

## SureCell - Cl<sub>2</sub>

Innovation, Quality and Expertise for Gas Detection.

### Operating Performance

Operating Principle	3-electrode electrochemical
Gas Detected	Chlorine
Measurement Range	0-20 ppm
Maximum Overload <sup>2</sup>	50 ppm
Expected Operating Life	2 years in air
Output Signal	0.50 ±0.10µA per ppm
Temperature Range	Continuous: -20°C to +40°C Intermittent: -40°C to +55°C
Pressure Range	1 atm ±10%
Humidity Range (non-condensing)	Continuous: 15 - 90% RH Intermittent: 0 - 99%RH
Response Time (T <sup>5</sup> <sub>90</sub> )	<60 seconds
Baseline Offset (clean air)	<±0.25ppm equivalent
Zero Shift (-40 to +55°C)	<±0.5ppm equivalent
Long Term Output Drift	<2% per month
Repeatability	<±5%
Linearity	Linear <±3%
Recommended Load Resistor	5Ω
Bias Voltage	Not required

### Intrinsic Safety Data

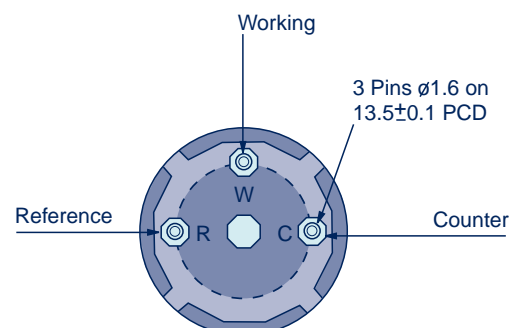
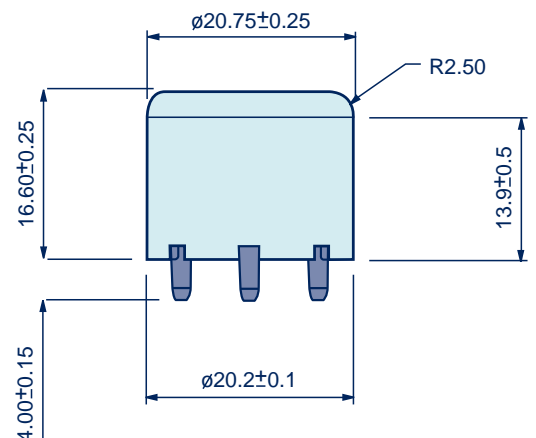
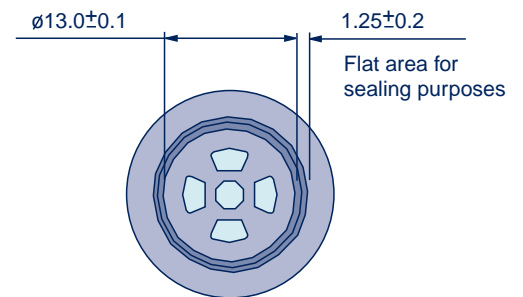
Maximum at 50ppm	0.05mA
Maximum o/c Voltage	0.8V
Maximum s/c Current	<1.0A

### Physical Specification

Weight	5g (approx)
Housing Material	Noryl 110
Storage Life	6 months in sealed container
Storage Conditions	+10°C to +30°C
Orientation	Any
Warranty Period	18 months from date of despatch

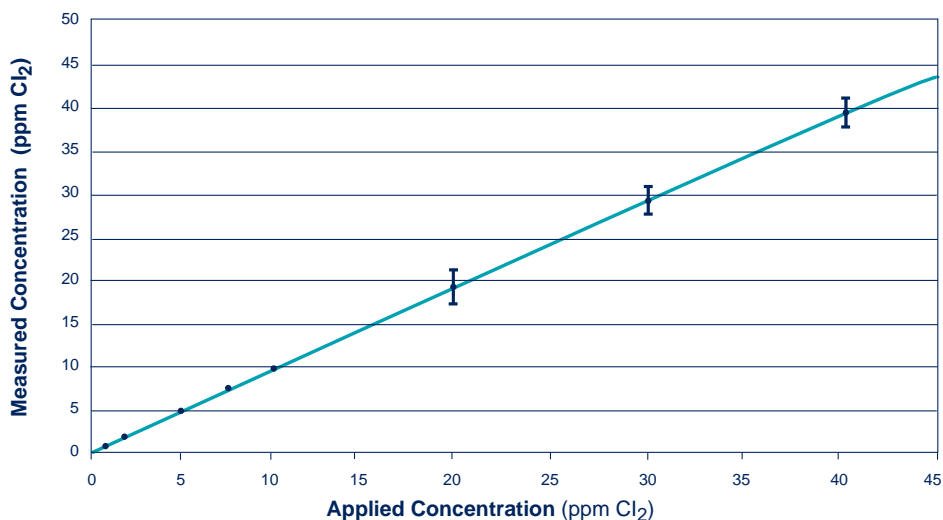
### Ordering Details

Part Number	2112B2035
Order From	Sixth Sense Hatch Pond House, 4 Stinsford Road Poole, Dorset, England BH17 0RZ T: +44 (0) 1202 645770 F: +44 (0) 1202 665331 E: sensors@sixth-sense.com W: www.sixth-sense.com
Code date:	08/03

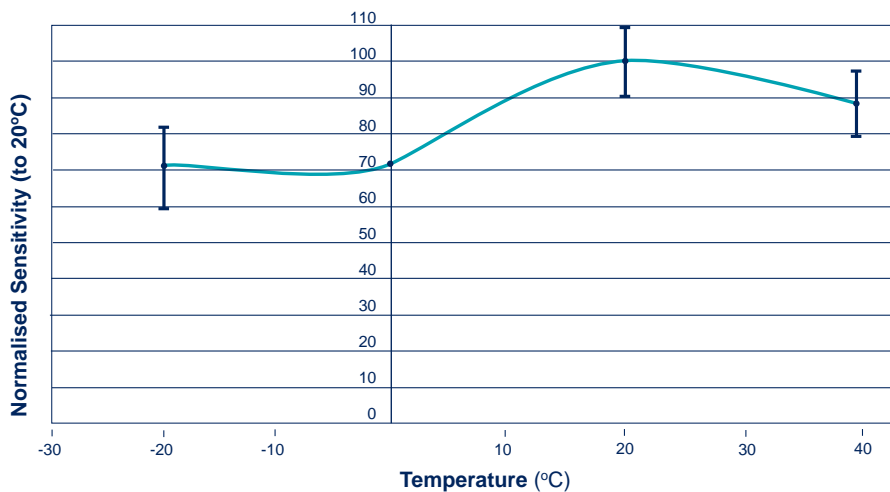




Linearity of Cl<sub>2</sub> SureCells across Measurement Range



Temperature Coefficients of Chlorine SureCells



Cross Sensitivity Table					
Gas	Concentration Used (ppm)	Reading (ppm Cl <sub>2</sub> )	Gas	Concentration Used (ppm)	Reading (ppm Cl <sub>2</sub> )
Hydrogen Sulphide	25	-16.3	Carbon Dioxide	20000	0
Sulfur Dioxide	50	9.1	Ammonia	50	-1.9
Nitrogen Dioxide	50	1.25	Hydrogen Chloride	9	1.25

In the interest of product improvement, Sixth Sense reserves the right to alter design features and specifications without notice. Unless otherwise stated, all product specifications are quoted at standard temperature and pressure.

**\*Note:** The figures in this table are typical values and should not be used as a basis for cross calibration. Cross sensitivities may not be linear and should not be scaled. All data based on a 5 minute gassing. For some cross interferences break through will occur if gas is applied for a longer time period.