

1. Overview

These instructions describe how to wire the GDX-150 transmitter to a Bacharach GDA-400 or GDA-1600 controller.

The GDX-150 is a sensor transmitter that provides a 4-20 mA output signal based on the concentration of gas detected. The 4-20 mA interface is convenient for use with Bacharach's GDA-400 and GDA-1600 controllers as well as other devices.

Please review the GDA-400 manual (5700-9000) or the GDA-1600 manual (5700-9001) for a more detailed description of its 4-20 mA interface and for instructions on properly configuring the controller.



Figure 1: GDX-150 Ammonia Transmitter

2. Installation

2.1. Items Required

- GDX-150 transmitter
- GDA-400 or GDA-1600 controller with 4-20 mA input(s)

2.2. Installation Procedure

1. The GDX-150 has three wires exiting the rear of the housing (one green, two white). These wires should be connected to one channel of the controller's 4-20 mA input module (5700-0014 for GDA-400; 5700-0006 for GDA-1600). The green wire is the ground wire and should be connected to the common terminal.
2. The white wires provide power to the transmitter and the 4-20 mA signal to the controller. Connect one of the wires to the power terminal and the other to the signal terminal.

NOTE: The polarity of the two white wires is irrelevant.

3. Once all connections are made refer to the controller's user manual for properly configuring the GDX-150 to operate with the controller.

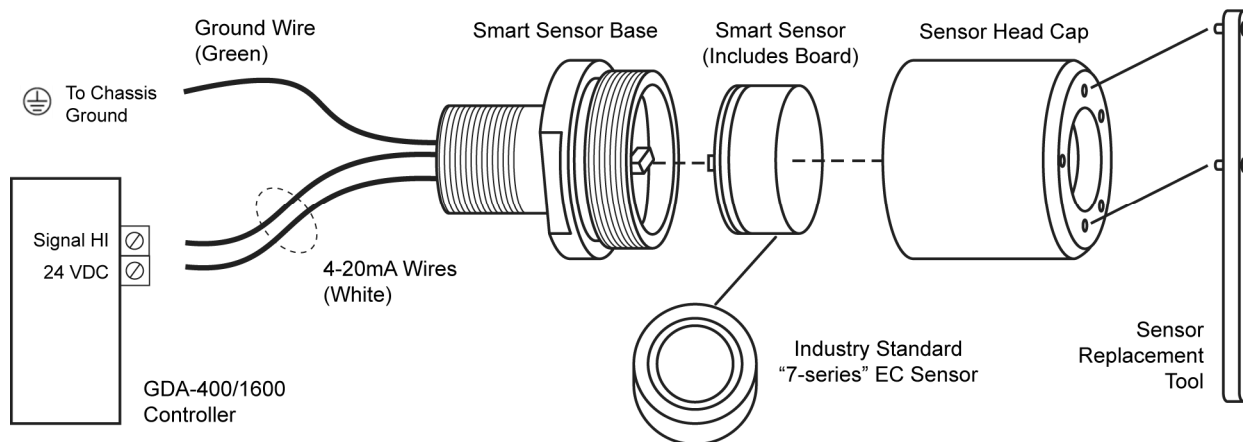


Figure 2: Components of the GDX-150

3. Specifications

Category	Description
Product Type	GDX-150 transmitter for low level continuous monitoring of ammonia in ambient environments
Coverage	Single sensor, 40-foot diameter
Detector Type	Electro-chemical, field replaceable
Sensitivity	1 ppm
Measuring Range	0-500 ppm
Accuracy	±15% of full scale, ±1 count (whichever is greater) of reading from 0-500 ppm
Long term Drift	<10% per 6 months
Linearity	<10% of full scale
Temperature Drift	<0.1% per degree C over temperature range
Housing	316 stainless, suitable for Class 1, Div 1 and 2, Gr. B, C, D ¾ inch NPT threading
Calibration	Through GDA-400 or GDA-1600 controllers
Response Time	T ₅₀ <30 s , T ₉₀ <90s
4-20 output Signal	2-wire, 4-20 mA current sink. Max output = 25 mA
Operating Temp	-20 – 50 °C (-4 - 122 °F)
Ambient Humidity	5% to 90% RH (non-condensing)
Power	9 – 36 VDC, 250 mA (@ 24 VDC)
Certification	Intrinsically safe with use of an IS barrier
Warranty	2 years from date of shipment, consumables not included

4. Accessories and Replacement Parts

Part Number	Description
5600-0004	Calibration Cup/Sample Draw Adaptor
5600-0003	Splash Guard/Remote Cal-Cup
0024-7059	Calibration Kit – Regulator, Tubing and Carrying Case (no gas included)
0051-3160	NH ₃ Calibration Gas, 25 ppm, 58 Liter
0051-7131	Zero Grade Air, 103 Liter
5600-5003	NH ₃ Replacement Sensor



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