

Ammonia

SensoriC NH3 3E 100 SE



Rev. 09/2006

SensoriC Sensors are designed and manufactured in
Justus-von-Liebig-Str. 22, D- 53121 Bonn, Germany

SensoriC NH3 3E 100 SE

FEATURES

Amperometric 3 electrode sensor cell
Very stable zero reading
Very selective
Highly sensitive
Hydrous electrolyte

TYPICAL APPLICATIONS

TLV-monitoring, leakage detection
portable & fixed point applications
Food & Refrigeration Industry, General Industry, Semiconductor Industry

PART NUMBER INFORMATION

MINI	1845-932-30009
SENSORIC CLASSIC	1845-932-30069
CTL 4 series adaptation	1845-932-30049
CTL 7 series adaptation	1845-932-30079

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TECHNICAL SPECIFICATIONS

Measuring Range	0–100 ppm
Sensitivity Range	130 nA/ppm ± 30 nA/ppm
Zero Current at 20°C	< ± 100 nA
Resolution at 20°C	< 1 ppm
Bias Potential	0 mV
Linearity	< 10% full scale
Response Time at 20°C	
t50	< 20 s calculated from 5 min. exposure time
t90	< 60 s calculated from 5 min. exposure time
Long Term Sensitivity Drift	< 5% per 6 months
Operation Conditions	
Temperature Range	-20°C to +40°C
Humidity Range	15–90% r.H, non-condensing
Effect of Humidity	
Sensor Life Expectancy	> 24 months in air*
Warranty	12 months

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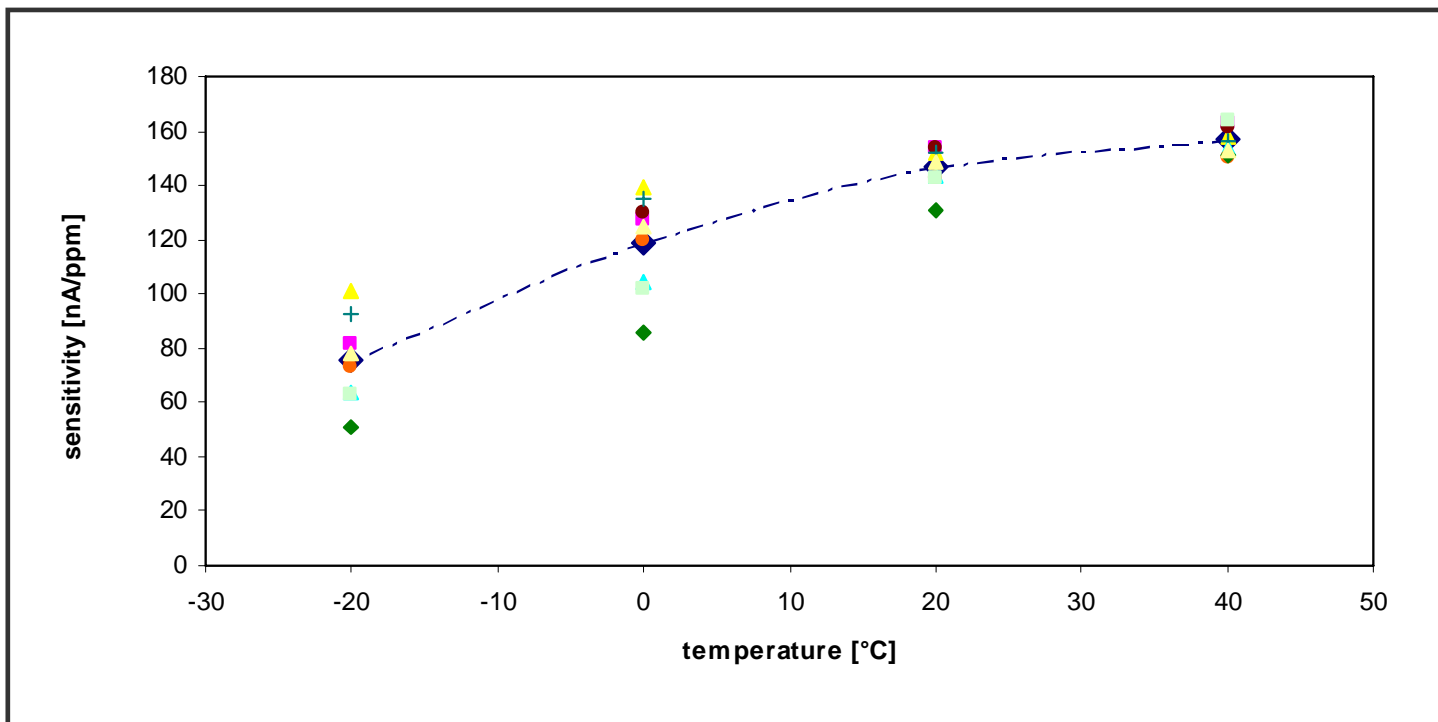
Background concentrations of ammonia might shorten life time of sensor.



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OUTPUT vs. TEMPERATURE:



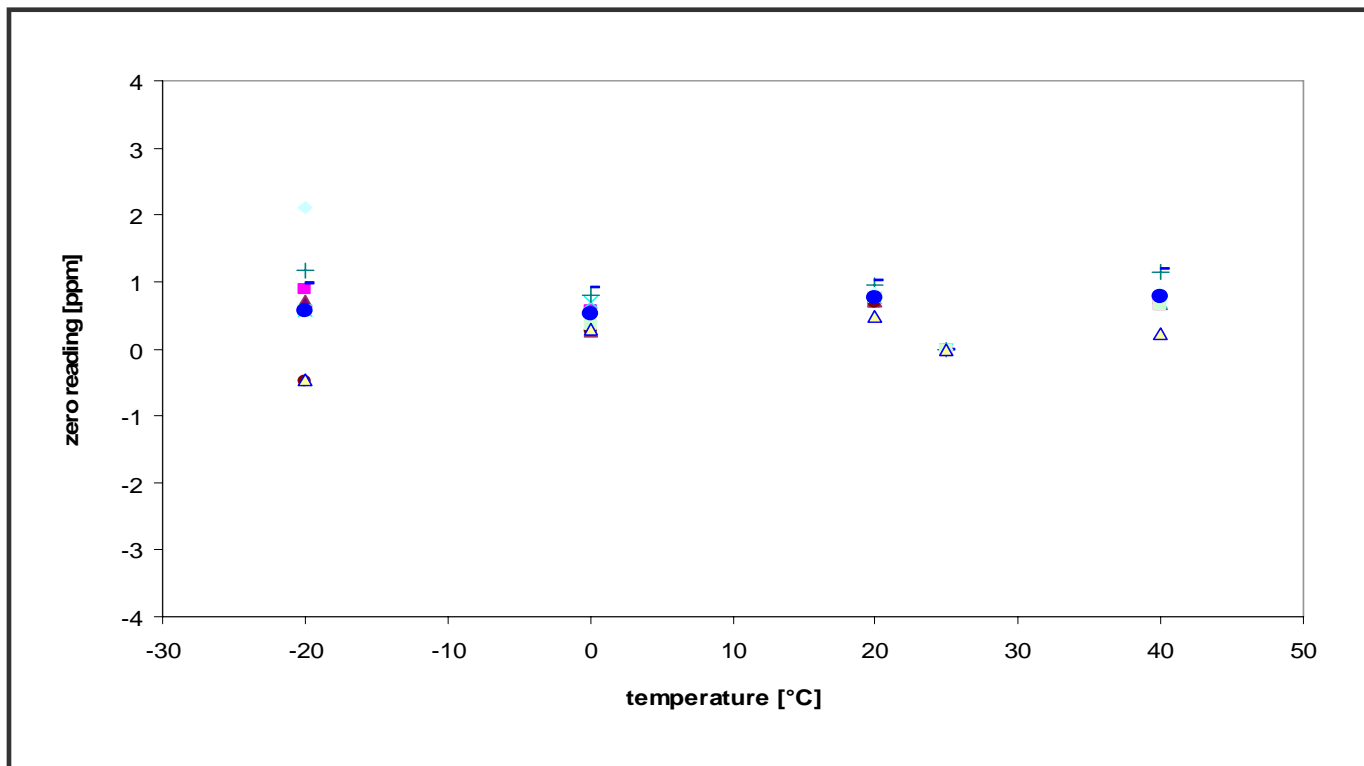
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ZERO READING vs. TEMPERATURE:



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Cross Sensitivities at 20°C

Gas	Concentration	Reading [ppm]
Alcohols	1000 ppm	0
Carbon Dioxide	5000 ppm	0
Carbon Monoxide	100 ppm	0
Hydrocarbons	% range	0
Hydrogen	10000 ppm	0
Hydrogen Sulfide	20 ppm	2 ¹

1) Short gas exposure in minute range.

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.

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