# **Chlorine**

SensoriC CI2 3E 50



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#### **FEATURES**

Amperometric 3 electrode sensor cell Low susceptibility to abrupt changes of humidity High dynamic range 0 voltage biased operation

### **TYPICAL APPLICATIONS**

Portable & fixed point applications
TLV monitoring
Water treatment plants, swimming pools, chemical industry

### PART NUMBER INFORMATION

MINI	0441-032-30009
SENSORIC CLASSIC	0441-032-30069
CTL 4 series adaptation	0441-032-30049
CTL 7 series adaptation	0441-032-30079



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### **TECHNICAL SPECIFICATIONS**

Measuring Range 0-50 ppm; typically: 0-5 ppm

Sensitivity Range 450 nA/ppm ± 200 nA/ppm (negative current)

Zero Current at  $20^{\circ}$ C  $< \pm 20$  nA Resolution at  $20^{\circ}$ C < 0.05 ppm

Bias Potential 0 mV

Linearity < 5% full scale

Response Time at 20°C

< 10 s calculated from 2 min. exposure time</li>
 < 30 s calculated from 2 min. exposure time</li>

Long Term Sensitivity Drift < 10% per 6 months

**Operation Conditions** 

Temperature Range -20°C to + 40°C

Humidity Range 10–90% r.H., non–condensing

Effect of Humidity no effect on zero current

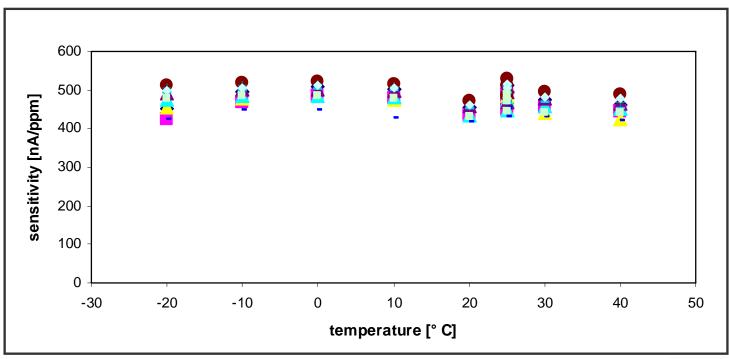
Sensor Life Expectancy > 24 months in air

Warranty 12 months



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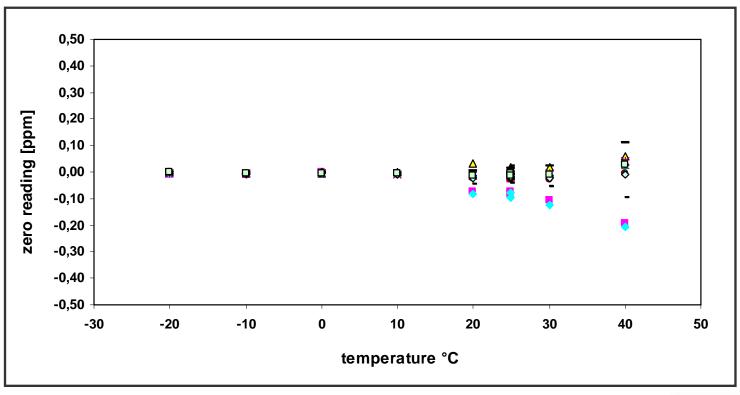
### **OUTPUT vs. TEMPERATURE:**





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### **ZERO READING vs. TEMPERATURE:**





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### **CROSS SENSITIVITIES AT 20°C**

Gas	Concentration	Reading [ppm]
Ammonia	100 ppm	0
Bromine	1 ppm	1.0
Carbon Dioxide	1 %	0
Carbon Monoxide	100 ppm	0
Chlorine Dioxide	1 ppm	0.5
Fluorine	1.0 ppm	0.4
Hydrogen	3000 ppm	0
Hydrogen Sulfide	20 ppm	01
Nitrogen Dioxide	10 ppm	2
Ozone	0.25 ppm	0.05
Sulfur Dioxide	20 ppm	3.5

<sup>1)</sup> Exposure to H<sub>2</sub>S will poison the cell; further exposure to chlorine will re-activate the sensor.

#### Notes:

- 1. Interference factors may differ from sensor to sensor and with life time. It is not advisable to calibrate with interference gases.
- 2. This table does not claim to be complete. The sensor might also be sensitive to other gases.

