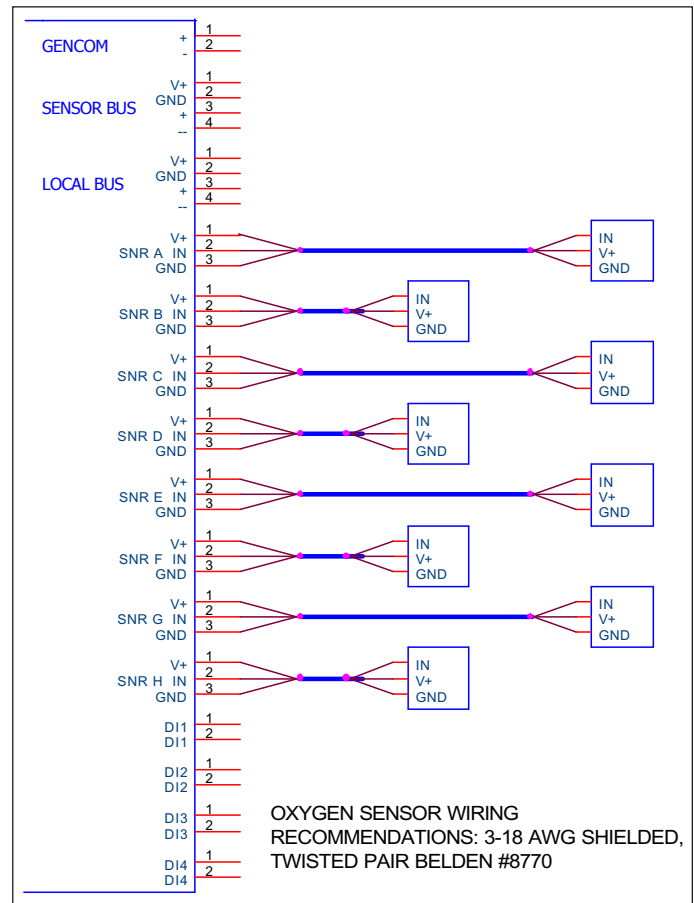
- Calibration is recommended every 6 months.
- Reading Range: 15% to 25%
- Long lifetime at 20.9% Oxygen
- Higher concentrations and adverse conditions will decrease sensor 5 year life expectancy
- Calibration kit available for easy checking accuracy of the sensor

## TYPICAL WIRING DIAGRAMS

- 1) The O<sub>2</sub> Sensor can be used in conjunction with any of our refrigerant sensors when controlled by a Sherlock monitor.
- 2) When connected to a Sherlock 204/404/804 any combination of O<sub>2</sub> sensors and refrigerant sensors can be utilized.
- 3) When connecting the Oxygen Sensor to a Genesis Sherlock 102/202/402/802, the sensor must be connected to the sensor "A" input.



2-SERIES WIRING DIAGRAM



4-SERIES WIRING DIAGRAM



# GENESIS INTERNATIONAL, INC.

1040 FOX CHASE INDUSTRIAL DRIVE  
ARNOLD, MISSOURI 63010

PHONE: (636) 282-0011  
FAX: (636) 282-2722

WEBSITE:  
WWW.GENESIS-INTERNATIONAL.COM

EMAIL:  
MAIL@GENESIS-INTERNATIONAL.COM