Ammonia

SensoriC NH3 3E 1000 SE



FEATURES

Amperometric 3 electrode sensor cell Low susceptibility to abrupt changes of humidity No CO2 interference High selectivity 0 voltage biased operation

TYPICAL APPLICATIONS

Portable & fixed point applications Food industry, Semiconductor industry, Chemical Industry, General Industry

PART NUMBER INFORMATION

| MINI | 1854-932-30009 |
|-------------------------|----------------|
| SENSORIC CLASSIC | 1854-932-30069 |
| CTL 4 series adaptation | 1854-932-30049 |
| CTL 7 series adaptation | 1854-932-30079 |



TECHNICAL SPECIFICATIONS

Measuring Range 0–1000 ppm

Sensitivity Range 8 nA/ppm ± 4 nA/ppm

Zero Current at 20° C $< \pm 40$ nA Resolution at 20° C < 12 ppm Bias Potential 0 mV

Linearity < 5% full scale

Response Time at 20°C

4 < 20 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control series = 10 < 90 s calculated from 5 min. exposure time control serie

Long Term Sensitivity Drift < 10% per 6 months

Operation Conditions

Temperature Range -20°C to +40°C

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

Effect of Humidity no effect on zero reading

Sensor Life Expectancy > 24 months in air*

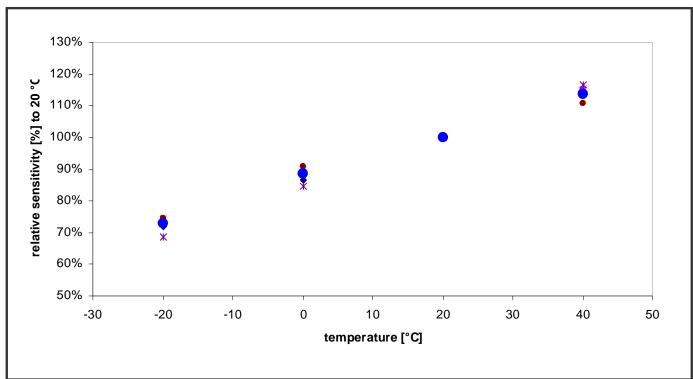
Warranty 12 months

Note:



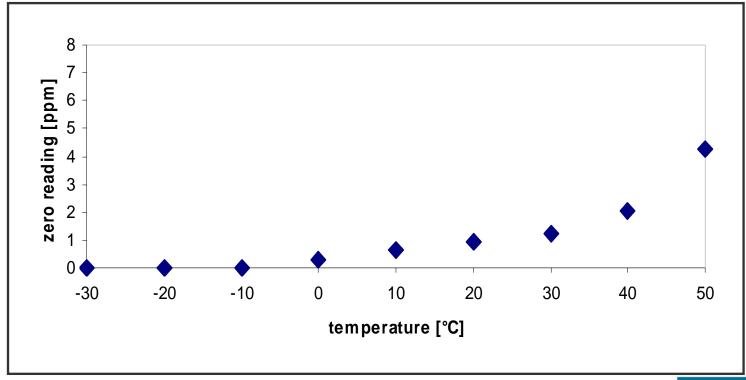
^{*} Background concentrations of ammonia might shorten life time of sensor .

OUTPUT vs. TEMPERATURE:





ZERO READING vs. TEMPERATURE:





CROSS SENSITIVITIES AT 20°C

| Gas | Concentration | Reading [ppm] |
|------------------|---------------|---------------|
| Alcohols | 1000 ppm | 0 |
| Carbon Monoxide | 100 ppm | 0 |
| Chlorine | 5 ppm | 0 |
| Nitrogen Dioxide | 10 ppm | 0 |
| Sulfur Dioxide | 20 ppm | -40 |
| Hydrogen | 3000 ppm | 0 |
| Hydrogen Sulfide | 20 ppm | 2 |

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.

