

Performance Characteristics

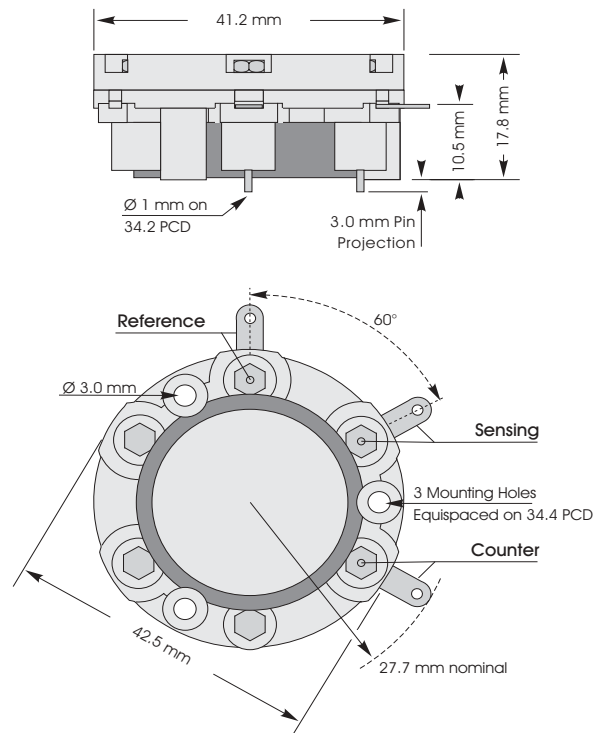
| | |
|--|--|
| Nominal Range | 0-4000ppm |
| Maximum Overload | 20 000ppm |
| Inboard Filter | To remove acid gases from flue stream. |
| Filter Life | 560,000 ppm hours *see Note |
| Expected Operating Life | Three years in air |
| Output Signal | 0.030 ± 0.006 µA/ppm |
| Resolution | 1ppm |
| Temperature Range | -20°C to +50°C |
| Pressure Range | Atmospheric ± 10% |
| Pressure Coefficient | 0.007 ± 0.003 %signal/mBar |
| T₉₀ Response Time | <30 seconds |
| Relative Humidity Range | 15 to 90% non-condensing |
| Typical Baseline Rang (pure air) | -3 to +10ppm equivalent |
| Maximum Zero Shift (+20°C to +40°C) | 20ppm equivalent |
| Long Term Output Drift | <2% signal loss/month |
| Recommended Load Resistor | 10Ω |
| Bias Voltage | Not required |
| Repeatability | 1% of signal |
| Output Linearity | Linear |

Note NO removal based on continuous exposure to 1000ppm and 5% breakthrough

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

Physical Characteristics

| | |
|--|---------------------------------|
| Colour of Ring | Red |
| Weight | 22g |
| 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 Dimensions

All tolerances ±0.15mm unless otherwise stated.
3F/F shown with side tags and tin pins.
Do not solder to pin connections

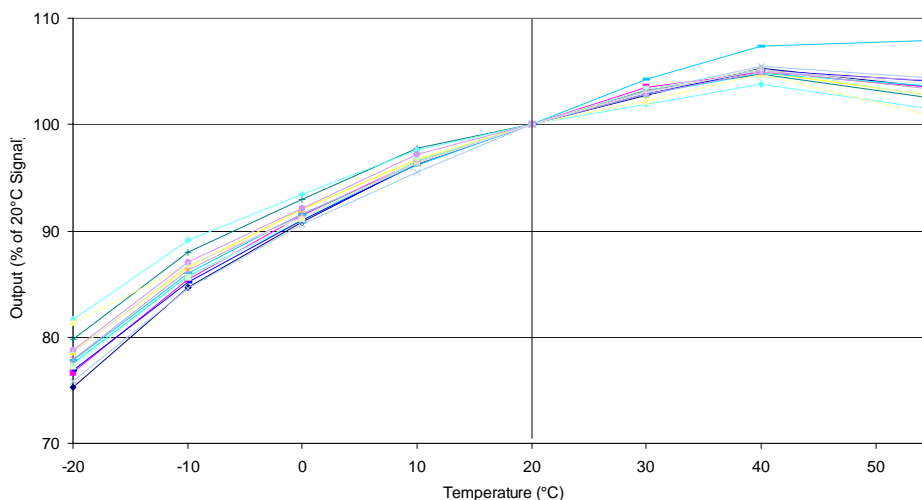
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Carbon monoxide CiTiceL[®] Specification



3F/F Carbon Monoxide - Output vs Temperature



Ordering Information

The 3F/F Carbon Monoxide CiTiceL is available with side tags, gold-plated PCB pins, or both PCB pins and side tags. To ensure the appropriate option is supplied care must be taken to provide the correct code when ordering.

Type 3F/F:- With side tag and PCB pin connections - **3F/F**
 With side tag connection - **3F/F(S)**
 With gold-plated PCB pin connection - **3F/F(G)**

Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 3F/F CiTiceLs have been tested with a number of commonly cross-interfering gases and the results are given below. The table shows the typical response to be expected from a sensor when exposed to a given test gas concentration (relevant to safety, e.g. TLV levels).

| <u>Gas</u> | <u>Conc.</u> | <u>3F/F</u> | <u>Gas</u> | <u>Conc.</u> | <u>3F/F</u> |
|---------------------------|--------------|---------------------|---------------------------|--------------|-------------|
| Hydrogen sulphide: | 15ppm | 0ppm | Sulphur dioxide: | 5ppm | 0ppm |
| Nitric oxide: | 50ppm | -1<x\$<0ppm | Nitrogen dioxide: | 50ppm | -1<x\$<0ppm |
| Hydrogen: | 100ppm | <60ppm ¹ | Hydrogen chloride: | 5ppm | 0ppm |
| Ethylene: | 100ppm | 0<x\$<20ppm | | | |

¹For applications where a hydrogen compensated output is required the A3E/D CiTiceL should be used

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.