ENMET

Creative Gas Detection Solutions

CO-GUARD

Continuous Respiratory Airline Monitor

PRODUCT HIGHLIGHTS

- **Meets OSHA 1910.134 compressed breathing air monitoring requirements**

- **Continuous carbon monoxide monitor for compressed breathing air**

- **Proven electrochemical sensor technology**

- **Simple push button operation**

- **Easy to install compact design**

- **User programmable alarms and high capacity relays**

- **Low maintenance field replaceable sensor**

CO-GUARD is a compact, easy to install and operate compressed airline carbon monoxide monitor that meets OSHA monitoring requirements for Grade D breathing air. The instrument is specifically designed for trouble-free operation, utilizing an electrochemical carbon monoxide (CO) sensor with a life expectancy of up to three years. The CO-GUARD is supplied with a regulator assembly and five foot sample hose, and is factory pre-calibrated.

CO-GUARD incorporates a rotameter for confirmation of proper airflow and has an easy to use software interface that allows users to change alarm points, program relays and perform calibrations in the field.

CO-GUARD includes a backlit digital display, audible and visual alarms with three alarm levels. The power LED doubles as a fault indicator

should a fault occur. The audible alarm features a four minute audio defeat option for alerts below alarm level three. The standard regulator for CO-GUARD is designed to accept an input pressure between 60 to 150 psi (pounds per square inch). The output pressure of the regulator is set to 55 psi to provide a flow rating around ½ liter per minute or 1 scfh (standard cubic feet per hour) as viewed on the rotameter. It is simple to replace the sensor and recalibrate the instrument in the field.

CO-GUARD is designed for use in a wide variety of applications ranging from automotive paint spray operations to wood finishing. This monitor can be used in virtually any commercial or industrial process that requires carbon monoxide monitoring of compressed breathing air for personnel working in such operations.
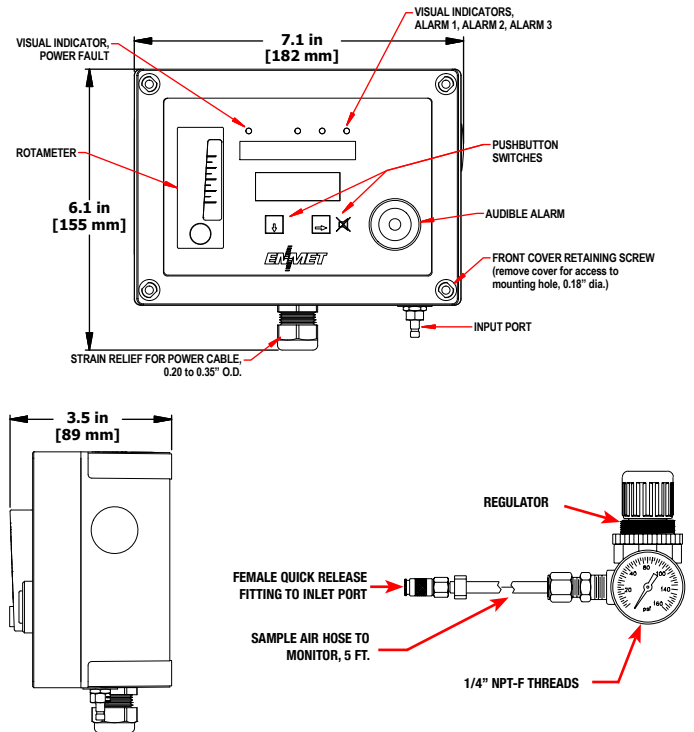
CO-GUARD

GENERAL SPECIFICATIONS

Display:	High-contrast, backlit
Resolution:	1 ppm
Alarms:	Visual Gas Alarm: 3 red LEDs
	Visual Power Fault: Green/Red LEDs
	Audible Alarm: 105 dB at 30 cm
	(12 inches)
Operating Power:	110 VAC, 220 VAC and/or 24 VDC, 15W
Power Connection:	Supplied with strain relief for 0.20 to 0.35 inch diameter cable
Outputs: Relays:	4 Form C, 10A SPDT contacts, 3 gas alarms and 1 fault
Analog:	4-20mA
Digital:	RS-485 COM port interface using Modbus RTU
Sensor:	Electrochemical
Response Time:	t_{90} = 30 sec
Accuracy:	+/- 10% of reading
Temperature Range:	32° to 104° F (0° to +40° C)
Inlet Air Line Connection:	1/4 inch NPT female
Air Line Sample Hose to Monitor:	5 foot length
Inlet Pressure:	60 to 150 psi, air supply lines, 55 psi regulated to monitor
Enclosure:	Polycarbonate
Dimensions:	7.1 W x 6.1 H x 3.5 D inches (18.2 W x 15.5 H x 8.9 D cm)
Weight:	2 lbs (0.9 kg)

DIMENSIONS

CO-GUARD is supplied with a regulator and 5 foot hose for connection to the monitor. Connection from the facility air supply to the regulator is 1/4 inch NPT female.

STANDARD CALIBRATIONS

Range:	0-50 ppm CO
Alarm Levels:	
Alarm 1:	5 ppm CO, user adjustable
Alarm 2:	10 ppm CO, user adjustable
Alarm 3:	20 ppm CO, user adjustable
Alarm Adjustment:	All three alarms are user adjustable between 1 to 50 ppm

ORDERING INFORMATION

Instrument	Part No.
CO-GUARD, with regulator & 5 foot hose	03481-005
NOTE: Power cable not supplied	
Gas Regulator Assembly for 34 liter steel gas cylinders, 1 Lpm	03700-500
Calibration Adapter for 11 liter aluminum cylinders	03700-036
Replacement CO Sensor for CO-GUARD	67025-1200

Calibration Gas and Accessories - See price list

Consult factory for oxygen or other optional instrument configurations.

⚠️ **WARNING:**

CO-GUARD should not be used without an oxygen monitor unless there is complete assurance that inert gas cannot be accidentally injected into the breathing airline.

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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