Ammonia Sensoric NH3 3E 100 SE

Rev. 11/2011

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 $20 \,^{\circ}\text{C}$ $< \pm 100 \,\text{nA}$ Resolution at $20 \,^{\circ}\text{C}$ $< 1 \,\text{ppm}$ Bias Potential $0 \,\text{mV}$

Linearity < 10% full scale

Response Time at 20 ℃

t50 < 20 s calculated from 5 min. exposure time t90 < 60 s calculated from 5 min. exposure time</p>

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

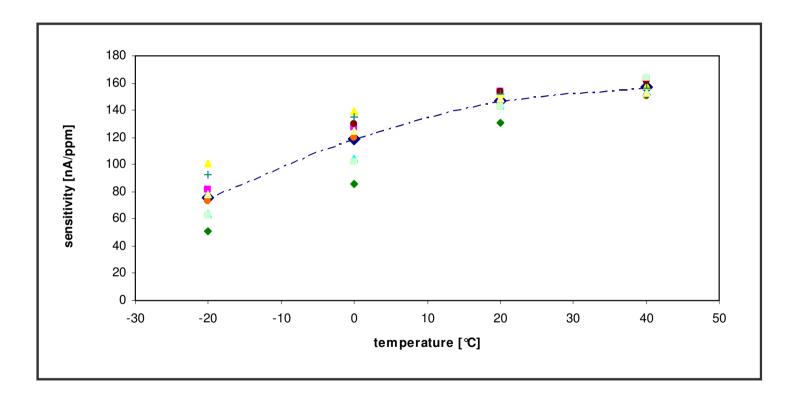
Note:

^{*} Background concentrations of ammonia might shorten life time of sensor .

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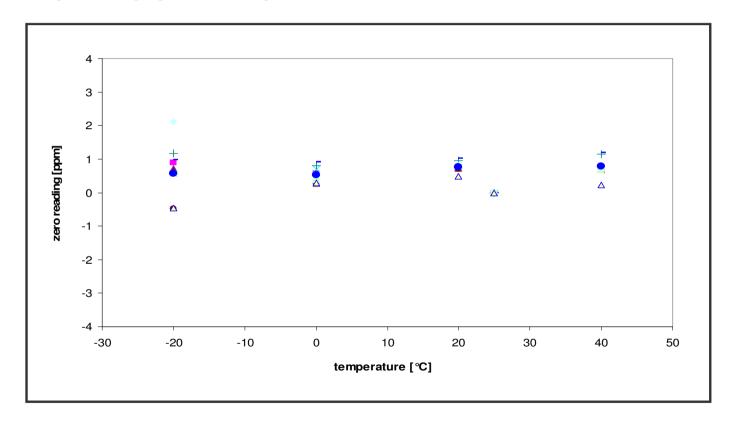
OUTPUT vs. TEMPERATURE:



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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	01
Carbon Monoxide	100 ppm	0
Hydrocarbons	% range	0
Hydrogen	10000 ppm	0
Hydrogen Sulfide	20 ppm	2^{2}

- 1) At higher carbon dioxide concentration (approx. >5%) there can be a negative reading
- 2) 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.

Safety Note

This sensor is designed to be used in safety critical applications. To ensure that the sensor and/or instrument in which it is used, are operating properly, it is a requirement that the function of the device is confirmed by exposure to target gas (bump check) before each use of the sensor and/or instrument. Failure to carry out such tests may jeopardize the safety of people and property.

Attention

Use of the Sensoric range sensors requires complete understanding of the instructions. Before using Sensoric range sensors please carefully read 'Application Notes' which can be found at www.citytech.com under the heading 'Support' -> 'Application Notes' -> 'Sensoric'

Product Safety Data Sheets (PSDS) can be obtained at www.citytech.com under the heading 'Support' -> 'Product Safety Datasheets'

For further assistance on sensor selection and use, please contact a member of the Technical Sales team.