ENMET

EX-5120

Infrared Combustible Hydrocarbon Detection

PRODUCT HIGHLIGHTS

- **Infrared sensor**
- **Three alarm LEDs**
- **24 VDC, 4-20 mA**
- **NEMA 4X, NEMA 7, IP66**
- **Immune to poisoning**
- **Non-intrusive calibration**
- **Instrinsically Safe**

EX-5120 uses a NDIR (Non Dispersive Infrared) sensor to monitor for hydrocarbon gases. NDIR has a key monitoring advantage as it can operate in anaerobic atmospheres. 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 NDIR sensor features an integral semiconductor for temperature compensation, a durable tungsten filament IR light source, filter and a dual temperature-compensated pyroelectric detector. EX-5120 offers the long-term calibration stability of NDIR and threrefore requires less maintenance.

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 single and multi-channel ENMET controllers or computer-based instrumentation, such as PLCs, SCADAs, BMSs, etc.
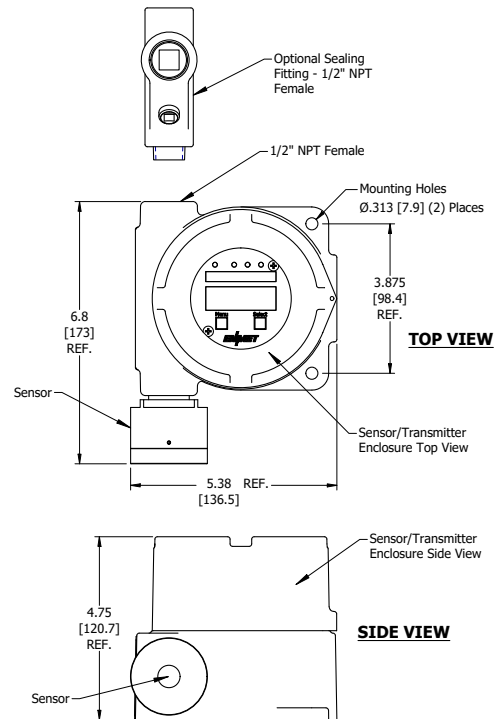
EX-5120

GENERAL SPECIFICATIONS

Sensor Type:	Infrared (NDIR)
Display:	Backlit LCD
Alarm Indicators:	3 LEDs at programmable set points
Menu/Calibration:	Magnet-actuated switches
Voltage:	24 VDC powered
Output:	4-20 mA
Installation:	3-wire
Connection:	1/2 inch NPT, conduit
Humidity Range:	0-95% rH, non-condensing
Temperature Range:	-4 to +122°F (-20 to +50°C)
Weight:	5.5 lbs (2.5 Kg)

Approvals & Certifications*:
Enclosure:
Class I, Groups B, C and D; Class II, Groups E, F and G; Class III Type 4X
Class I, Zone 1, AEx d IIC
Ex d IIC IEC 60529 IP66

IR Sensor:
ATEX Approved: Ex I M2, Ex d I Mb and Ex II2 G, Ex d IIX Gb
Certificate No.: Sira 04ATEX1357U

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

DIMENSIONS

ORDERING INFORMATION

Description	Part No.
EX-5120 Sensor Transmitter, factory calibrated, supplied with calibration magnet and manual	10014-003
Sampling/Calibration Adapter for EX-5120 Sensor/Transmitters	03700-034
Gas Regulator Assembly for 34 liter steel gas cylinders (Also order Calibration Adapter P/N 03700-034)	02506-004
Optional Splash Guard for EX-5120	04546-004
Optional Sealing Fitting	73152-000
Replacement Magnet	50030-001

TYPICAL CALIBRATIONS

Gas/Vapor	% Vol.	% LEL	Gas/Vapor	% Vol.	% LEL
Acetone	0-3.0	0-100	Isopropyl alcohol, (IPA)	0-2.0	0-100
Butane	0-2.0	0-100	Methane	0-5.0	0-100
Cyclopentane	0-2.0	0-100	Methane	0-100	—
Chloromethane	0-8.0	0-100	Methanol	0-6.0	0-100
Dichloroethane	0-12.0	0-100	Methyl alcohol	0-6.0	0-100
Ethane	0-3.0	0-100	Methyl ethyl ketone	0-2.0	0-100
Ethanol	0-5.0	0-100	Natural Gas	0-5.0	0-100
Ethyl alcohol	0-5.0	0-100	Pentane	0-2.0	0-100
Ethyl Acetate	0-3.0	0-100	Propane	0-2.0	0-100
Ethylene	0-3.0	0-100	Propane	0-100	—
Ethylene oxide	0-3.0	0-100	Propylene	0-2.0	0-100
Hexane	0-1.0	0-100	Toluene	0-2.0	0-100
Isopropanol	0-2.0	0-100	Xylene	0-2.0	0-100

Contact ENMET regarding ranges and custom calibration requirements.

⚠️ **WARNING!** Loss of primary power renders continuous gas monitors inoperative.
Contact factory for specifications and pricing for backup battery systems compatible with ENMET monitors.

ENMET
Creative Gas Detection Solutions