

OEM Specification Datasheet - 8010011

VR Technology Ltd.
VR2200 Oxygen Sensor



Image for illustration purposes only.
Shown with VST labelling

© Vandagraph Sensor Technologies :td.

v1.1
08/12/12

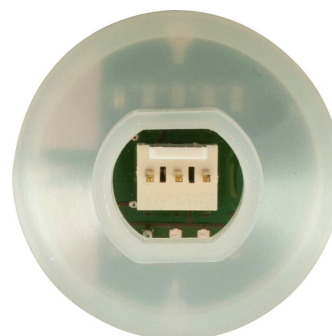
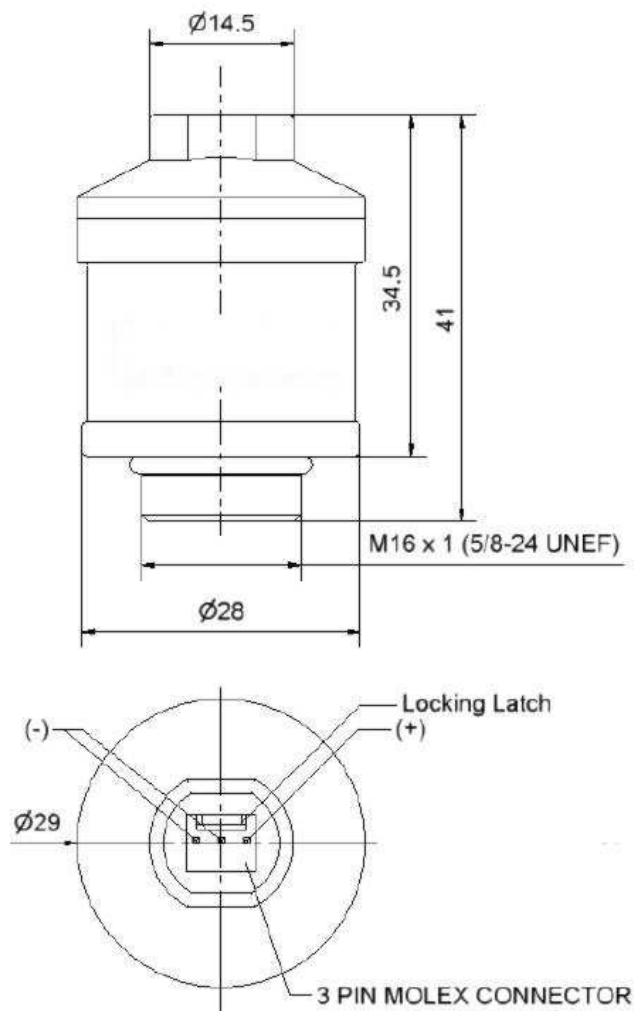
Vandagraph Sensor Technologies Ltd.
15 Station Road, Cross Hills, Keighley, West Yorkshire BD20 7DT, United Kingdom
Tel +44 (0) 1535 634900 Fax +44 (0) 1535 635582 e-mail: info@vandagraphst.com
www.vandagraphst.com

Specifications

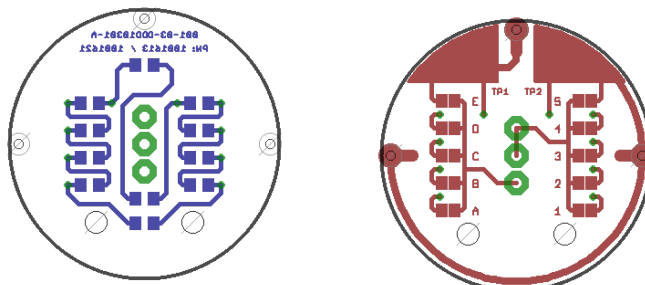
VST part number	8010011
OEM model number	VR2200 Oxygen Sensor
Output	9 – 13 mV
Output connector	3 pin Molex
Input	Threaded M16 x 1mm
Input O ring	Yes
Input casing cap	8030101
Sensor body casing	8030200
Output casing cap	8030300
Range	0 – 2 bar PPO ₂
Pressure range	600 to 2500 mbar
Linearity error	0.1 to 1.0 bar < 3% relative 0.1 to 2.5 bar < 5% relative
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% vol. O ₂ response to 5% CO ₂ balance N ₂
Response time	< 6 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 – 40 °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 40 °C, 5% relative error
Average sensor life	36 months in air at 25°C and 50% R.H.
Long term output drift	< 1% vol 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 - Zitex®
Conformal coating on PCB	Yes – Kontakt Chemie Plastik 70
Pressure equalization - PCB	Yes – 2 x 3mm holes
Pressure equalization - output cap	None
Weight (approximate)	28 g
Flow diverter	No
Packaging	Gas barrier bag - transparent
Warranty period	12 months from date of sales invoice
All specifications are applicable at standard conditions: 1013 mbar, 25°C dry ambient air.	

Specifications subject to change

Drawings/images



PCB layout



Labelling

Oxygen sensor label 90.0mm x 15.0mm

White vinyl label, text & graphics - black

Font: **Century Schoolbook Greek BT (True Type)**

Font file name: **GrCnskn**

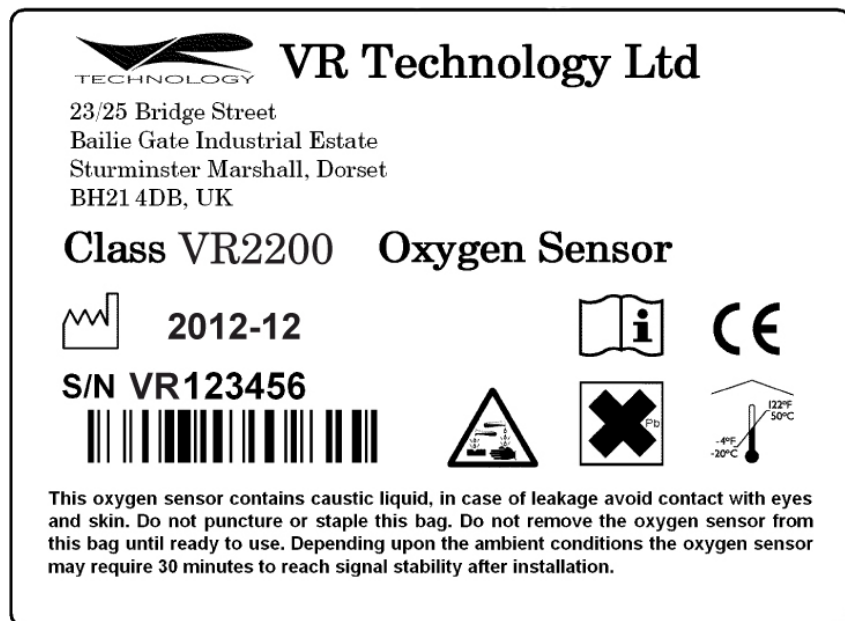


Gas barrier bag label 63.5mm x 46.6mm

White label, text & graphics – black

Font: **Century Schoolbook Greek BT (True Type)**

Font file name: **GrCnskn**



Serial number prefix = VR