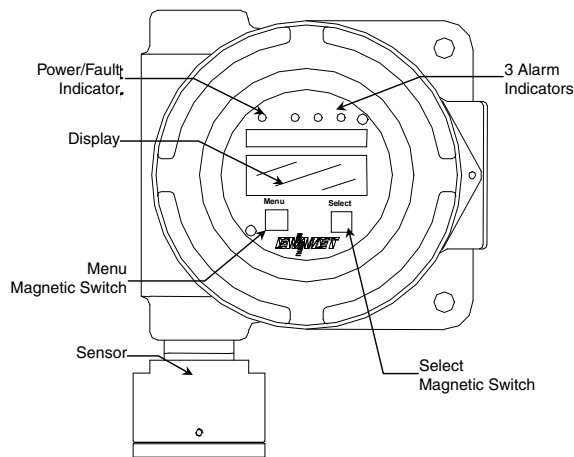


EX-5120

Infrared Hydrocarbon Sensor/Transmitter

FEATURES

- Infrared Sensor
- Three Alarm LEDs
- NEMA 4X, NEMA 7 and IP66 Rated Enclosure
- 24 VDC, 4-20 mA
- Immune to Poisoning
- Operates in Anaerobic Atmospheres
- Minimal Maintenance
- Liquid Crystal Display
- Non-intrusive Calibration
- Designed for Class I, Division 1, Groups B, C, & D
- Non-contact Sensor Technology
- Operates in Continuous Hydrocarbon Environment
- Long-term Stability



EXAMPLES of Some Typical Calibrations

Gas/Vapor	Range: % Vol.	Range: % LEL
Methane, CH ₄	0-5.0	0-100
Methane, CH ₄	0-100	—
Propane, C ₃ H ₈	0-2.1	0-100
Propane, C ₃ H ₈	0-100	—
Propylene, C ₃ H ₆	0-2.0	0-100
Butane, C ₄ H ₁₀	0-1.6	0-100
Pentane, C ₅ H ₁₂	0-1.5	0-100
Ethane, C ₂ H ₆	0-3.0	0-100

Some other calibrations (% by volume) available:

Ethylene	0-3%	Ethanol	0-5%
Isopropanol	0-2%	ETO	0-3%
Hexane	0-1%	Acetic acid	0-4%
Methanol	0-5.5%	Toluene	0-1.1%

Also, Methyl bromide, CH₃Br, 0-25,000 ppm.



Description/Operation

The EX-5120 incorporates a sensor that operates on the NDIR principle to monitor the concentration of hydrocarbon gas. It can be calibrated for a specific gas, such as methane, but it also responds to some other hydrocarbon gases, including propane, butane, etc. The sensor features an integral semiconductor for temperature compensation, a durable tungsten filament IR light source, filter and a dual temperature-compensated pyroelectric infrared detector.

The EX-5120 Sensor/Transmitter operates on 24 VDC power and features three LED alarm point indicators, 4-20 mA output and optional alarm relay board. This sensor/transmitter can be connected to various ENMET controllers or computer-based instrumentation, such as PLCs, etc.



EX-5120 Infrared Hydrocarbon Sensor/Transmitter

SPECIFICATIONS

Voltage: 24 VDC, Loop powered
Output: 4-20 mA
Installation: 3-wire, typically 16 to 18 AWG, depending upon distance
Connection: 1/2 inch NPT, conduit
Humidity: 0-95%rH, non-condensing
Temperature Range: -4 to +122°F (-20 to +50°C)
Response Time, T₉₀: <30 seconds, @500 cc/min.
Display: 8-character, single-line, backlit LCD
Alarm Indicators: 3 LEDs at programmable set points
Menu/Calibration: Magnet-actuated switches
Sensor Type: Infrared (IR)
Accuracy: ± 2% @68°F, 1 bar, 2.5% CH₄
Performance: ± 2% FSD, or ± 10% of reading to mid-scale, ± 15% of reading from 50 to 100% FSD, whichever is greater, over range of -4 to +122°F.

Approvals & Certifications*

Enclosure:

Class I, Groups B, C, D
 Class II, Groups E, F, G
 Canelec: EEx d IIC, IP66

IR Sensor:

ATEX certifications:
 I M2 EExd I
 II 2 G EEx d IIC

Certifications:

FM Standard 3615
 CSA Standard C22.2 No. 30
 UL Standard 1203
 CENELEC EN 50014, 50018

IECEx certifications:

Ex d I and/or Ex d IIC

UL Recognized:

Class I, Groups A, B, C, D
 T4 with 60°C ambient

OPTIONS & RELATED PRODUCTS

CONTROLLERS:

CP-10, CP-60 and MX Series
 Controllers are available, 1 to 16 Channels.

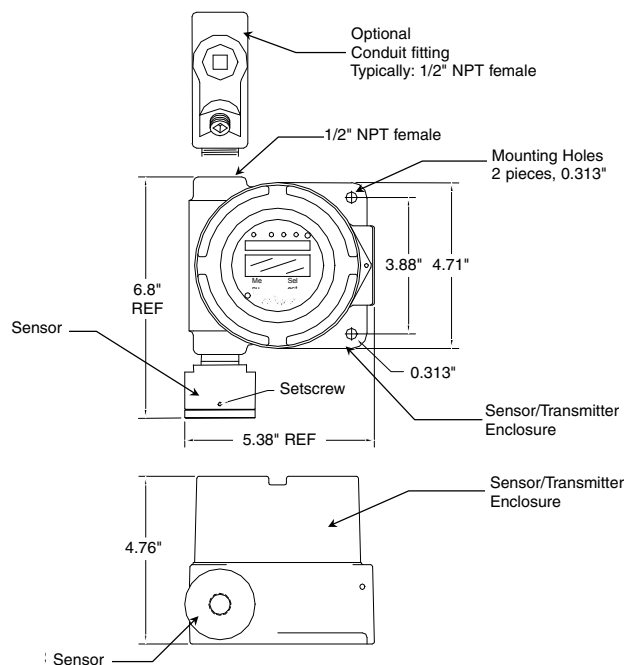
TOXIC GAS SENSOR/TRANSMITTER:

The EX-5175 utilizes electrochemical sensors for oxygen, CO, H₂S and other toxic gases.

MOS SENSOR/TRANSMITTER:

The EX-5155 utilizes a metal oxide semiconductor (MOS) sensor ppm (toxic) level detection of organic solvents and hydrocarbons.

NOTE: Loss of primary power renders continuous gas monitors inoperative. Contact factory for specifications and pricing for backup battery systems compatible with ENMET monitors.



ORDERING INFORMATION

Description	Part Number
EX-5120 Sensor/Transmitter..... supplied with magnet and instruction manual	10014-003
Replacement Parts & Accessories	
Replacement Magnet.....	50030-001
Instruction Manual.....	80003-092
Sensor Sampling Adapter.....	03700-034
Optional Sealing Fitting.....	73152-000
Sensor (gas/calibration dependent, consult ENMET).....	03056-XXX

Calibration Equipment

Regulator Assembly for 17 liter Gas Cylinders..... Also order P/N 03700-034	02506-004
Calibration Adapter for Sensor.....	03700-034
Case – Holds Calibration Hardware and up to two..... 17 liter Gas Cylinders	73083-000
Calibration Gas, 17 liters, 50%LEL Methane.....	03220-050
Calibration Gas, 17 liters, 50%LEL Propane.....	03221-050
Calibration Gas, 17 liters, 50%LEL Butane.....	03282-050

See Price List for other Calibration Gases

*Approvals and certifications apply to the sensor and enclosure as individual components, not for the combined unit.

Specifications subject to change without notice

