## O<sub>2</sub> - Medical Sensor Type M-03



## **KEY FEATURES**

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.

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|---|---|--|--|
| Measurement Range:                              | 0 to 100 Vol.% O <sub>2</sub>                                       |  |  |
| Expected Operating Life:                        | ~ 1,000,000 Vol.% h   |  |  |
| Sensor Lifetime:                                | < 6 years @ ambient air, depending on application                   |  |  |
| Electrical Connector:                           | 3.5 mm mono jack  |  |  |
| Initial Output Signal:                          | 13.0 to 16.5 mV @ dry ambient air                                   |  |  |
| Response Time t <sub>90</sub> :                 | < 12 s  |  |  |
| Drift:  | < 1% Vol. 0 <sub>2</sub> /month @ air, averaged across 12 months    |  |  |
| Operating Temperature:                          | 10 to 40 °C   |  |  |
| Pressure Range:                                 | 700 to 1250 hPa   |  |  |
| Linearity Error:                                | ≤ 3 @ 100 % O₂, applied for 5 min                                   |  |  |
| Zero Offset Voltage:                            | $\leq$ 0,3 Vol% $0_2$ @ 100 % $N_2$ , applied for 5 min             |  |  |
| Repeatability:                                  | $\pm 1 \% \text{ Vol. } 0_2 @ 100 \% 0_2 \text{ applied for 5 min}$ |  |  |
| Influence of Humidity:                          | - 0.03 % rel. O <sub>2</sub> reading per % RH                       |  |  |
| Recommended Load Resistor:                      | ≥ 10 k0hm   |  |  |
| Temperature Compensation:                       | NTC   |  |  |
| Interferences:                                  | according to DIN EN ISO 80601-2-55                                  |  |  |
| Weight:   | approximately 26 g  |  |  |
| Material in Contact with Media:                 | PA, PPS, PTFE, stainless steel                                      |  |  |

| STORAGE CONDITIONS IN UNOPENED ORIGINAL PACKAGE |   |  |
|---|---|--|
| Temperature Range:                              | recommended: 5 to 30 °C maximum: - 20 to 50 °C (≤10h) |  |
| Humidity:                                       | up to 100 % RH, non-condensing                        |  |
| Shelf Life:                                     | < 6 months recommended                                |  |

| RELATED PRODUCTS              |          |                       |  |  |
|-------------------------------|----------|-----------------------|--|--|
| Product                       | Part-No. | <b>Housing Colour</b> | Other Specifics                        |  |
| 0 <sub>2</sub> - Sensor M-03  | 41 00 03 | white                 |  |  |
| 0 <sub>2</sub> - Sensor M-03  | 41 02 03 | white                 | with flow diverter                     |  |
| 0 <sub>2</sub> - Sensor M-03B | 41 01 03 | white                 | Initial Output Signal: 16.0 to 20.5 mV |  |
| 0 <sub>2</sub> - Sensor M-03T | 47 00 13 | translucent           |  |  |

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