



TECHNICAL INFORMATION SHEET

NCP-170S-H Pellistor Gas Sensor (Special high temperature range)

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General Description

The Nemoto NCP-170S-H is a catalytic (pellistor) type flammable gas sensor supplied as a matched pair of pellistor elements mounted on a single header and protected by a metal mesh enclosure and can.

The sensor detects and measures the presence of flammable gases and vapours in air, in the range 0-60% of the Lower Explosive Limit (LEL) of the gas or vapour being measured. Very similar to the popular NCP-170S sensor, the NCP-170S-H employs a slightly different header material which allows the sensor to be used within a very wide temperature range (-40°C to +150°C).

The NCP-170S-H exhibits excellent long term zero and sensitivity stability and a high level of resistance to catalytic poisons. The highly automated manufacturing procedure employed by Nemoto results in a repeatable reliable sensor which, unlike similar devices, requires no trimming resistor to enable the detector to be matched with a compensator.

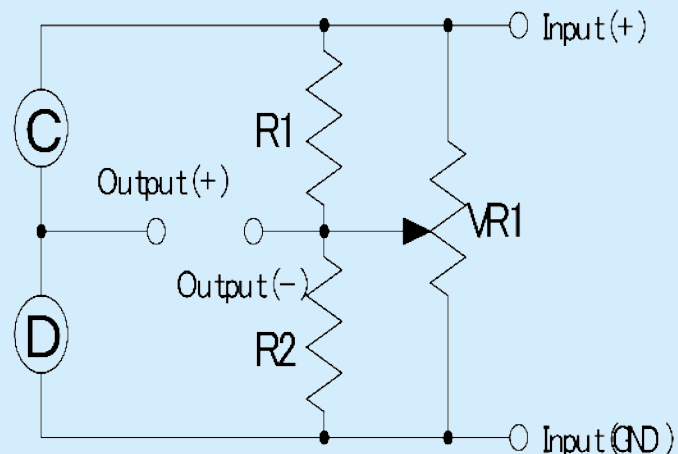


Specifications:

Recommended Voltage:	2.0V +/- 0.1V
Current Drawn:	170 +/- 20mA
Zero Offset:	0mV +/- 30mV
Signal Sensitivity:	50-80mV/% CH4/Air
Range:	0-60% LEL
Accuracy:	+/- 1%LEL(CH4)
Maximum Long Term Drift:	
Span:	< +/- 5% Signal / 3 Month
Zero:	< +/- 1/2 mV/Month
Response Time:	T50: 3 sec T90: 8 sec
Temperature Range:	-40°C to +150°C
Temperature Drift:	(-20°C to +70°C): < +/- 2%LEL
Humidity:	0-100%RH, non-condensing
Humidity Response:	+/- 2%LEL
Linearity:	Effectively Linear to 60%LEL

Recommended Circuit:

Note: The values R1 and R2 are arbitrary, since their function is to balance the bridge. They should both be the same value. 200Ω - 1KΩ is suggested.

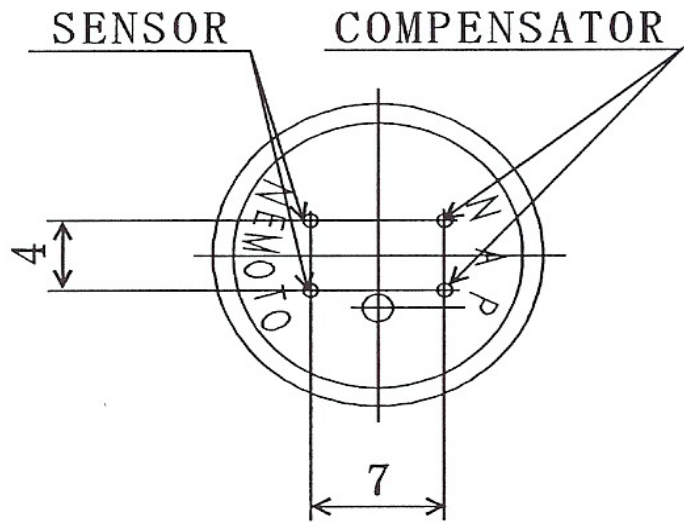
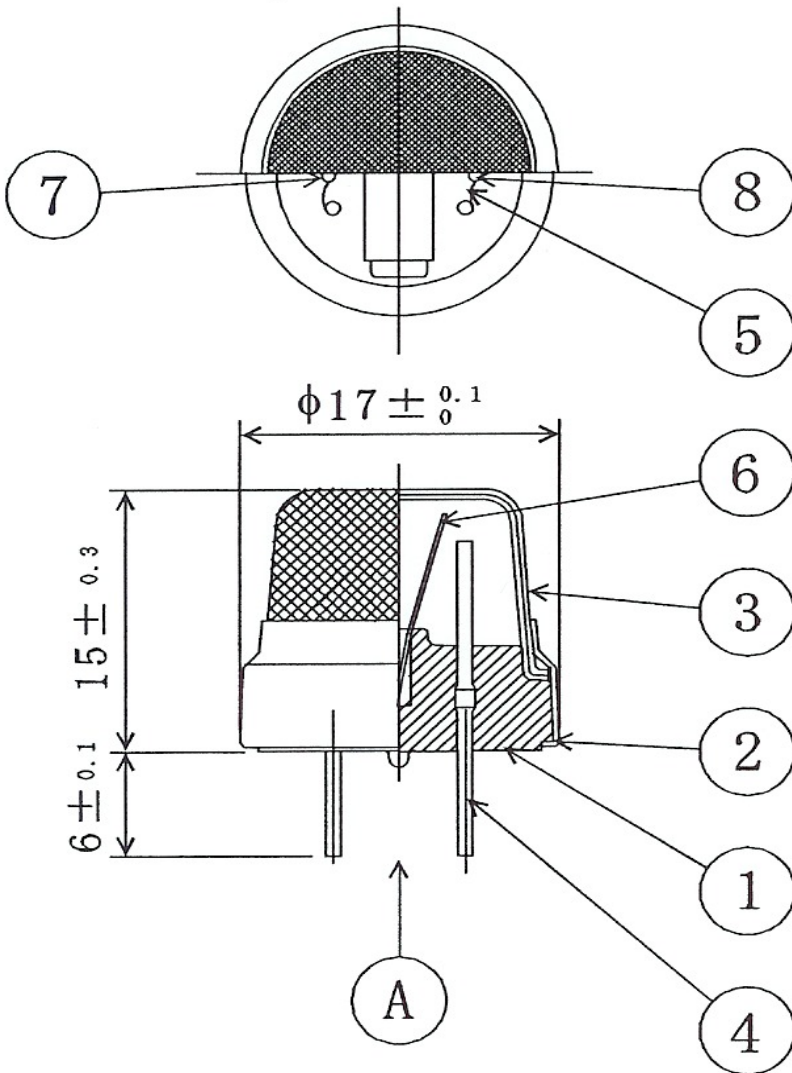


Test data on drift, poisoning, temperature performance, linearity are available on the Characterisation Document.

Nemoto 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

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Dimensions



A ; Bottom view

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