NITROGEN DIOXIDE NO₂ (2E) SENSOR + 4-20 mA TRANSMITTER

Figure 1. NO₂ sensor with 4-20 mA transmitter
Range 0-20 ppm
Part number: 2112B9999

Features
- Signal 4-20 mA
- Pre-calibrated on 0 – 20 ppm NO₂
- Two-wire system
- Automatic zeroing
- Signal test pins on transmitter
- Accessory installation kit
- Accessory test gas cap

User Benefits
- Standard interface
- Integrates directly with system
- Reduced installation costs
- Reduced maintenance costs
- 4-20 mA signal available on transmitter, allows for one man calibration
- Allows easy assembly into wall mounting boxes
- Suitable to plug onto installation ring to apply test gas mixture

Figure 2. NO₂ sensor; 4-20 mA transmitter; installation kit (sensor holder, protection disc, O-ring, installation ring, installation screws)
NITROGEN DIOXIDE NO₂ (2E) SENSOR
+ 4-20 mA TRANSMITTER

SPECIFICATION

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Detection principle</td>
<td>electrochemical</td>
</tr>
<tr>
<td>Operation</td>
<td>continuous</td>
</tr>
<tr>
<td>Gas entry</td>
<td>by diffusion</td>
</tr>
<tr>
<td>Measuring range</td>
<td>0 – 20 ppm NO₂</td>
</tr>
<tr>
<td>Reproducibility</td>
<td>smaller than 2% of measuring signal</td>
</tr>
<tr>
<td>Response time t90</td>
<td>smaller than 60 sec</td>
</tr>
<tr>
<td>Temperature range</td>
<td>-15 °C up to +40°C</td>
</tr>
<tr>
<td>Humidity range</td>
<td>15-90% relative humidity, non-condensing</td>
</tr>
<tr>
<td>Life time</td>
<td>2 years</td>
</tr>
<tr>
<td>Power supply</td>
<td>20-28 V d.c.</td>
</tr>
<tr>
<td>Signal</td>
<td>4-20 mA, max. load 300 Ohm</td>
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<tr>
<td>Zero adjustment</td>
<td>automatic</td>
</tr>
<tr>
<td>Sensitivity adjustment</td>
<td>via potentiometer</td>
</tr>
<tr>
<td>R.F.I.</td>
<td>according EN 50081-1 resp. EN 50082-2 B</td>
</tr>
<tr>
<td>Recommended storage temp.</td>
<td>+5 °C up to +20°C</td>
</tr>
<tr>
<td>Dimensions</td>
<td>NO₂ Sensor: 20 mm diameter</td>
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<tr>
<td></td>
<td>Height 30 mm incl. terminal block</td>
</tr>
<tr>
<td>Part no</td>
<td>2112B9999</td>
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</tbody>
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Accessories:

- Installation kit: Sensor holder, protection disc, O-ring, installation ring and installation screws suitable for assembling into a wall mounting box. Part no 2112B1012
- Test gas flow cap: Part no: 2112B1010
- Aluminium housing: Gas Measuring System available including sensor, transmitter and installation kit as a complete assembly in aluminium housing. Part no: 2112B9995

Figure 3. NO₂ Gas Measuring System
The NO₂ Nitrogen Dioxide sensor with 4-20mA transmitter and installation kit is also available as a complete housed unit in aluminium housing. Measuring range: 0-20ppm. Part no. 2112B9995
NITROGEN DIOXIDE NO₂ (2E) SENSOR
+ 4-20 mA TRANSMITTER

Potentiometer
for calibration adjustment

Please note: No zero adjustment required as automatically compensated

Test Gas
For calibration, flow required level of Nitrogen Dioxide NO₂ through a test flow cap. Test Gas Cap also available from Euro-Gas. Please ask for details

Two wire screw terminal
for 24V d.c. power supply (+/-10%); +4-20mA signal output.

Please note: No polarity (+/-) requirements

Test pins
for one man calibration;
0.4 – 2.0 volts signal output

Figure 4. Instructions
NO₂ Nitrogen Dioxide sensor with 4-20mA transmitter
Part no. 2112B9999

Two wire screw terminal: The transmitter has a two wire screw terminal to connect a 24V d.c. power supply. There is no polarity requirement across the two screw terminals (i.e. there is no +/- logic).

On the same two wires, you will receive the 4-20 mA signal output. The transmitter is precalibrated. When there is zero NO₂ concentration, you will receive a 4mA signal. With a 20ppm concentration, you will receive a 20mA signal.

Figure 5. Test gas cap
Part no. 2112B1010

Potentiometer: This is used for adjusting the signal to the correct value if you apply a test gas concentration to the transmitter and it gives an incorrect signal.

Test pins: The two test pins allow for one man calibration. Please kindly note that the signal here is not 4-20 mA but 0.4 – 2.0 Volts.

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