

Oxygen Sensors - Diving

Model No. * Non-magnetic	PSR-11-15D PSR-11-15-2D	PSR-11-33-N * PSR-11-33-NM * PSR-11-33-NM1	PSR-11-37-D2 PSR-11-37-D3 PSR-11-37-D7	PSR-11-39-JD PSR-11-39-JD1 PSR-11-39-JD2 PSR-11-39-MD PSR-11-39-MD1 PSR-11-39-MDN *	PSR-11-55D	PSR-11-75D PSR-11-75-KE1D	PSR-11-77D
Measuring Range	0-100% O ₂	0-100% O ₂	0-100% O ₂	0-100% O ₂	0-100% O ₂	0-100% O ₂	0-100% O ₂
Signal Output (1)	(-15D) 53-67uA (-2D) 23-30uA	(-N, -NM) 25 ± 2mV (-NM1) 20 ± 2mV	25 ± 2mV	8.5-13mV (-MD1) 20 ± 2mV	25-40mV	(-75D) 10 ± 3mV (-KE1D) 12 ± 2mV	10 ± 3mV
Response Time 90%	10 seconds	(-N) 30 secs (-NM, NM1) 6 secs	6 seconds	6 seconds	9 seconds	10 seconds	6 seconds
Accuracy Full Scale (2)	± 1%	± 1%	± 1%	± 1%	± 1%	± 1%	± 1%
Accuracy Over Operating Temperature (3)	± 5%	NA	± 5%	± 5%	± 5%	± 5%	± 5%
Repeatability Full Scale (2)	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%	± 0.5%
Drift % Signal/Month (2)	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%
Linearity	± 1%	± 1%	± 1%	± 1%	± 1%	± 1%	± 1%
Offset (4)	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%	< 0.5%
Temperature Coefficient	2.5% / °C	Compensated	Compensated	Compensated	Compensated	Compensated	Compensated
Operating Temperature	0 to 40°C	0 to 40°C	0 to 40°C	0 to 40°C	0 to 40°C	0 to 40°C	0 to 40°C
Storage Temperature (4)	0 to 50°C	0 to 50°C	0 to 50°C	0 to 50°C	0 to 50°C	0 to 50°C	0 to 50°C
Pressure	Ambient	Ambient	Ambient	Ambient	Ambient	Ambient	Ambient
Flow Rate Recommended	0.1–10 lpm	0.1–10 lpm	0.1–10 lpm	0.1–10 lpm	0.1–10 lpm	0.1–10 lpm	0.1–10 lpm
Humidity Non-Condensing	0-99% RH	0-99% RH	0-99% RH	0-99% RH	0-99% RH	0-99% RH	0-99% RH
Motion/Position Sensitivity	None	None	None	None	None	None	None
Expected Life (1)	60 mos	(-N) 18 mos (-NM, NM1) 60 mos	60 mos	60 mos	60 mos	(-75D) 24 mos (-KE1D) 60 mos	60 mos
Recommended Storage (5)	24 mos	(-N) 6 mos (-NM, NM1) 24 mos	24 mos	24 mos	24 mos	24 mos	24 mos
Warranty ex-factory (6)	24 mos	(-N) 12 mos (-NM, NM1) 24 mos	24 mos	24 mos	24 mos	24 mos	24 mos
Connection Gas Stream	NA - user	NA - user	(-D2) Thread M16 x 1 (-D3) Probe o-ring (-D7) NA - user	Thread M16 x 1	Probe o-ring	(-75D) NA - user (-KE1D) Thread	Probe o-ring
Connection Electrical	PCB 3 ring	Winchester	Wires, 2 pos Molex	(-JD, JD2) 3.5mm jack (-JD1) 5.5mm jack (-MD's) 3 pin Molex	PCB 4 pins	(-75D) 2 pins (-KE1D) Wire, 2 pos white Molex	PCB 4 pins
Dimensions Dia x Height	1.140 x .870"	1.625 x 1.325"	(-D2) 1 x 1.330" (-D3) 1 x 1.620" (-D7) 1 x 1.055"	(-JD) 1.250 x 1.820" (-MD's) 1.250 x 1.640"	1 x 2.350"	(-75D) .750 x .750" (-KE1D) .900 x 1.855"	1.250 x 2.350"

Specifications validated during design and in the pursuit of improvement are subject along with prices to change without notice. 10/02 © Analytical Industries Inc.

- In air (20.9% oxygen) at 25°C and 1 atm. Changes in oxygen levels, temperature and pressure produce a proportional change in signal output and an inversely proportional change in expected sensor life.
- At constant temperature and pressure. Caution: To avoid erroneous readings: 1) calibrate at operating pressure of sample, and, 2) calibrate with 100% oxygen for use at elevated oxygen levels above 30%.
- Once sensor reaches equilibrium following step change of 15°C or more. Maximum error ± 10% within the first hour following the aforementioned step change.
- After a one minute exposure to nitrogen zero gas at 25°C and 1 atm.
- Sensors may be stored at -10°C to 60°C on an intermittent basis only. Changes in temperature produce an inversely proportional change in expected sensor. For extended storage, open bag and store at 5°C (41°F).
- Under normal operating conditions. The sensors are warranted to be free of defects in materials and workmanship for the period specified above provided the sensor is properly installed and operated.

The sole remedy for a sensor determined to be defective by Analytical Industries Inc. is limited to replacing the defective sensor. Replacement of a sensor under warranty does not extend the original warranty period specified. Analytical Industries Inc. shall not be liable for buyer's negligence, misapplication, alteration, abuse or accident or any damages arising there from.