

Specification Datasheet - 8010050

JFD Ltd.
DB200381 Oxygen Sensor



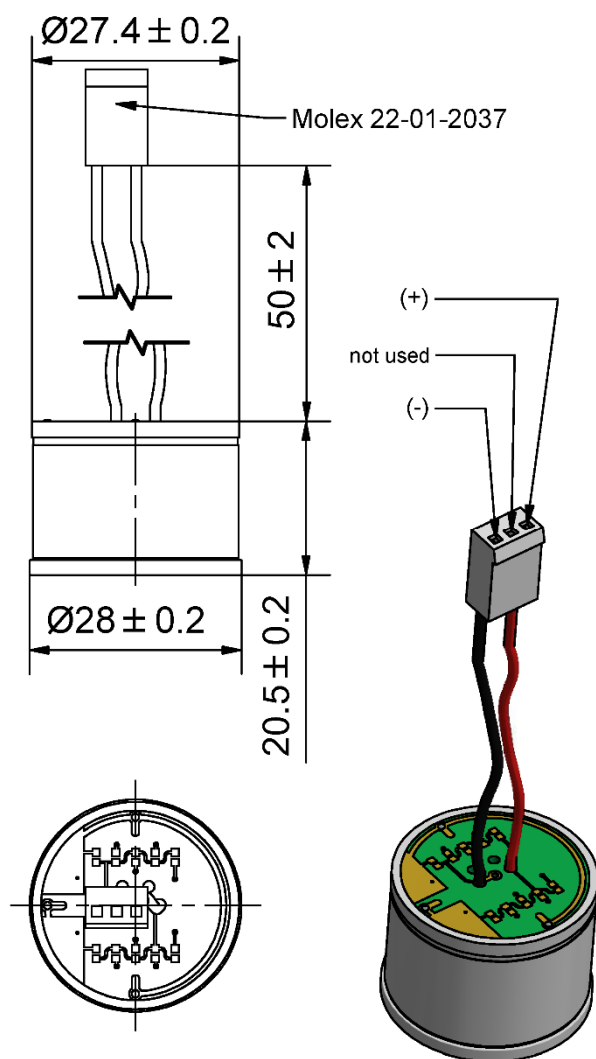
v1.1
14th July 2017

Specifications

VST part number	8010050
OEM model number	DB200381 Oxygen Sensor
Output	9 – 13 mV
Output connector	Flying leads with 3 pin female connector - Molex 22-01-2037
Input	Open input – see drawing and images
Input O ring	Not applicable
Range	0 – 100% oxygen
Pressure range	600 to 2500 mbar
Repeatability	<1% volume oxygen at constant temperature and pressure
Linearity error	0.1 to 1.0 bar < 3% relative 0.1 to 2.5 bar < 5% relative (at ppO ₂ > 1.0 bar after 1-hour equilibration time)
Warm up time	< 30 minutes after sensor installed
Zero offset voltage	< 0.5% oxygen reading in 100% nitrogen @ 25°C after 36 seconds
Cross interference	<0.5% volume oxygen response to 5% CO ₂ balance N ₂
Response time	< 5 s for 90% of final value.
Operating humidity	0 – 99% R.H. (non-condensing).
Influence of humidity	- 0.03% relative per % R.H. at 25 °C.
Influence of mechanical shock	< 1% after fall from 1m
Operating temperature range	0 – 50 °C
Storage temperature	-20 to +50 °C
Recommended storage temperature	+5 to +15 °C
Temperature compensation	Integrated NTC network
Temperature compensation error	0 °C to 50 °C, 5% relative error
Nominal sensor life	> 500,000 % oxygen hours
Long term output drift	< 1% volume oxygen per month, typically < -15% over sensor lifetime.
Shelf life	24 months
Load required	> 10 K Ohms
Input - membrane protection grille	No
Input - hydrophobic membrane	Yes
Conformal coating on PCB	Yes
Pressure equalization - PCB	Yes
Pressure equalization - output cap	None
Weight	28 g
Flow diverter	No
Packaging	Gas barrier bag
Warranty period	12 months from date of sales invoice
Application specific components	Low/non magnetic components utilized: Cathode, internal wiring. Suitability and QA assessment carried out by JFD.

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

Drawings/images

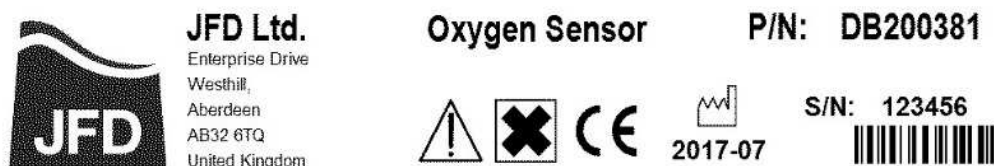


Dimensions in mm

Labelling

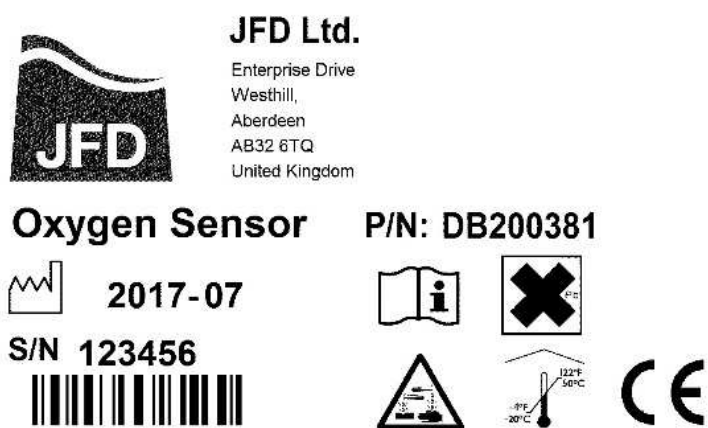
Oxygen sensor label 90.0mm x 15.0mm

White vinyl label, text & graphics - black



Gas barrier bag label 63.5mm x 46.6mm

White label, text & graphics – black



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.