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Specification Datasheet - 0110041

Viamed R-41V Oxygen Sensor





Specifications

ModelR-41VOutput13 mV - 16 mVOutput connector/connection3.5 mm phone socketInput O ringYesRange0 - 100% oxygenAccuracy< 1% volume oxygen when calibrated in 100°Influence of pressureOutput proportional to change in oxygen partLinearity error< 3% relativeWarm up time< 30 minutes after sensor installedZero offset voltage< 0.5% oxygen reading in 100% nitrogen @ 2Cross interferenceMeets requirements of EN ISO 21647Response time (t90)< 12 s for 90% of final value.Operating humidity0 - 99% R.H. (non-condensing).Influence of humidity- 0.03% relative per % R.H. at 25 °C.Influence of mechanical shock< 1% relative after fall from 1mOperating temperature range0 - 50 °CStorage temperature-20 to +50 °CRecommended storage temperature+5 to +15 °CTemperature compensationIntegrated NTC thermistorTemperature compensation error+20 to +40 °C: 3% relative 0 to +50 °C: 8% relativeNominal sensor life> 1,000,000 % oxygen hoursLong term output drift< 1% volume oxygen per month, typically < -	al pressure
Output connector/connection 3.5 mm phone socket Input O ring Yes Range 0 − 100% oxygen Accuracy < 1% volume oxygen when calibrated in 100° Influence of pressure Output proportional to change in oxygen part Linearity error < 3% relative Warm up time < 30 minutes after sensor installed Zero offset voltage < 0.5% oxygen reading in 100% nitrogen @ 2 Cross interference Meets requirements of EN ISO 21647 Response time (t90) < 12 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% relative after fall from 1m Operating temperature range 0 − 50 °C Storage temperature +5 to +15 °C Temperature compensation Integrated NTC thermistor Temperature compensation error +20 to +40 °C: 3% relative Nominal sensor life > 1,000,000 % oxygen hours	al pressure
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Nominal sensor life > 1,000,000 % oxygen hours	
7	
Long term output drift < 1% volume oxygen per month. typically < -	
	5% over sensor lifetime.
Recommended load $> 10 \text{ K}\Omega$	
Shelf life 24 months	
Weight 28 g	
Flow diverter Not included	
Standards Meets with requirements of EN ISO 21647. D	
according to EN ISO 9001:2008 & EN 13485	
Packaging Aluminium can	2007
Warranty period 15 months from date of sales invoice	2007

All specifications are applicable at standard conditions: 1013 mbar, 25 $\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbox{\ensuremath{^{\circ}}}\mbo$