



## Nitric Oxide CiTiceL<sup>®</sup> Specification

# 5NF CiTiceL<sup>®</sup>

### Performance Characteristics

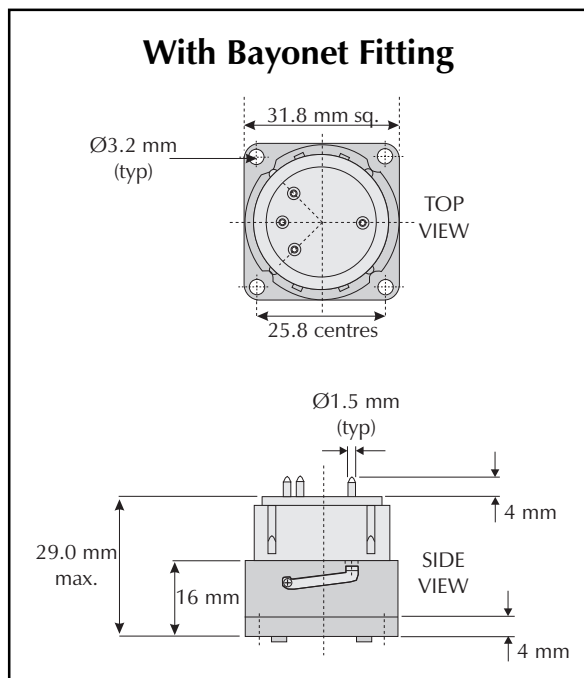
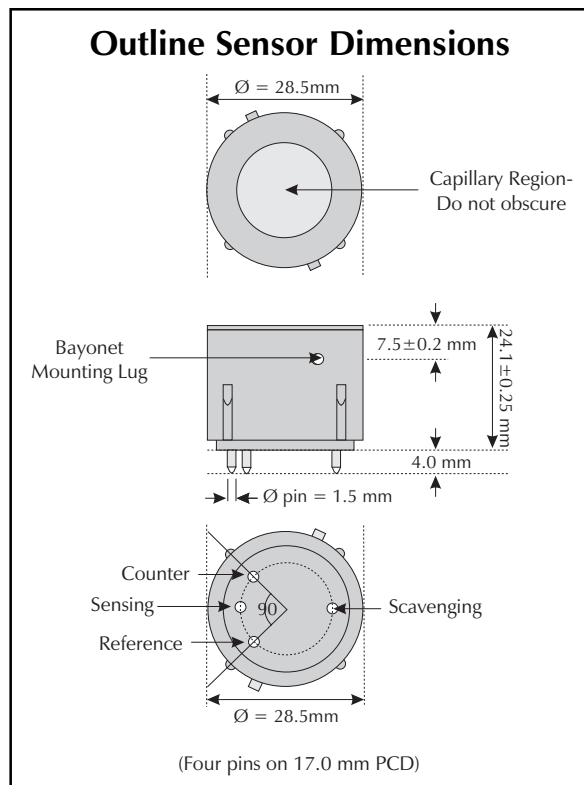
<b>Nominal Range</b>	0-1000ppm
<b>Maximum Overload</b>	5000ppm
<b>Replaceable Filter</b>	To remove effect of SO <sub>2</sub>
<b>Expected Operating Life</b>	Three years in air
<b>Output Signal</b>	0.10 ± 0.02 μA/ppm
<b>Resolution</b>	1ppm
<b>Operating Temperature Range</b> *see Note1	-20°C to +40°C
<b>Pressure Range</b>	Atmospheric ± 10%
<b>Pressure Coefficient</b>	0.01% signal/mBar
<b>T<sub>90</sub> Response Time</b>	≤30 seconds
<b>Relative Humidity Range</b>	15 to 90% non-condensing
<b>Typical Baseline Range (pure air)</b>	0 to +12ppm equivalent
<b>Maximum Zero Shift (+20°C to +40°C)</b>	30ppm equivalent
<b>Long Term Output Drift</b>	<2% signal loss/month
<b>Recommended Load Resistor</b>	10 Ω
<b>Bias Voltage</b>	+300mV
<b>Repeatability</b>	2% of signal
<b>Output Linearity</b>	Linear
<b>Colour Coding</b>	Orange

Note1: While not being used to measure NO the 5NF can withstand temperatures of up to +50°C

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

### Physical Characteristics

<b>Weight</b>	13 g
<b>Position Sensitivity</b>	None
<b>Storage Life</b>	Six months in CTL container
<b>Recommended Storage Temperature</b>	0-20°C
<b>Warranty Period</b>	12 months from date of despatch

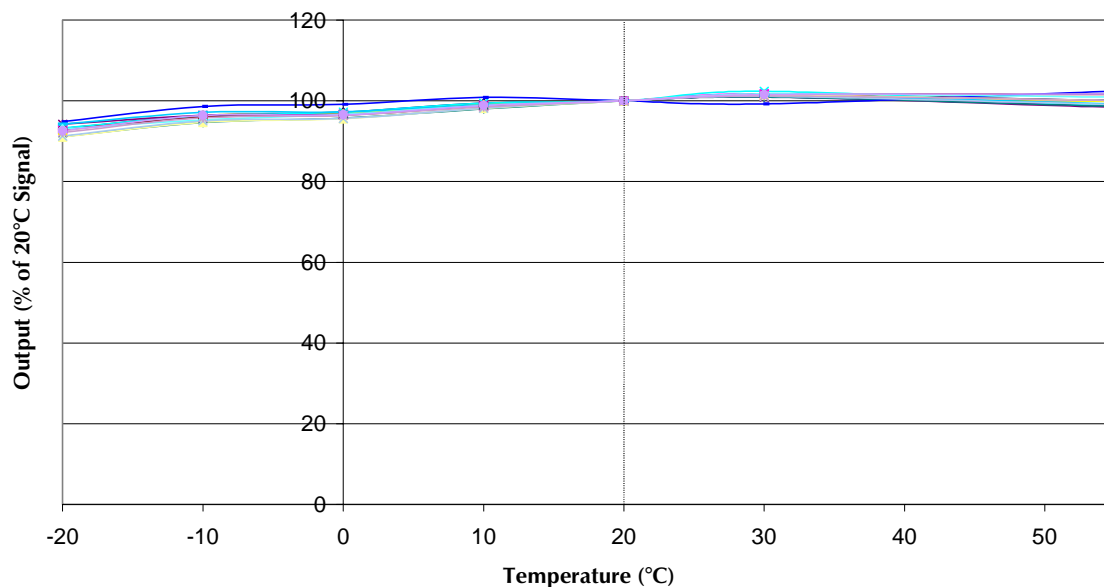


All tolerances ±0.15mm unless otherwise stated

Doc. Ref.: 5NF.p65  
Issue 3.8 Nov 17, 1999



### 5NF CiTiceL - Temperature Coefficient Data



### Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. The table below shows the typical response of 5NF sensors to a number of common cross-interfering gases. The figures are expressed as a percentage of the primary sensitivity (i.e. nitric oxide = 100%).

Gas	Response	Gas	Response
Carbon monoxide:	0	Hydrogen:	0
Hydrogen sulphide:	0	Hydrogen chloride:	<5
Sulphur dioxide:	0	Ethylene:	0
Nitrogen dioxide:	<10	** For details of other possible cross-interfering gases contact City Technology.**	

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.