

FECS40-1000 - for the Detection of Carbon Monoxide

Features:

- * High sensitivity/selectivity to CO
- * Quick response to CO
- * Linear output
- * Long life
- * Stable baseline
- * Unique leak-proof structure

Figaro's Carbon Monoxide Sensor FECS40-1000 is a unique electrochemical-type carbon monoxide sensor. Its most notable feature is its unique leak-proof structure, making it ideal for CO monitors and detectors in various fields.

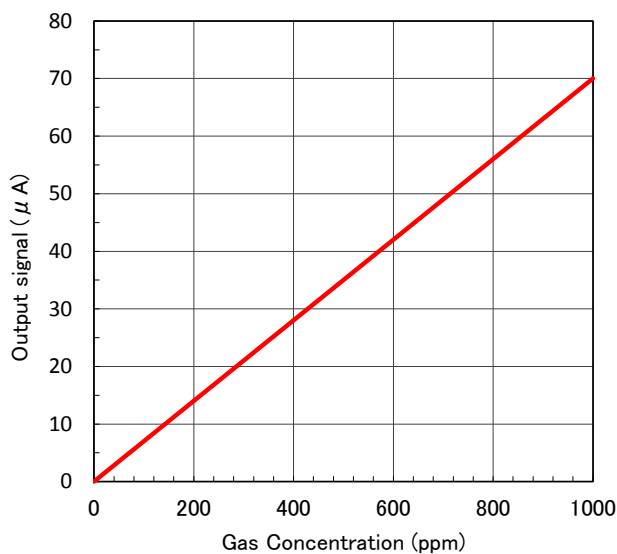
Applications:

- * Portable and fixed installation CO monitors
- * CO detectors
- * Ventilation control for indoor parking garages



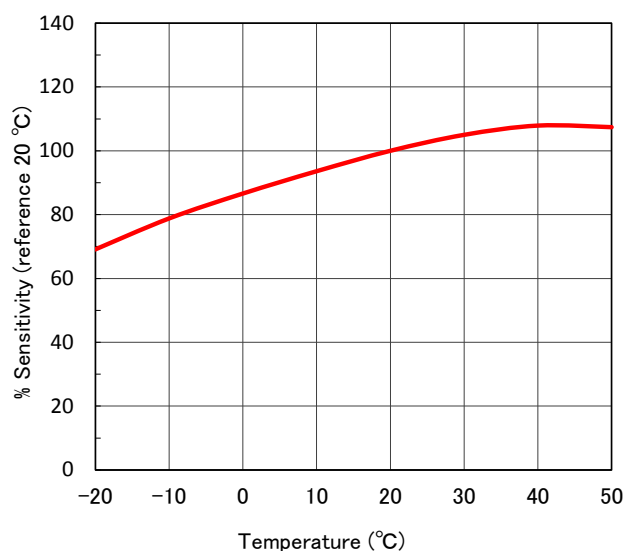
Sensitivity Characteristics:

Typical characteristics (linearity) of FECS40-1000 (20°C) are shown below.



Temperature Dependency:

Typical characteristics (temperature dependency) of FECS40-1000 are shown below.

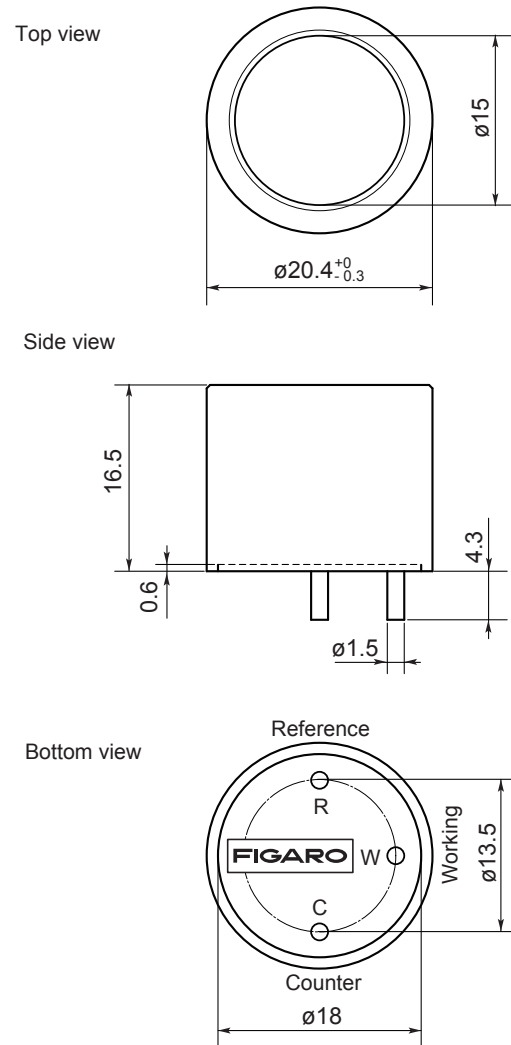


Specifications:

Detection Gas	Carbon Monoxide
Detection Range	0 ~ 1000 ppm
Maximum Overload	1500 ppm
Output Signal	70 ± 15 nA/ppm (*)
Repeatability	±2% (*)
Resolution	1 ppm (*)
Typical Baseline Range (Pure air)	-2 ppm to +3 ppm(*)
Typical Response Time (t ₉₀)	< 30 sec (*)
Baseline Shift (-20 ~ 50°C)	< 10 ppm(*)
Long Term Output Drift	< 5% /year (*)
Expected Life Time	3 years (*)
Operating Temperature	-20 ~ 50°C
Operating Humidity	15 ~ 90% RH
Operating Pressure Range	1013 hPa ±10%
Recommended Load Resistor	10 Ω
Bias Voltage	Not required
Position Sensitivity	None
Recommended Storage Temp.	0 ~ 20°C
Storage Life	6 months
Cap Color	Red
Weight	4.5g (approx.)

(*) Performance data conditions: 20°C, 50%RH and 1013 hPa.

Dimensions:



All dimensions in mm.
All tolerance ± 0.1mm unless otherwise stated.

Cross Sensitivity Data :

Table1 shows the typical response of FECS40-1000 to interference gases.

Table1 Cross Sensitivity of FECS40-1000 (20°C)

Gas	Concentration (ppm)	Typical Carbon Monoxide Concentration(ppm)Equivalent
Carbon Monoxide	100	100
Hydrogen	100	< 40
Carbon Dioxide	5,000	0
Sulphur Dioxide	30	0
Hydrogen Sulfide	30	0
Nitric Oxide	30	< 3
Nitrogen Dioxide	30	0
Ammonia	100	0
Ethanol	200	0

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