

# Specification Datasheet - 0110701

## itg

### MLF-04 Lead-free Oxygen Sensor



#### .: KEY FEATURES .:

##### Lead free, RoHS compliant, long-life expectancy.

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

<b>Measurement Range:</b>	0 to 100 Vol.%O <sub>2</sub>
<b>Expected Operating Life:</b>	4 years @ ambient air, depending on application
<b>Nominal Sensor Life:</b>	> 2,000,000 Vol.% O <sub>2</sub> h
<b>Electrical Connector:</b>	3-pin Molex <sup>®</sup> gold plated
<b>Mechanical Mating Connector:</b>	fits for M16x1 DIN 13 or 5/8-24 UNEF
<b>Initial Output Signal Range:</b>	13 to 16.5 mV @ dry ambient air
<b>Response Time t<sub>90</sub>:</b>	< 7 s
<b>Signal Drift (long term):</b>	< 0.1%/month of sensor output signal @ dry ambient air
<b>Signal Drift (short term):</b>	< 0.1 Vol.%O <sub>2</sub> /day @ dry ambient air, constant environmental / measurement conditions
<b>Static Temperature Error:</b>	< ±10% @ 40-50 °C < ±1.5% @ 10-40 °C < ±10% @ 0-10 °C
<b>Operating Temperature:</b>	0 - 40 °C; intermittent 40 - 50 °C
<b>Ambient Pressure Range:</b>	500 to 1250 mbar
<b>Zero Offset Equivalents:</b>	< 0.3 Vol.%O <sub>2</sub> @ 100 Vol.%N <sub>2</sub> applied for 5 min
<b>Linearity Error:</b>	< 3 % @ 100 Vol.%O <sub>2</sub> applied for 5 min
<b>Influence of Humidity:</b>	- 0.03 % rel. O <sub>2</sub> reading per % RH
<b>Temperature Compensation:</b>	NTC on sensor PCB
<b>Recommended Load Resistor:</b>	≥ 1MOhm
<b>Interferences:</b>	according to DIN EN ISO 80601-2-55
<b>Weight:</b>	approximately 20g
<b>Material in contact with media:</b>	PPS, PTFE, ABS, FPM, stainless steel

#### .: STORAGE CONDITIONS IN UNOPENED ORIGINAL PACKAGE .:

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