General Description

The Nemoto NCH-180 is a new low cost catalytic flammable gas sensor fitted within a certified flameproof enclosure.

Using the popular NAP-56A sensor, the NCH-180 offers excellent detection performance, stability and long life but may also be used in hazardous locations when coupled with a suitable certified flameproof Junction Box.

The NCH-180 is remarkably compact compared with other similar devices, with the sensor contained within the same barrel as the mounting thread, resulting in a very ergonomically elegant design.

Specifications:

- Detectable Gas: All Flammable Gases
- Approvals: Exd IIC T4 Gb
- Ex tb IIIC T135°C Db IP6X

Note: Alternative temperature ratings are available within the certification of the device. Please contact Nemoto if a different T rating is required.

- Certificates: SIRA 08ATEX1313X
- IECExSIR08.0123X

- Recommended Voltage: 2.5V +/- 0.2V
- Current Drawn: 180 +/- 10mA
- Zero Offset: 0mV +/- 35mV
- Minimum Sensitivity: 20 mV for 1% CH4
- Range: 0-60% LEL *
- Repeatability: +/- 0.5mV

- Maximum Long Term Drift:
  - Span: < +/- 8% FSD / Year
  - Zero: <+/- 2mV / year
  - Response Time: \( T_{90} \) < 30 sec
  - Temperature Range: -20°C to +70°C
  - Humidity: 0-95%RH, non-condensing
  - Linearity: Effectively Linear to 60% LEL *
- Expected Lifetime: >5 years

* (May be extended to 0-100% LEL with suitable linearity correction)

Monitors flammability directly
Unaffected by humidity
Very low long term drift
Poison resistant
Certified Flameproof to ATEX and IEC Standards
Superb temperature stability
Shock Resistant
Effectively Linear to 60% LEL

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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Notes

Material: Stainless Steel
Thread: M20 x 1.5
Dimensions: mm
Tolerance: ±0.2

Wiring Connections:

- Pink
- Yellow
- White