

Nitric Oxide CiTiceL[®] Specification



5NF CiTiceL[®]

Performance Characteristics

Nominal Range	0-1000ppm
Maximum Overload	5000ppm
Internal Filter	To remove effect of SO ₂
Internal Filter Life	25,000 ppm hours (1000ppm SO ₂ at 200ml/min)
Expected Operating Life	Three years in air
Output Signal	0.10 ± 0.02 μA/ppm
Resolution	1ppm
Operating Temperature Range	-20°C to +40°C
	<small>*see Note1</small>
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	0.01 % signal/mbar
T₉₀ Response Time	< 30 seconds
Relative Humidity Range	15 to 90 % non-condensing
Typical Baseline Range (pure air)	0 to +12ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	30ppm equivalent
Long Term Output Drift	<2% signal loss/month
Recommended Load Resistor	10Ω
Bias Voltage	+300mV
Repeatability	2% of signal
Output Linearity	Linear

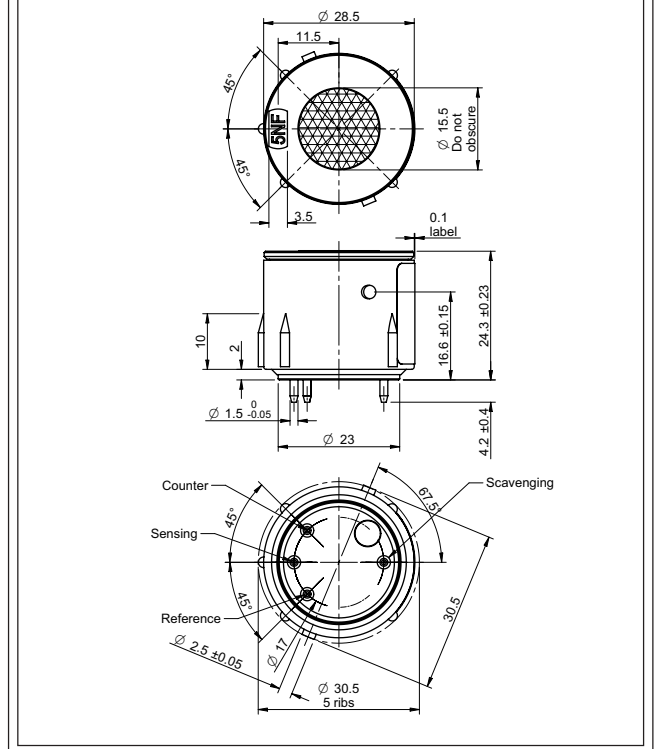
Note1: While not being used to measure NO the 5NF can withstand temperatures of up to +50°C

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

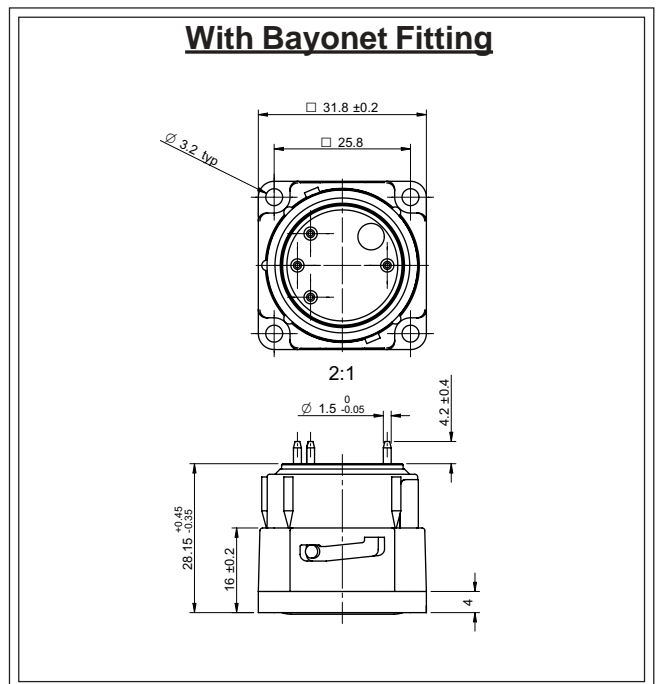
Physical Characteristics

Colour Coding	Orange
Weight	13g
Position Sensitivity	None
Storage Life	Six months in CTL container
Recommended Storage Temperature	0-20°C
Warranty Period	12 months from date of despatch

Outline Sensor Dimensions



With Bayonet Fitting

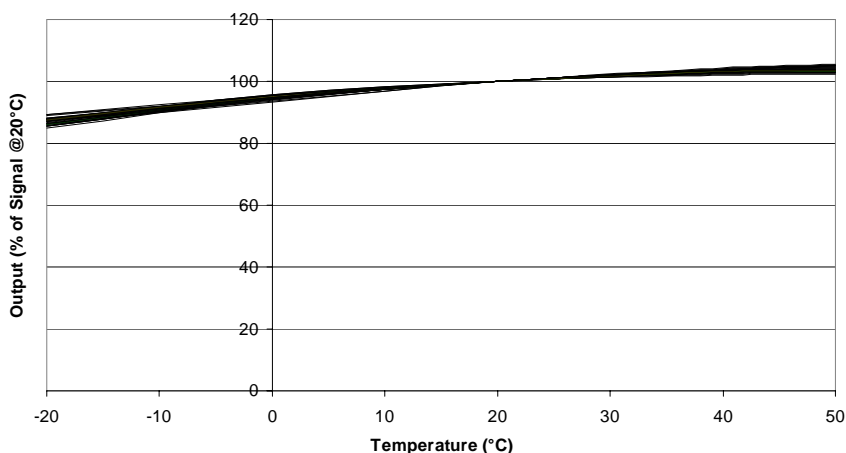


All tolerances ±0.15mm unless otherwise stated

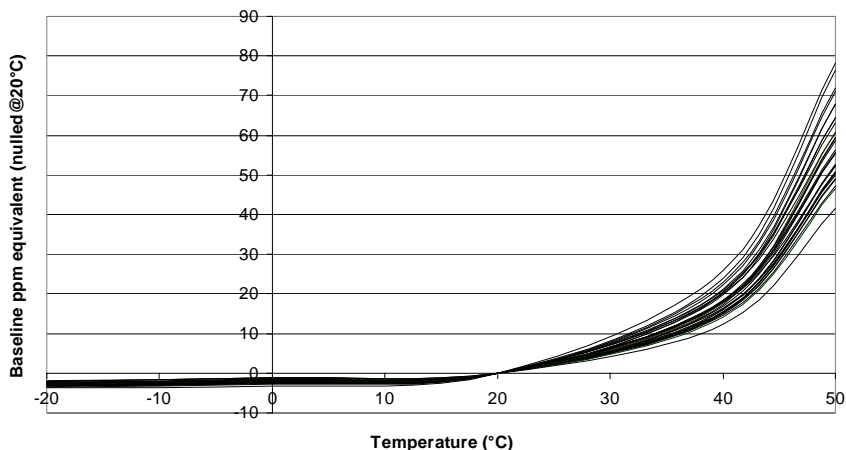
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5NF CiTiceL - Typical Output vs Temperature



5NF CiTiceL - Typical Baseline vs Temperature



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%).

<u>Gas</u>	<u>Response</u>	<u>Gas</u>	<u>Response</u>
Carbon monoxide:	0	Hydrogen:	0
Hydrogen sulphide:	0	Hydrogen chloride:	<5
Sulphur dioxide:	0	Nitrogen dioxide:	<10

** For details of other possible cross-interfering gases contact City Technology.**

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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.