



# A5F CiTiceL<sup>®</sup>

## Performance Characteristics

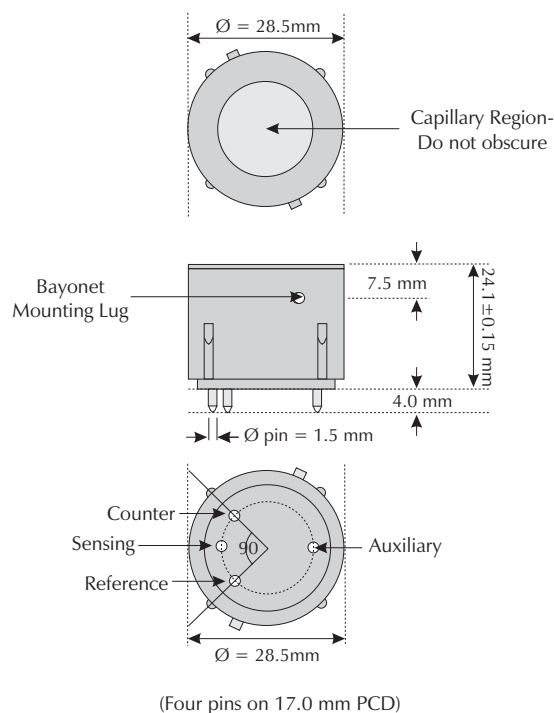
<b>Nominal Range</b>	0-2000ppm
<b>Maximum Overload</b>	4000ppm
<b>Internal Filter</b>	To remove acid gases
<b>Internal Filter Life</b>	>100,000ppm hours (1000ppm NO at 200ml/min)
<b>Auxiliary Electrode</b>	To compensate for maximum 2000ppm H <sub>2</sub> cross-interference
<b>Expected Operating Life</b>	Three years in air
<b>Output Signal</b>	0.075 ± 0.025 µA/ppm
<b>Resolution</b>	1ppm
<b>Temperature Range</b>	-20°C to +50°C
<b>Pressure Range</b>	Atmospheric ± 10%
<b>Pressure Coefficient</b>	0.010% signal/mbar
<b>T<sub>90</sub> Response Time</b>	< 40 seconds
<b>Relative Humidity Range</b>	15 to 90 % non-condensing
<b>Typical Net Baseline Range (pure air)</b>	-2 to +17ppm equivalent
<b>Maximum Net Zero Shift (+20°C to +40°C)</b>	5ppm CO equivalent
<b>Long Term Output Drift</b>	<2% signal loss/month
<b>Recommended Load Resistor</b>	10Ω
<b>Bias Voltage</b>	0mV
<b>Repeatability</b>	<1% of signal
<b>Output Linearity</b>	Linear

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

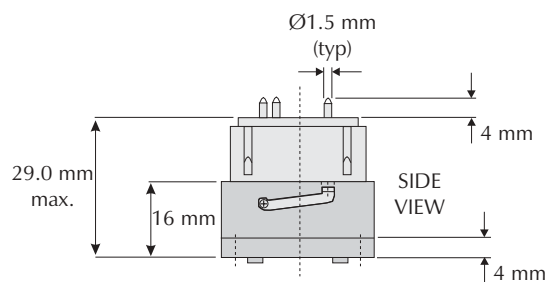
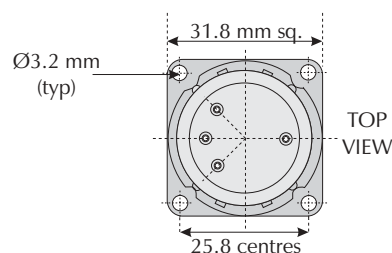
## Physical Characteristics

<b>Colour Coding</b>	Red
<b>Weight</b>	13g
<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

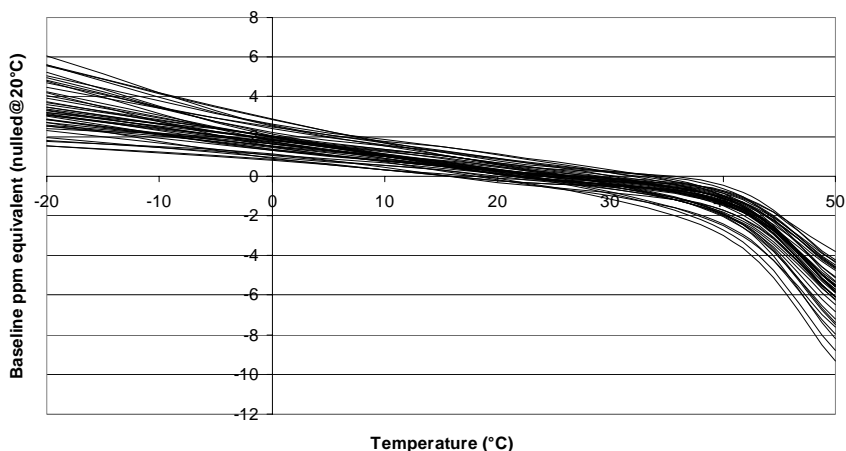


All tolerances ±0.15mm unless otherwise stated

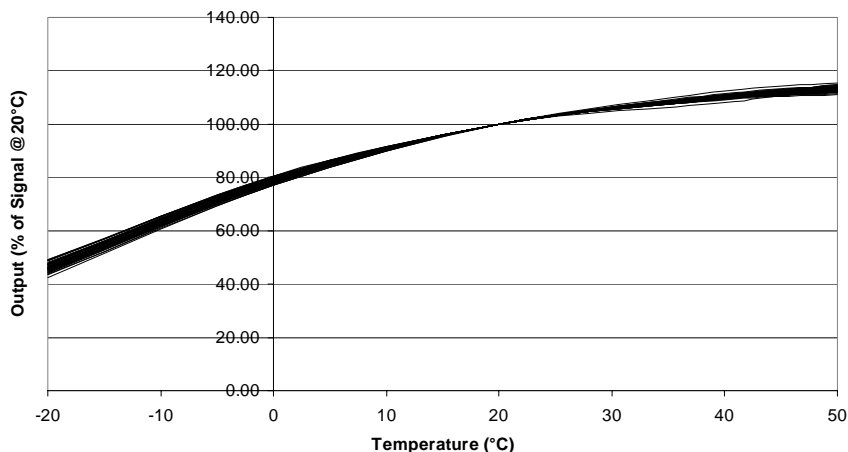
# Carbon Monoxide CiTiceL<sup>®</sup> Specification



A5F CiTiceL - Typical Baseline vs Temperature



A5F 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 A5F 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>
<b>Hydrogen sulphide:</b>	0	<b>Hydrogen:</b>	<1 (see note)
<b>Sulphur dioxide:</b>	0	<b>Hydrogen chloride:</b>	5
<b>Nitric oxide:</b>	0	<b>Nitrogen dioxide:</b>	0

\*\* For details of other possible cross-interfering gases contact City Technology.\*\*  
**Note:** Cross-sensitivity to H<sub>2</sub> <1% after compensation

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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.