



● NEMOTO SENSORTECH DIVISION  
● NANO & CYBERTECH DIVISION



## TECHNICAL INFORMATION SHEET: NEMOTO NP-30 Pellistor Gas Sensor



### General Description

The Nemoto NP-30 is a catalytic (pellistor) type flammable gas sensor supplied as a matched pair of elements mounted on TO4 size headers and protected by a metal 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.

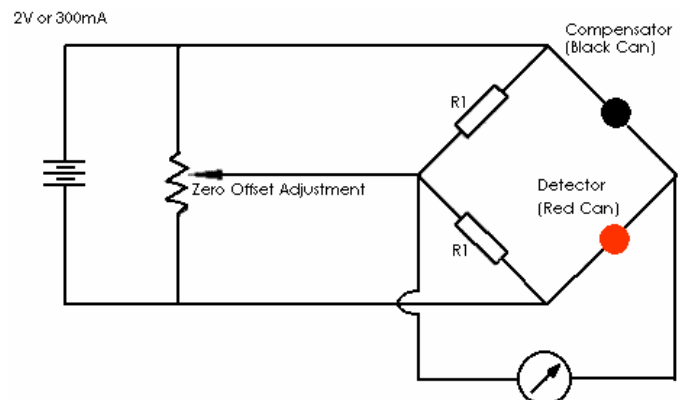
Designed as a sensing platform for use in fixed flammable gas detection systems, the NP-30 exhibits excellent long term zero and sensitivity stability and a high level of resistance to catalytic poisons. The device is compatible with a wide range of commercially available Gas Detection Systems and remote flammable gas detection heads.

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:	300 +/- 20mA
Zero Offset:	0mV +/- 25mV
Minimum Sensitivity:	20mV/% CH <sub>4</sub> /Air
Range:	0-100% LEL
Accuracy:	+/- 1%LEL(CH <sub>4</sub> )
Maximum Long Term Drift:	
Span:	< +/- 1% Signal/Month
Zero:	< +/- 1/2 mV/Month
Response Time:	T <sub>50</sub> : 3 sec T <sub>90</sub> : 8 sec

### Recommended Circuit:



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

Temperature Range:	-20°C to +70°C
Temperature Drift:	(-20°C to +70°C)
Zero:	< +/- 2%LEL
Humidity:	0-100%RH, non-condensing
Humidity Response:	+/- 1%LEL
Linearity:	Effectively Linear to 60%LEL

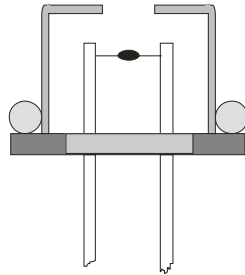
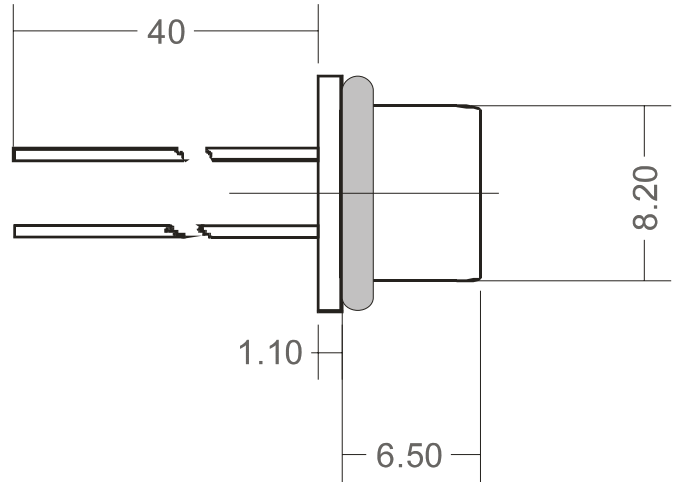
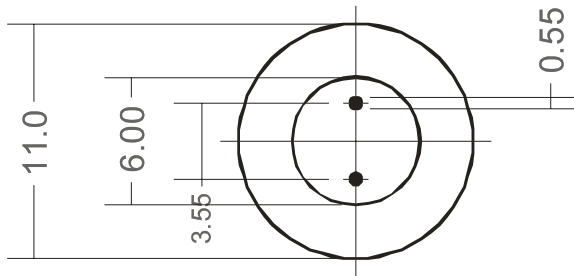
**Test data on drift, poisoning, temperature performance, linearity are available on the Characterisation Document.**

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

ds-np30.doc, issue 6, Feb 2006



**Dimensions:**



All tolerances +/- 0,15mm

<b>N.E.T. s.r.l.</b>	
NP-30 Gas Sensor	Rev. <b>0</b>
All Dimensions in mm:	