# **Hydrogen Chloride**

SensoriC HCI 3E 30



#### **FEATURES**

Amperometric 3 electrode sensor cell Short warm up time Good zero stability Fast response 1:1 cross interference to HBr

#### **TYPICAL APPLICATIONS**

TLV-Monitoring Leak detection Pharmaceutical industry

### PART NUMBER INFORMATION

MINI	1139-034-30009
SENSORIC CLASSIC	1139-034-30069
CTL 4 series adaptation	1139-034-30049
CTL 7 series adaptation	1139-034-30079



#### TECHNICAL SPECIFICATIONS

Measuring Range 0–30 ppm

Sensitivity Range 140 nA/ppm ± 60 nA/ ppm

Zero Current at  $20^{\circ}$ C  $< \pm 100 \text{ nA}$ Resolution at  $20^{\circ}$ C < 0.7 ppmBias Potential 200 mV

Linearity < 5% full scale

Response Time at 20°C

< 30 s calculated from 4 min. exposure time</li>
 < 70 s calculated from 4 min. exposure time</li>

Long Term Sensitivity Drift < 3% per month

**Operation Conditions** 

Temperature Range -20°C to +40°C

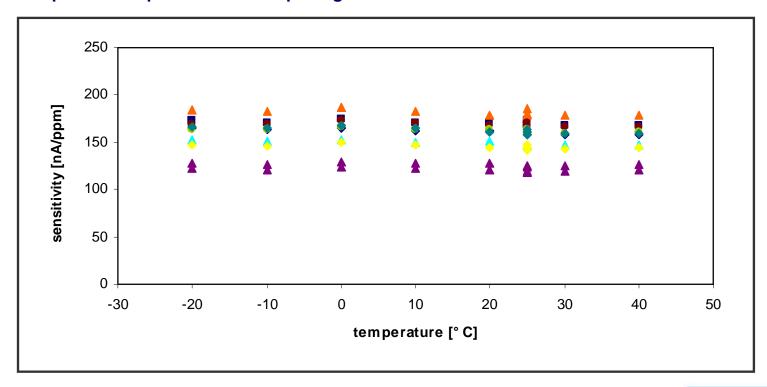
Humidity Range 15–95% r.H., non–condensing

Effect of Humidity high humidity causes HCl absorption

Sensor Life Expectancy > 24 months
Warranty 12 months

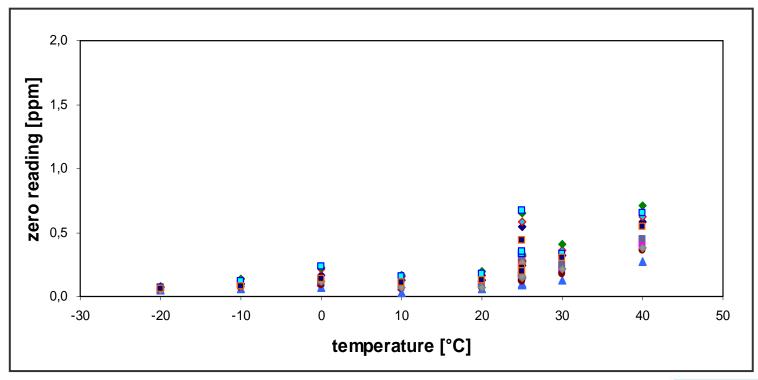


### Temperature dependence of output signal:





### Temperature dependence of zero reading:





#### **CROSS SENSITIVITIES AT 20°C**

Gas	Concentration	Reading [ppm]
Alcohols	1000 ppm	0
Ammonia	100 ppm	0.1
Arsine	0.2 ppm	0.7
Carbon Dioxide	5000 ppm	0
Carbon Monoxide	100 ppm	0
Chlorine	5 ppm	0.3
Hydrocarbons	% range	0
Hydrogen	10000 range	0
Hydrogen Cyanide	20 range	7
Hydrogen Sulfide	20 range	13
Nitric Oxide	100 range	45
Nitrogen	100 %	0
Nitrogen Dioxide	10 ppm	0.3
Phosphine	0.1 ppm	0.3
Sulfur Dioxide	20 ppm	8

#### Notes:

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

