

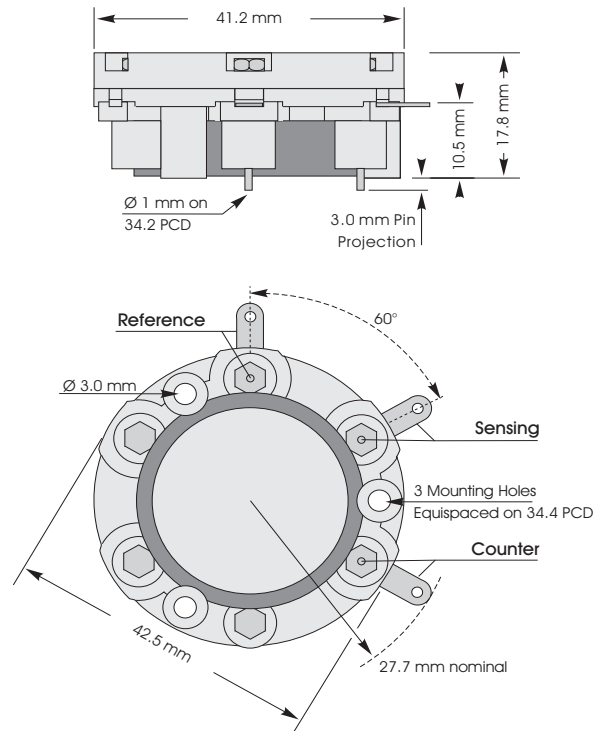
3M/F CiTiceL[®]

Performance Characteristics

Nominal Range	0-40 000ppm
Maximum Overload	100 000ppm
Inboard Filter	High capacity to remove acid gases from flue stream
Expected Operating Life	Three years in air
Output Signal	0.007 ± 0.002 µA/ppm
Resolution	10ppm
Temperature Range	-20°C to +50°C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	No data
T₉₀ Response Time	<30 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Range (pure air)	-20 to +30ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	200ppm equivalent
Long Term Output Drift	<2% signal loss/month
Recommended Load Resistor	10 Ω
Bias Voltage	Not required
Repeatability	1% of signal
Output Linearity	Linear

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

Outline Dimensions



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

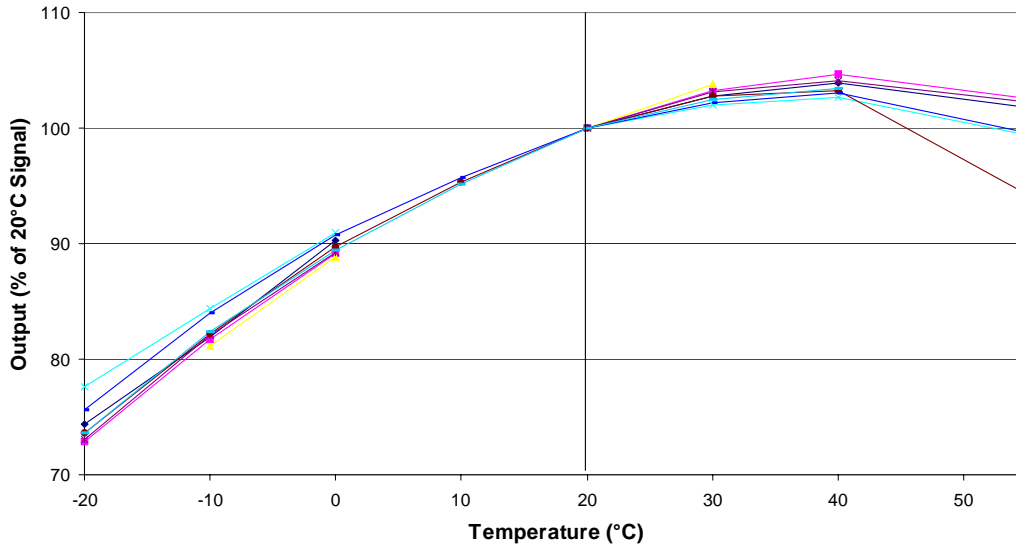
Physical Characteristics

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

Carbon Monoxide CiTiceL[®] Specification



3M/F Carbon Monoxide - Output vs Temperature



Ordering Information

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

Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 3M/F CiTiceLs have been tested with some common cross-interfering gases at concentrations relevant to emissions applications. The table below details the concentrations used and the typical response observed.

<u>Gas</u>	<u>Conc.</u>	<u>Response</u>	<u>Gas</u>	<u>Conc.</u>	<u>Response</u>
Hydrogen sulphide:	2000ppm	≈20ppm	Hydrogen:	2000ppm	1200<x\$<2800ppm ¹
Sulphur dioxide:	1000ppm	0ppm	Hydrogen chloride:	n/d	n/d
Nitric oxide:	1000ppm	0ppm	Ethylene:	n/d	n/d
Nitrogen dioxide:	n/d	n/d			

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

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

n/d: No data, under investigation

Every effort has been made to ensure the accuracy of this document at the time of printing. In accordance with the company's policy of continued product improvement City Technology Limited reserves the right to make product changes without notice. No liability is accepted for any consequential losses, injury or damage resulting from the use of this document or from any omissions or errors herein. The data is given for guidance only. It does not constitute a specification or an offer for sale. The products are always subject to a programme of improvement and testing which may result in some changes in the characteristics quoted. As the products may be used by the client in circumstances beyond the knowledge and control of City Technology Limited, we cannot give any warranty as to the relevance of these particulars to an application. It is the clients' responsibility to carry out the necessary tests to determine the usefulness of the products and to ensure their safety of operation in a particular application.

Performance characteristics on this data sheet outline the performance of newly supplied sensors. Output signal can drift below the lower limit over time.