Classic Line 4-NO₂-20 Sensor

Nitrogen Dioxide Sensor 0-20 ppm

Performance Characteristics

- **Part Number**: CLE-0321-400
- **Nominal Range**: 0 to 20 ppm
- **Maximum Overload**: 250 ppm
- **Sensitivity**: 0.60 ± 0.15 µA/ppm
- **Baseline (20 °C)**: < ± 0.4 µA
- **Baseline Drift**: 0 to -0.5 ppm equivalent (-20 to 40 °C)
- **Resolution**: 0.1 ppm
- **Response Time (T₉₀)**: ≤ 30 seconds
- **Linearity**: Linear
- **Long Term Output Drift**: < 2% signal/month

Outline Dimensions

Operation Conditions

- **Temperature Range**: -20 °C to 50 °C
- **Operating Humidity**: 15 to 90%RH non-condensing
- **Pressure Range**: 90 to 110 kPa
- **Bias Potential**: 0 mV
- **Storage Life**: 6 months in sealed container
- **Storage Temperature**: 0 °C to 20 °C
- **Expected Operating Life**: 2 years in air
- **Warranty**: 12 months from date of despatch

Physical Characteristics

- **Weight**: 5 g (approx)
- **Orientation Sensitivity**: None

Note: PCB sockets are recommended for the sensor pin connection. Soldering to the sensor should be avoided.

All dimensions are in millimeters. All tolerances are ±0.2mm.
Cross-sensitivity Data

<table>
<thead>
<tr>
<th>Gas</th>
<th>Concentration (ppm)</th>
<th>Output Signal (ppm NO₂ equivalent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide</td>
<td>300</td>
<td>0</td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>15</td>
<td>-1.2</td>
</tr>
<tr>
<td>Sulphur Dioxide</td>
<td>5</td>
<td>-5</td>
</tr>
<tr>
<td>Nitric Oxide</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td>Chlorine</td>
<td>1</td>
<td>-1</td>
</tr>
</tbody>
</table>

Notes:
1. All performance specifications are based upon the following environment conditions: 20 °C, 50% relative humidity and 1 atmospheric pressure (100 kPa or ambient pressure).
2. Recommend calibration with target gas. If calibration with a cross sensitivity gas, we cannot ensure the accuracy of calibration and measurement.
3. The cross sensitivity may fluctuate between +/- 30% and may differ from batch to batch or from sensor’s life time.
4. The cross sensitivities are including but not limited to the above gases. It may also respond to other gases.