

# O<sub>2</sub> - Scuba Diving Sensor

## Type D-21R



### KEY FEATURE

#### Galvanic gas sensor with an extra water repellent head space.

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

Operating Principle:	Partial pressure electrochemical cell
Electrical Connector:	SMB plug
Measurement Range:	0.01 to 100 Vol.% O <sub>2</sub>
Sensor Lifetime:	1 to 3 years @ ambient air (depending on application)
Expected Operating Life:	~ 500,000 Vol.% h O <sub>2</sub>
Initial Output Signal:	9.0 to 13.0 mV @ dry ambient air
Response Time t <sub>90</sub> :	< 5 s
Drift:	≤ 2 % volume O <sub>2</sub> / month @ air, averaged across 12 months
Linearity Error:	≤ ± 2 % @ 100 % O <sub>2</sub> , applied for 5 min
Zero Offset Voltage:	≤ 150 μV in 100 % N <sub>2</sub> , applied for 5 min
Operating Temperature:	0 to 45 °C
Pressure Range:	600 to 1750 hPa
Influence of Humidity:	-0.03 % rel. O <sub>2</sub> reading per % RH
Recommended Load Resistor:	≥ 10 kOhm
Temperature Compensation:	NTC (on sensor PCB)
Interferences:	none to He, H <sub>2</sub> and CO
Weight:	approximately 27 g
Material in Contact with Media:	PA, PPS, PTFE, stainless steel, NBR
Gas Connector:	Fits M16x1 DIN 13 or 5/8-24 UNEF

### STORAGE CONDITIONS

Temperature Range:	Recommended: 15 to 25 °C maximum: -20 to 50 °C (max. one week)
Ambient Pressure:	600 to 1750 hPa
Humidity:	50 to 100 % RH recommended (non-condensing)
Shelf Life:	< 6 months recommended

### RELATED PRODUCTS

Product	Part-No.	Housing Colour
O <sub>2</sub> - Sensor D-21R	1741	white

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



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