O₂ - leadfree Medical Sensor / Type MLF-650



.: 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.

0 to 100 Vol.% O₂ **Measurement Range:**

Expected Operating Life: 2 years @ ambient air, depending on application

Nominal Sensor Life: $> 1,000,000 \text{ Vol.}\% \text{ O}_2 \text{ h}$

Electrical Pin Assignment: 3-pin Molex

> 1: (+) 2: (-)

3: (-)

Mechanical Mating Connector: fits for M16x1 DIN 13 or 5/8-24 UNEF

Initial Output Signal Range: 9 - 14mV @ dry ambient air

 $<650ms\ @\ 0$ to 20.95 Vol.% O_2 (dry ambient air, 200mL/min, Response Time t₉₀:

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.%O₂/day @ dry ambient air, constant

environmental / measurement conditions

Static Temperature Error: $<\pm$ 3 % @ 10-40 °C,

> $< \pm$ 10 % @ 0-10 °C / 40-50 °C 0 - 40 °C; intermittent 40 - 50 °C

Operating Temperature:

Ambient Pressure Range: 500 to 1250 mbar

Zero Offset Equivalents: < 0.3 Vol.%O₂ @ 100% N₂ applied for 5 min < -10 % @ 100 Vol.%O2 applied for 5 min **Linearity Error:** Influence of Humidity: - 0.03 % rel. O₂ 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

.: RELATED PRODUCTS :.

Product Part-No. **Housing Colour Other Specifics**

O₂-Sensor MLF-650 41 00 33 RoHS compliant, lead free white

This data sheet is subject to change without prior notice. [mlf-650-Rev02-2018_1219.doc]

IT Dr. Gambert GmbH .: Hinter dem Chor 21 .: 23966 Wismar .: Germany Phone: +49 (0)3841 220 050 .: Fax: +49 (0)3841 220 052 2 .: E-Mail: sales@itg-wismar.de

www.itg-wismar.de