

Specification Datasheet - 0110706

itg

MLF-43 Lead-free Oxygen Sensor



:: KEY FEATURE ::

Lead free, RoHS compliant, long-life expectancy.

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

Measurement Range:	0 to 100 Vol.%O ₂
Expected Operating Life:	4 years @ ambient air, depending on application
Nominal Sensor Life:	> 2,000,000 Vol.%O ₂ h
Electrical Connector:	gold plated slip rings
Initial Output Signal Range:	11 to 15 mV @ dry ambient air, external load resistor: 31 kOhm
Response Time t₉₀:	< 7 s
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:	< $\pm 3\%$ @ 15-20 °C, external load resistor: 31 kOhm < $\pm 1.5\%$ @ 20-40 °C, external load resistor: 31 kOhm
Operating Temperature:	15 - 40 °C
Ambient Pressure Range:	500 to 1250 mbar
Zero Offset Equivalents:	< 0.3 Vol.%O ₂ @ 100 Vol.%N ₂ applied for 5 min
Linearity Error:	< 2 % @ 100 Vol.%O ₂ applied for 5 min
Influence of Humidity:	- 0.03 % rel. O ₂ reading per % RH, non-condensing
Temperature Compensation:	NTC on PCB
Interferences:	according to DIN EN ISO 80601-2-55
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