

Product Specification of:

## O<sub>2</sub> - Medical Sensor / Type M – 14



### .: KEY FEATURE .:

**Gas Sensor that shows high signal stability at low cross interferences to anesthesia gases combined with a 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>	0.141" miniature phone plug at cable
<b>Initial Output Signal:</b>	8.0 to 12.0 mV @ dry ambient air
<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>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>Recommended Load Resistor:</b>	≥ 10 kOhm
<b>Temperature Compensation:</b>	NTC
<b>Interferences:</b>	according to DIN EN ISO 21647 and ISO 7767



### .: 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>	< 6 months recommended
<b>Weight:</b>	approximately 28 g
<b>Material in Contact with Media:</b>	PA, PPS, PTFE, stainless steel

### .: RELATED PRODUCTS .:

Product	Part-No.	Housing Colour	Other Specifics
O <sub>2</sub> - Sensor M-14	41 00 19	white	
O <sub>2</sub> - Sensor M-14T	41 01 19	translucent	
O <sub>2</sub> - Sensor M-14ST	41 02 19	translucent	2.5 mm Kobiconn connector

*This data sheet is subject to change without prior notice. [M-14\_Rev\_102011.doc]*

page 1 of 1

**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](http://www.itg-wismar.de)