



Electrochemical Carbon-monoxide Sensor

# CO-MF-300



## Design Features

- Gas Flow Type
- Measurement for Low Concentration
- Quick Response, Repeatability, Selectivity and Linearity
- Small Temperature Dependency
- Perfect Leak-proof Structure

## Specifications

### Sensitivity Characteristics

Detection Gas	Carbon-monoxide
Detection Range	0 ~ 100ppm
Maximum Overload	500ppm
Output Signal	300 ± 75 nA/ppm
Repeatability	± 2%
Resolution	0.1ppm
Typical Baseline Range (pure air)	± 0.5ppm
Typical Response Time (t90)	< 30seconds
Baseline Shift (-20 ~ 40°C)	< 1.5ppm
Long Term Output Drift	< 1.5% / month
Expected Life Time	3years

Performance data conditions: 20 °C , 50%RH and 1013mBar, using MGK SENSOR recommended circuitry.

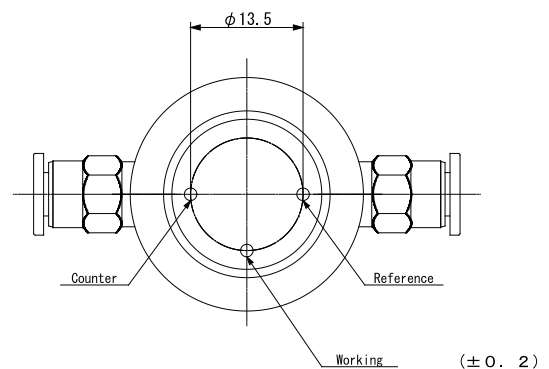
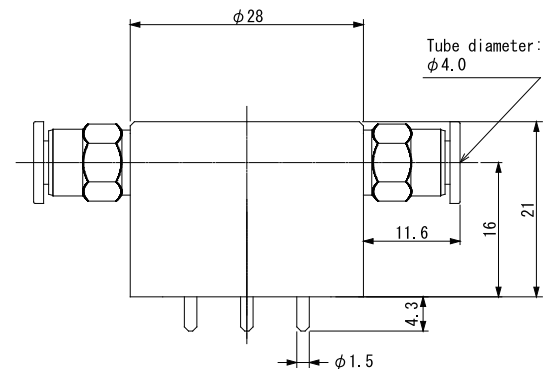
## Operating Conditions

Operating Temperature	-20 ~ 50°C
Operating Humidity	15 ~ 90% RH
Operating Pressure Range	Atmospheric ± 10%
Recommended Load Resistor	10Ω
Bias Voltage	Not required
Position Sensitivity	None
Recommended Storage Temp.	0 ~ 20°C
Storage Life	6months

## Physical Characteristics

Cap Color	Black
Weight	22g (approx.)

## Appearance and Dimensions



All dimensions in mm

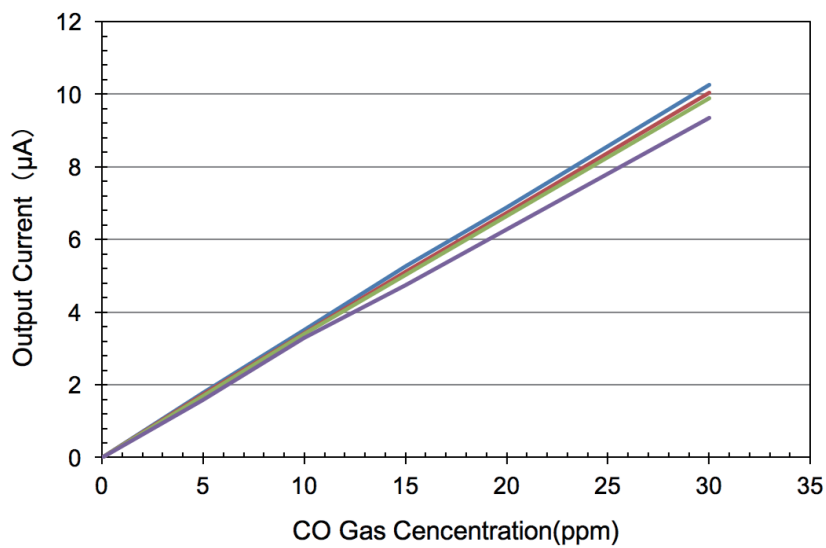
All tolerance +/-0.2 mm unless otherwise stated

NOTE: Do not solder to electrode pins. Use exclusive sockets. Do not blow organic solvents, paints, chemical agents, oils or high concentration gases onto sensor.

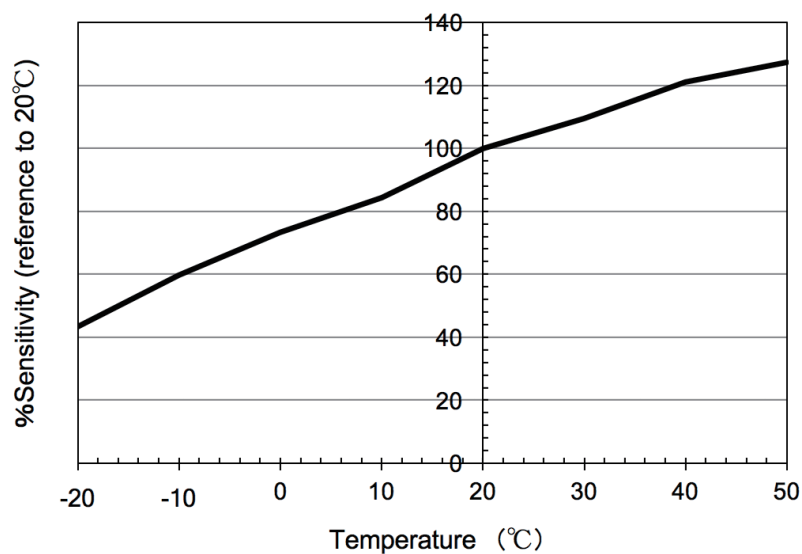
## Typical Cross Sensitivities

Gas	Concentration (ppm)	Typical Carbon-monoxide Concentration (ppm) Equivalent
Carbon Monoxide	10	10
Hydrogen	10	0.9
Carbon Dioxide	500	0
Hydrogen Sulfide	2	0
Nitric Oxide	2	0.2
Nitrogen Dioxide	2	0.02
Ammonia	25	0
IPA	100	0
Ethanol	100	0

## Linearity



## Temperature Dependency



**NOTE:** CO-MF-300 DN-2042 Nov. 2012

As the products may be used outside the control of MGK SENSOR, the information provided is given without legal responsibility. Customer should test under their own conditions, to ensure that the sensors are suitable for their own requirements.

In accordance with the company's policy of continued product improvement, MGK SENSOR reserves the right to make product changes without notice.



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