Sensor Data Sheet

SENSALERT® PLUS

SENSIDYNE®

Hydrogen Cyanide
(0 – 50 ppm)
Part No. 823-0203-42

Minimum Indicated Concentration	2 ppm
Repeatability	± 5% of Reading
Accuracy[1]	± 10% of Reading
Span Drift	< 5 % change per month (typical)
Response Time (Rise)[2]	T_{50}: < 10 seconds
	T_{90}: < 60 seconds, successive exposures
Recovery Time (Fall)[2]	T_{10}: < 120 seconds
Temperature Range	-20° to 50°C (-4° to 122°F)
Humidity Range (continuous)	15–95 %RH, non-condensing
Humidity Range (intermittent)	0–99 %RH, non-condensing
Pressure Range	Ambient atmospheric, ± 1 psi
Expected Sensor Life	12 months from Shipping Date
Recommended Calibration Flow Rate	500 to 1000 cc/min
Oxygen Requirement	1% by volume, minimum
SensAlert 4-Channel Controller	Not Compatible

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

[2]*Room Temperature, seasoned system.*

Cross-Interferences*

Gas	Gas Exposure	Sensor Output
Carbon Monoxide	6 ppm	+1 ppm
Chlorine	2 ppm	-1 ppm
Ethylene	2 ppm	+1 ppm
Hydrogen Sulfide	0.3	+1 ppm**
Hydrogen	200 ppm	None
Nitric Oxide	2 ppm	-1 ppm
Nitrogen Dioxide	0.5 ppm	-1 ppm
Sulfur Dioxide	1 ppm	+1 ppm

* Interference factors may differ from sensor to sensor, it is not advisable to calibrate with interferent gases.
** Due to the high cross sensitivity, this sensor is unsuitable for atmospheres containing H_2S.

Special Calibration Considerations:
Hydrogen Cyanide (PN° 823-0203-42)

Zeroing The Sensor

There are no special zeroing considerations for this sensor. Complete zeroing instructions are provided in the SensAlert Plus User Manual.

Span Calibration

It is recommended that this sensor be calibrated at 25 ppm HCN. A 2 to 3 minute pre-calibration exposure must be performed in order to ensure that the gas reaches the sensor at full concentration. Complete span calibration instructions are provided in the SensAlert Plus User Manual.

Test-on-Demand Cell

The Type S Test-On-Demand cell, PN° 821-0204-06, may be used with this sensor. It is strongly advised that the customer minimize the intensity of the ToD cell in order to prevent the transmitter resuming live output prior to the ToD cell gas completely clearing out. The intensity of the ToD cell may then be increased as the cell ages.

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