

NO₂ SENSOR + 4-20 mA TRANSMITTER



Figure 1. NO₂ sensor with 4-20 mA transmitter

Range 0-20ppm
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

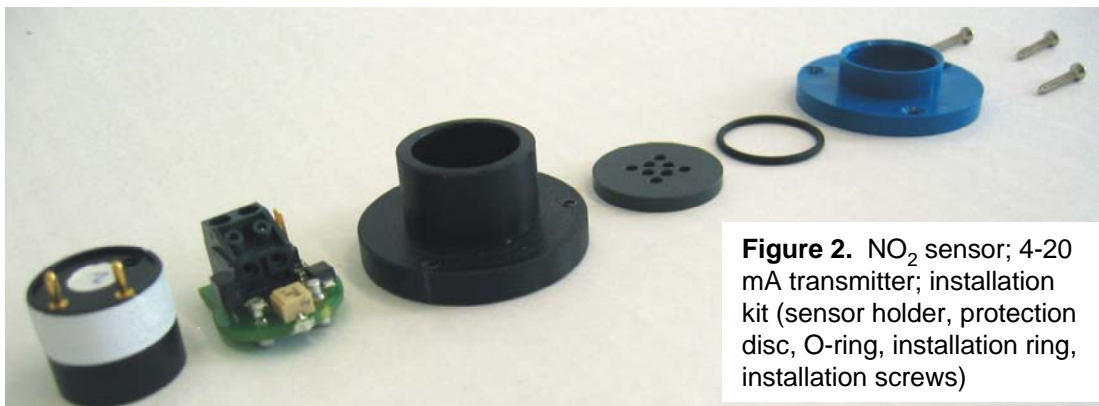


Figure 2. NO₂ sensor; 4-20 mA transmitter; installation kit (sensor holder, protection disc, O-ring, installation ring, installation screws)



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SPECIFICATION

Detection principle:	electrochemical
Operation:	continuous
Gas entry:	by diffusion
Measuring range:	0 – 20 ppm NO ₂
Reproducibility:	smaller than 2% of measuring signal
Response time t₉₀:	smaller than 60 sec
Temperature range:	-15 °C up to +40°C
Humidity range:	15-90% relative humidity, non-condensing

Life time:	2 years
Power supply:	20-28 V d.c.
Signal:	4-20 mA, max. load 300 Ohm
Zero adjustment:	automatic
Sensitivity adjustment:	via potentiometer
R.F.I.:	according EN 50081-1 resp. EN 50082-2 B
Recommended storage temp.:	+5 °C up to +20°C
Dimensions:	NO ₂ Sensor: 20 mm diameter Height 30 mm incl. terminal block
Part no:	2112B9999

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
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Test gas flow cap	Part no: 2112B1010
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Aluminium housing	Gas Measuring System available including sensor, transmitter and installation kit as a complete assembly in aluminium housing. Part no: 2112B9995
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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



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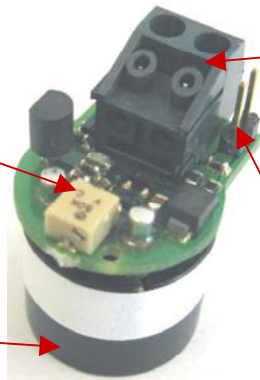
Potentiometer

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 and Calibration Gases 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



Figure 5. Test gas cap
Part no. 2112B1010

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.

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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