

Product Specification of:

## O<sub>2</sub> - Medical Sensor / Type M – 02



### .: KEY FEATURE .:

**Dual-cathode gas sensor that shows high signal stability at low cross interferences to anesthesia gases combined with superior linearity over the entire range.**

*All characteristics are based on conditions at 25°C, 50% RH and 1013 hPa.*

<b>Measurement Range:</b>	0 to 100 Vol.%
<b>Expected Operating Life:</b>	> 500,000 Vol.% h
<b>Sensor Lifetime:</b>	< 3 years @ ambient air
<b>Electrical Connector:</b>	gold-plated slip rings
<b>Initial Output Signal:</b>	14 to 20 mV @ dry ambient air, load 600 Ohm
<b>Response Time <math>t_{90}</math>:</b>	< 12 s
<b>Drift:</b>	< 1 % Vol. O <sub>2</sub> /month @ air, averaged across 12 months
<b>Operating Temperature:</b>	10 to 40 °C
<b>Pressure Range:</b>	700 to 1250 hPa
<b>Linearity Error:</b>	≤ 3 % @ 100 % O <sub>2</sub> , applied for 5 min
<b>Output Differential:</b>	U1-U2 < 10 % < U1 + U2 @ 20 % to 100 % O <sub>2</sub>
<b>Zero Offset Voltage:</b>	≤ 200 µV in 100 % N <sub>2</sub> , applied for 5 min
<b>Repeatability:</b>	± 1 % Vol. O <sub>2</sub> @ 100 % O <sub>2</sub> , applied for 5 min
<b>Influence of Humidity:</b>	- 0.03 % rel. O <sub>2</sub> reading per % RH
<b>Interferences:</b>	according to DIN EN ISO 21647 and ISO 7767
<b>Weight:</b>	approximately 20 g
<b>Material in Contact with Media:</b>	PA, PPS, PTFE, stainless steel



### .: STORAGE CONDITIONS .:

<b>Temperature Range:</b>	recommended: 5 to 30 °C maximum: - 20 to 50 °C
<b>Humidity:</b>	up to 100 % RH
<b>Shelf Life:</b>	< 4 months recommended

### .: RELATED PRODUCTS .:

Product	Part-No.	Housing Colour	Other Specifics
O <sub>2</sub> - Sensor M-02	41 00 02	white	
O <sub>2</sub> - Sensor M-02L2	41 01 02	white	US-Version
O <sub>2</sub> - Sensor M-02T	47 00 09	translucent	
O <sub>2</sub> - Sensor M-02TL2	41 02 02	translucent	US-Version

*This data sheet is subject to change without prior notice. [M-02\_Rev\_012012.doc]*

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