

## FECS43-20 Gas Sensor for Detection of Sulfur Dioxide

### characteristic :

- \* High sensitivity and selectivity to sulfur dioxide
- \* Very fast response to sulfur dioxide
- \* linear output
- \* long-life
- \* The output signal is stable at high temperature
- \* Unique leak-proof structure

### apply :

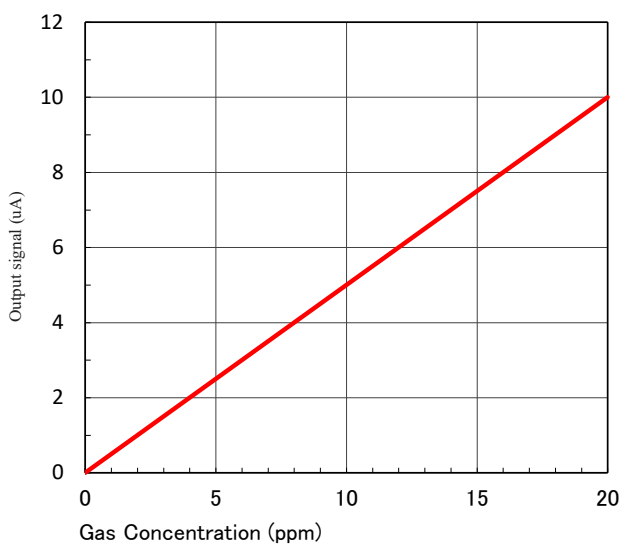
- :: Portable and fixed sulfur dioxide monitors
- :: Sulfur dioxide detectors

FECS43-20 is a very unique electrochemical sulfur dioxide sensor. Its most significant feature is that it can output signal stably at high temperature and its unique leak-proof structure, which makes it the ideal choice for sulfur dioxide monitors and detectors in various fields.



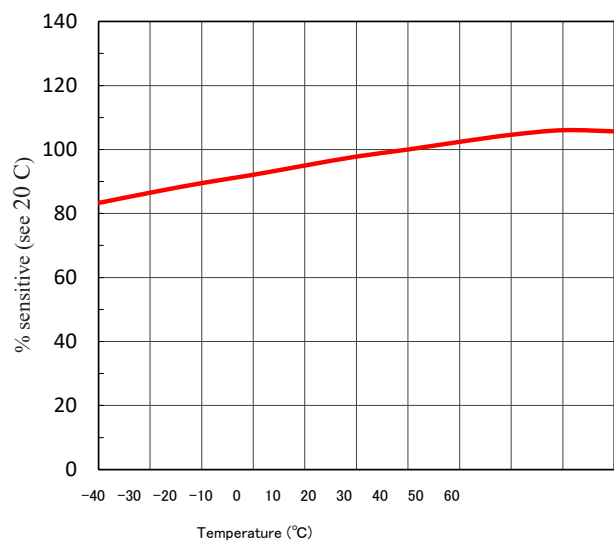
### Sensitivity characteristics:

The typical characteristics (linear output) of FECS43-20(25. C) are shown in the figure below.



### Temperature dependent characteristics:

The typical characteristics (temperature dependent) of FECS43-20 are shown in the figure below.

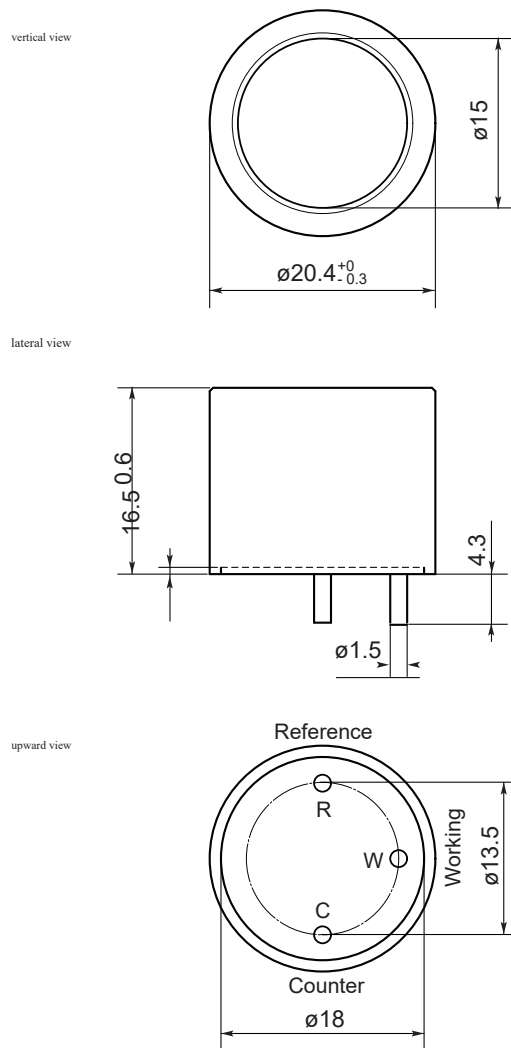


## specifications :

Object gas	sulfur dioxide
Scope of detection	0 ~ 20 ppm
Extreme overload	150 ppm
output signal	500 ± 100 nA/ppm (*)
repetitiveness	±2% (*)
resolution ratio	0.1 ppm (*)
Typical baseline range (pure air)	-0.2 ppm ~ +0.5 ppm equivalent (*)
Typical response time (t90)	<25 seconds (*)
Baseline conversion (-20 to 40°C)	<± 0.2 ppm equivalent(*)
Long-term output drift	<2% / month (*)
expected life	> 2 years (*)
working temperature	-30 ~ 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	green
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 FECS43-20 to various interfering gases.

Table 1 Cross-Sensitivity Characteristics of FECS43-20 (25.C)

gas	potency (ppm)	Typical sulfur dioxide equivalent concentration (ppm)
sulfur dioxide	10	10
carbon monoxide	300	< 1
carbon dioxide	5,000	0
hydrogen	400	< 1
hepatic gas	15	0
nitric oxide	50	1
nitrogen dioxide	10	-10
ammonia	20	0
chlorine	5	-1

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