



Product Specification of:

O₂ - Industrial Sensor / Type I – 103

.: KEY FEATURE .:

Lead free sensor, RoHS conform, long-life expectancy, fully CO₂ resistant, neutral electrolyte, non poisonous

All characteristics are based on conditions at 25°C, 50% RH and 1013 hPa.

Measurement Range:	0 to 100 Vol.%
Expected Operating Life:	> 1,200,000 Vol.% h
Nominal Sensor Life:	6 years @ ambient air
Electrical Connector:	3-pin molex®
Output Signal Range:	5.0 to 15.0 mV, dry ambient air
Output Signal Delivery Condition:	10.5 to 13.5 mV, dry ambient air
Response Time t₉₀:	< 5 s
Drift:	< 1 % per month, averaged across 12 month
Operating Temperature:	0 to 45 °C
Pressure Range:	750 to 1250 hPa
Linearity Error:	0 to 2 Vol.% O ₂ : ± 0.1 absolute 2.1 to 35 Vol.% O ₂ : ± 0.5 relative
Zero Offset Voltage:	< 200 µV in 100 % N ₂ applied for 5 min
Repeatability:	± 1 % volume O ₂ @ 100 % O ₂ applied for 5 min
Influence of Humidity:	- 0.03 % rel. O ₂ reading per % RH
Recommended Load Resistor:	> 1 MOhm
Interferences:	
< 20 ppm O ₂ response to:	3,000 ppm NO, balance to N ₂
100 Vol.% CO	1,000 ppm H ₂ , balance to N ₂
100 Vol.% CO ₂	2,000 ppm H ₂ S, balance N ₂
100 Vol.% C ₃ H ₈	500 ppm SO ₂ , balance N ₂
1,000 ppm Benzene, balance N ₂	



.: STORAGE CONDITIONS .:

Temperature Range:	recommended: 5 to 30 °C maximum: - 15 to 60 °C
Humidity:	up to 100 % RH
Shelf Life:	< 6 month
Weight:	approximately 25 g
Material in Contact with Media:	ABS, PVC, PPS, PTFE, stainless steel

.: RELATED PRODUCTS .:

Product	Part-No.	Housing Colour	Other Specifics
O ₂ -Sensor I-103	48 03 14	white	none
O ₂ -Sensor ILF-11	47 01 18	white	3.5 mm mono jack connector, lead free sensor

This data sheet is subject to change without prior notice. [i-103-date-of-issue-2008-02.doc]

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