

## 3CLH CiTiceL<sup>®</sup>

### Performance Characteristics

<b>Nominal Range</b>	0-20ppm
<b>Maximum Overload</b>	250ppm
<b>Expected Operating Life</b>	Two years in air
<b>Output Signal</b>	1.0 ± 0.25 µA/ppm
<b>Resolution</b>	0.1ppm
<b>Temperature Range</b>	-20°C to +50°C
<b>Pressure Range</b>	Atmospheric ± 10%
<b>Pressure Coefficient</b>	No data
<b>T<sub>80</sub>* Response Time</b>	≤60 seconds
<b>Relative Humidity Range</b>	15 to 90% non-condensing
<b>Typical Baseline Rang (pure air)</b>	0 to +0.5ppm equivalent
<b>Maximum Zero Shift (+20°C to +40°C)</b>	-0.2ppm equivalent
<b>Long Term Output Drift</b>	<2% signal loss/month
<b>Recommended Load Resistor</b>	33Ω
<b>Bias Voltage</b>	Not required
<b>Repeatability</b>	2% of signal
<b>Output Linearity</b>	Linear

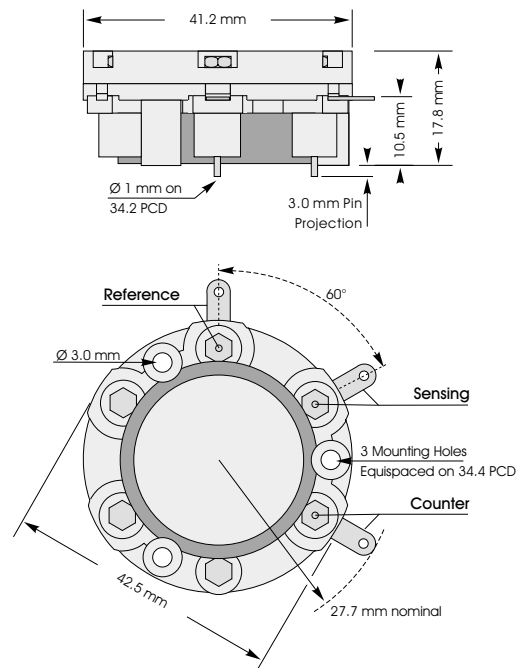
\*T<sub>80</sub> : Time taken for signal to reach 80% of final signal.

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

### Physical Characteristics

<b>Colour of Ring</b>	Brown
<b>Weight</b>	22g
<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 Dimensions



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

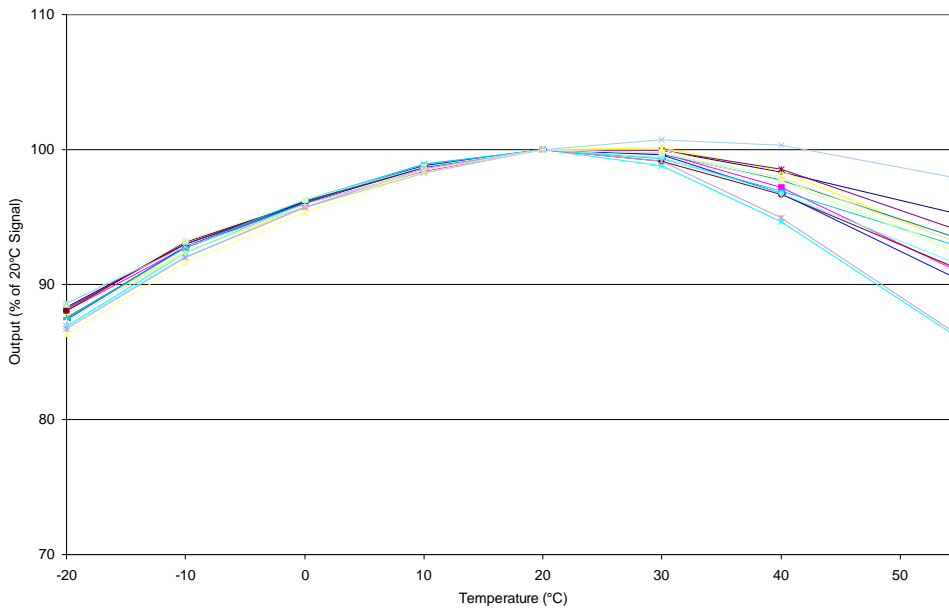
**Distributed by:**

Shawcity Ltd  
91-92 Shrivenham Hundred Business Park  
Watchfield, Oxfordshire, SN6 8TY  
Tel: 01793 780622  
Email: sensororders@shawcity.co.uk  
www.shawcity.co.uk

# Chlorine CiTiceL<sup>®</sup> Specification



**3CLH Chlorine - Output vs Temperature**



## 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).

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

\*\*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.