



● NEMOTO SENSORTECH DIVISION
● NANO & CYBERTECH DIVISION



TECHNICAL INFORMATION SHEET: NEMOTO NP-18 Pellistor Gas Sensor



General Description

The Nemoto NP-18 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-18 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.

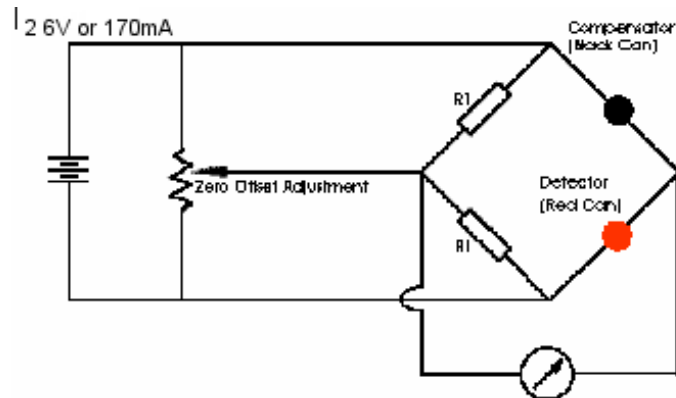
The highly automated manufacturing procedure employed by Nemoto results in a repeatable reliable sensor which, unlike similar devices, requires no trimming resistor to enable the detector to be matched with a compensator.

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

Specifications

Recommended Voltage:	2.6V +/- 0.15V
Current Drawn:	170 mA
Zero Offset:	0mV +/- 25mV
Minimum Sensitivity:	20mV/% CH ₄ /Air
Range:	0-100% LEL
Accuracy:	+/- 1%LEL(CH ₄)
Maximum Long Term Drift:	
Span:	< +/- 1% LEL/Month
Zero:	< +/- 1/2 mV/Month
Response Time:	T ₅₀ : 3 sec T ₉₀ : 8 sec

Recommended Circuit:



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

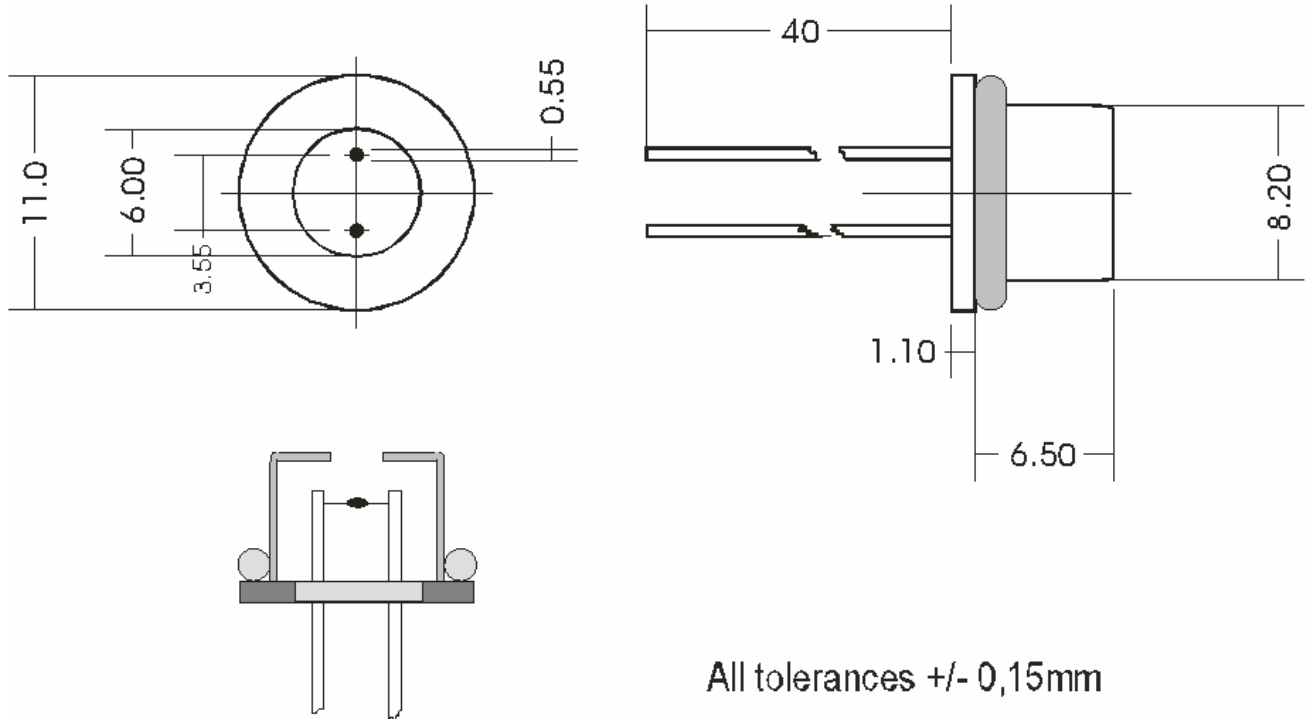
Temperature Range:	-20°C to +70°C
Temperature Drift:	(-20°C to +70°C)
Zero:	< +/- 2%LEL
Humidity:	0-100%RH, non-condensing
Humidity Response:	+/- 1%LEL
Linearity:	Effectively Linear to 60%LEL

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

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Dimensions:



All tolerances +/- 0,15mm

N.E.T. s.r.l.	
NP-18 Gas Sensor	Rev. 0
All Dimensions in mm:	

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