

Specification Datasheet - 0110708

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
MLF-650 Lead-free Oxygen Sensor



.. KEY FEATURES ..

Lead free, ROHS compliant, fast response time for time resolved O₂ measurements.

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

Measurement Range:	0 to 100 Vol.% O ₂
Expected Operating Life:	2 years @ ambient air, depending on application
Nominal Sensor Life:	> 1, 000, 000 Vol.% O ₂ h
Electrical Pin Assignment:	3-pin Molex <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> 1: (+) 2: (-) 3: (-) </div>  </div>
Mechanical Mating Connector:	fits for M16x1 DIN 13 or 5/8-24 UNEF
Initial Output Signal Range:	9 - 14mV @ dry ambient air
Response Time t₉₀:	< 650ms @ 0 to 20.95 Vol.% O ₂ (dry ambient air, 200mL/min, optimised gas tracking system, small dead spaces)
Signal Drift (long term):	< 0.1%/month of sensor output signal @ dry ambient air
Signal Drift (short term):	< 0.1 Vol.%O ₂ /day @ dry ambient air, constant environmental / measurement conditions
Static Temperature Error:	< ± 3 % @ 10-40 °C, < ± 10 % @ 0-10 °C / 40-50 °C
Operating Temperature:	0 - 40 °C; intermittent 40 - 50 °C
Ambient Pressure Range:	500 to 1250 mbar
Zero Offset Equivalents:	< 0.3 Vol.%O ₂ @ 100% N ₂ applied for 5 min
Linearity Error:	< -10 % @ 100 Vol.%O ₂ applied for 5 min
Influence of Humidity:	- 0.03 % rel. O ₂ reading per % RH
Temperature Compensation:	NTC on sensor PCB
Recommended Load Resistor:	> 1 MOhm
Weight:	approximately 20g
Material in contact with media:	PPS, PTFE, ABS, FPM, stainless steel

.. STORAGE CONDITIONS IN UNOPENED ORIGINAL PACKAGE ..

Temperature Range:	-20 °C to 40 °C 5 °C to 25 °C recommended 40 °C to 50 °C maximum 1 week
Ambient Pressure Range:	500 to 1250 mbar
Humidity:	up to 100 % RH, non condensing
Shelf Life:	< 6 months recommended