



High temperature sensor for combustible gases

Sensepoint High Temperature Sensor





Excellent Performance

- Certified for hazardous area operation up to +150°C (+302°F)
- Alarm trip points as low as 5% LEL
- Fast speed of response
- Poison resistant detectors
- Low power consumption

Cost Effective

- Low cost disposable sensor
- Greater than 5 year typical operating life

Reliable Operation

- Thermally matched beads provide optimum accuracy and stability
- Proven technology from the World leader in combustible gas detection

Flexibility

- Measuring ranges from 0-20% LEL to 0-100% LEL
- Wide range of accessories

Robust Construction

- 316 Stainless Steel sensor body
- ATEX/ IECEx approved design

The Sensepoint High Temperature Sensor has been specifically designed for the detection of combustible gases in high temperature hazardous area locations. Typical applications include turbine enclosures and drying ovens used in solvent based printing and coating machines.



These applications require a sensor that provides reliable and stable detection allowing low level alarm settings across a wide temperature range. Utilising a specially matched pair of Honeywell poison resistant combustible gas detection elements, the Sensepoint High Temperature Sensor has a very stable baseline allowing alarm trip points to be set as low as 5% LEL across a temperature range of -55°C to +150°C (-67°F to +302°F). The gas measuring range can be configured from 0-20% LEL up to 0-100% LEL depending on the type of controller used.

The detector elements are housed in an explosion proof assembly, and provide an industry standard 3 wire mV bridge output which can be connected to a suitable control device or converted to an analog output signal via a field transmitter.

General Specification



| General Specification ¹ | | | |
|--------------------------------------|---|---|--|
| Range | 0-20% LEL, 0-100% LEL (Control card dependent) | | |
| Speed of Response ² | T60 Less than 6 seconds T90 Less than 10 seconds | | |
| Minimum Alarm Level ³ | 5% LEL | | |
| Output Signal | mV bridge | | |
| Operating Temperature | -55°C to +150°C (-67°F to +302°F) | | |
| Operating Humidity | Continuous: 20 to 90% RH Intermittent: 10 to 99% RH | | |
| Operating Pressure | 75 to 110kPa (750 to 1100mbar) | | |
| Stability (zero) | With time: With temperature: With humidity: With pressure: | Less than $\pm 5\%$ LEL / year Less than $\pm 3\%$ LEL Less than $\pm 3\%$ LEL Less than $\pm 3\%$ LEL | |
| Stability (span) | With time: With temperature: With humidity: With pressure: | Less than $\pm 5\%$ LEL / year Less than $\pm 4\%$ LEL Less than $\pm 3\%$ LEL Less than $\pm 3\%$ LEL | |
| Linearity | Better than ±5% fsd | | |
| Repeatability | Better than ±2% LEL | | |
| Warm-up Time | 30 minutes | | |
| Detector Operating Life ⁴ | More than 5 years (typical) | | |
| Storage Life | Typically, no degredation has been observed in clean, stable conditions for up to 5 years | | |
| Power Consumption | 0.7W at 200mA | | |
| Enclosure Material | 316 Stainless Steel | | |
| Mounting Thread | M20, M25 or ¾" NPT | | |
| Weight | 225g (7.9oz) | | |
| Certification | II 2 GD Ex d IIC T3 Gb T_{amb} -55°C to +150°C tb IIIC T200°C Db IP66 A21 Baseefa08ATEX0264X IECEx BAS08.0069X | | |

Notes:

- 1. Typical performance figures for a sensor calibrated on 10% LEL methane and tested at 20°C and 50% RH.
- 2. T60 / T90 defined as the time to achieve 60% and 90% of the signal obtained after 5 minutes exposure to 50% FSD gas concentration.
- 3. With recommended 3 month calibration period.
- 4. In clean atmosphere.

