

Specification Datasheet - 0110751

itg

ILF-11 Lead-free Oxygen Sensor



.: 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 35 Vol.%								
Expected Operating Life:	~ 1,200,000 Vol.% h								
Sensor Lifetime:	6 years @ ambient air								
Electrical Connector:	3.5 mm mono jack								
Initial Output Signal:	13.2 to 13.5 mV@ dry ambient air								
Output Signal Range:	5.0 to 15.0 mV@ dry ambient air								
Response Time t_{90} :	< 5 s								
Drift:	< 1 % per month, averaged across 12 month								
Linearity Error:	0 to 2 Vol.% O ₂ : ± 0.1 absolute 2.1 to 35 Vol.% O ₂ : ± 0.5 relative								
Repeatability:	± 1 % volume O ₂ @ 100 % O ₂ applied for 5 min								
Zero Offset Voltage:	< 200 µV in 100 % N ₂ applied for 5 min								
Operating Temperature:	0 to 45 °C								
Pressure Range:	700 to 1250 hPa								
Influence of Humidity:	- 0.03 % rel. O ₂ reading per % RH								
Recommended Load Resistor:	> 1 MOhm								
Interferences:	< 20 ppm O ₂ response to: <table border="0"> <tr> <td>100 Vol.% CO</td><td>3,000 ppm NO, balance to N₂</td></tr> <tr> <td>100 Vol.% CO₂</td><td>1,000 ppm H₂, balance to N₂</td></tr> <tr> <td>100 Vol.% C₃H₈</td><td>2,000 ppm H₂S, balance N₂</td></tr> <tr> <td>1,000 ppm Benzene, balance N₂</td><td>500 ppm SO₂, balance N₂</td></tr> </table>	100 Vol.% CO	3,000 ppm NO, balance to N ₂	100 Vol.% CO ₂	1,000 ppm H ₂ , balance to N ₂	100 Vol.% C ₃ H ₈	2,000 ppm H ₂ S, balance N ₂	1,000 ppm Benzene, balance N ₂	500 ppm SO ₂ , balance N ₂
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1,000 ppm Benzene, balance N ₂	500 ppm SO ₂ , balance N ₂								
Weight:	approximately 25 g								
Material in Contact with Media:	ABS, PVC, PPS, PTFE, stainless steel								

.: STORAGE CONDITIONS .:

Temperature Range:	recommended: 5 to 30 °C maximum: - 20 to 50 °C
Humidity:	up to 100 % RH
Ambient Pressure:	600 to 1750 hPa
Shelf Life:	< 6 months recommended