



# Electrochemical Hydrogen Sulfide Sensor

## H2S-MD-700



### Design Features

- Quick Response and High Sensitivity
- Excellent Selectivity (small sensitivity to CO)
- Linearity
- Stability
- High Reliability
- Perfect Leak-proof Structure

### Specifications

#### Sensitivity Characteristics

Detection Gas	Hydrogen Sulfide
Detection Range	0 ~ 100ppm
Maximum Overload	500ppm
Output Signal	700 ± 150 nA/ppm
Repeatability	± 2%
Resolution	0.1ppm
Typical Baseline Range (pure air)	-0.1 ppm to +0.4 ppm
Typical Response Time (t90)	< 30seconds
Baseline Shift (-20 ~ 40°C)	< 0.5ppm
Long Term Output Drift	< 2% / month
Expected Life Time	> 2years

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

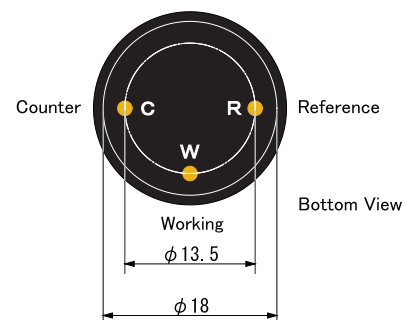
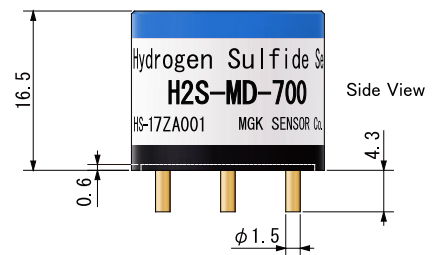
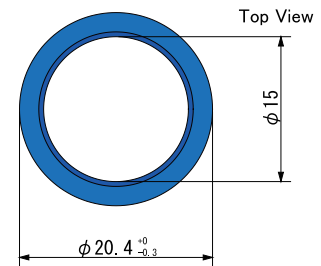
### Operating Conditions

Operating Temperature	-40 ~ 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	Dark Blue
Weight	4.5g (approx.)

### Appearance and Dimensions



All dimensions in mm

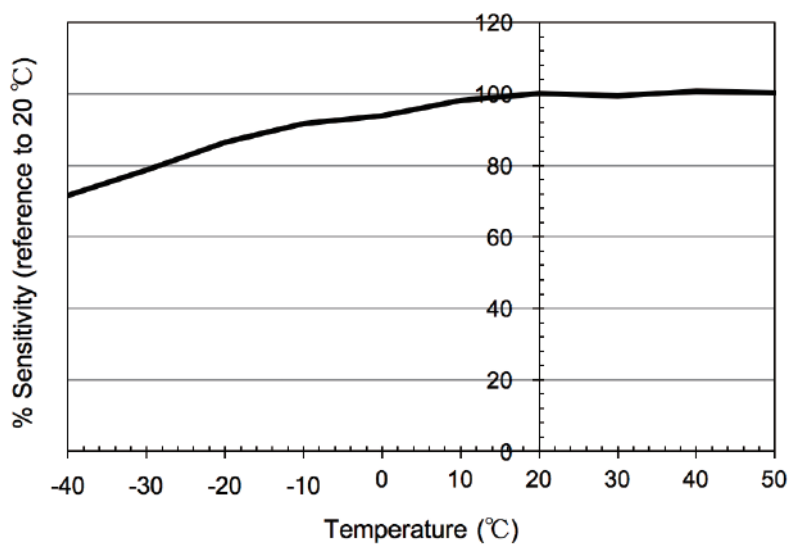
All tolerance +/-0.1 mm unless otherwise stated

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.

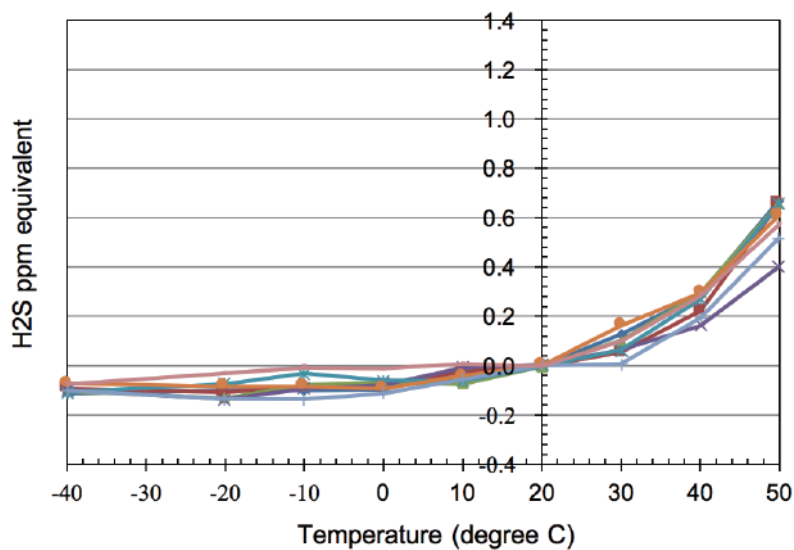
## Typical Cross Sensitivities

Gas	Concentration (ppm)	Typical Hydrogen Sulfide Concentration (ppm) Equivalent
Hydrogen Sulfide	10	10
Carbon Monoxide	300	< 2
Carbon Dioxide	5000	0
Hydrogen	1000	< 3
Sulphur Dioxide	5	0.5
Nitric Oxide	30	0.3
Nitrogen Dioxide	5	-1
Ammonia	100	0
Ethanol	1000	< 2

## Temperature Dependency



## Baseline Shift



**NOTE:** H2S-MD-700 DN-2011 Aug. 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.



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