


## Specification Datasheet - 0110709

### itg MLF-350 Lead-free Oxygen Sensor

#### .. KEY FEATURES ..

#### Lead free, ROHS compliant, fast response time for breath-to-breath analysis.

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

<b>Measurement Range:</b>	0 to 35 Vol.%O <sub>2</sub>
<b>Expected Operating Life:</b>	18 months @ dry ambient air, depending on application
<b>Nominal Sensor Life:</b>	> 1,000,000 Vol.%O <sub>2</sub> h
<b>Electrical Pin Assignment:</b>	3-pin Molex® <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">           1: (+)            2: (-)            3: (-)         </div>  </div>
<b>Mechanical Mating Connector:</b>	fits for M16x1 DIN 13 or 5/8-24 UNEF
<b>Initial Output Signal Range:</b>	9 to 14 mV @ dry ambient air
<b>Response Time <math>t_{90}</math>:</b>	< 350 ms @ 20.95 Vol.%O <sub>2</sub> to 15 Vol.%O <sub>2</sub> (dry ambient air, 200 mL/min, optimised gas tracking system, small dead spaces)
<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>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>	< 0.15 Vol.%O <sub>2</sub> @ 20.95 Vol.%O <sub>2</sub> to 15 Vol.%O <sub>2</sub> applied for 5s (dry ambient air, constant environmental and flow conditions)
<b>Influence of Humidity:</b>	- 0.03 % rel. O <sub>2</sub> reading per % RH
<b>Temperature Compensation:</b>	NTC on sensor PCB
<b>Recommend Load Resistor:</b>	$\geq 1$ MOhm
<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

#### .. RELATED PRODUCTS ..

Product	Part-No.	Housing Colour	Other Specifics
O <sub>2</sub> -Sensor MLF-350	41 00 35	white	RoHS compliant, lead free