Creative Gas Detection Solutions

EX-5155

Remote Gas Monitoring Sensor Transmitter for Toxic Hydrocarbons & Organic Solvents

PRODUCT HIGHLIGHTS

- **Solid-state MOS sensor**
- **Three alarm LEDs**
- **24 VDC, 4-20 mA**
- **NEMA 4X, NEMA 7 and IP66 rated enclosure**
- **Poison resistant**
- **Non-intrusive calibration**
- **Approved for Class I, Division 1, Groups B, C & D**

EX-5155 is a remote gas monitoring sensor transmitter that incorporates a solid state MOS sensor. An MOS sensor consists of a heated mixed metal oxide element that decreases in resistance in the presence of many gases and vapors. These sensors are broad range in their response characteristics. Different types of MOS sensors are available which can be optimized for a particular gas, but they are inherently non-specific. The EX-5155 can provide ppm level monitoring capability for detecting certain common toxic gases, including ammonia (NH_3) and hydrogen sulfide (H_2S), in addition to a wide range of hydrocarbons and organic solvents. The transmitter is 24 Vdc powered and provides a 4-20 mA output signal that can be connected to a controller, PLC or similar instrumentation.

MOS sensors operate at lower temperatures than catalytic type sensors, which makes them less prone to poisoning. The MOS sensor is therefore the sensor of choice in applications where, for example, lead, phosphates or sulfur-containing compounds are present. Silicones, which are used in a wide range of oils, lubricants, adhesives, and many other products, can poison catalytic sensors and also influence the performance of MOS sensors under certain conditions. Applications for monitoring of hydrocarbon gases where silicones are present in the environment should be discussed with ENMET.

EX-5155

GENERAL SPECIFICATIONS

Sensor Type: Solid state MOS sensor

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

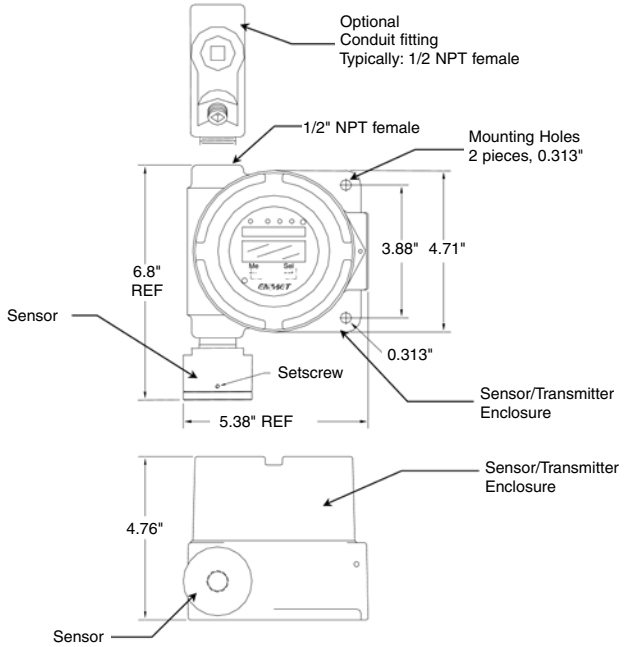
Connection: 1/2 inch NPT, conduit

Weight: 5.5 lbs (2.5 Kg)

Approvals:
Approved for Class I, Div. 1, Groups B,C, & D

Classified to:
UL 916 (3rd ed.) and UL 1203 (4th ed.)
CSA 22.2, No. 0-M91, 30-M1986 and 142-M1987

DIMENSIONS



ORDERING INFORMATION

Description	Part No.
EX-5155 Sensor Transmitter, factory calibrated, supplied with calibration magnet and manual	10014-018
Sampling/Calibration Adapter for EX-5155 Sensor/Transmitters	03700-034
Regulator & Humidifier Assy for 34 liter steel gas cylinder (for gases other than Toluene & Ammonia) (Also order Calibration Adapter P/N 03700-034)	03700-008
Regulator & Humidifier Assembly for 34 liter aluminum gas cylinder, Toluene, C_7H_8 (Also order Calibration Adapter P/N 03700-034)	03700-009
Regulator & Humidifier Assembly for 58 liter aluminum gas cylinder Ammonia, NH_3 (Also order Calibration Adapter P/N 03700-034)	03700-005
Optional Splash Guard for EX-5155	04546-004
Optional Sealing Fitting	73152-000
Replacement Magnet	50030-001

GASES MONITORED*

In general, the EX-5155 can be calibrated for ppm concentrations of hydrocarbons, halogenated hydrocarbons, jet fuels, refrigerants, organic solvents, esters, ethers, alcohols, ketones, and other similar compounds and mixtures.

Examples of Some Typical Calibrations:

Gas/Vapor	Range
• Ammonia, NH_3	0-300 ppm
• Acetone, $(CH_3)_2CO$	0-2000 ppm
• Hydrogen sulfide, H_2S	0-100 ppm
• Isopropanol, CH_3 $CHOH$	0-100 ppm
• Methyl alcohol, CH_3OH	0-400 ppm
• Methyl chloride, CH_3Cl	0-200 ppm
• Methyl ethyl ketone, C_4H_8O	0-400 ppm
• Methylene chloride, CH_2Cl_2	0-200 ppm
• Styrene, C_8H_8	0-100 ppm
• Xylene, C_8H_{10}	0-400 ppm

Other Gases Monitored

- Acetonitrile, CH_3CN
- Benzene, C_6H_6
- 1-3 Butadiene, C_4H_6
- 2-Butanone (MEK), C_4H_8O
- Cyclohexanol, $C_6H_{11}OH$
- Cyclohexanone, $C_6H_{10}O$
- Dimethylformamide, C_3H_7NO
- Ethyl alcohol, C_2H_5OH
- Ethyl Methacrylate, $C_5H_8O_2$
- Ethylene, C_2H_4
- Gasoline
- Hexane, C_6H_{14}
- Hydrocarbons
- Hydrogen, H_2
- Isopropyl alcohol (IPA), C_3H_8O
- Methanol, CH_3OH
- Organic solvents
- Solvents
- Toluene, C_7H_8
- Trichloroethylene, C_2HCl_3
- Volatile Organic Compounds, VOCs

*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.

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www.enmet.com
Lit. no. EX-5155-080717-V1