



TECHNICAL INFORMATION SHEET: NET-4-13S Low Power Pellistor Gas Sensing Head



General Description

The NET-4-13S Pellistor Gas sensor head is a NET-4 flameproof stainless steel enclosure accommodating the NPL-13S single header catalytic flammable gas sensor (pellistor) for use as part of a portable flammable gas detection or multigas instrument.

The head comprises a stainless steel flameproof enclosure constructed with an integral stainless steel sinter filter for the safe entry of the atmosphere being detected. The NET-4 enclosure has been designed to be electrically and mechanically compatible with a wide variety of portable instruments in current manufacture.

The NET-4-13S contains no internal trimming resistor, since our manufacturing technique produces a sensor with a workable zero offset without the need for the a coarse offset correction which a trimming resistor would provide.

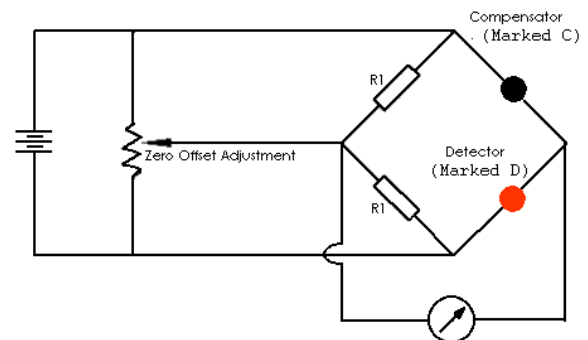


The NET-4 is certified as Flameproof to ATEX standards. Other explosion-proof approvals are pending.

Specifications:

Recommended Voltage:	3.00V +/- 0.3V
Current Drawn @ 3V	75 +/- 5mA
Zero Offset:	0mV +/- 150mV
Gas Sensitivity:	30-50mV/% CH ₄ /Air
Range:	0-100% LEL
Accuracy:	+/- 1%LEL(CH ₄)
Maximum Long Term Drift:	
Span:	< +/- 2% LEL/Month
Zero:	< +/- 2 mV/Month
Response Time:	T ₅₀ : <10 sec T ₉₀ : <30 sec

Recommended Circuit:



Note: The value R1 is arbitrary, since the function of R1 is to balance the bridge. 200Ω 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:	+/- 2%LEL
Linearity:	Effectively Linear to 60%LEL
ATEX Certificate No:	CESI 05 ATEX 026U
Approval Code:	II 2GD EEx d IIC

Performance data for the NPL-13S sensor, on poisoning, temperature performance, linearity etc is available on the Characterisation Document NPL13S-CD.doc

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.

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Dimensions

