

FECS41-250 - for the Detection of Nitric Oxide

Features:

- * High sensitivity/selectivity to NO
- * Quick response to NO
- * Linear output
- * Long life
- * Stable baseline
- * Unique leak-proof structure

The FECS41-250 is a unique electrochemical-type nitric oxide sensor. Its most notable feature is its unique leak-proof structure, making it ideal for NO monitors and detectors in various fields.

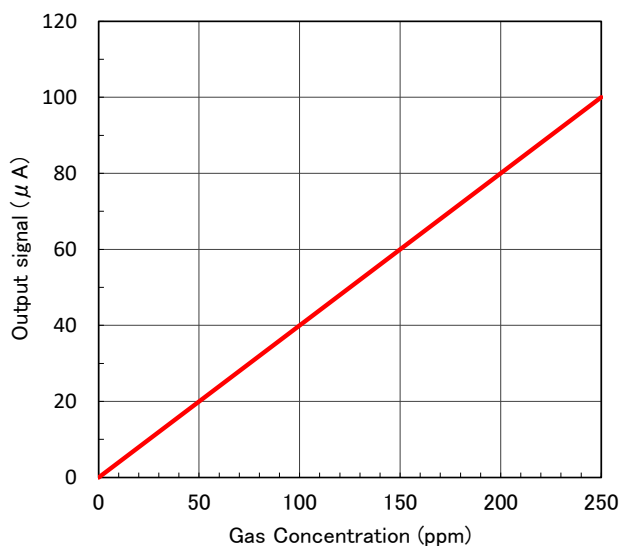
Applications:

- * Portable and fixed installation NO monitors
- * NO detectors
- * Ventilation control for indoor parking garages



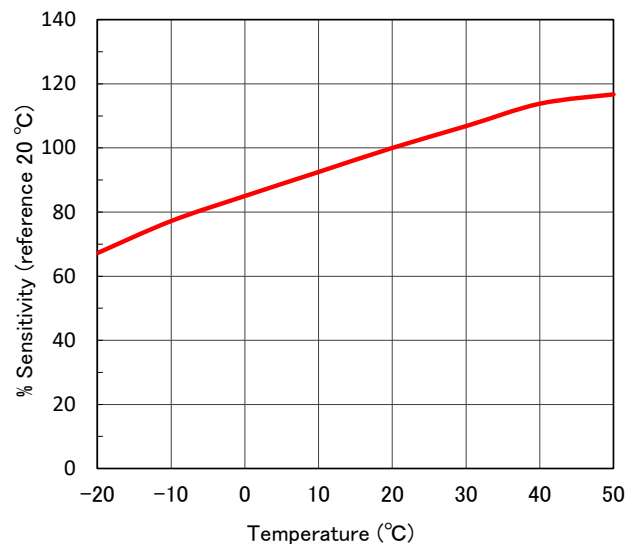
Sensitivity Characteristics:

Typical characteristics (linearity) of FECS41-250 (20°C) are shown below.



Temperature Dependency:

Typical characteristics (temperature dependency) of FECS41-250 are shown below.



Specifications:

Detection Gas	Nitric Oxide
Detection Range	0 ~ 250 ppm
Maximum Overload	1000 ppm
Output Signal	400 ± 80 nA/ppm (*1)
Repeatability	±2% (*1)
Resolution	0.5 ppm (*1)
Baseline Range (Clean air)	0 ~ 3 ppm (typical) (*1)
Response Time (t ₉₀)	< 40 seconds (typical) (*1)
Baseline Shift (-20 ~ 40°C)	< 4 ppm (typical) (*1)
Long Term Output Drift	< 2% /month (*1)
Expected Life Time	> 2 years (*1,*2)
Operating Temperature	-20 ~ 50°C
Operating Humidity	15 ~ 90% RH
Operating Pressure Range	1013 hPa ±10%
Recommended Load Resistor	10Ω
Bias Voltage	+300 mV
Position Sensitivity	None
Recommended Storage Temp.	0 ~ 20°C
Cap Color	Orange
Weight	4.5g (approx.)

*1 Factory test data conditions: 20°C, 50%RH and 1013 hPa.

*2 Life expectancy in normal air under the factory test conditions is defined as the period until sensor output drops to 60% of its original value.

Cross Sensitivity Data :

Table1 shows the typical response of FECS41-250 to interference gases.

Table1 Cross Sensitivity of FECS41-250 (20°C)

Gas	Concentration (ppm)	Typical Nitric Oxide Concentration(ppm)Equivalent
Nitric Oxide	100	100
Carbon Monoxide	300	0
Carbon Dioxide	5,000	0
Hydrogen	1,000	0
Nitrogen Dioxide	5	< 1
Chlorine	10	0
Hydrogen Sulfide	15	< 4
Sulphur Dioxide	20	0
Ammonia	20	0

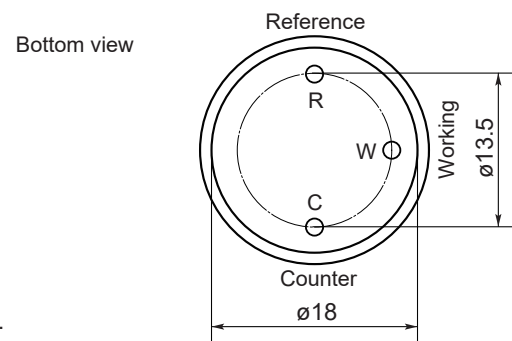
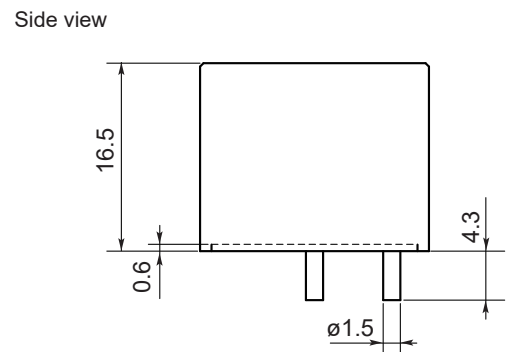
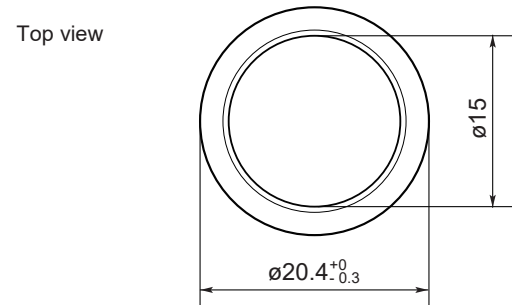
For information on warranty, please refer to Standard Terms and Conditions of Sale of Figaro USA Inc. All sensor characteristics shown in this brochure represent typical characteristics. Actual characteristics vary from sensor to sensor. The only characteristics warranted are those in the Specification table above.

Before purchasing this product, please read the Warranty Statements shown in our webpage by scanning this QR code.



https://figarosensor.com/pdf/Figaro_USA_Sales_T&C.pdf

Dimensions:



Unit: mm

All tolerance ± 0.1mm unless otherwise stated.

The following are the recommended socket pins of FECS-series gas sensors:

Recommended specifications:

- Basically fitting male pin diameter is φ1.5 mm
- Male pin insertion depth is 4.3 mm or more

Socket pins (example):

S.E.R. Corporation: SS 6000-00

Mac Eight Co., Ltd: PD-152

FIGARO USA, INC.

5400 Newport Drive, Suite 19,
Rolling Meadows, IL 60008
Phone: (847)-832-1701

URL: www.figarosensor.com