Nitric Oxide Sensor

Sensoric NO 3E 100



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Sensoric Sensors are designed and manufactured in Justus-von-Liebig-Str. 22, D- 53121 Bonn, Germany **Tel**: ++49 (0) 228 52 66 40 **Fax**: ++49 (0) 228 5266439

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FEATURES

Amperometric 3 electrode sensor cell selective good zero stability fast response short warm up time

TYPICAL APPLICATIONS

leakage detection portable & fixed point applications

PART NUMBER INFORMATION

MINI	1945-034-30009
SENSORIC CLASSIC	1945-034-30069
CTL4 series adaptation	1945-034-30049
CTL 7 series adaptation	1945-034-30079

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TECHNICAL SPECIFICATIONS

Measuring Range	0–100 ppm / 0-500 ppm	
Sensitivity Range	45 nA/ppm ± 15 nA/ ppm	
Zero Current at 20 °C	< ± 30 nA after warm up time of at least 12 hrs	
Resolution at 20 °C	< 0.7 ppm	
Bias Potential	200 mV	
Linearity	< 5% full scale	
Response Time at 20 ℃	with recommended load resistor of 100 Ohm	
t50	< 10 s calculated from 4 min. exposure time	
t90	< 20 s calculated from 4 min. exposure time	
Long Term Sensitivity Drift	< 5% per month	
Operation Conditions Temperature Range Humidity Range	-15℃ to +40℃ 20–90% r.H., non–condensing	
Effect of Humidity	exposure in dry air will decrease the sensitivity	
Sensor Life Expectancy	> 24 months	
Warranty	12 months	

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CROSS SENSITIVITIES AT 20 °C

Gas	Concentration	Reading [ppm]
Alcohols	1000 ppm	0
Carbon Dioxide	5000 ppm	0
Carbon Monoxide	100 ppm	0
Chlorine	1 ppm	0
Hydrocarbons	5 ppm	0
Hydrogen	3000 ppm	0
Hydrogen Cyanide	20 ppm	5
Hydrogen Sulfide	10 ppm	yes; n/d
Nitrogen	100 %	0
Nitrogen Dioxide	10 ppm	3.5
Ozone	0.25 ppm	0
Sulfur Dioxide	20 ppm	6
unsat. Hydrocarbons		yes; n/d

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.

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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 <u>www.citytech.com</u> 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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