

OBL Sensor Specification

Type: OOD103-JJCCR

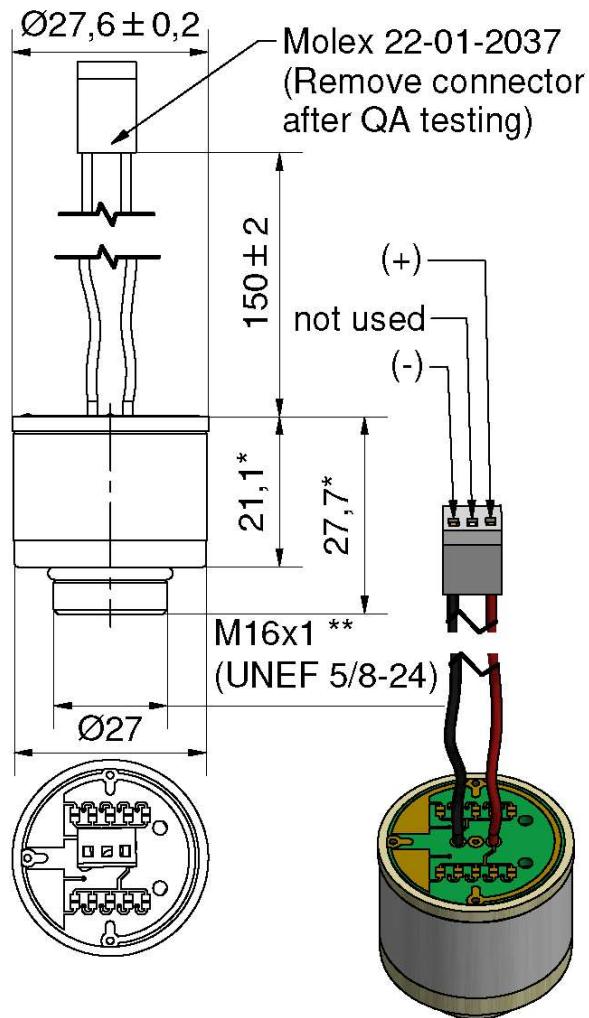
Änderungsregister / Change log

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 Error mBar pO ₂ mBar pO ₂ Min Max 209 -4 4 1000 0 0 Calibration point 1500 -30 30 2000 -75 75 Specified Range 2300 -100 100 Over-range capability Hysteresis after use at high pressure according to accuracy specification (Within + / - 3% of reading)
Response time:	< 5 sec. to 90% of final value
Zero Offset Voltage:	< 0.5% oxygen reading in 100% nitrogen @ 25°C after 36 hours
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 +25 °C and +40 °C: 3 % relative error Between 0 °C and +50 °C: 8 % relative error 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:	≥100 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.
Packaging	In plastic bag
Part No.:	OOD103-JJCCR: tbd (REF tbd)

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

Confidential - For Vandagraph only!

Mechanical draft:



General tolerances ISO 2768-c

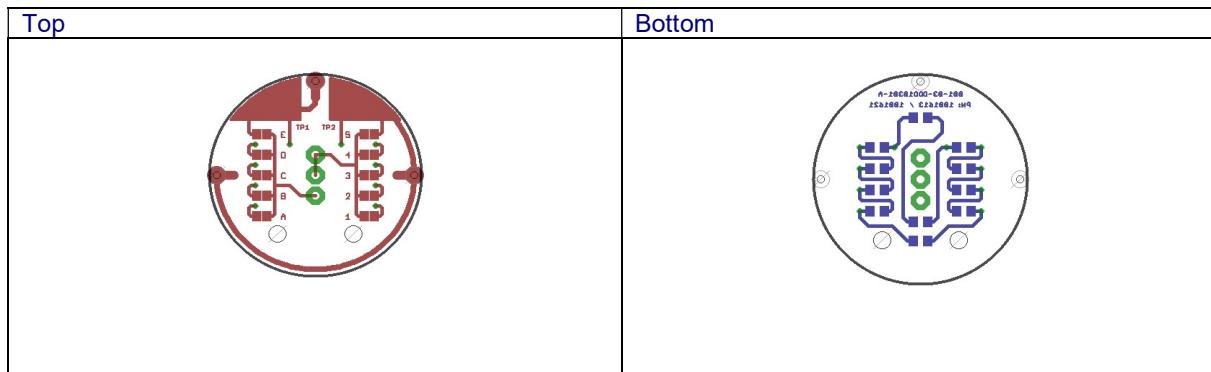
* sensor housing without PCB, tolerances $\pm 0,2$

**Intermediate thread: Metric / Unified Extra Fine

Remove Molex connector after QA testing.

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)
tbd	tbd

Customer Approval

Date:

Signature: