

**Sensor for
combustible gases**

Model 705 Sensor for Combustible Gases

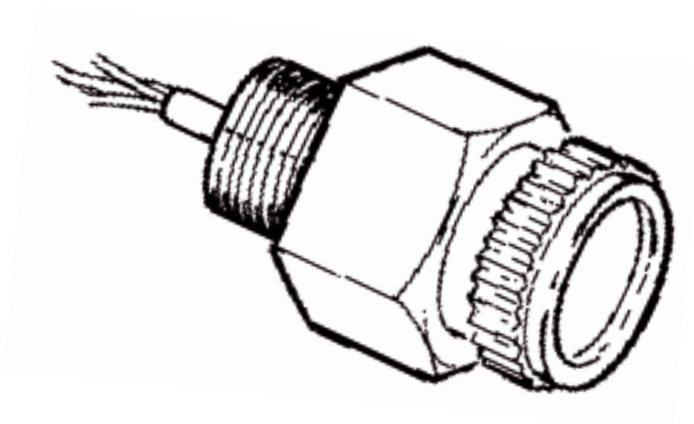


Features

- 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	-40oF to +176oF (-40oC to +80oC).
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.

