

% Oxygen Sensor

Model: AST-33D1

AST-33D1 Oxygen Sensor is a galvanic type micro fuel cell specific to oxygen. Proprietary electrolyte formulation and anode structure ensures full utilization of Pb anode, thus providing longer life without signal drift and minimizing periodic calibration requirement. Sensor is designed, developed and manufactured in the USA.

AST-33D Replaces: Teledyne R-33S1, R-33D1
All Model PSR-11-37-D2-1
NUVAIR O2 Stick

Specifications*



Sensor Technology	Galvanic Type Micro Fuel Cell
Measuring Range	0 to 100 Percent Oxygen
Signal Output ¹	23-28 mV
Response Time T90	6 seconds
Accuracy ²	+/- 1% of signal
Drift ²	< 2%
Linearity	+/- 1%
Repeatability	+/- 0.5%
Temperature Coefficient	NONE - signal output is temperature compensated
Operating Temperature	0 to 40°C
Recommended Storage Temperature	5 to 35°C - Intermittent exposure upto 50° C acceptable
Recommended Flow Rate	0.5 - 5 SCFH
Humidity Non-Condensing ²	0 - 98% RH
Expected Life ³	36 months
Recommended Storage	6 months
Warranty ⁴	12 months
Electrical Connections	2-PIN Female Molex on wires
Front	M16x1 mm

Note: AST-33D1 is packaged in a polyethylene bag. Do not expose sensor to temperatures above 50°C for extended period of time. Failure to do so may have negative impact on its performance and life.

1. Signal Output measured in air at 25°C, atmospheric pressure.
2. At constant temperature and pressure; for each %RH increase, O₂ signal will drop equivalent to 0.03% oxygen.
3. At ambient temperature and pressure, and oxygen content less than 21%.
4. AST warrants the sensor for 12 months to be free from defects in materials and workmanship. AST will not be held liable for sensor damaged due to customer neglect.

* Specifications are validated during design and are subject to change without notice.