Carbon Monoxide

Sensoric CO 3E 300
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FEATURES

Amperometric 3 electrode sensor cell
Very selective
Highly sensitive
Long lifetime

TYPICAL APPLICATIONS

TLV-monitoring, leakage detection
portable & fixed point applications
Oil & Petrochemical industry, parking garages, Mining, Steel Industry

PART NUMBER INFORMATION

MINI 0248-034-30009
SENSORIC CLASSIC 0248-034-30069
CTL 4 series adaptation 0248-034-30049
CTL 7 series adaptation 0248-034-30079

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TECHNICAL SPECIFICATIONS

- Measuring Range: 0-500 ppm
- Sensitivity Range: 70 nA/ppm ± 20 nA/ppm
- Zero Current at 20°C: < 150 nA
- Resolution at 20°C: < 3 ppm
- Bias Potential: 0 mV
- Linearity: < 5% full scale

- Response Time at 20°C:
  - t50: < 10 s calculated from 2 min. exposure time
  - t90: < 30 s calculated from 2 min. exposure time

- Long Term Sensitivity Drift: < 10% per 6 months

- Operation Conditions
  - Temperature Range: -40°C to + 50°C
  - Humidity Range: 15-90 % r.H., non-condensing

- Effect of Humidity: no effect on base line shift, longer exposure to dry gas might decrease the sensitivity

- Sensor Life Expectancy: > 4 years
- Warranty: 24 months

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OUTPUT vs. TEMPERATURE:

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ZERO READING vs. TEMPERATURE:

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## CROSS SENSITIVITIES AT 20°C

<table>
<thead>
<tr>
<th>Gas</th>
<th>Concentration</th>
<th>Reading [ppm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic Acid</td>
<td>sat. vapor</td>
<td>0</td>
</tr>
<tr>
<td>Alcohols (i.e. IPA)</td>
<td>1025 ppm</td>
<td>0</td>
</tr>
<tr>
<td>Ammonia</td>
<td>100 ppm</td>
<td>0.1</td>
</tr>
<tr>
<td>Carbon Dioxide</td>
<td>10 %</td>
<td>0</td>
</tr>
<tr>
<td>Chlorine</td>
<td>1 ppm</td>
<td>0</td>
</tr>
<tr>
<td>Chlorine Dioxide</td>
<td>1 ppm</td>
<td>0</td>
</tr>
<tr>
<td>Gasoline Vapour</td>
<td>% range</td>
<td>0</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>3000 ppm</td>
<td>1000</td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>20 ppm</td>
<td>0</td>
</tr>
<tr>
<td>Nitric Oxide</td>
<td>100 ppm</td>
<td>25</td>
</tr>
<tr>
<td>Nitrogen Dioxide</td>
<td>10 ppm</td>
<td>0</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>20 ppm</td>
<td>0</td>
</tr>
</tbody>
</table>

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.

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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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Sensoric Sensors are designed and manufactured in
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