

## Carbon Monoxide CiTiceL<sup>®</sup> Specification



# 5MF CiTiceL<sup>®</sup>

### Performance Characteristics

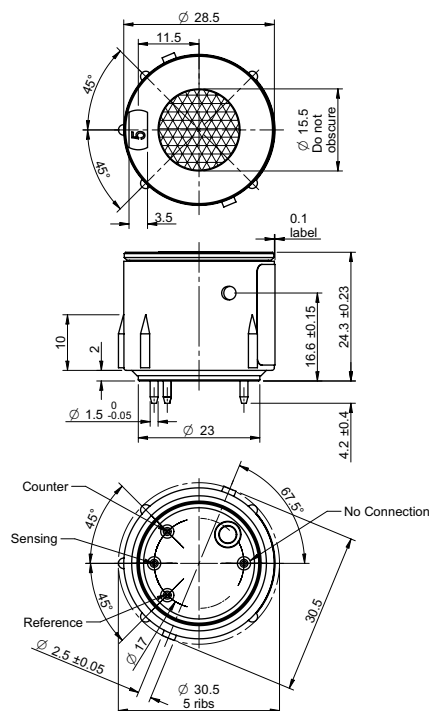
<b>Nominal Range</b>	0-40,000ppm
<b>Maximum Overload</b>	0-100,000ppm
<b>Inboard Filter</b>	To remove acid gases
<b>Filter Life</b>	> 400,000 ppm hours (1000ppm NO @ 200ml/min)
<b>Expected Operating Life</b>	Three years in air
<b>Output Signal</b>	0.010 ± 0.004 µA/ppm
<b>Resolution</b>	10ppm
<b>Temperature Range</b>	-20°C to +50°C
<b>Pressure Range</b>	Atmospheric ± 10%
<b>Pressure Coefficient</b>	0.007 ± 0.003 %signal/mBar
<b>T<sub>90</sub> Response Time</b>	<40 seconds
<b>Relative Humidity Range</b>	15 to 90% non-condensing
<b>Typical Baseline Range (pure air)</b>	-30 to +100ppm equivalent
<b>Maximum Zero Shift (+20°C to +40°C)</b>	-100ppm equivalent
<b>Long Term Output Drift</b>	<2% signal loss/month
<b>Recommended Load Resistor</b>	10Ω
<b>Bias Voltage</b>	Not required
<b>Repeatability</b>	1% of signal
<b>Output Linearity</b>	Linear
<b>Colour Coding</b>	Red

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

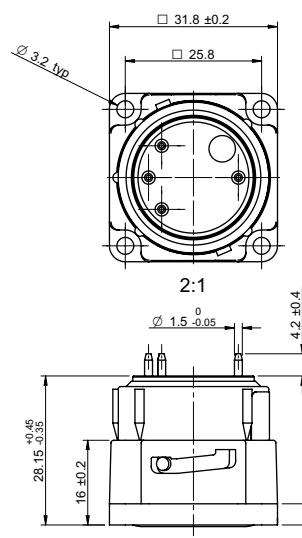
### Physical Characteristics

<b>Weight</b>	12.5g
<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

### Outline Sensor Dimensions



### With Bayonet Fitting

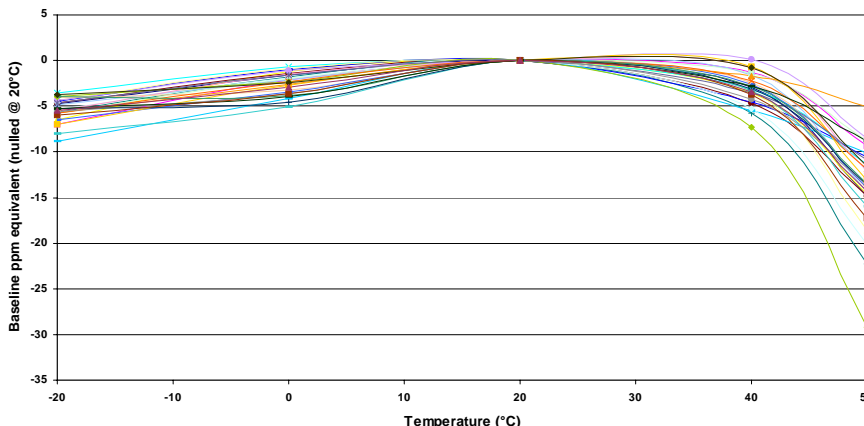


All tolerances ±0.15mm unless otherwise stated

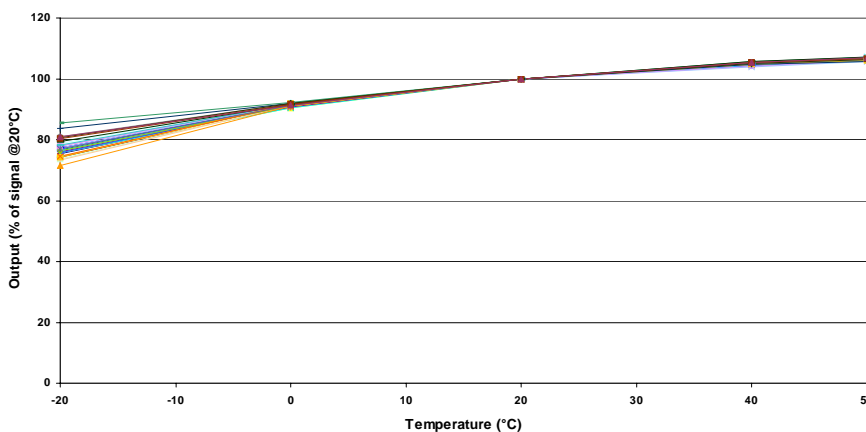
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5MF CiTiceL - Typical Baseline vs Temperature



5MF CiTiceL - Typical Output 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 5MF sensors to a number of common cross-interfering gases. The figures are expressed as a percentage of the primary sensitivity (i.e. carbon monoxide = 100%).

<u>Gas</u>	<u>Response</u>	<u>Gas</u>	<u>Response</u>
Hydrogen sulphide:	0	Hydrogen:	<60 <sup>1</sup>
Sulphur dioxide:	0	Hydrogen chloride:	0
Nitric oxide:	0	Ethylene:	<10
Nitrogen dioxide:	0	** For details of other possible cross-interfering gases contact City Technology.**	

<sup>1</sup>For applications where a hydrogen compensated output is required the A5F CiTiceL should be used

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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.