

FECS50-100 Gas Sensor for Hydrogen Sulfide Detection

characteristic :

- * High sensitivity and high selectivity to hydrogen sulfide
- * Responds very quickly to hydrogen sulfide
- * Very little interference with carbon monoxide
- * linear output
- * long-life
- * baseline stability
- * Unique leak-proof structure

FECS50-100 is a very unique electrochemical hydrogen sulfide sensor. Its most significant features are its little interference from carbon monoxide and its unique leak-proof structure, which make it the ideal choice for hydrogen sulfide monitors and detectors in various fields.

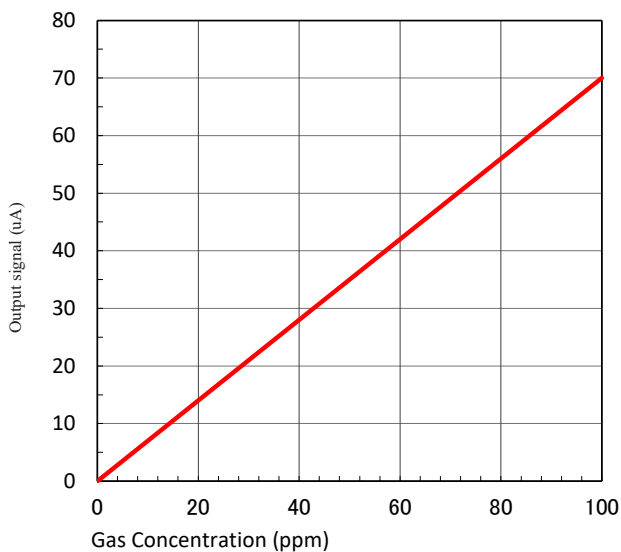
apply :

- Portable and fixed hydrogen sulfide monitors
- * H₂S detector



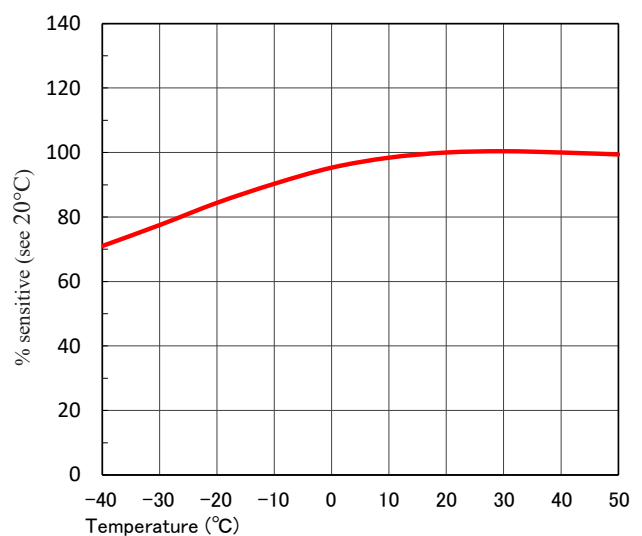
Sensitivity characteristics:

The typical characteristics (linear output) of FECS50-100 (20°C) are shown in the figure below.



Temperature dependent characteristics:

The typical characteristics (temperature dependent) of FECS50-100 are shown in the figure below.

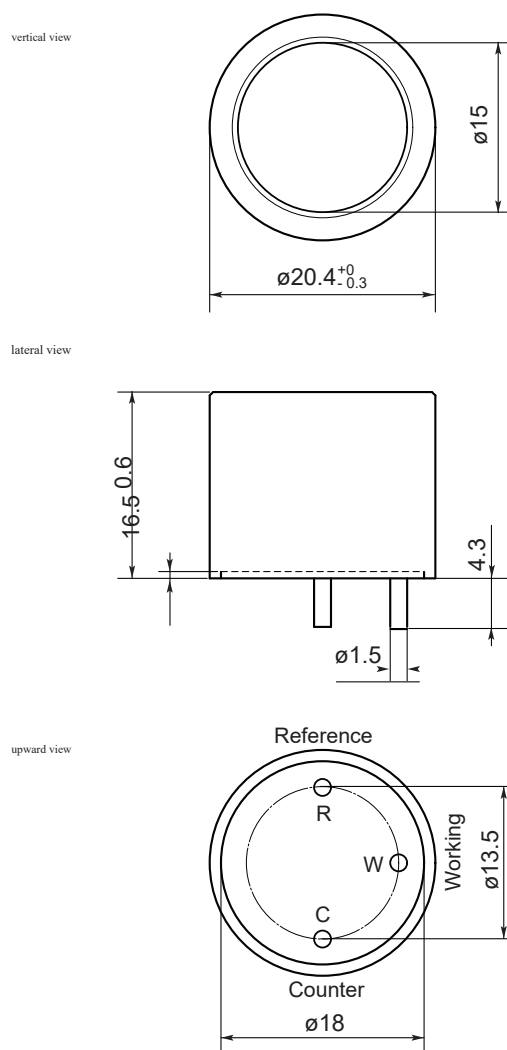


specifications :

Object gas	hepatic gas
Scope of detection	0 ~ 100 ppm
Extreme overload	500 ppm
output signal	700 ± 150 nA/ppm (*)
repeitiveness	±2% (*)
resolution ratio	0.1 ppm (*)
Typical baseline range (pure air)	-0.1 ppm ~ +0.4 ppm(*)
Typical response time (t90)	<30 seconds (*)
Baseline conversion (-20 ~ 40)	< 0.5 ppm(*)
Long-term output drift	<2% / month (*)
expected life	> 2 years (*)
working temperature	-40 ~ 50°C
Humidity at work	15 ~ 90% RH
working pressure range	1013 hPa ± 10%
Recommended load resistance	10 Ω
offset voltage	no requirement
Directional sensitivity	not have
Recommended storage temperature	0 ~ 20°C
Hat color	mazarine
net weight	About 4.5g

(*) Performance parameters prerequisite: 20. C, 50%RH, 1013hPa.

Structure and size:



Unit : mm
Unless otherwise stated, all work is ±0.1mm

Cross-sensitive characteristic data:

Table 1 below shows the typical response of FECS50-100 to various interfering gases.

Table 1 Cross Sensitivity Characteristics of FECS50-100 (20. C)

gas	potency (ppm)	Typical hydrogen sulfide equivalent concentration (ppm)
hepatic gas	10	10
carbon monoxide	300	< 2
carbon dioxide	5,000	0
hydrogen	1000	< 3
sulfur dioxide	5	0.5
nitric oxide	30	0.3
nitrogen dioxide	5	-1
ammonia	100	0
ethyl alcohol	1000	< 2

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