



# TECHNICAL INFORMATION SHEET NCP-180S-6S Pellistor Gas Sensor

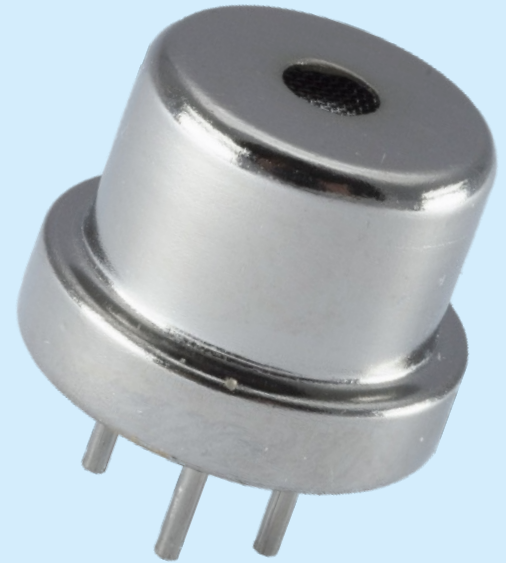
**Nemoto & Co., Ltd.**  
Sensor Division  
4-10-9, Takaido-higashi,  
Suginami-ku, Tokyo,  
JAPAN

## General Description

The Nemoto NCP-180S-6S 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 enclosure and can.

The sensor detects and measures the presence of flammable gases and vapours in air, in the range 0-100%\* of the Lower Explosive Limit (LEL) of the gas or vapour being measured. Designed for use in Fixed Gas Detection Systems, we believe the NCP-180S-6S offers an unparalleled combination of high performance and low-cost.

The NCP-180S-6S 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.



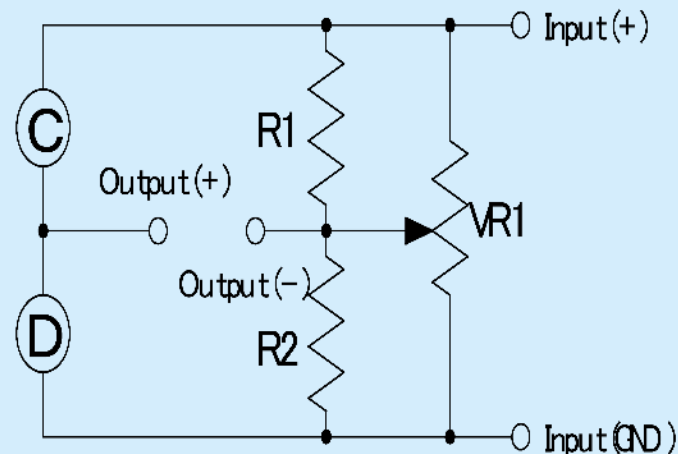
## Specifications:

Recommended Voltage:	2.6V +/- 0.1V
Current Drawn:	170 +/- 20mA
Zero Offset:	0mV +/- 30mV
Minimum Signal Sensitivity:	20mV/% CH4/Air
Range:	0-100% LEL*
Accuracy:	+/- 1%LEL(CH4)
<b>Maximum Long Term Drift:</b>	
Span:	< +/- 1% FSD / month
Zero:	< +/- 0.5mV/month
Response Time:	T50: <5 sec    T90: <10 sec
Temperature Range:	-20°C to +60°C
Temperature Drift:	(-20°C to +60°C): < +/- 2%LEL
Humidity:	0-95%RH, non-condensing
Humidity Response:	+/- 2%LEL
Linearity:	Effectively Linear to 100% LEL *

\* A slight deviation from full linearity occurs between 50% LEL and 100% LEL. Full details are available in the full manual for the device.

## Recommended Circuit:

Note: The value R1 is arbitrary, since the function of R1 is to balance the bridge. 1K 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

ncp-180s-6s.ppp, issue 4, May 2019

## Contact Information:

Europe & Africa Area

Asia Area

Americas Area

## Website

[www.nemoto.eu](http://www.nemoto.eu)

[www.nemoto.co.jp](http://www.nemoto.co.jp)

[www.nemoto.eu](http://www.nemoto.eu)

## email

[eusensor@nemoto.co.jp](mailto:eusensor@nemoto.co.jp)

[sensor2@nemoto.co.jp](mailto:sensor2@nemoto.co.jp)

[nasensor@nemoto.co.jp](mailto:nasensor@nemoto.co.jp)

## Telephone

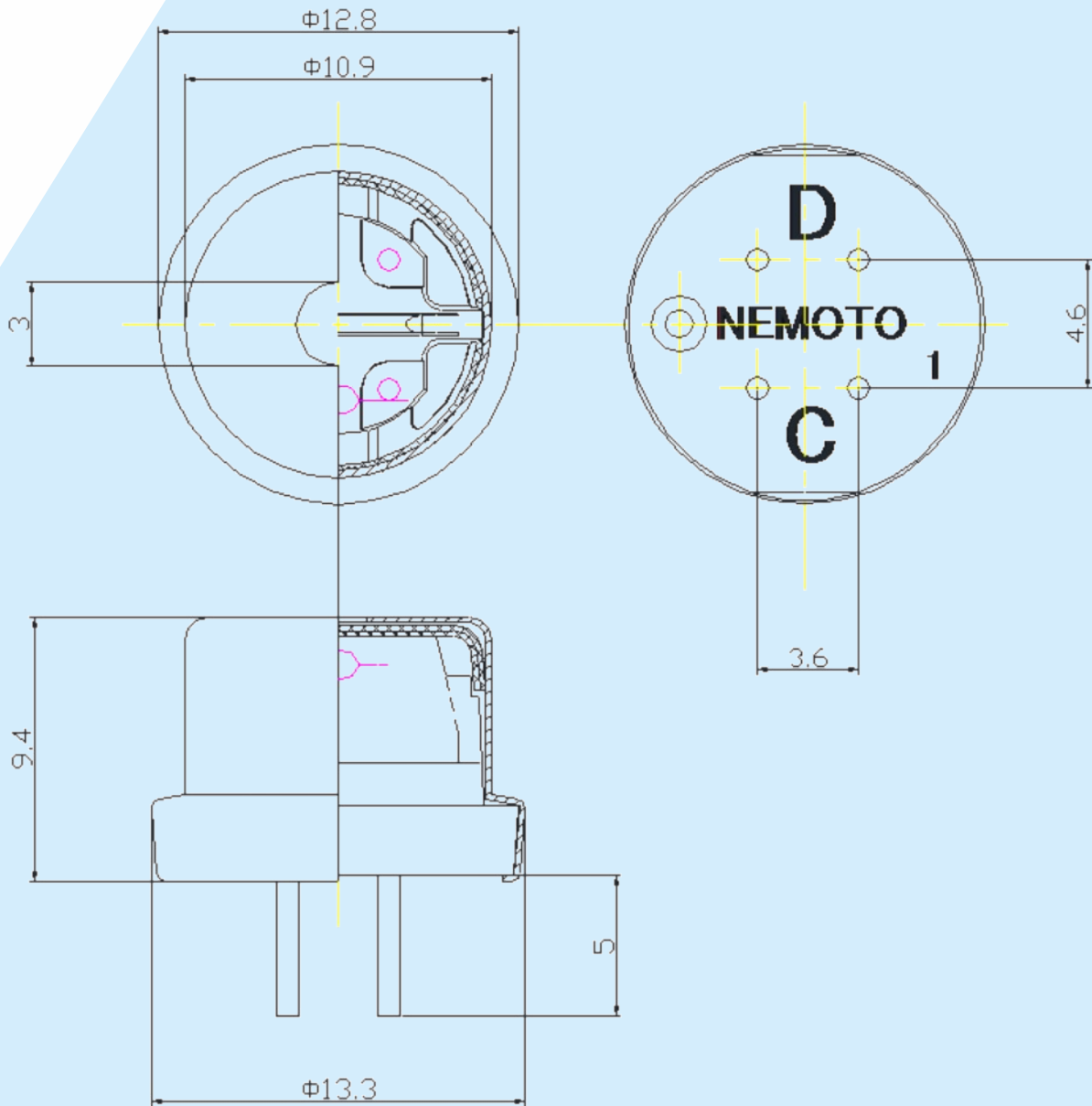
+44 (0)1799 543968

+81 3 3333 2760

+1 604 761 7363



## Dimensions



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

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### email

[eusensor@nemoto.co.jp](mailto:eusensor@nemoto.co.jp)

[sensor2@nemoto.co.jp](mailto:sensor2@nemoto.co.jp)

[nasensor@nemoto.co.jp](mailto:nasensor@nemoto.co.jp)

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