



# DiveceL3

with molex connector

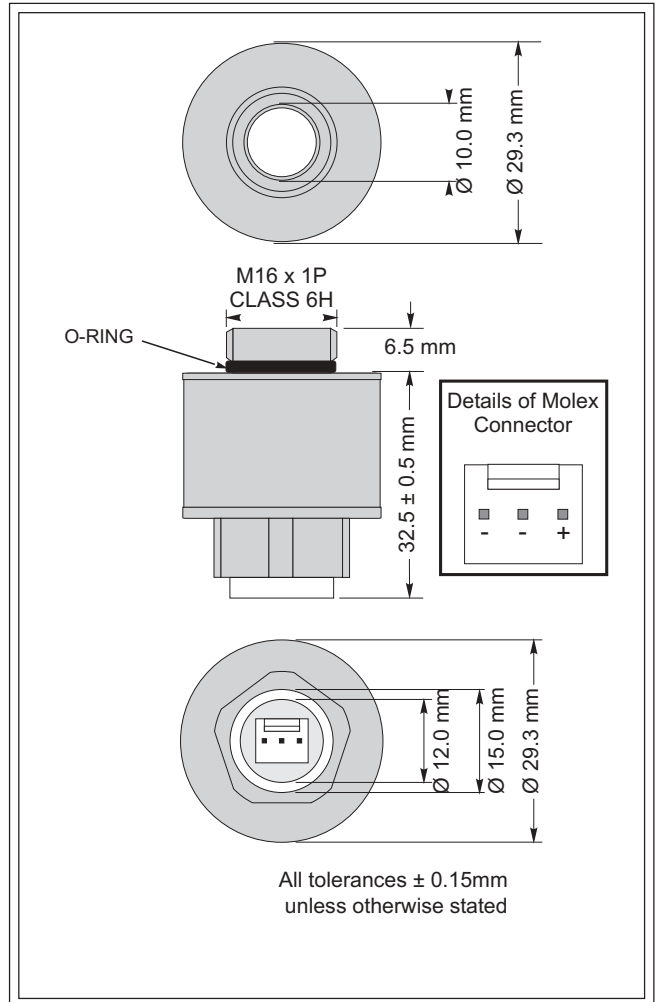
## Performance Characteristics

<b>Output</b>	9 - 13.5mV in 210mBar O <sub>2</sub>
<b>Range</b>	0-100% O <sub>2</sub>
<b>Resolution</b>	0.01% O <sub>2</sub>
<b>Expected Operating Life</b>	Two years in 20.9% O <sub>2</sub> at 22°C ± 2°C
<b>T<sub>90</sub> Response Time</b>	<7 seconds
<b>Linearity</b>	Linear 0-100% O <sub>2</sub>
<b>Baseline at 20°C</b>	<20µV
<b>Temperature Range</b>	-20°C to +50°C
<b>Temperature Compensation</b>	<4% variation from 0-40°C
<b>Pressure Range</b>	Atmospheric ± 10%
<b>Relative Humidity Range</b>	0 to 99% non-condensing
<b>Long Term Output Drift</b>	<10% signal loss/year
<b>Warranty Period</b>	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 <sub>2</sub> equivalent)
16%CO <sub>2</sub> / Balance N <sub>2</sub>	<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.

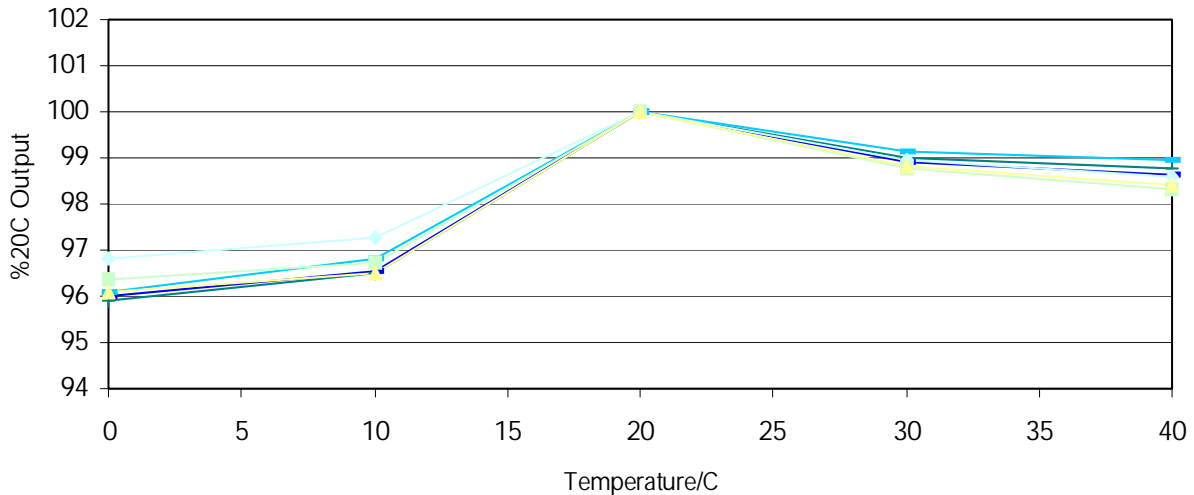


## Temperature Behaviour

The output of a DivecelL3 varies with gradual changes in temperature, but incorporates a thermistor to compensate for these changes. The thermistor gives the DivecelL3 a very stable output over a wide temperature range.

The graph below shows the typical output behaviour of DivecelL3 sensors over the range 0°C to +40°C.

DivecelL3 Temperature Performance  
%20C Output vs Temperature/C



Every effort has been made to ensure the accuracy of this document at the time of printing. In accordance with the company's policy of continued product improvement City Technology Limited reserves the right to make product changes without notice. No liability is accepted for any consequential losses, injury or damage resulting from the use of this document or from any omissions or errors herein. The data is given for guidance only. It does not constitute a specification or an offer for sale. The products are always subject to a programme of improvement and testing which may result in some changes in the characteristics quoted. As the products may be used by the client in circumstances beyond the knowledge and control of City Technology Limited, we cannot give any warranty as to the relevance of these particulars to an application. It is the clients' responsibility to carry out the necessary tests to determine the usefulness of the products and to ensure their safety of operation in a particular application.

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



**Distributed by:**

Shawcity Ltd  
91-92 Shrivenham Hundred Business Park  
Watchfield, Oxfordshire, SN6 8TY  
Tel: 01793 780622  
Email: [sensororders@shawcity.co.uk](mailto:sensororders@shawcity.co.uk)  
[www.shawcity.co.uk](http://www.shawcity.co.uk)