

# O<sub>2</sub> - Medical Sensor

## Type M-02



### KEY FEATURES

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, depending on application
<b>Electrical Connector:</b>	gold-plated slip rings
<b>Initial Output Signal:</b>	14 to 20 mV @ dry ambient air, load 600 Ohm
<b>Difference Output Signal:</b>	Difference between U1 and U2 is smaller than 10% of the greater value @ 20 % to 100 % O <sub>2</sub>
<b>Response Time t<sub>90</sub>:</b>	< 12 s
<b>Drift:</b>	< 1% Vol. O <sub>2</sub> /month @ air, averaged across 12 months
<b>Operating Temperature:</b>	10 - 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>Interferences:</b>	according to DIN EN ISO 80601-2-55
<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 °C to 30 °C maximum: - 20 °C to 50 °C (≤ 10h)
<b>Humidity:</b>	up to 100% RH, non condensing
<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 00 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

[www.nrc-international.com](http://www.nrc-international.com)



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