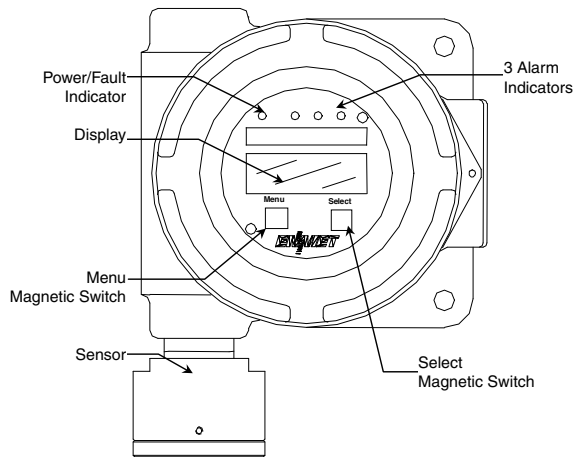


# EX-5175

Explosionproof Sensor/Transmitter For H<sub>2</sub>, O<sub>2</sub>, CO, H<sub>2</sub>S and Other Toxic Gases

## FEATURES

- Three Alarm LEDs
- 24 VDC, 4-20 mA
- NEMA 4X, NEMA 7 and IP66 Rated Enclosure
- Liquid Crystal Display
- Non-Intrusive Calibration
- Approved for Class I, Division 1, Groups B, C, & D



## BASIC SPECIFICATIONS

- Voltage:** 24 VDC minimum, loop powered
- Output:** 4-20 mA
- Display:** Backlit LCD
- Alarm Indicators:** 3 LEDs at programmable set points
- Menu/Calibration:** Magnet-actuated switches
- Sensor Type:** Electrochemical Cell
- 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



## THE EX-5175 IS AVAILABLE FOR:

GAS	RANGE
Ammonia, NH <sub>3</sub>	100 ppm
Carbon monoxide, CO	500 ppm
Hydrogen, H <sub>2</sub>	2000 ppm
Hydrogen sulfide, H <sub>2</sub> S	100 ppm
Nitric oxide, NO	100 ppm
Nitrogen dioxide, NO <sub>2</sub>	30.0 ppm
Oxygen, O <sub>2</sub> (% by volume)	30.0 %
Sulfur dioxide, SO <sub>2</sub>	30.0 ppm

The EX-5175 Series Sensor/Transmitters utilize electrochemical type cells to detect the target gas. These cells consist of electrodes, electrolyte and an air/liquid separation barrier. Gas molecules enter the cell and, as a result of an oxidation/reduction reaction, generate an electrical current proportional to the gas concentration. This current is measured, conditioned, converted to the gas concentration, digitally displayed and transmitted as a 4-20 mA output signal. ENMET offers a variety of multi-channel controller/alarm modules that provide the 24 VDC loop power and receive the 4-20 mA signal from the sensor/transmitters. These sensor/transmitters can also be connected to various computer-based instrumentation, PLCs, etc.



# EX-5175 Explosionproof Sensor/Transmitter For H<sub>2</sub>, O<sub>2</sub> & Toxic Gases

## SPECIFICATIONS

Gas	Range PPM	LED Alarms, PPM	LDL PPM*	Typical Sensor Life
Ammonia, NH <sub>3</sub>	100	25, 50, 75	6	1 year
Carbon monoxide, CO	500	35, 50, 200	4	2-3 yrs
Hydrogen, H <sub>2</sub>	2000	200, 500, 1000	24	1-2 yrs
Hydrogen sulfide, H <sub>2</sub> S	100	10, 20, 50	4	2-3 yrs
Nitric oxide, NO	100	25, 50, 75	4	1-2 yrs
Nitrogen dioxide, NO <sub>2</sub>	30.0	3, 5, 10	1.2	1-2 yrs
Oxygen, O <sub>2</sub> (% by vol.)	30.0%	17, 19.5, 23.5%	0.2%	1.5-2 yrs
Sulfur dioxide, SO <sub>2</sub>	30.0	2, 5, 10	0.8	1-2 yrs

\*Lower Detectable Limit calculated from baseline noise level, thermal drift and interference data used to derive zero point deviation estimates

**Sensor:** Electrochemical cell, disposable, plug-in type

**Temperature Range:** -4° to 104° F (-20° to 40° C)

**Humidity Range:** 5 to 90% rH, non-condensing

**Pressure Range:** Atmospheric ± 10%

**Display:** 8-character, single-line, backlit LCD

**Alarm Indicators:** 3 LEDs at programmable set points

**Menu/Calibration:** Magnet-actuated switches

**Installation:** 3-wire, typically 16 to 20 AWG, depending upon distance  
Max. loop resistance: 300 ohms @24 VDC  
Typical installation wire: 18 AWG (0.8 mm<sup>2</sup>)

**Sensor Location from Controller:** Up to 2,000 feet (600 m)  
Consult factory for greater distance

**Voltage:** 24 VDC minimum, Loop powered

**Output:** 4-20 mA

**Current Draw:** 45 mA maximum

**Connection:** 1/2 inch NPT, conduit

**Weight:** 5.5 lbs (2.5 Kg)

**Materials:** Transmitter Enclosure: Polyester Coated Aluminum.  
Sensor Enclosure: Stainless Steel

**Approvals:**

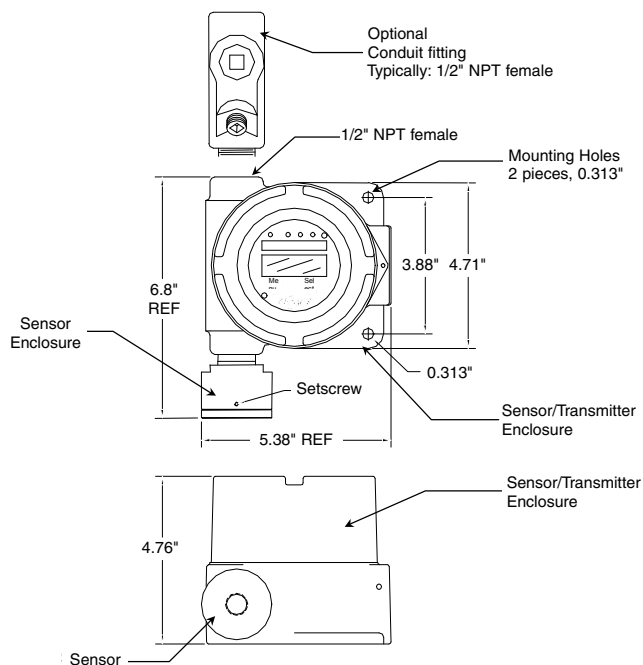
Approved for Class I, Div. 1, Groups B,C, & D

Classified to:

UL 916 (3rd ed.) and UL 1203 (4th ed.)

CSA 22.2, No. 0-M91, 30-M1986 and 142-M1987

**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

Sensor/Transmitter supplied with magnet and instruction manual

Description	Part Number
EX-5175 Sensor/Transmitter, CO.....	10014-1200
EX-5175 Sensor/Transmitter, H <sub>2</sub> S.....	10014-0200
EX-5175 Sensor/Transmitter, O <sub>2</sub> .....	10014-1100
EX-5175 Sensor/Transmitter, NH <sub>3</sub> .....	10014-2400
EX-5175 Sensor/Transmitter, SO <sub>2</sub> .....	10014-0500
EX-5175 Sensor/Transmitter, H <sub>2</sub> .....	10014-1500
EX-5175 Sensor/Transmitter, NO <sub>2</sub> .....	10014-1700
EX-5175 Sensor/Transmitter, NO.....	10014-1750

### Replacement Parts & Accessories

Replacement Magnet.....	50030-001
Instruction Manual.....	80003-098
Optional Sealing Fitting.....	73152-000

**Replacement Sensors— See Price List**

### Calibration Equipment

Gas Regulator Assembly for 17 liter Cylinders.....	02506-004
Gas Regulator Assembly for 34 liter Cylinders.....	02506-002
Calibration Adapter for Sensor.....	03700-034
Case – Holds Calibration Hardware and up to two 34 liter... or two 17 liter Gas Cylinders	73083-000
Case – Holds Calibration Hardware and up to four 17 liter... Gas Cylinders, or two 58 liter Gas Cylinders	73083-002

**Calibration Gas Cylinders — See Price List**



Specifications subject to change without notice