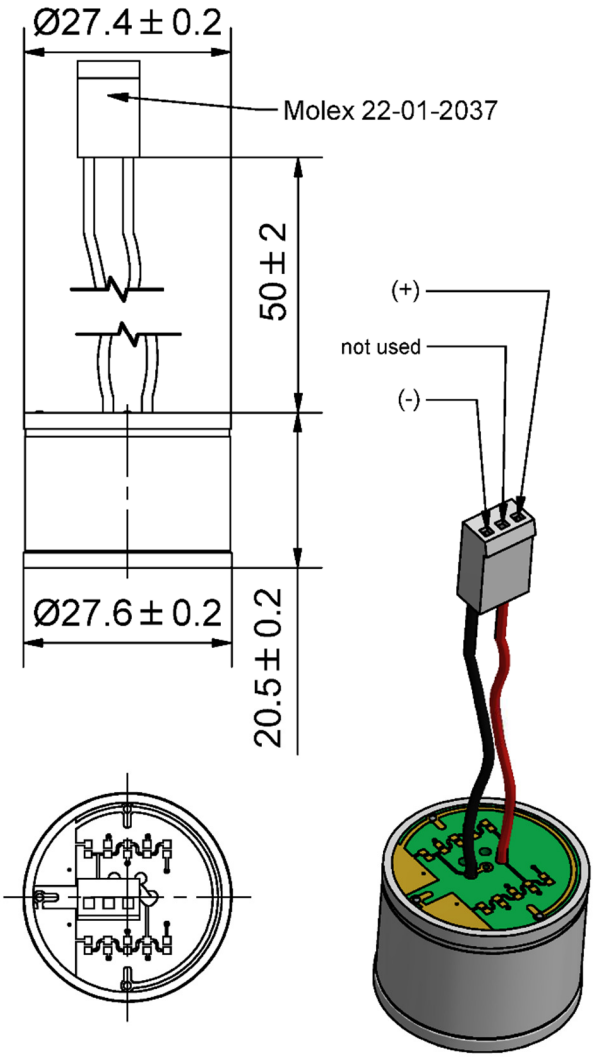
**Product Specification**
**Oxygen Sensor**
**«Sensor_type»**
**Confidential - For Vandagraph only!**

ENVITEC
by Honeywell

| | |
|---|---|
| **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℃<br>Acceptable limits are<br>Error mBar pO2<br>mBar pO2 Min Max<br>209 -4 4<br>1000 0 0 Calibration point<br>1500 -30 30<br>2000 -75 75 Specified Range<br>2300 -100 100 Over-range capability<br>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℃ after 36 seconds |
| **Cross Interference:** | < 0.5% vol. O2 response to: 5% CO2 balance N2 |
| **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℃ to 50℃ |
| **Temperature Compensation:** | Built-in NTC compensation |
| **Effect of Temperature Compensation (steady state):** | Between 0℃ and +50℃: 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℃ to +50℃ |
| **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) |
| **Typical Lifetime** | 20 to 24 months from shipment (including shelf life) in air at 25℃. |
| **Electrical output** | 30-60 Microamperes in air @ 25 ℃ sea level |
| **Packaging** | In plastic bag |
| **Part No.:** | OOD103-JFD: 1002461 (REF DB200381) |

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

Mechanical draft:




General tolerances ISO 2768-c

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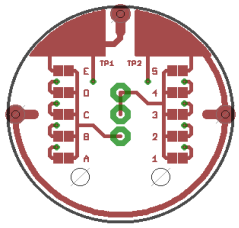
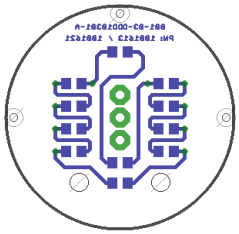
## Customized Design Specification:

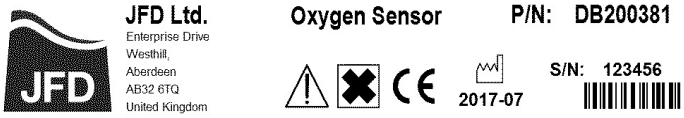
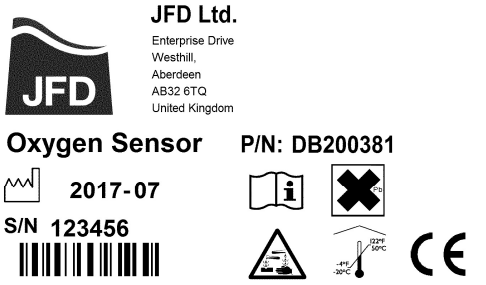
- Integration of additional Zitex membrane in sensor gas diffusion way
- using of non magnetic components for the sensor
- Conformal coating on the sensor PCB with PLASTIK 70
- 2 x 2mm holes drilled in the sensor PCB
- No information about EnviteC on PCB top / bottom sides, information for ordering process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

## PCB Layout:

| Top | Bottom |
|---|---|
|  |  |

## Product Labeling

OOD103-JFD: 1002461 (REF DB200381)

| Label on Sensor (90x15) | Label on Blister- Card (63,5x46,6) |
|---|---|
|  |  |





## Customer Approval

Date:

Signature: