ISO9001:2000 Certified

PEMTECH *Gas Detection Technology*

Model PT395-H2S

Hydrogen Sulfide Sensor

(3 Alarm Relay Contacts)

Features

- Microprocessor based modular design
- Electrochemical Sensor Technology
- Industry standard 4-20mA output
- Field adjustable Low & High Alarm levels
- Single point Non-Intrusive calibration
- Bright 3 digit LED display
- Displays gas concentration in ppm, calibration prompts and sensor fault codes
- Suitable for use in Hazardous Location

Description

Model PT395-H2S is a microprocessor-based sensor designed to detect hydrogen sulfide in parts per million (ppm) level. The unit features easy one-man calibration initiated by simply activating a magnetic switch and applying the gas.
The complete sensor consists of a stainless steel sensor head assembly, a user connection board and a transmitter board assembly. All of the sensor electronics are enclosed in an explosion proof instrument box. Sensor modular design allows easy maintenance, troubleshooting and high reliability. Standard features also includes a linear 4-20mA signal output proportional to the full scale detection range and two (2) fully programmable alarm relays and a Fault relay.

The sensor transmitter board includes a three (3) digit LED display for continuous indication of the gas concentration. The calibration mode, alarm and fault status of the sensor are also indicated on the digital display. In the normal operating mode the digital display and 4-20mA reading is proportional to the gas concentration detected by the sensor. In the calibration mode the digital display indicates the calibration status, alarm relay outputs are inhibited and analog signal output is set to 2 mA to avoid any false alarm by the control monitor. In the sensor fault mode the transmitter drops the output signal to < 1 mA.

Model PT395 Stand Alone sensor for H_2S

Specifications

Sensor Type
Electrochemical

Measuring Range
0 to 100 parts per million (ppm)

Repeatability
± 2 % Full scale

Zero Drift
< 5% per year

Response Time
T90 < 30 seconds with 100% FS gas applied

Classification
Class I, division 1, Groups B,C & D

Operating Temperature
-4°F to +158°F (-20°C to +70°C)

Operating Humidity
15% to 90% RH, non-condensing

Mechanical Specifications
Length: 7 inches (178 mm)
Width: 5 inches (127 mm)
Height: 4.5 inches (114 mm)

Display
Bright 3 digit LED display

Status Indicators
Three-digit display for gas concentration, Alarm relay status, calibration mode and sensor fault status.

Approvals
CSA / ATEX for use in Hazardous Locations
CSA Standard C22.2 No 30-M1985 & C22.2 No 142-M1987

Input Power
14-28 VDC. 24 VDC nominal

Power Consumption
< 2 Watt. Typical 65mA @ 24 VDC

Alarm Relays
3 Alarm Relays, Low, High and Fault Fully programmable. 0 to Full scale Range of the sensor, Latching or Non-Latching

Relay Ratings
SPDT Form "C" type Relay contacts
0.5 Amp @ 125 VAC or
2 Amps @ 30 VDC

Analog Output
Linear 4-20mA (300 Ohms max. load)
2.0 mA - Calibration mode
< 1.0 mA - Sensor malfunction

Calibration
Non-Intrusive activated by internal magnetic switch

Cable Requirement
3 wire shielded cable. Max loop resistance of 20 Ohms @ 24 VDC nominal

Cable Entry Hub
¾" NPT Female

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