

**Product Specification  
Oxygen Sensor  
OOD103-ISC**

**ENVITEC**  
by Honeywell

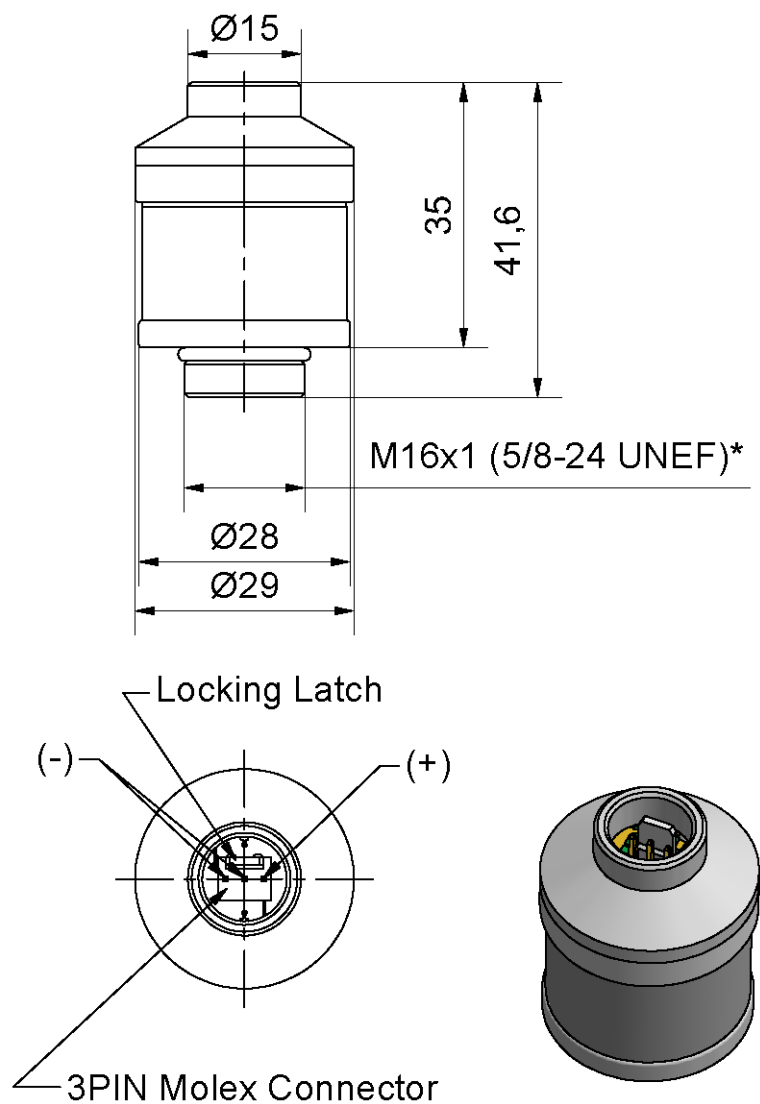
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<b>Measurement Range:</b>	0 % ... 100 % oxygen
<b>Output in Ambient Air:</b>	9 to 13 mV
<b>Electrical Interface:</b>	3 pin (Molex 22-11-1031)
<b>Repeatability:</b>	< 1% vol. O <sub>2</sub> @ constant temperature and pressure
<b>Linearity error:</b>	0.1 to 1.0 bar ppO <sub>2</sub> < 3% relative
	0.1 to 2.5 bar ppO <sub>2</sub> < 5% relative (at ppO <sub>2</sub> > 1.0 bar after 10 min equilibration time)
<b>Response time:</b>	< 5 sec. to 90% of final value
<b>Zero Offset Voltage:</b>	< 0.5% oxygen reading in 100% nitrogen @ 25°C after 36 seconds
<b>Cross Interference:</b>	< 0.5% vol. O <sub>2</sub> response to: 5% CO <sub>2</sub> balance N <sub>2</sub>
<b>Influence of Humidity:</b>	- 0.03% rel. per % RH at 25°C
<b>Pressure Range:</b>	600 to 2500 mbar
<b>Influence of Mechanical Shock:</b>	< 1% relative after a fall from 1m
<b>Operating Temperature:</b>	0°C to 50°C
<b>Temperature Compensation:</b>	Built-in NTC compensation
<b>Effect of Temperature Compensation (steady state):</b>	Between 0°C and +50°C: 5% relative error
<b>Operating Humidity:</b>	0 - 99% RH non-condensing
<b>Long Term Output Drift:</b>	< 1% vol. oxygen per month
	Typically < -15% relative over lifetime
<b>Storage Temperature:</b>	-20°C to +50°C
<b>Recommended Storage:</b>	+5°C to +15°C
<b>Recommended Load:</b>	10 kOhms
<b>Warm-Up Time:</b>	< 30 minutes, after replacement of sensor
<b>Nominal Sensor Lifetime:</b>	500,000% vol oxygen hours
<b>Weight:</b>	Approximately 28 grams
<b>Warranty Period:</b>	15 months (including 3-month shelf life)
<b>Part No.:</b>	OOD103-ISC: 1002106 (REF 8010012 / SC-I22D)

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

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Mechanical draft:



General tolerances ISO 2768-c

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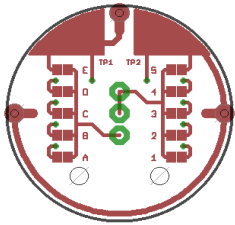
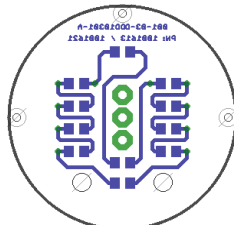
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Customized Design Specification:

- 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:

Top	Bottom
	

Product Labeling

OOD103-ISC: 1002106 (REF 8010012 / SC-I22D)	
Label on Sensor (90x15)	Label on Blister- Card (63,5x46,6)
 <b>Innerspace Systems Corporation</b> 1711 Midway Court Centralia, WA 98531 USA     2011-08 <b>SC-I22D Oxygen Sensor</b> S/N ISC123456 	 <b>Innerspace Systems Corporation</b> 1711 Midway Court Centralia, WA 98531 USA Email: info@customrebreathers.com Phone (+001) 360.330.9018 <b>SC-I22D Oxygen Sensor</b>  2011-08 <b>S/N ISC123456</b>     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: