

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



**Figure 1. NO₂ sensor
with 4-20 mA transmitter**

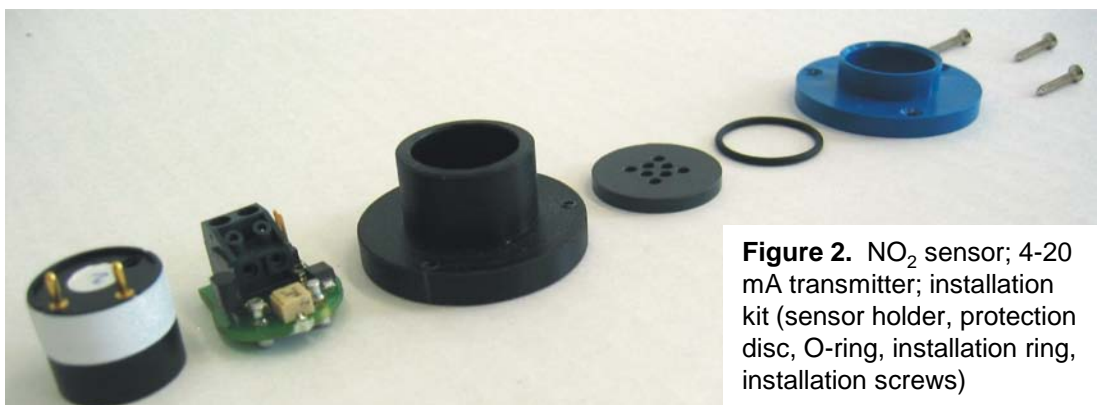
Range 0-20ppm
Part number: 2112B9999

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)**



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

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
------------------	--

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
-------------------	--

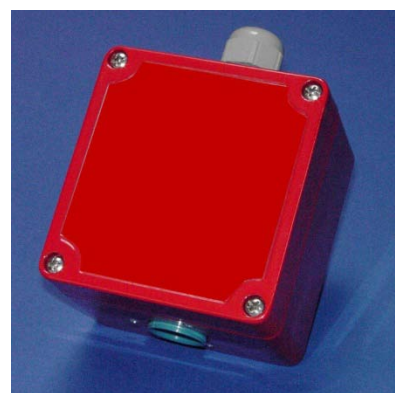


Figure 3. NO₂ Gas Measuring System

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

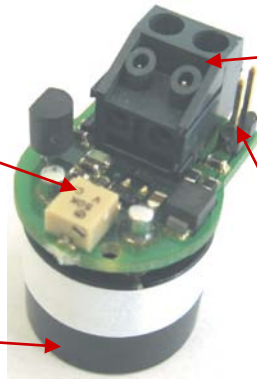
Potentiometer

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



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**.

The data contained in this document is believed to be accurate and reliable. The data given is for guidance only. Euro-Gas Management Services Ltd accepts no liability for any consequential losses, injury or damage resulting from the use of this datasheet or the information contained in it. Customers should test the sensors under their own conditions to ensure that the sensors are suitable for their own requirements and in accordance with the plans and circumstances of the specific project and any standards/regulations pertaining to the country in which the sensors will be utilised. This datasheet is not intended to form the basis of a contract and in the interest of product improvement, Euro-Gas reserves the right to alter design features and specifications without notice. 01/13

