

Premium Line

NT-CL2-PL5

Electrochemical Chlorine Sensor

Description

The NT-CL2-PL5 is a new electrochemical gas sensor with 3 electrodes for the detection of Chlorine in low ranges of gas detection applications. Exhibiting high performance with long-term stability, this compact (20.4 mm diameter) sensor is suitable both for portable and fixed gas detection instruments.

The porous electrode technology enables accurate gas detection with high sensitivity. The mechanical design of the sensor gives optimum gas diffusion characteristics, and the hermetically sealed enclosure prevents costly electrolyte leakage.



Technical Specifications

Detectable Gas:	Chlorine
Detection Range:	0 – 5 ppm
Maximum Overload:	25 ppm
Output Signal:	900 ± 250 nA/ppm ⁽¹⁾
Resolution:	0.05 ppm
Repeatability:	± 2 %
Typical Baseline Range: (pure air)	< 0.15 ppm
Typical Response Time (t ₉₀):	< 60 sec
Baseline Shift: (- 20 ~ 50 °C)	< 0.3 ppm
Long Term Output Drift:	< 2%/month
Expected Life Time:	> 2 years
Weight:	Approximately 4.5 g

Operating conditions

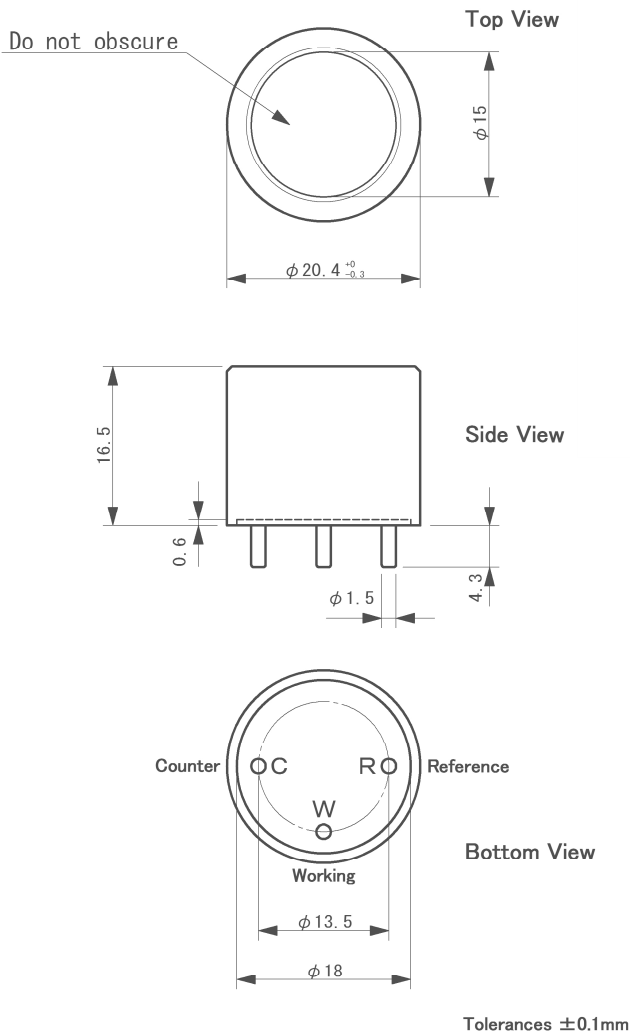
Operating Temperature:	-20 °C to + 50 °C
Operating Humidity:	15 to 90 % RH
Operating Pressure Range:	1atm± 10 %
Recommended Load Resistor:	33 Ω
Bias Voltage:	Not required
Position Sensitivity:	None
Recommended Storage Temp.:	0-20 °C
Storage Life:	Less than 6 months

⁽¹⁾ The output signal of the NT-CL2-PL10 sensor is of opposite polarity to similar sensors such as for CO or H₂S.

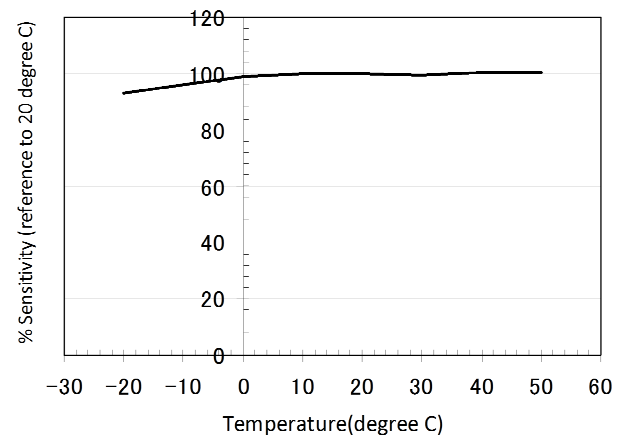
Typical cross sensitivities

Gas	Test Gas Concentration (ppm)	Typical Chlorine Concentration Equivalent (ppm)
Chlorine	5	5
Carbon Monoxide	300	0
Carbon Dioxide	5000	0
Hydrogen	1000	0
Nitrogen Dioxide	10	10
Nitric Oxide	35	< -0.5
Hydrogen Sulfide	15	< -12
Sulphur Dioxide	20	0
Ethanol	100	0

Dimensions



Temperature Dependency



N.E.T. has a policy of continuous development and improvement of its products. As such the specification for the device outlined in the data sheet may be changed without notice.