# **Ammonia**

SensoriC NH3 3E 1000



#### **FEATURES**

Amperometric 3 electrode sensor cell Fixed organic gel electrolyte No CO2 interference 0 volt bias operation

#### TYPICAL APPLICATIONS

TLV-monitoring, leakage detection Fixed point applications in cold storages & refrigeration plants No background concentrations of ammonia \*

### PART NUMBER INFORMATION

 SENSORIC CLASSIC
 1854-031-03069

 CTL 4 series adaptation
 1854-031-04049

 CTL 7 series adaptation
 1854-031-07079

#### Note:



<sup>\*</sup> Background concentrations of ammonia might shorten life time of sensor .

### **TECHNICAL SPECIFICATIONS**

Measuring Range 0–1000 ppm

Sensitivity Range 6 nA/ppm ± 3 nA/ppm

Zero Current at 20°C <± 40 nA Resolution at 20°C <15 ppm

Bias Potential 0 mV

Linearity <5% full scale

Response Time at 20°C

t50 <20 s calculated from 5 min. exposure time t90 <120 s calculated from 5 min. exposure time

Long Term Sensitivity Drift <10% per 6 months

**Operation Conditions** 

Temperature Range -40°C to +40°C

Humidity Range 15–90% r.H, non–condensing

Effect of Humidity an abrupt change of r.H. will cause a short term drift of zero

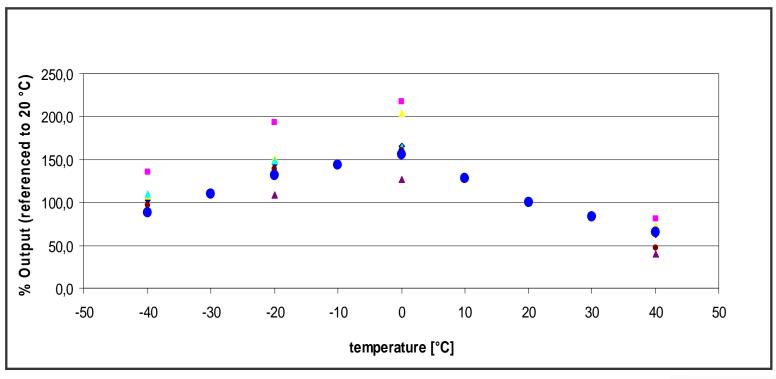
reading

Sensor Life Expectancy > 18 months in air

Warranty 12 months

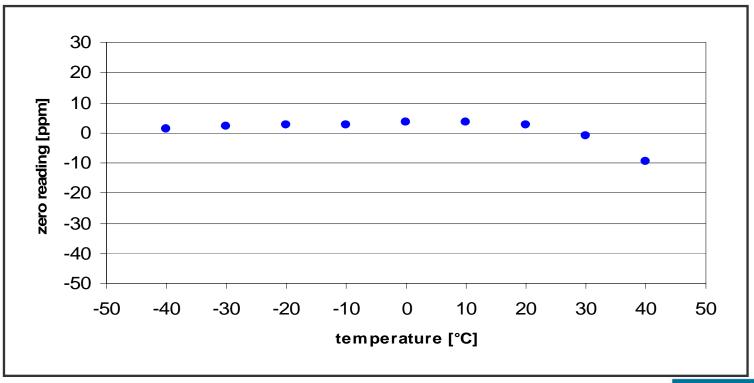


### **OUTPUT vs. TEMPERATURE:**





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





### **CROSS SENSITIVITIES AT 20°C**

Gas	Concentration	Reading [ppm]
Alcohols	1000 ppm	yes / n.d.
Amines		yes <sup>1</sup>
Arsine	0.2 ppm	0
Carbon Dioxide	5000 ppm	0
Carbon Monoxide	100 ppm	95
Chlorine	5 ppm	0
unsat. Hydrocarbons	% range	yes / n.d.
Hydrogen	3000 ppm	3000
Hydrogen Sulfide	20 ppm	40
Hydrogen Chloride	10 ppm	0
Nitrogen Dioxide	10 ppm	0
Phosphine	300 ppm	0
Sulfur Dioxide	20 ppm	5

1) Please contact our Technical Marketing Department for more details

#### Notes:

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

