

SC310 Catalytic Bead Combustible Gas Sensor

Millennium II Series Sensors

The SC310 provides versatile, robust and field proven performance in a rugged package designed for the most extreme industrial environments. For all flammable gas types, % LEL detection is fast and reliable with simplified field serviceability using the M2B, M21, or M22 universal transmitters. SensorGuard technology protects against exposures to high gas concentrations allowing a full 5 year warranty on the SC310 sensor.

- Lowest power consumption available
- Long range (+2,000 ft.) sensor separation
- Industry leading 5 year sensor warranty
- Non-selective response - detects both hydrocarbon and non-hydrocarbon based combustible gases



ST3 Sensors shown with JB-MPD-A/S.

- Complete profile of correction factors available for accurate calibrations
- Designed to perform in the most extreme industrial environments

Single or Dual Channel Transmitter Available

There's no longer the need to purchase multiple gas specific detectors. You have the option to utilize 1 or 2 toxic and/or combustible gas sensors on a single Millennium II transmitter and easily mix and match any of our sensor technologies.

Sensor Designed for Durability & Performance

Advanced engineering delivers an LEL gas sensor with excellent response times, longevity and sensitivity with negligible zero drift related to pressure, humidity and temperature changes. The housing is designed for optimal resistance to shock and vibration.

SensorGuard Protection System

Oversaturation (> 100 % LEL) is prevented by our advanced microprocessor automatically preventing premature sensor burnout when the presence of concentrated gas remains in the area, which dramatically increases the sensor's lifespan.

Specifications

Table 1 - SC310 Catalytic Bead Combustible Gas Sensor

Combustible Gases [% LEL] Catalytic Bead P/N: SC310(A/S)-100-ASSY	
Performance	
Response Time	T50 ≤ 5.5 s T60 ≤ 6 s T90 ≤ 12 s
Accuracy	±3 % < 50 % ±5 % > 50 %
Detection Range	0–100 % LEL Gases Detected (partial list): Methane, Propane, n-Butane, Isobutylene, Hydrogen, Ethane, Pentane, Hexane, Heptane, Ethylene, Propylene
Zero Drift	±2 % per month
Repeatability	±1 % LEL full scale
Electromagnetic Compatibility (EMC)	IEC 61000-4-3
Environmental	
Temperature	-40°F to +167°F (-40°C to +75°C)
Relative Humidity	0–95 % RH non condensing
Ingress Protection (IP) Rating	IP64
Enclosure	
Enclosure Material	Aluminum (AL6061) or stainless steel (SS316)
Certifications	North American Class I, Division 1, Groups BCD T5 Class I, Zone 1, AEx/Ex d IIB +H2 T5 -40 °C ≤ Ta ≤ +75 °C IECEX Ex d IIB+H2 T5 Gb IECEX FMG 12.0007X -40 °C ≤ Ta ≤ +75 °C INMETRO - Ex d IIB+H2 T4 Gb IP66/67
Sensor Separation	Up to 2,000 feet/600 meters (18 AWG cabling)
Transmitter Required	Millennium II Series (M21, M22, M2B)
Warranty	Five years

Accessories and Ordering Information

Table 2 - SC310 Catalytic Bead Combustible Gas Sensor

JB-MPD-S	Termination Box - Digital Output - Stainless Steel
JB-MPD-A	Termination Box - Digital Output - Aluminum
CCS-1	Calibration Cup/Rain Shield/Splash Guard/Dust Filter with DF-1
CC-INLINE	Inline Calibration Adaptor, allows slip stream of gas to be brought to sensor and vented back into main stream
IPF-001	IP 66/67 Filter for SX3 Series sensors, enhanced sensor protection from contamination by dirt and moisture

Ordering Information

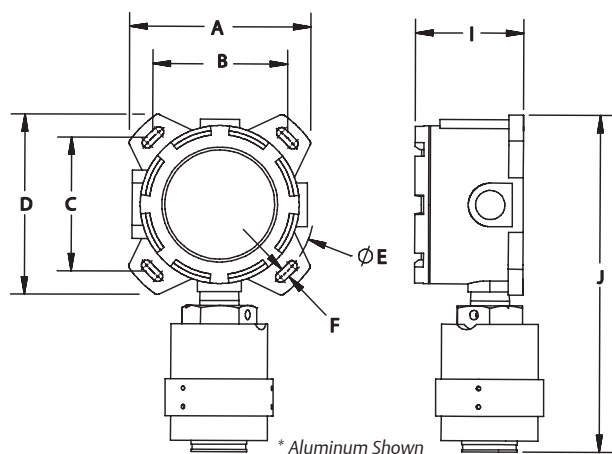
SC310 A-100-ASSY (Aluminum Housing)

Combustible Gases, 0–100 % LEL

SC310S-100-ASSY (Stainless Steel Housing)

Combustible Gases, 0–100 % LEL

Drawings and Dimensions



	A		B		C		D		E	
Aluminum Housings	6.3	160	5.6	142	5.4	137	9.7	246	6.0	152
Stainless Steel Housings	5.9	150	5.1	130	4.6	117	8.9	226	6.0	152
	F		G		H		I			
Aluminum Housings	5.7	145	2.6	66	2.9	74	4.1	103		
Stainless Steel Housings	5.8	147	2.6	66	2.9	74	3.9	100		

EmersonProcess.com/FlameGasDetection



YouTube.com/user/RosemountAnalytical



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