

Product Specification of:

## O<sub>2</sub> - Scuba Diving Sensor / Type D – 02



### :: KEY FEATURE ::

#### Single-cathode galvanic gas sensor with an extra water repellent head space.

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

<b>Electrical Connector:</b>	gold-plated slip rings
<b>Measurement Range:</b>	0 to 100 Vol.%
<b>Sensor Lifetime:</b>	< 3 years @ ambient air
<b>Expected Operating Life:</b>	~ 500,000 Vol.% h
<b>Initial Output Signal:</b>	14.0 to 20.0 mV @ dry ambient air, 300 Ohm load
<b>Response Time <math>t_{90}</math>:</b>	< 12 s
<b>Drift:</b>	< 1 % volume O <sub>2</sub> / month @ air, averaged across 12 months
<b>Linearity Error:</b>	< 3 % @ 100 % O <sub>2</sub> , applied for 5 min
<b>Zero Offset Voltage:</b>	< 200 $\mu$ V in 100% N <sub>2</sub> , applied for 5 min
<b>Operating Temperature:</b>	0 to 45 °C
<b>Pressure Range:</b>	600 to 1750 hPa
<b>Influence of Humidity:</b>	-0.03 % rel. O <sub>2</sub> reading per % RH
<b>Interferences:</b>	none to He, H <sub>2</sub> and CO



### :: STORAGE CONDITIONS ::

<b>Temperature Range:</b>	recommended: 5 to 30 °C maximum: -20 to 50 °C
<b>Ambient Pressure:</b>	600 to 1750 hPa
<b>Humidity:</b>	up to 100 % Rh
<b>Shelf Life:</b>	< 6 months recommended
<b>Weight:</b>	approximately 20 g
<b>Material in Contact with Media:</b>	PA, PPS, PTFE, stainless steel

### :: RELATED PRODUCTS ::

Product	Part-No.	Housing Colour
O <sub>2</sub> - Sensor D-02	41 00 52	white

*This data sheet is subject to change without prior notice. [D-02-Rev\_012011.doc]*

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