# Product Specification Oxygen Sensor OOD103-3V



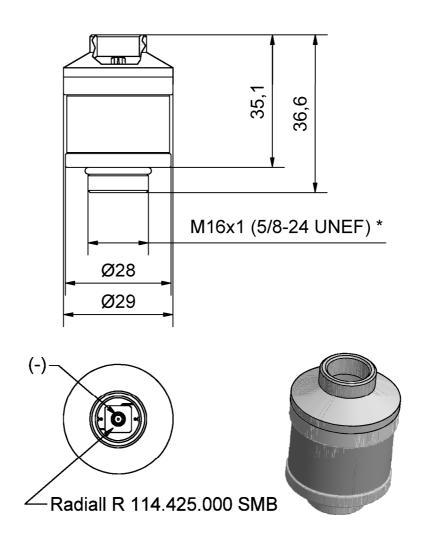
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Measurement Range:	0 % 100 % oxygen	
Output in Ambient Air:	9 to 13 mV	
Electrical Interface:	Mini HF (RADIALL R 114-425-000)	
Repeatability:	< 1% vol. O <sub>2</sub> @ constant temperature and pressure	
Linearity error:	0.1 to 1.0 bar ppO <sub>2</sub> < 3% relative	
	0.1 to 2.5 bar ppO $_2$ < 5% relative (at ppO $_2$ > 1.0 bar after 1 h equilibration time)	
Response time:	< 5 sec. to 90% of final value	
Zero Offset Voltage:	< 0.5% oxygen reading in 100% nitrogen @ 25 ℃ after 36 seconds	
Cross Interference:	< 0.5% vol. O <sub>2</sub> response to: 5% CO <sub>2</sub> balance N <sub>2</sub>	
Influence of Humidity:	- 0.03% rel. per % RH at 25 ℃	
Pressure Range:	600 to 2500 mbar	
Influence of Mechanical Shock:	< 1% relative after a fall from 1m	
Operating Temperature:	0°C to 50°C	
Temperature Compensation:	Built-in NTC compensation	
Effect of Temperature Compensation (steady state):	Between 0 °C and +50 °C: 5% relative error	
Operating Humidity:	0 - 99% RH non-condensing	
Long Term Output Drift:	< 1% vol. oxygen per month	
	Typically < -15% relative over lifetime	
Storage Temperature:	-20°C to +50°C	
Recommended Storage:	+5℃ to +15℃	
Recommended Load:	10 kOhms	
Warm-Up Time:	< 30 minutes, after replacement of sensor	
Nominal Sensor Lifetime:	500,000% vol oxygen hours	
Weight:	Approximately 28 grams	
Warranty Period:	15 months (including 3-month shelf life)	
Part No.:	OOD103-3V: 1002289 (REF 8010024 / UDT-24)	

All specifications are applicable at standard conditions: 1013 mbar, 25°C dry ambient air.



Mechanical draft:



General tolerances ISO 2768-c

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## **Customized Design Specification:**

- Integration of additional Zitex membrane in sensor gas diffusion way
- Conformal coating on the sensor PCB with PLASTIK 70
- 2 x 2mm holes drilled in the sensor PCB
- No information about EnviteC on PCB top / bottom sides, information for ordering process and traceability only.

#### **PCB Layout:**

Тор	Bottom
	PARIOR WIN

#### **Product Labeling**

OOD103-3V: 1002289 (REF 8010024 / UDT-24)		
Label on Sensor (90x15)	Label on Blister- Card (63,5x46,6)	
WWW.divetechnology.com UDT-24 Oxygen Sensor  WWW.divetechnology.com UDT-24 Oxygen Sensor  S/N UDT123456  2016-01	UDT UNCHARTED DIVING TECHNOLOGY  Email: octagon@unchartereddiving.com www.divetechnology.com  UDT-24 Oxygen Sensor  2016-01  S/N UDT123456  This oxygen sensor contains caustic liquid, in case of leakage avoid contact with eyes and skin. Do not puncture or staple this bag. Do not remove the oxygen sensor from this bag until ready to use. Depending upon the ambient conditions the oxygen sensor may require 30 minutes to reach signal stability after installation.	

#### **Customer Approval**

Date:

Signature: