

Product Specification
Oxygen Sensor
OOD103-JFD

ENVITEC
by Honeywell

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Measurement Range:	0 % ... 100 % oxygen																					
Output in Ambient Air:	6.5 to 9 mV																					
Electrical Interface:	Flying leads with 3 pin female connector (Molex® 22-01-2037)																					
Repeatability:	< 1% vol. O ₂ @ constant temperature and pressure																					
Linearity error:	0.1 to 1.0 bar ppO ₂ < 3% relative																					
	0.1 to 2.5 bar ppO ₂ < 5% relative (at ppO ₂ > 1.0 bar after 1 h equilibration time)																					
Accuracy at constant temperature, pressure and humidity	Accuracy – Within + / - 3% of reading (or ±5 mBar Oxygen whichever is greater) up to specified range, when calibrated using 100% oxygen at known atmospheric pressure and 25 °C Acceptable limits are <table><tr><td></td><td colspan="2">Error mBar pO₂</td></tr><tr><td>mBar pO₂</td><td>Min</td><td>Max</td></tr><tr><td>209</td><td>-4</td><td>4</td></tr><tr><td>1000</td><td>0</td><td>0</td></tr><tr><td>1500</td><td>-30</td><td>30</td></tr><tr><td>2000</td><td>-75</td><td>75</td></tr><tr><td>2300</td><td>-100</td><td>100</td></tr></table> Calibration point Specified Range Over-range capability Hysteresis after use at high pressure according to accuracy specification (Within + / - 3% of reading)		Error mBar pO ₂		mBar pO ₂	Min	Max	209	-4	4	1000	0	0	1500	-30	30	2000	-75	75	2300	-100	100
	Error mBar pO ₂																					
mBar pO ₂	Min	Max																				
209	-4	4																				
1000	0	0																				
1500	-30	30																				
2000	-75	75																				
2300	-100	100																				
Response time:	< 5 sec. to 90% of final value																					
Zero Offset Voltage:	< 0.5% oxygen reading in 100% nitrogen @ 25 °C after 36 seconds																					
Cross Interference:	< 0.5% vol. O ₂ response to: 5% CO ₂ balance N ₂																					
Influence of Humidity:	- 0.03% rel. per % RH at 25 °C																					
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 °C to +15 °C																					
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)																					
Typical Lifetime	20 to 24 months from shipment (including shelf life) in air at 25 °C.																					
Electrical output	30-60 Microamperes in air @ 25 °C sea level																					
Packaging	In plastic bag																					
Part No.:	OOD103-JFD: 1002461 (REF DB200381)																					

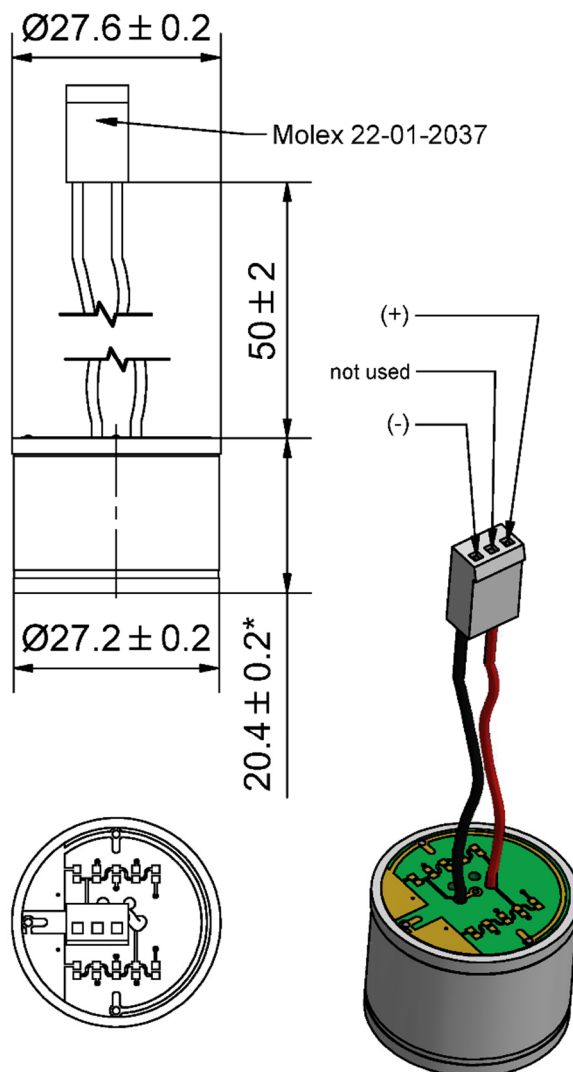
All specifications are applicable at standard conditions: 1013 mbar, 25 °C dry ambient air.

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Mechanical draft:



General tolerances ISO 2768-c
*Sensor housing without PCB

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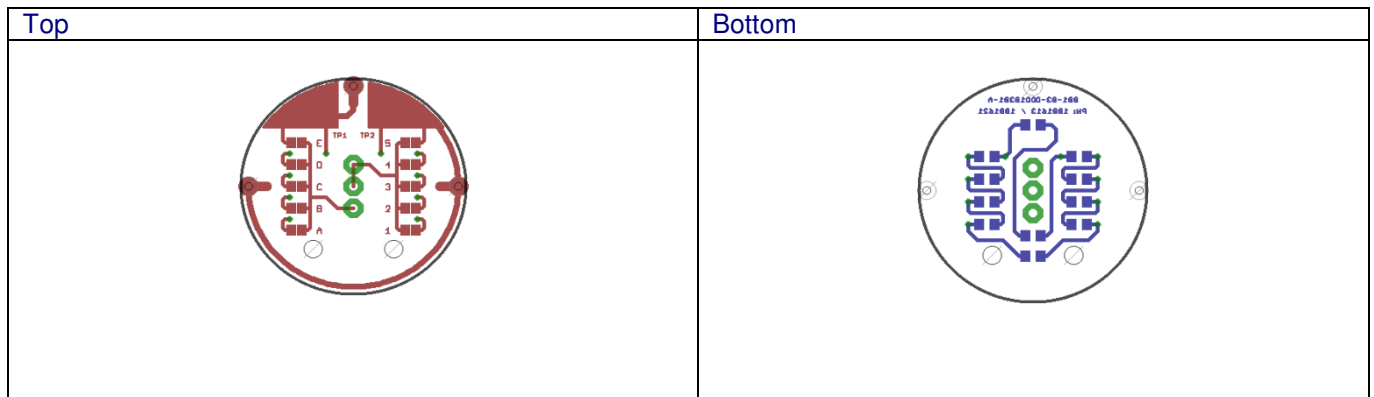
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Customized Design Specification:

- Integration of additional Zitex membrane in sensor gas diffusion way
- using of non magnetic components for the sensor
- 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:



Product Labeling

OOD103-JFD: 1002461 (REF DB200381)	
Label on Sensor (90x15)	Label on Blister- Card (63,5x46,6)
 JFD Ltd. Enterprise Drive Westhill, Aberdeen AB32 6TQ United Kingdom	 JFD Ltd. Enterprise Drive Westhill, Aberdeen AB32 6TQ United Kingdom
Oxygen Sensor	Oxygen Sensor
P/N: DB200381	P/N: DB200381
   2018-07	   2018-07
S/N: 123456 	S/N 123456 
	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: