

Product Specification of:

## O<sub>2</sub> - Medical Sensor / Type M – 25



### .: KEY FEATURE .:

**Long life 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>           | > 750,000 Vol.% h  |
| <b>Sensor Lifetime:</b>                   | < 6 years @ ambient air  |
| <b>Electrical Connector:</b>              | straight miniature power jack  |
| <b>Initial Output Signal:</b>             | 9.0 to 14.5 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<br>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<br>maximum: - 20 to 50 °C |
| <b>Humidity:</b>                       | up to 100 % RH                                    |
| <b>Shelf Life:</b>                     | < 6 months recommended                            |
| <b>Weight:</b>                         | approximately 26 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-25  | 41 00 20 | white          |                    |
| O <sub>2</sub> - Sensor M-25T | 41 01 20 | translucent    |                    |
| O <sub>2</sub> - Sensor M-25T | 41 02 20 | translucent    | with flow diverter |
| O <sub>2</sub> - Sensor M-25F | 41 03 20 | white          | flying wires       |

*This data sheet is subject to change without prior notice. [M-25\_Rev\_102011.doc]*

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