

**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.



General Specification

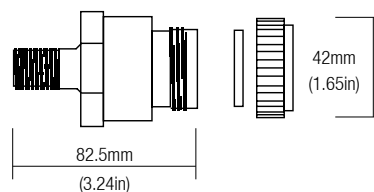


General Specification¹

Range	0-20% LEL, 0-100% LEL (Control card dependent)	
Speed of Response²	T60 Less than 6 seconds. T90 Less than 10 seconds.	
Minimum Alarm Level³	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 Life⁴	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.



Our Product Range



Fixed Gas Monitoring

Honeywell Analytics offers a wide range of fixed gas detection solutions for a diverse array of industries and applications including: Commercial properties, industrial applications, semiconductor manufacturers, energy plants and petrochemical sites.

- » Detection of flammable, oxygen and toxic gases (including exotics)
- » Innovative use of 4 core sensing technologies – paper tape, electrochemical cell, catalytic bead and infrared
- » Capability to detect down to Parts Per Billion (ppb) or Percent by Volume (%v/v)
- » Cost effective regulatory compliance solutions

Portable Gas Monitoring

When it comes to personal protection from gas hazards, Honeywell Analytics has a wide range of reliable solutions ideally suited for use in confined or enclosed spaces.

These include:

- » Detection of flammable, oxygen and toxic gases
- » Single gas personal monitors – worn by the individual
- » Multi-gas portable gas monitors – used for confined space entry and regulatory compliance
- » Multi-gas transportable monitors – used for temporary protection of area during site construction and maintenance activities

Technical Services

At Honeywell Analytics, we believe in the value of great service and customer care. Our key commitment is providing complete and total customer satisfaction. Here are just a few of the services we can offer:

- » Full technical support
- » Expert team on hand to answer questions and queries
- » Fully equipped workshops to ensure quick turnaround on repairs
- » Comprehensive service engineer network
- » Training on product use and maintenance
- » Mobile calibration service
- » Customised programmes of preventative/corrective maintenance
- » Extended warranties on products

Find out more

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