

## **Electrochemical Carbon Monoxide Sensor**

# **CO-MD-70S**



#### **Features**

- High sensitivity and quick response
- Excellent cross-sensitivities
- Linearity
- Stable output signal
- Long-term stability
- Perfect leak-proof structure

## **Specifications**

### **Sensitivity Characteristics**

Detection Gas	Carbon-monoxide
Detection Range	0 ~ 2000ppm
Maximum Overload	5000ppm
Output Signal	70 ± 15 nA/ppm
Repeatability	± 2%
Resolution	1ppm
Typical Baseline Range (pure air)	-2ppm to +3ppm
Typical Response Time (t90)	< 30seconds
Baseline Shift (-20 $\sim$ 40°C)	< 5ppm
Long Term Output Drift	< 5% / year
Expected Life Time	3years

Performance data conditions: 20  $^{\circ}\text{C}$  , 50%RH and 1013mBar, using MGK SENSOR recommended circuitry.

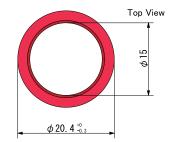
## **Operating Conditions**

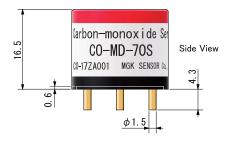
Operating Temperature	-20 ~ 50℃
Operating Humidity	15 $\sim$ 90% RH
Operating Pressure Range	Atmospheric ± 10%
Recommended Load Resistor	10Ω
Bias Voltage	Not required
Position Sensitivity	None
Recommended Storage Temp.	0 ~ 20℃
Storage Life	6months

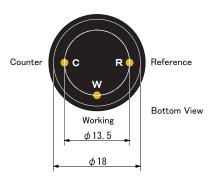
## **Physical Characteristics**

Cap Color	Red
Weight	4.5g (approx.)

#### **Appearance and Dimensions**







All dimensions in mm
All tolerance +/-0.1 mm unless otherwise stated

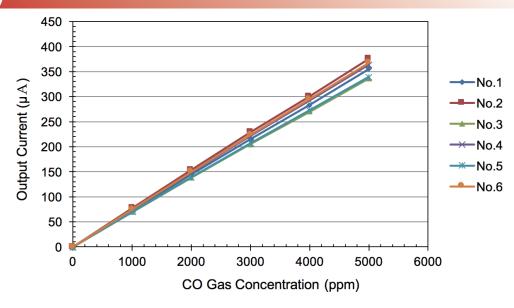
NOTE: Do not solder to electrode pins. Use exclusive sockets.

Do not blow organic solvents, paints, chemical agents, oils or high concentration gases onto sensor.

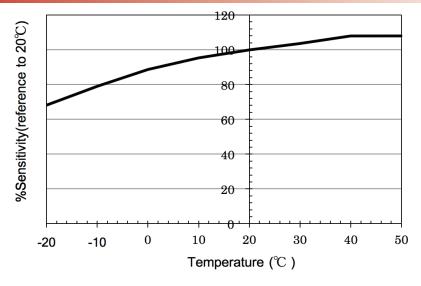
#### **Typical Cross Sensitivities**

Gas	Concentration (ppm)	Typical Carbon-monoxide Concentration (ppm) Equivalent
Carbon Monoxide	100	100
Hydrogen	100	< 40
Carbon Dioxide	5000	0
Sulphur Dioxide	30	0
Hydrogen Sulfide	30	0
Nitric Oxide	30	< 3
Nitrogen Dioxide	30	0
Ammonia	100	0
Ethanol	200	0

## Linearity



#### **Temperature Dependency**



#### **NOTE:** CO-MD-70S DN-2041 Sep. 2011

As the products may be use outside 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.