

.: KEY FEATURE .:

Lead free sensor, RoHS conform, long-life expectancy, fully CO₂ and solvent resistant, weak acid electrolyte, non poisonous.

All characteristics are based on conditions at 25°C, 50% RH and 1013 hPa and flow rates > 2.5 L/min.

Measurement Range:	0 to 100 Vol.% O ₂
Expected Operating Life:	~ 1,200,000 Vol.% O ₂ h
Sensor Lifetime:	6 years @ ambient air, depending on application
Electrical Connector:	3-pin Molex
Initial Output Signal:	9 to 13.5 mV@ dry ambient air
Output Signal Range:	4 to 15.0 mV@ dry ambient air
Response Time t ₉₀ :	< 6 s
Drift:	< 1 Vol.%O ₂ per month @ air, averaged across 12 months, depending on application
Static Temperature Error:	± 5% @ 0-10 °C ±1.5% @ 10-40 °C ±3% @ 40-45 °C
Linearity Error:	0 to 2 Vol.% O ₂ : ± 0.1 absolute 2.1 to 35 Vol.% O ₂ : ± 0.5 relative 35.1 to 100 Vol.% O ₂ : ± 2.5 relative
Repeatability:	± 1 Vol.% O ₂ @ 100 Vol.% O ₂ applied for 5 min
Zero Offset Voltage:	< 200 µV in 100 Vol.% 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
Temperature Compensation:	NTC on sensor PCB
Recommended Load Resistor:	> 1 MOhm
Interferences:	< 20 ppm O ₂ response to: 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
Weight:	approximately 25g
Material in Contact with Media:	PA, PPS, PTFE, stainless steel



.: STORAGE CONDITIONS .:

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

.: RELATED PRODUCTS .:

Product	Part-No.	Housing Colour
O ₂ - Sensor ILF-12	48 00 18	translucent / white

This data sheet is subject to change without prior notice. [ILF-12-Rev07-2017_0712.doc]

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