Hydrogen Sensor

SensoriC H2 3E 4 %



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FEATURES

Amperometric 3 electrode sensor cell Resistant to poison gases Good long term stability LEL detection

TYPICAL APPLICATIONS

TLV-monitoring, LEL-detection, fuel cells

PART NUMBER INFORMATION

MINI	0364-034-30009
SENSORIC CLASSIC	0364-034-30069
CTL 4 series adaptation	0364-034-30049
CTL 7 series adaptation	0364-034-30079



TECHNICAL SPECIFICATIONS

Measuring Range 0–4% (100% LEL)

Sensitivity Range $1 \text{ nA/ppm} \pm 0.5 \text{ nA/ppm}$

Zero Current at 20° C $< \pm 100 \text{ nA}$ Resolution at 20° C < 100 ppmBias Potential 0 mV

Linearity < 10% full scale

Response Time at 20°C

< 40 s calculated from 2 min. exposure time
 < 60 s calculated from 2 min. exposure time

Long Term Sensitivity Drift < 10% per 6 months

Operation Conditions

Temperature Range -20°C to +40°C

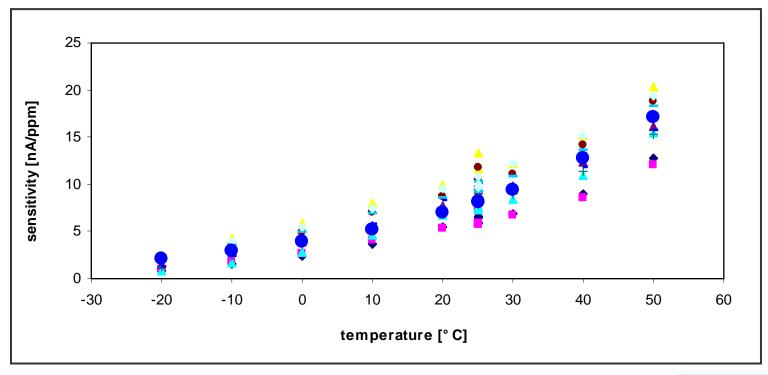
Humidity Range 15–95% r.H., non–condensing

Effect of Humidity no effect

Sensor Life Expectancy > 24 months
Warranty 18 months

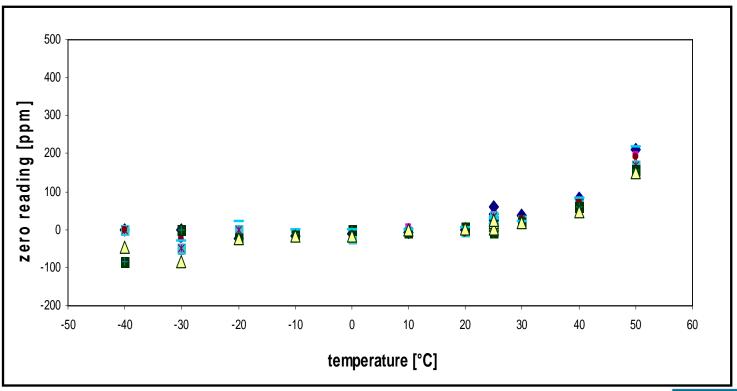


OUTPUT vs. TEMPERATURE:





ZERO READING vs. TEMPERATURE:





CROSS SENSITIVITIES AT 20°C

Gas	Concentration	Reading [ppm]
Ammonia Arsine Carbon Dioxide Carbon Monoxide Chlorine Ethylene Hydrogen Cyanide Hydrogen Sulfide Isopropanol	100 ppm 0.2 ppm 1000 ppm 100 ppm 5 ppm 500 ppm 20 ppm 20 ppm 1100 ppm	0 0 0 0 0 yes; n/d 0 44 ¹ yes; n/d
Methane Nitric Oxide	1 % 100 ppm	0
Nitrogen Dioxide	10 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 adviseable to calibrate with interference gases.
- 2. This table does not claim to be complete. The sensor might also be sensitive to other gases.

