

FECS45-10 - for the Detection of Chlorine

Features:

- * High sensitivity/selectivity to Cl_2
- * Linear output
- * Long life
- * Stable baseline
- * Unique leak-proof structure

Figaro's Chlorine Sensor FECS45-10 is a unique electrochemical-type chlorine sensor. Its most notable feature is its unique leak-proof structure, making it ideal for Cl_2 monitors and detectors in various fields.

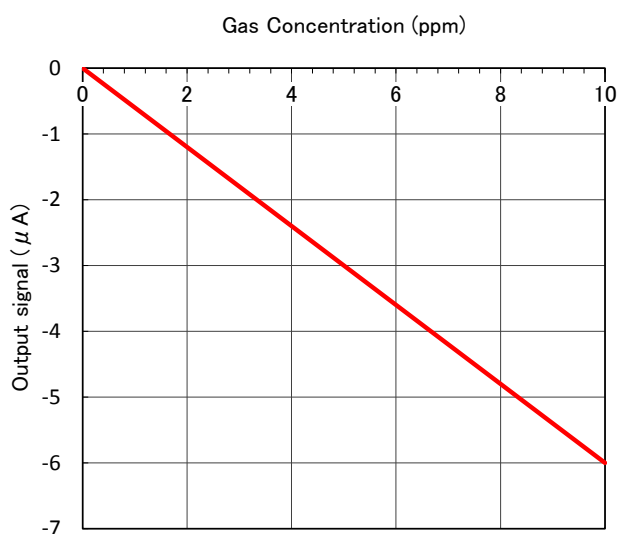
Applications:

- * Portable and fixed installation Cl_2 monitors
- * Cl_2 detectors



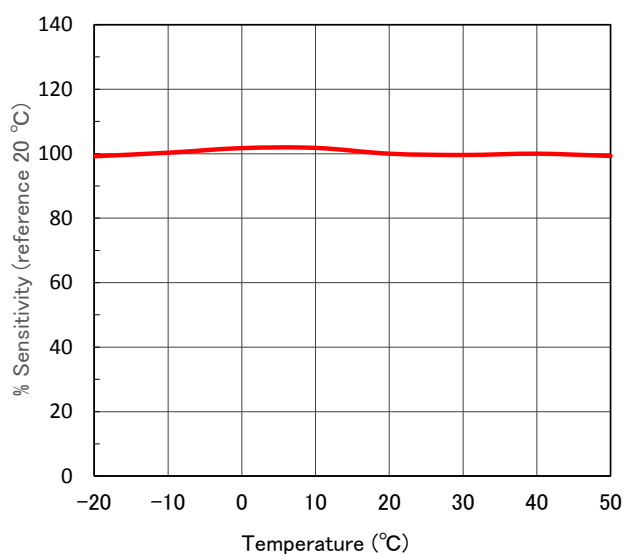
Sensitivity Characteristics:

Typical characteristics (linearity) of FECS45-10 (20°C) are shown below.



Temperature Dependency:

Typical characteristics (temperature dependency) of FECS45-10 are shown below.



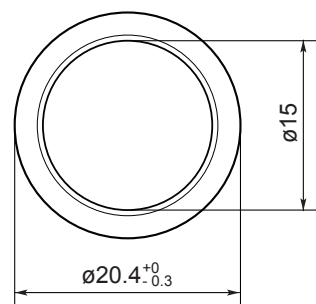
Specifications:

Detection Gas	Chlorine
Detection Range	0 ~ 10 ppm
Maximum Overload	50 ppm
Output Signal	-600 ± 150 nA/ppm (*)
Repeatability	±2% (*)
Resolution	0.1 ppm (*)
Typical Baseline Range (Pure air)	< ±0.2 ppm (*)
Typical Response Time (t ₉₀)	< 60 seconds (*)
Baseline Shift (-20 ~ 50°C)	< ±0.5 ppm (*)
Long Term Output Drift	< 2% /month (*)
Expected Life Time	> 2 years (*)
Operating Temperature	-20 ~ 50°C
Operating Humidity	15 ~ 90% RH
Operating Pressure Range	1013 hPa ±10%
Recommended Load Resistor	33Ω
Bias Voltage	Not required
Position Sensitivity	None
Recommended Storage Temp.	0 ~ 20°C
Storage Life	6 months
Cap Color	Brown
Weight	4.5g (approx.)

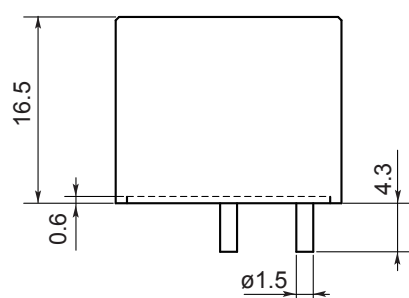
(*) Performance data conditions: 20°C, 50%RH and 1013 hPa.

Dimensions:

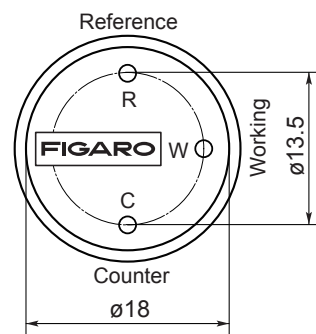
Top view



Side view



Bottom view



All dimensions in mm.

All tolerance ± 0.1mm unless otherwise stated.

Cross Sensitivity Data :

Table1 shows the typical response of FECS45-10 to interference gases.

Table1 Cross Sensitivity of FECS45-10 (20°C)

Gas	Concentration (ppm)	Typical Chlorine Concentration(ppm)Equivalent
Chlorine	10	10
Carbon Monoxide	300	0
Carbon Dioxide	5,000	0
Hydrogen	1,000	0
Nitrogen Dioxide	10	10
Nitric Oxide	35	< -0.3
Hydrogen Sulfide	15	< -7.5
Sulphur Dioxide	20	0
Ethanol	100	0

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