



**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.

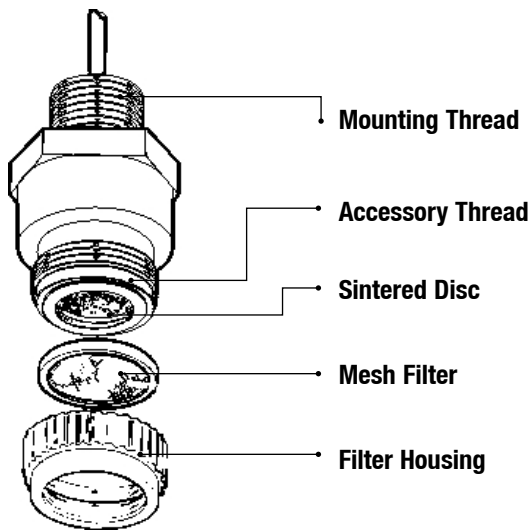
The sensor is electrocatalytic, and consists of two beads of refractory oxide formed on a fine platinum wire coil. The active bead is coated with a catalyst material whilst the reference bead is glass coated. In the presence of gas the catalyst coated bead promotes the oxidation of the gas, causing it 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 ±3%LEL.
Accuracy	better than ±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.



Honeywell Analytics Lines of Business



Commercial

Vulcan-brand gas detection from stand-alone units to fully engineered, multi-point systems, all offering cost-effective regulatory compliance

- » Applications: parking structures, chillers, mechanical rooms, office towers, commercial buildings, shopping centers, swimming pools, golf courses, schools and universities, laboratories

Industrial

Renowned Sieger and Manning gas detection systems with advanced electrochemical, infrared and open path sensing technologies

- » Applications: oil and gas, cold storage, water/wastewater treatment, chemicals, engine rooms, plastics and fibers, agriculture, printing and light industrial



Portables

Single or multi-gas Lumidor and other premium detectors with compact, lightweight designs ranging from simple alarm only units to advanced, fully configurable and serviceable instruments

- » Applications: underground utility and electricity ducts, boiler rooms, post-fire sites, sewers, industrial plants, industrial hygiene, first responder teams, remote fleets



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High Tech/Government

A complete portfolio of gas and chemical detection instrumentation including infrared spectroscopy (MST) with no cross interference, to Chemcassette paper-based solutions (MDA Scientific) offering detection down to parts per billion

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