

FEEDBACK TRANSMITTER BOARD 4-20mA

Installation, Operation & Maintenance Manual

▲ PEAKTRONICS

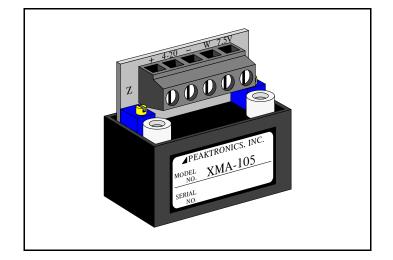
The Peaktronics XMA-105 is a 4-20mA transmitter that is specifically designed for use with the Peaktronics AMC, LRC, SVC, and DMC series controllers. When a feedback potentiometer of 1K to 10K ohms is used with the AMC/LRC/SVC/DMC unit, the XMA-105 can be used to provide a 4-20mA signal that is proportional to the potentiometer value. Since the feedback potentiometer monitors the position of an actuator, the 4-20mA signal can be used by a remote instrument to monitor or display actuator position. A 1-5V signal can be obtained by connecting a 250 ohm load resistor between the "4-20" and "-" terminals.

The zero and span adjustments on the XMA-105 allow the user to scale the 4-20mA signal to correspond with the zero and span positions set by the AMC/LRC/SVC/DMC controller. After the AMC/LRC/SVC/DMC has been set, position the actuator to the zero position and adjust the XMA-105 zero to achieve the desired output (usually 4 mA). Then position the actuator to the span position and adjust the XMA-105 span to achieve the desired output (usually 20 mA). Repeat this process until the zero and span positions yield the desired output from the XMA-105 without further adjustment.

The XMA-105 can also be used when no actuator controller is used. In this application, the XMA-105 will

XMA-105

Feedback Potentiometer Transmitter



need to be powered by an AMI/PWR Series unit or an equivalent power supply of 11 to 32 VDC - see wiring diagram for details.

SPECIFICATIONS

OPERATING VOLTAGE 11 to 32 VDC

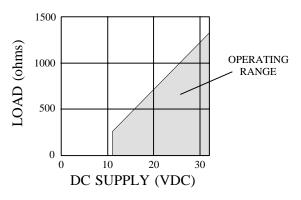
OPERATING CURRENT

(not including output current and feedback pot) 5 to 8 mA

INPUT SPECIFICATIONS

Zero (output = 4.0mA) Span (output = 20.0mA) Zero-to-Span Differential Input Impedance 0.2 to 5 VDC 0.62 to 10 VDC 0.42 VDC minimum 200K ohms

OUTPUT OPERATING RANGE

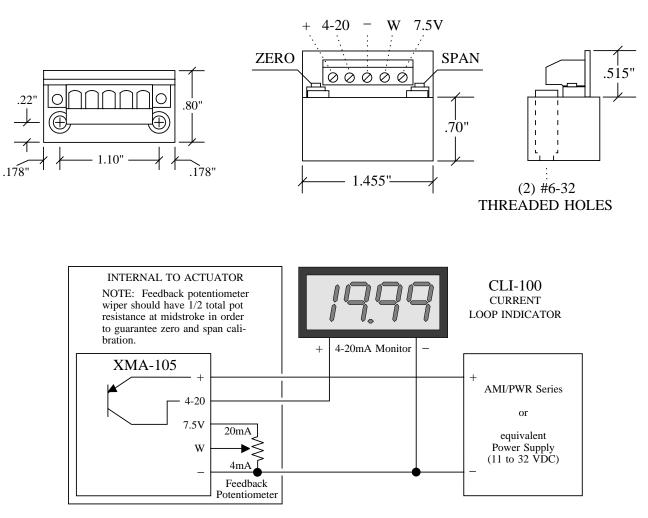


FEEDBACK POTENTIOMETER (total resistance)

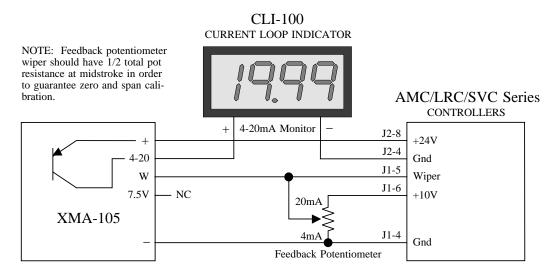
1K to 10K ohms

ENVIRONMENTAL

Operating Temperature Storage Temperature Relative Humidity -40 to 65 °C -40 to 85 °C 0 to 90 % (non-condensing)



CONNECTING XMA-105 AS STAND ALONE FEEDBACK TRANSMITTER



CONNECTING XMA-105 WITH AMC/LRC/SVC SERIES

www.peaktronics.com