



3CLH CiTiceL[®]

Performance Characteristics

Nominal Range	0-20ppm
Maximum Overload	250ppm
Expected Operating Life	Two years in air
Output Signal	1.0 ± 0.25 µA/ppm
Resolution	0.1ppm
Temperature Range	-20°C to +50°C
Pressure Range	Atmospheric ± 10%
Pressure Coefficient	No data
T₈₀* Response Time	≤60 seconds
Relative Humidity Range	15 to 90% non-condensing
Typical Baseline Rang (pure air)	0 to +0.5ppm equivalent
Maximum Zero Shift (+20°C to +40°C)	-0.2ppm equivalent
Long Term Output Drift	<2% signal loss/month
Recommended Load Resistor	33Ω
Bias Voltage	Not required
Repeatability	2% of signal
Output Linearity	Linear

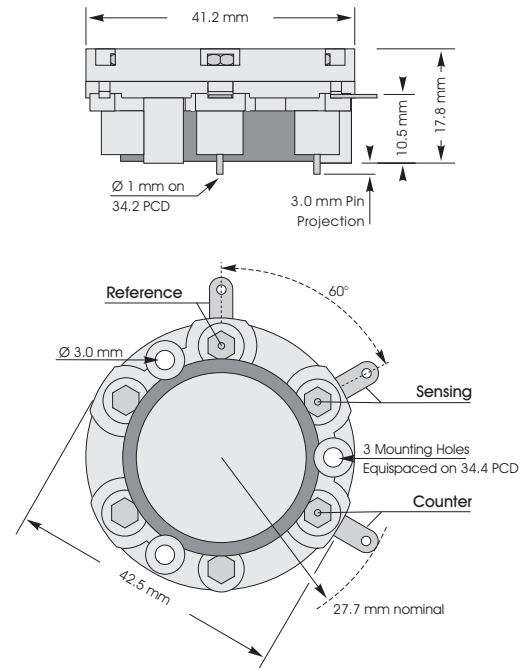
*T₈₀ : Time taken for signal to reach 80% of final signal.

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

Physical Characteristics

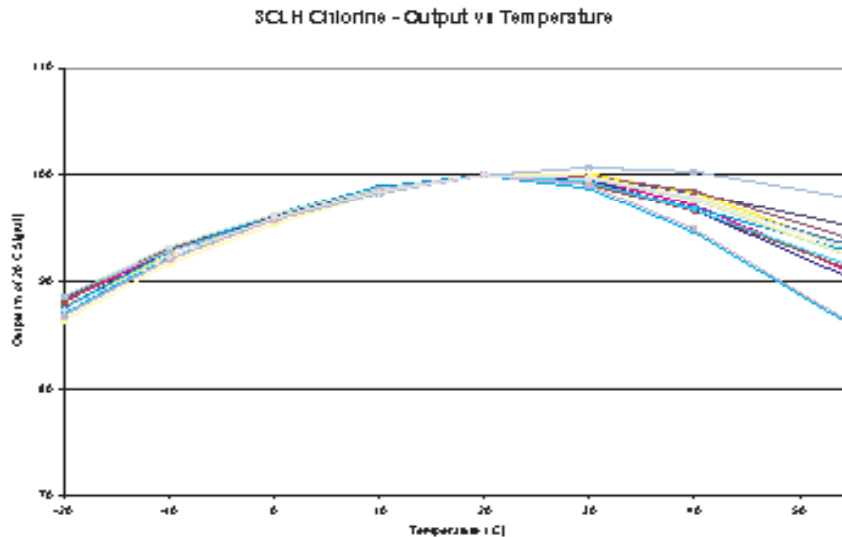
Colour of Ring	Brown
Weight	22g
Position Sensitivity	None
Storage Life	Six months in CTL container
Recommended Storage Temperature	0-20°C
Warranty Period	12 months from date of despatch

Outline Dimensions



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

Chlorine CiTiceL[®] Specification



Ordering Information

The 3CLH Chlorine 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 3CLH:-** With side tag and PCB pin connections - **3CLH**
 With side tag connection - **3CLH(S)**
 With gold-plated PCB pin connection - **3CLH(G)**

Cross-sensitivity Data

CiTiceLs may exhibit a response to certain gases in a sample other than the target gas. 3CLH 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).

Gas	Conc.	3CLH	Gas	Conc.	3CLH
Carbon monoxide:	300ppm	0ppm	Hydrogen:	100ppm	0ppm
Hydrogen sulphide:	15ppm	≈-1.5ppm	Hydrogen cyanide:	10ppm	0ppm
Sulphur dioxide:	10ppm	-0.1<x\$<0ppm	Hydrogen chloride:	5ppm	0ppm
Nitric oxide:	35ppm	0ppm	Ethylene:	100ppm	0ppm
Nitrogen dioxide:	5ppm	≈5ppm			

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

SAFETY NOTE

This sensor is designed to be used in safety critical applications. To ensure that the sensor and/or instrument in which it is used, are operating properly, it is a requirement that the function of the device is confirmed by exposure to target gas (bump check) before each use of the sensor and/or instrument. Failure to carry out such tests may jeopardize the safety of people and property.

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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.