Sensor Data Sheet

SENSALERT PLUS

SENSIDYNE

Acetylene - Infrared
(0 – 50 %LEL)
Part No. 823-0249-51

Minimum Indicated Concentration .... 2 %LEL
Repeatability .... ± 5% of Reading
Accuracy[1,2] .... Highest of ± 1 %LEL or 10%-of-Reading
Baseline Drift .... < 1 %LEL change per month (typical)
Response Time (Rise)[2] .... T_{60}: < 16 seconds
Response Time (Rise)[2] .... T_{90}: < 45 seconds
Recovery Time (Fall)[2] .... T_{10}: < 90 seconds
Temperature Range .... -20° to 55°C (-4° to 131°F)
Humidity Range (continuous) .... 0–95 %RH, non-condensing
Expected Sensor Life .... 5 years from Shipping Date
Recommended Calibration Flow Rate .... 500 to 1000 cc/min
SensAlert 4-Channel Controller................... Compatible

[1] When unit is calibrated and serviced at recommended intervals.

[2] Room Temperature.

Special Calibration Considerations:
Infrared Acetylene Sensor (PN 823-0249-51)

Zeroing The Sensor

It is recommended that zero-air or zero-nitrogen be used to calibrate the zero on this sensor. It is important that the zero-gas be at the same temperature as the sensor, zeroing with the gas and sensor at different temperatures will significantly affect both the baseline value and sensor accuracy. Complete zeroing instructions are provided in the SensAlert[Plus] User Manual or SensAlert ASI User Manual. A 3 to 5 minute pre-exposure is recommended prior to zeroing the sensor.

Span Calibration

It is recommended that this sensor be calibrated at the full scale concentration of 50 %LEL C_2H_2. It is important that the span gas be at the same temperature as the sensor, calibrating with the gas and sensor at different temperatures will significantly affect the sensor accuracy. Complete span calibration instructions are provided in the SensAlert[Plus] User Manual or SensAlert ASI User Manual.

NOTE: Due to the sensor C_2H_2 IR absorption characteristics, it is highly recommended that the zero and span be calibrated one right after the other. Zeroing the sensor without a subsequent span calibration can affect the sensor accuracy.

Moisture Barrier

The Hydrophobic Moisture Barrier, p/n 821-0201-01, must be used in applications where splashing, sprays or condensation could contaminate the sensor.
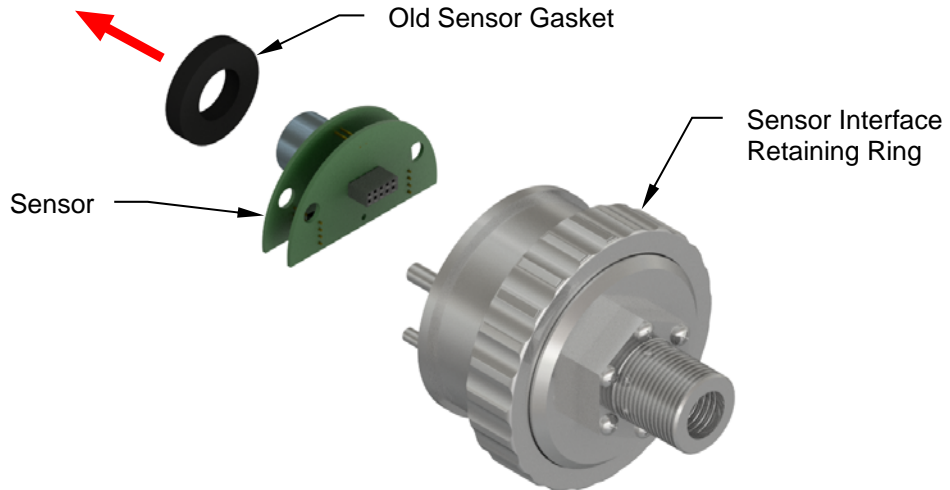
Test-on-Demand Cell

There is no Test-On-Demand cell available for this sensor.

## Sensor Gasket Installation Instruction

Remove Sensor by sliding it off the two Interface Pins. Remove and discard old Sensor Gasket.

Note: If no gasket is found on Sensor, check inside the Sensor Holder.

Old Sensor Gasket

Sensor Interface
Retaining Ring

Sensor

Caution: Handle Sensor with care and keep Sensor Cavity clean.

Install new Sensor Gasket over Sensor until flush with Sensor face as shown.

New Sensor Gasket
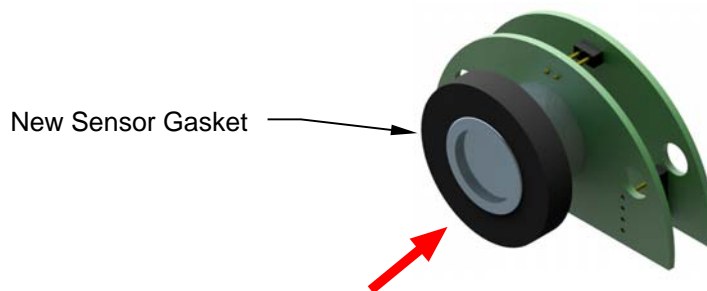
Caution: Do not touch face of Sensor.