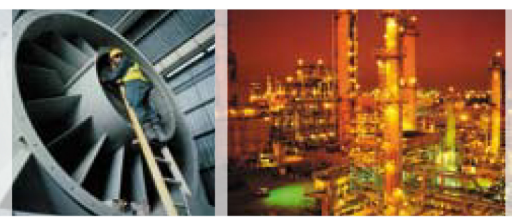


**High temperature sensor
for combustible gases**

Model 705

High Temperature Sensor



Excellent Performance

- Certified for hazardous location 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

- Specially matched 'Sieger' detectors provide highest 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

- UL approved explosion proof enclosure
- High grade Aluminum construction

The Model 705 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.

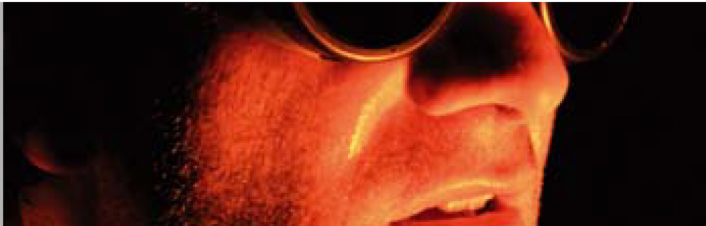
These applications require a sensor that provides reliable and stable detection allowing low level alarm settings across a wide temperature range. Utilizing a specially matched pair of Sieger poison resistant combustible gas detection elements, the Model 705 High Temperature Sensor has a very stable baseline allowing alarm trip points to be set as low as 5% LEL across a temperature range of -25°C to +150°C (-3°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 a UL hazardous area approved 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.



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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 | -25°C to +150°C (-13°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: | Less than ±5% LEL/year |
| | With temperature: | Less than ±3% LEL |
| | With humidity: | Less than ±3% LEL |
| | With pressure: | Less than ±3% LEL |
| Stability (span) | With time: | Less than ±5% LEL/year |
| | With temperature: | Less than ±4% LEL |
| | With humidity: | Less than ±3% LEL |
| | With pressure: | Less than ±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 degradation has been observed in clean, stable conditions for up to 5 years | |
| Power Consumption | 0.7W at 200mA | |
| Enclosure Material | Aluminum | |
| Mounting Thread | 3/4" NPT | |
| Weight | 200g (7oz) | |
| Certification | UL Hazardous location approval Class1, Div1, groups B, C and D Tamb: -25°C to +150°C | |

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.



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