

Arsine

Sensoric AsH3 2E 1



Product Data Sheet

Sensoric AsH3 2E 1

FEATURES

Amperometric 2 electrode sensor cell
fixed organic gel electrolyte
low zero reading
no cross sensitivity to hydrogen
Inboard filter improves selectivity

TYPICAL APPLICATIONS

Portable & fixed point applications
Semiconductor Industry, General Industry

PART NUMBER INFORMATION

MINI	0731-021-30009
SENSORIC CLASSIC	0731-021-30069
CTL 4 series adaptation	0731-021-30049
CTL 7 series adaptation	0731-021-30079

Sensoric 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 Sensoric 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.



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TECHNICAL SPECIFICATIONS

Measuring Range	0–500 ppb
Sensitivity Range	570 nA/ppm \pm 230 nA/ppm
Zero Current at 20 °C	< \pm 10 nA
Resolution at 20 °C	< 20 ppb
Bias Potential	not required
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	20–90% r.H, non–condensing
Effect of Humidity	an abrupt change of humidity will cause a short term drift in zero reading
Sensor Life Expectancy	> 18 months in air
Warranty	10 months

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CROSS SENSITIVITIES AT 20 °C

Gas	Concentration	Reading [ppm]
Ammonia	100 ppm	0.5
Carbon Dioxide	5000 ppm	0
Carbon Monoxide	100 ppm	0
Chlorine	1 ppm	0
Diborane	0.25 ppm	0.1
Silane	5 ppm	0
Hydrocarbons	% range	0
Hydrochloric Acid	5 ppm	0 ¹⁾
Hydrogen	3000 ppm	0
Hydrogen Cyanide	20 ppm	3
Hydrogen Sulfide	1 ppm	0 ¹⁾
Isopropanol	200 ppm	0
Nitrogen	100%	0
Phosphine	0.1 ppm	0.1

1) with filter; without filter the cell will be poisoned at longer exposure rates

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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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.

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