

Oxygen DiveceL[®] Specification



DiveceL3

with molex connector

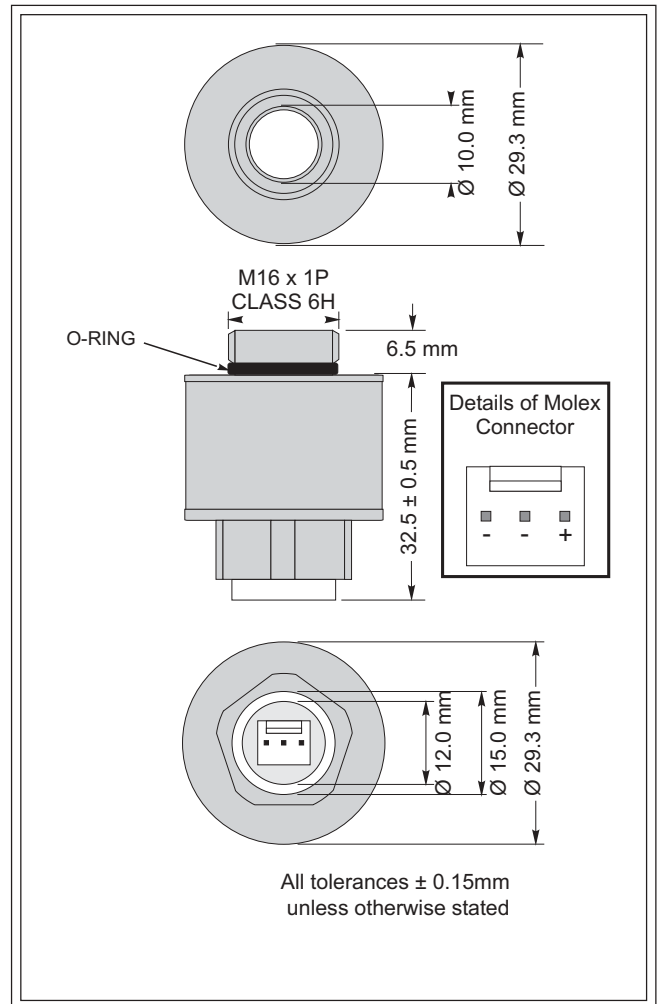
Performance Characteristics

Output	9 - 13.5mV in 210mBar O ₂
Range	0-100% O ₂
Resolution	0.01% O ₂
Expected Operating Life	Two years in 20.9% O ₂ at 22°C ± 2°C
T₉₀ Response Time	<7 seconds
Linearity	Linear 0-100% O ₂
Baseline at 20°C	<20µV
Temperature Range	-20°C to +50°C
Temperature Compensation	<4% variation from 0-40°C
Pressure Range	Atmospheric ± 10%
Relative Humidity Range	0 to 99% non-condensing
Long Term Output Drift	<10% signal loss/year
Warranty Period	12 month from date of despatch

N.B. All performance data is based on conditions at 20°C, 50%RH, and 1013mBar

NOTE

Molex header used in sensor is MOLEX 22-29-2031
 Suggested mating parts are:
 Molex 22-01-2035: 3-way housing
 Molex 08-56-0110: crimp terminals
 DiveceL3 to be assembled into application 'finger tight' only



Cross-sensitivity

The DiveceL3 has been tested for cross-sensitivity to carbon dioxide. The gas concentration used and the response of the DiveceL3 has been summarised below.

Gas	DiveceL3 Output (%O ₂ equivalent)
16%CO ₂ / Balance N ₂	<0.01

This shows that carbon dioxide does not show a sufficiently large cross-sensitivity to cause any inaccuracy in readings. In addition the baseline was unaffected.

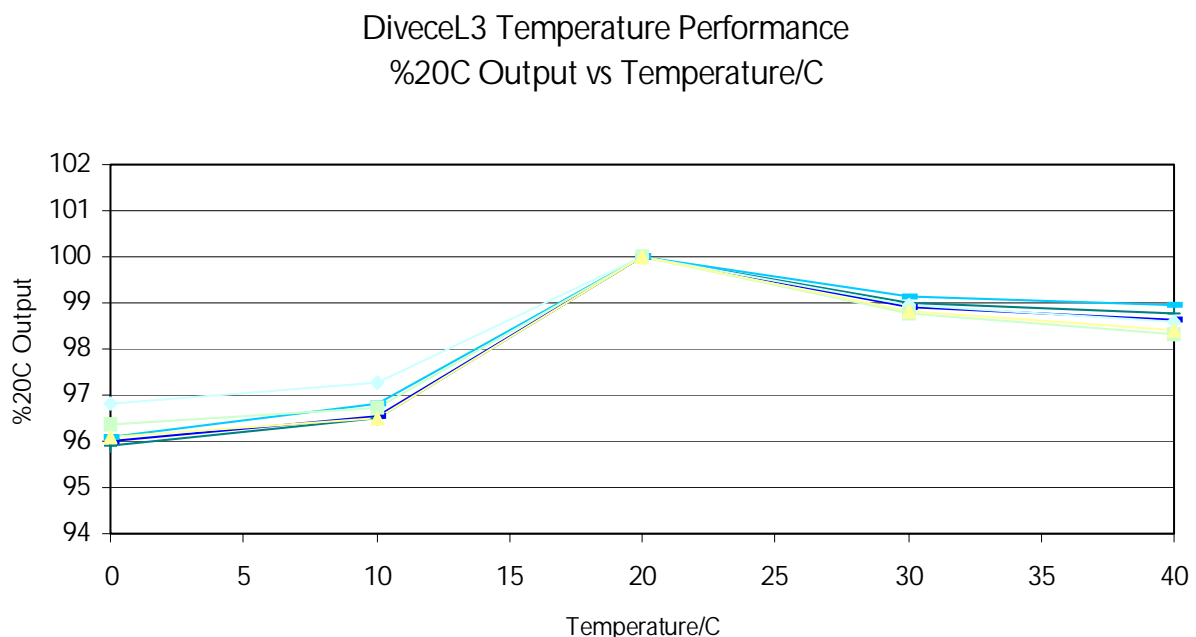
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Temperature Behaviour

The output of a DiveceL3 varies with gradual changes in temperature, but incorporates a thermistor to compensate for these changes. The thermistor gives the DiveceL3 a very stable output over a wide temperature range.

The graph below shows the typical output behaviour of DiveceL3 sensors over the range 0°C to +40°C.



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Performance characteristics on this data sheet outline the performance of newly supplied sensors. Output signal can drift below the lower limit over time.