

Hydrogen Sensor

H2 3E 1%

Product Data Sheet

H2 3E 1%

FEATURES

Amperometric 3 electrode sensor cell
Fast response
Good long term stability

TYPICAL APPLICATIONS

Ambient monitoring
Very sensitive leak detection

PART NUMBER INFORMATION

| | |
|---------------------|----------------|
| MINI | 0361-034-30009 |
| 4 series adaptation | 0361-034-30049 |
| 7 series adaptation | 0361-034-30079 |

The manufacturer deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which the manufacturer assumes legal responsibility. The data are offered solely for consideration, investigation and verification. Any use of this information is subject to federal, state and local laws and regulations.

Product Data Sheet

H2 3E 1%

TECHNICAL SPECIFICATIONS

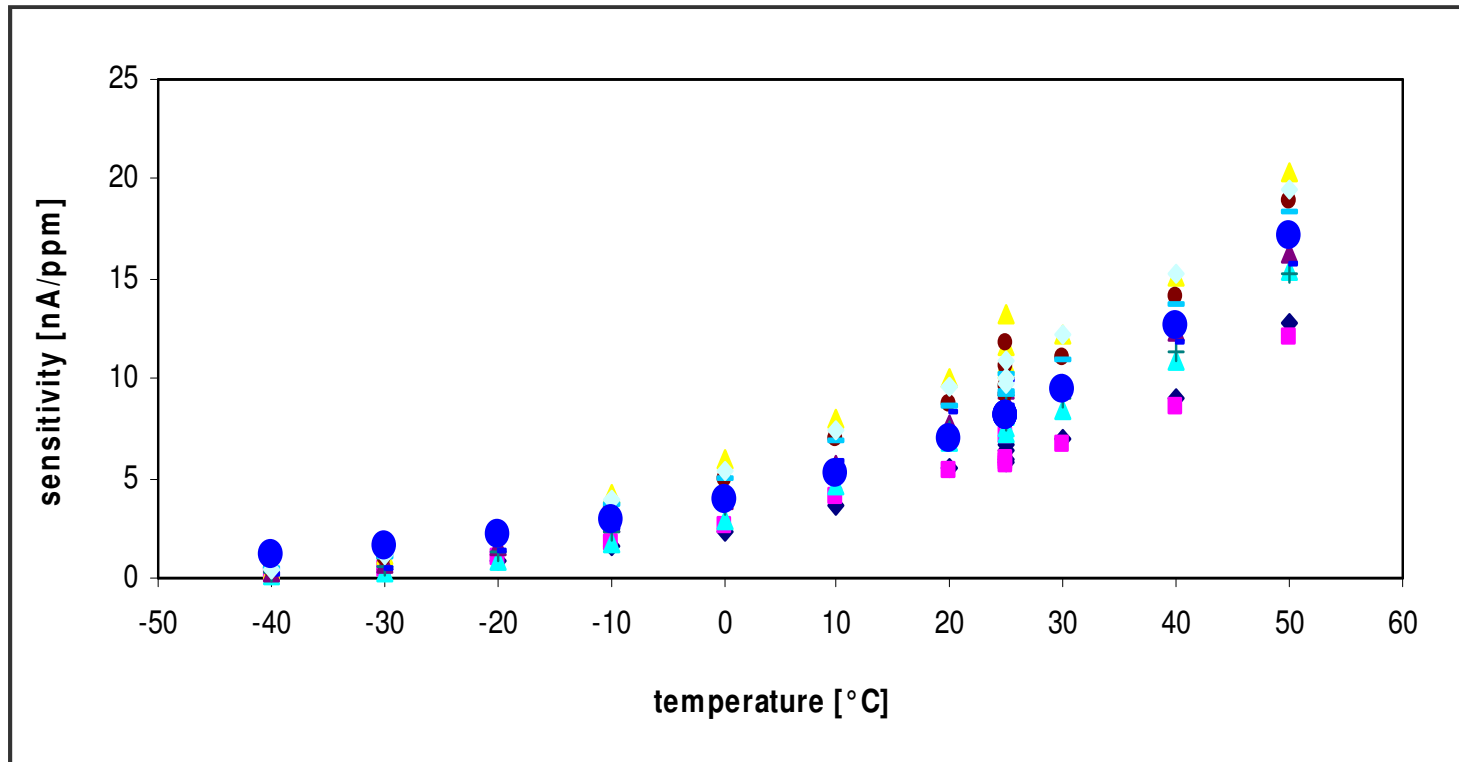
| | |
|-----------------------------|---|
| Measuring Range | 0–10000 ppm |
| Sensitivity Range | 10 nA/ppm \pm 5 nA/ppm |
| Zero Current at 20 °C | < \pm 250 nA |
| Resolution at 20 °C | < 20 ppm |
| Bias Potential | 0 V |
| Linearity | < 5% full scale |
| Response Time at 20 °C | |
| t50 | < 40 s calculated from 2 min. exposure time |
| t90 | < 70 s calculated from 2 min. exposure time |
| 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 |
| Sensor Life Expectancy | > 24 months |
| Warranty | 18 months |

The manufacturer deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which the manufacturer assumes legal responsibility. The data are offered solely for consideration, investigation and verification. Any use of this information is subject to federal, state and local laws and regulations.

Product Data Sheet

H2 3E 1%

OUTPUT vs. TEMPERATURE:

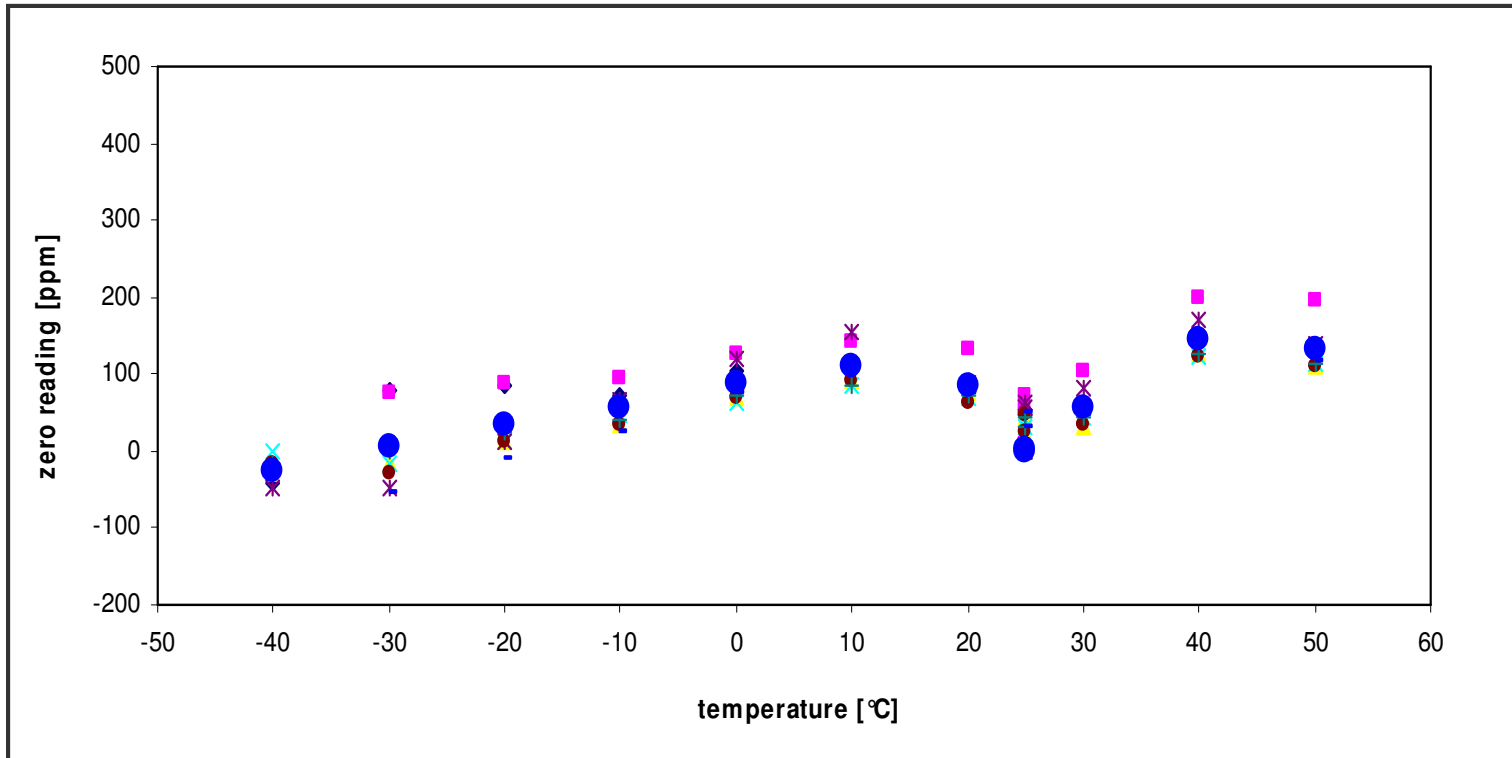


The manufacturer deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which the manufacturer assumes legal responsibility. The data are offered solely for consideration, investigation and verification. Any use of this information is subject to federal, state and local laws and regulations.

Product Data Sheet

H2 3E 1%

ZERO READING vs. TEMPERATURE:



The manufacturer the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which the manufacturer assumes legal responsibility. The data are offered solely for consideration, investigation and verification. Any use of this information is subject to federal, state and local laws and regulations.

Product Data Sheet

H2 3E 1%

CROSS SENSITIVITIES AT 20°C

| Gas | Concentration | Reading [ppm] |
|------------------|---------------|-----------------|
| Ammonia | 100 ppm | 0 |
| Arsine | 0.2 ppm | 0 |
| Carbon Dioxide | 1000 ppm | 0 |
| Carbon Monoxide | 100 ppm | 60 |
| Chlorine | 1 ppm | 0 |
| Ethylene | 500 ppm | yes; n/d |
| Hydrogen Cyanide | 20 ppm | 0 |
| Hydrogen Sulfide | 20 ppm | 0 ¹⁾ |
| Isopropanol | 1100 ppm | yes; n/d |
| Methane | 1 % | 0 |
| Nitrogen Dioxide | 10 ppm | -40 |
| Ozone | 0.25 ppm | 0 |
| Sulfur Dioxide | 5 ppm | 0 |

1) With inboard filter; to remove TLV levels of interfering gases; continuous high level exposure may reduce the efficiency of the filter material.

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.

The manufacturer deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which the manufacturer assumes legal responsibility. The data are offered solely for consideration, investigation and verification. Any use of this information is subject to federal, state and local laws and regulations.

Product Data Sheet

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 this range of sensors requires complete understanding of the instructions. Please carefully read 'Application Notes'.

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

The manufacturer deems the data contained herein as factual, and the opinions expressed are those of qualified experts based on the results of tests conducted. The above data can not be used as a warranty provision or representation for which the manufacturer assumes legal responsibility. The data are offered solely for consideration, investigation and verification. Any use of this information is subject to federal, state and local laws and regulations.