



**Sensor for
combustible gases**

Model 705 Sensor for Combustible Gases



Features

- Fast response.
- High resistance to catalytic poisoning.
- Low cost, high performance design.
- Low power consumption.
- Accurate, trouble free gas detection.
- Corrosion resistant aluminum construction.
- Five year warranty.

The model 705 gas sensor is a low cost, explosion proof assembly fitted with ‘Sieger’ poison-resistant combustible gas detection elements. Fully encapsulated, it is designed for use in hazardous locations.

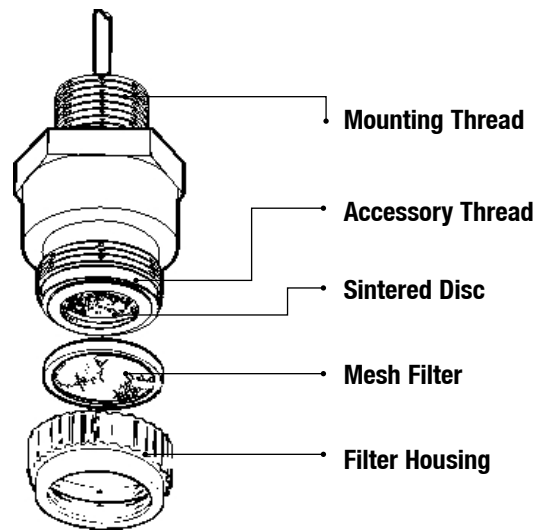
The sensor is electrocatalytic, and consists of two beads of refractory oxide formed on a fine platinum wire coil. The active bead is coated with a catalyst material whilst the reference bead is glass coated. In the presence of gas the catalyst coated bead promotes the oxidation of the gas, causing it to heat up and so increase in electrical resistance. This change of resistance relative to the reference bead can be measured, and is in direct proportion to the concentration of combustible gas. The signal is converted to an analogue output for direct display on a companion control card as percent LEL (Lower Explosive Limit).



General Specification



General Specifications	
Gas and Range	combustible gases; 0 to 100% LEL.
Operating Temperature	-40°F to +176°F (-40°C to +80°C).
Operating Humidity	0 to 99%RH (non-condensing).
Response Time – T90	typically 9 seconds for methane.
Signal Output	bridge output (mV).
Linearity	better than $\pm 3\%$ LEL.
Accuracy	better than $\pm 3\%$ FSD.
Sensitivity	typically 66mV/100%LEL methane.
Zero Drift	less than 4% per year.
Mounting Thread	3/4-inch NPT.
Construction Materials	aluminum.
Approvals	CSA & UL approved; Class 1, Division 1, Groups B,C & D.



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

www.honeywellanalytics.com

Contact Honeywell Analytics:

Europe, Middle East, Africa

Life Safety Distribution AG
Wilstrasse 11-U31
CH-8610 Uster
Switzerland
Tel: +41 (0)44 943 4300
Fax: +41 (0)44 943 4398
gasdetection@honeywell.com

Americas

Honeywell Analytics Distribution, Inc.
405 Barclay Blvd.
Lincolnshire, IL 60069
USA
Tel: +1 847 955 8200
Toll free: +1 800 538 0363
Fax: +1 847 955 8208
detectgas@honeywell.com

Asia Pacific

Honeywell Analytics Asia Pacific
#508, Kolon Science Valley (1)
187-10 Guro-Dong, Guro-Gu
Seoul, 152-050,
Korea
Tel: +82 (0)2 2025 0307
Fax: +82 (0)2 2025 0329
analytics.ap@honeywell.com

Technical Services

ha.emea.service@honeywell.com

www.honeywell.com

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