

OXYGEN SENSOR FOR COMBUSTION TRIM CONTROL

- Maximize Combustion Efficiency
- Minimize NO_x Formation
- Reduce Fuel Costs



Updated Design

- Single side connections
- Easier in-field upgrade
- Compatible with standard conduit fittings
- New design moves cable away from hot furnace wall

CERTIFIED

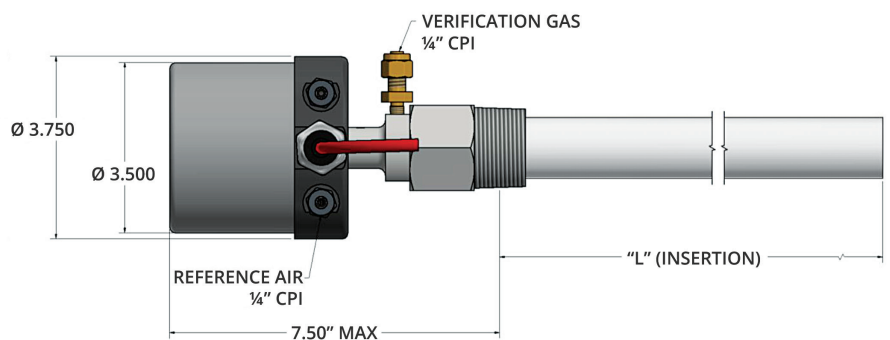


Oxyfire™ is a CE certified oxygen sensor that meets the highest quality and safety standards of the combustion market.

FEATURES	BENEFITS	VALUE
High temperature Zirconia cell	Fast response time & accurate measurement in applications up to 1600°C (2912°F)	A reliable measurement permits control in difficult applications
In-situ	Eliminates sampling system	True - accurate - fast process wet measurement
No heater / No calibration	Sensor is intrinsically safe	Reduces installation, start-up and maintenance costs
Integral thermocouple	Provides process temperature	Additional temperature input for flame optimization
Real time measurement	Permits quick response to changing conditions	Tighter control of excess O ₂ results in fuel cost savings and reduced NO _x emissions

OPERATION

Oxyfire™ reliably measures the excess oxygen concentration that remains after combustion is complete. Oxygen diffuses across the cell wall of the platinum coated zirconia cell. The emf potential generates a millivolt signal which is logarithmically proportional to the excess oxygen concentration. An integral thermocouple provides the process/sensor temperature needed to calculate the oxygen concentration.



SPECIFICATIONS

Net O ₂ Range:	PPM to 21%
Accuracy:	1.5% of observed process variable or 0.5% O ₂ , whichever is greater
Control System Interface:	UPC Protherm 20 or Oxymit Transmitter
Response Time:	Less than one second for 98% of final value
Stability:	Less than 1% deviation in signal output over the life of sensor
Temperature Limits:	
Process	550-1600°C (1022-2912°F)
Terminal Head	Ambient to 149°C (300°F)
Mounting:	Vertical or Horizontal
Construction:	
Inner Tube	Zirconia
Outer Protection Sheath	Alumina, Silicon Carbide, HR-160 high temperature alloy
Sensor Head	Air tight, machined 6061-T6 aluminum
Integral T/C	Type "B" standard, "R" and "S" optional
Sensor Insertion Lengths:	6", 12", 18", 24", 30", 36", 42", 48" (non-standard) (≈ 15 cm, 30 cm, 46 cm, 61 cm, 76 cm, 91 cm, 107 cm, 122 cm)

*The Oxyfire oxygen sensor is a "simple apparatus" and thereby intrinsically safe per EN50 14 (1977) Clause 1.3.