# O<sub>2</sub> - leadfree Medical Sensor / Type MLF-350



#### .: 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.

**Measurement Range:** 0 to 35 Vol.%O<sub>2</sub>

**Expected Operating Life:** 18 months @ dry ambient air, depending on application

Nominal Sensor Life: > 1,000,000 Vol.%O<sub>2</sub> 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 to 14 mV @ dry ambient air

**Response Time t<sub>90</sub>:**  $< 350 \text{ ms } @ 20.95 \text{ Vol.} \%O_2 \text{ to } 15 \text{ Vol.} \%O_2 \text{ (dry ambient air,}$ 

200 mL/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<sub>2</sub> / day @ dry ambient air, constant

environmental / measurement conditions

**Operating Temperature:**  $0 - 40 \,^{\circ}\text{C}$ ; intermittent  $40 - 50 \,^{\circ}\text{C}$ 

**Ambient Pressure Range:** 500 to 1250 mbar

**Zero Offset Equivalents:** < 0.3 Vol.%O<sub>2</sub> @ 100 Vol.%N<sub>2</sub> applied for 5 min

 $\textbf{Linearity Error:} \hspace{1.5cm} < 0.15 \ Vol.\%O_2 \ @ \ 20.95 \ Vol.\%O_2 \ to \ 15 \ Vol.\%O_2 \ applied$ 

for 5s (dry ambient air, constant environmental and flow

conditions)

**Influence of Humidity:** - 0.03 % rel. O<sub>2</sub> reading per % RH

**Temperature Compensation:** NTC on sensor PCB

**Recommend 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

O<sub>2</sub>-Sensor MLF-350 41 00 35 white RoHS compliant, lead free

This data sheet is subject to change without prior notice. [mlf-350-Rev03-2018\_1219.doc]

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