Low-Cost Combustible Transmitter with Sensor

- New, Enhanced Electronics
- Aluminum or SS Sensor Housing
- Standard or Poison Resistant Sensors
- Rugged Compact XP Design (Class I, Division 1, Groups B, C, & D)
- Easy One Person Calibration
- 3 Wire , 4-20 mA Linear Output
- Lowest Cost, Highest Reliability
- Thousands Sold to Satisfied Customers

Optional Rainshield shown

LOW COST, HIGH RELIABILITY

Sensidyne's combustible gas monitoring systems are available with several sensors designed to meet a wide range of combustible gas applications. You may choose from the standard catalytic bead sensor or the poison-resistant catalytic bead sensor, each of which is offered in an anodized aluminum housing or stainless steel housing. All of Sensidyne's standard combustible transmitter electronics are housed in UL listed Appleton® condulets.

Anodized Aluminum and Stainless Steel Sensor Housings

POISON RESISTANT CATALYTIC BEAD SENSORS

Industrial atmospheres often contain catalyst poisons such as silicon, silane, lead, sulfur, or phosphorous compounds, which may poison catalytic bead sensors. Silicon compound concentrations of less than one part per million (ppm) will quickly degrade the performance of a standard catalytic bead sensor and render it inactive. Sensidyne's poison resistant sensor will reduce this problem and substantially lower sensor replacement costs.

APPLICATIONS

- Flammables Storage
- Methane Remediation
- Hydrocarbon Pipelines
- Transportation Garages
- Chemicals & Synthetics
- Cylinder & Aerosol Filling
- Industrial Solvents
- Battery Rooms
- Natural Gas Processing
- Waste Treatment
- Utility Rooms
- Solvent Recovery

SENSIDYNE®

Combustible Gas Sensor & Transmitter Assembly

PRODUCT SPECIFICATIONS

General Specifications

Sampling Principle ..... Diffusion

Detection Range ..... 0–100 %LEL

Housing ..... UL listed Zinc-plated iron condulet

Mounting Orientation ..... Vertical (sensor down)

Conduit Entry ..... 3/4" NPT female

Visual Indicators ..... Power, green LED
Fault, red LED

Controls ..... 4 mA level and pushbutton activator, Zero, Span

Dimensions ..... 7.5" (L) x 3.8" (W) x 3.0" (D)
191 mm (L) x 97 mm (W) x 76 mm (D)

Weight ..... 2.9 lbs (1.3 kg) with anodized aluminum sensor assembly
3.2 lbs (1.5 kg) with stainless steel sensor assembly

Electrical Specifications

Power Requirement ..... 24 Vdc, nominal, (15–30 Vdc) @ 65–110 mA

Check Points ..... Enables reading of output current (as 40–200 mV) without breaking loop.

Termination Resistance ... < 500 Ω @ 24 VDC

RFI/EMI Immunity ..... < 5 %LEL interference from a 5 watt, 450 MHz RF source operated 1 meter away from the transmitter

Transmission Link ..... 3-wire, 4–20 mA , non-isolated

Classification/Certification

Explosion-Proof ..... Designed to meet requirements for NEC Class I, Division 1, Groups B, C, D

Sensor Specifications

Min. Detectable Change .. ± 1 %LEL

Repeatability ..... ± 2% of reading

Accuracy ..... ± 3 %LEL or 10% of reading whichever is greater

Zero Drift ..... ± 3% of Full Scale per month

Span Drift ..... ± 5% of Full Scale per month

Response Time (Rise) ..... $T_{50} \leq 10$ seconds
$T_{90} \leq 30$ seconds

Recovery Time (Fall) ..... < 30 seconds to indicate 10 %LEL after exposure to 100 %LEL

Operating Temperature ... -40° to 75°C (-40° to 167°F)

Operating Humidity ..... 10-95% RH, non-condensing

Operating Pressure ..... Atmosphere ± 2 psig

Calibration Frequency ..... Monthly (recommended)

Oxygen Requirement ..... 10% by volume, minimum

SAMPLE A & E SPECIFICATION

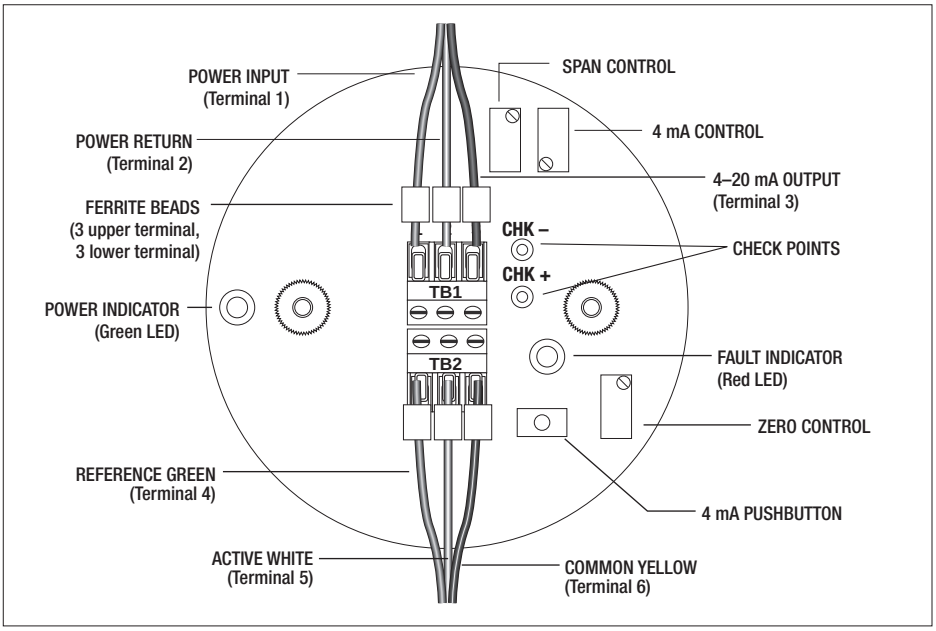
Contractor shall furnish NEMA 4 / NEMA 7 combustible gas transmitter-sensor(s) which are UL approved for use in a Class I, Division 1, Group B, C, or D environment. The transmitter will have "Power On" and "Fault" LEDs, independent zero and span adjustments with 40-200 mV test points. The transmitter shall have a 4-20 mA linear output capable of driving 500 ohms.

The sensor assembly shall be available in anodized aluminum or stainless steel (specify) and standard or poison resistant versions (specify). The contractor will provide one year's supply of spares, calibration gases, system start-up, and training of owner's personnel. The gas detection system shall be Sensidyne, as manufactured by Sensidyne, Inc., or approved equal.

Aspirator Assembly

ORDERING INFORMATION

Description	Part No.
Combustible Gas Sensor & Transmitter Assemblies	
Standard, Aluminum Housing	7010604-1
Standard, Stainless Steel Housing	7010604-2
Poison Resistant, Aluminum Housing	7010604-3
Poison Resistant, Stainless Steel Housing	7010604-4
Spare Replacement Sensors	
Standard, Aluminum Housing	7013274-1
Standard, Stainless Steel Housing	7013274-2
Poison Resistant, Aluminum Housing	7010263-1
Poison Resistant, Stainless Steel Housing	7010263-2
Sensor Accessories	
Wiring, conduit, and piping requirements are by others. Accessories are constructed of PVC or Delrin®	
Rainshield	7010164-2
Baffled Rainshield with Calibration Port	7010031-1
Aspirator Assembly, Brass	7013154-1
Aspirator Assembly, Stainless	7013154-2
Flow Block	7011057-1
SensAlert Four Channel Controller	7013227-1
Calibration Accessories	
Calibration Cup with Tubing	7010704-1
Regulator	009827-1
Zero Gas (20.9% Oxygen) [103L Bottle]	009824-25
Propane Gas (30% LEL) [103L Bottle]	009824-1
Propane Gas (50% LEL) [103L Bottle]	009824-61
Methane Gas (30% LEL) [103L Bottle]	009824-2
Methane Gas (50% LEL) [103L Bottle]	009824-3



SENSIDYNE®

Protecting People, Plants, and Products. . . Everyday

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Sensidyne products are third party approved to many different international codes and standards. Please consult individual product bulletins for approval listing.

ISO 9001 sira UKAS QUALITY MANAGEMENT
Certificate No. 970084