Nitrogen Dioxide

Sensoric NO2 3E 50
Sensoric NO2 3E 50

FEATURES

Amperometric 3 electrode sensor cell
Good zero stability
Fast response
High resolution

TYPICAL APPLICATIONS

TLV monitoring, parking garages

PART NUMBER INFORMATION

MINI 2241-032-30009
SENSORIC CLASSIC 2241-032-30069
CTL 4 series adaptation 2241-032-30049
CTL 7 series adaptation 2241-032-30079

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.
Sensoric NO2 3E 50

TECHNICAL SPECIFICATIONS

Measuring Range: 0–50 ppm
Sensitivity Range: 200 nA/ppm ± 40 nA/ppm (negative signal)
Zero Current at 20 °C: < ± 20 nA
Resolution at 20 °C: < 0.1 ppm
Bias Potential: 0 mV
Linearity: < 5% full scale

Response Time at 20 °C:
- t50: < 10 s calculated from 4 min. exposure time
- t90: < 30 s calculated from 4 min. exposure time

Long Term Sensitivity Drift: < 5% per month

Operation Conditions
- Temperature Range: -20 °C to +40 °C
- Humidity Range: 15–90% r.H., non–condensing

Effect of Humidity: an abrupt change of r.H. will cause a short term drift of zero reading

Sensor Life Expectancy: > 24 months in air
Warranty: 12 months

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.

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
www.citytech.com
Sensoric NO2 3E 50

OUTPUT vs. TEMPERATURE:

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 cannot 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.

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

www.citytech.com
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.
# Sensoric NO2 3E 50

## CROSS SENSITIVITIES AT 20 °C

<table>
<thead>
<tr>
<th>Gas</th>
<th>Concentration</th>
<th>Reading [ppm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohols</td>
<td>1000 ppm</td>
<td>0</td>
</tr>
<tr>
<td>Carbon Dioxide</td>
<td>5000 ppm</td>
<td>0</td>
</tr>
<tr>
<td>Chlorine</td>
<td>1 ppm</td>
<td>1</td>
</tr>
<tr>
<td>Nitric Oxide</td>
<td>100 ppm</td>
<td>0.4</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>20 ppm</td>
<td>-5</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>3000 ppm</td>
<td>0</td>
</tr>
</tbody>
</table>

### Notes:
1. Interference factors may differ from sensor to sensor and with lifetime. 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.

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

www.citytech.com
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.