Sulphur Dioxide CiTiceL® Specification



5SF CiTiceL®

Performance Characteristics

Nominal Range | 0-2000ppm Maximum Overload | 5000ppm

Expected Operating Life Two years in air

Output Signal $0.10 \pm 0.02 \mu \text{A/ppm}$

Resolution 1ppm

Temperature Range | -20°C to +50°C

Pressure Range Atmospheric ± 10%
Pressure Coefficient 0.004 % signal/mBar

T_{so} Response Time <30 seconds

Relative Humidity Range | 15 to 90% non-condensing

Typical Baseline Range | 0 ± 2ppm equivalent

(pure air)

Maximum Zero Shift | 5ppm equivalent (+20°C to +40°C)

Long Term Output Drift | <2% signal loss/month

Recommended Load 10 Ω

Resistor

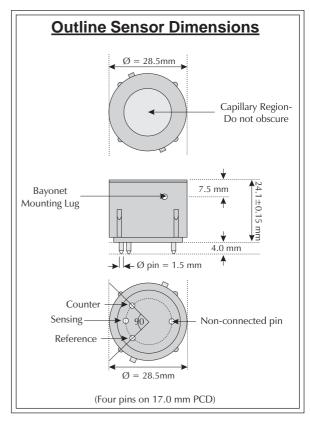
Bias Voltage Not required Repeatability 1% of signal

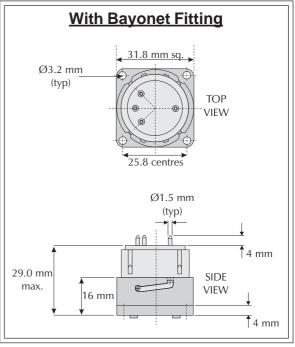
Output Linearity Linear Colour Coding Green

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

Physical Characteristics

Weight	10g
Position Sensitivity	None
Storage Life	Six months in CTL container
Recommended Storage Temperature	0-20°C
Warranty Period	12 months from date of despatch



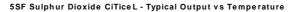


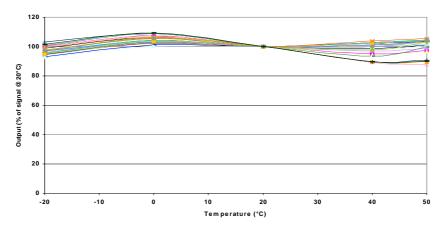
All tolerances ±0.15mm unless otherwise stated

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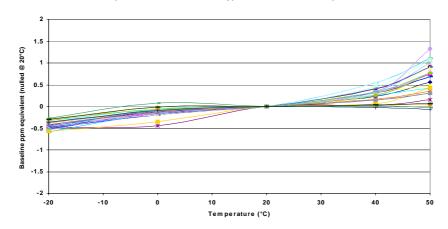
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5SF Sulphur Dioxide CiTiceL - Typical Baseline vs Temperature



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 5SF sensors to a number of common cross-interfering gases. The figures are expressed as a percentage of the primary sensitivity (i.e. sulphur dioxide = 100%).

Gas	Response	Gas	Response
Carbon monoxide:	<3	Hydrogen:	<3
Hydrogen sulphide:	≈200	Hydrogen chloride:	≈15
Nitric oxide:	0	Ethylene:	<50
Nitrogen dioxide:	≈-125	** 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.

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