PEAKTRONICS

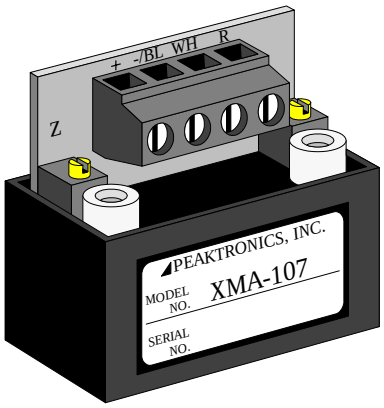
XMA-107

2-Wire Loop Powered
Feedback Potentiometer Transmitter

The Peaktronics XMA-107 2-Wire Loop Powered Transmitter converts a potentiometer signal to a standard 4-20mA current loop signal. Since the XMA-107 is loop powered, the 4-20mA signal only requires a 2 wire connection (see wiring diagram for details). The unit is a compact encapsulated package with two mounting holes (mounting screws are included) and screw terminals that provide for easy installation and wiring.

The XMA-107 is ideally suited for actuator applications that require only a feedback signal. The unit's small size allows it to mount inside nearly any actuator. Combining the XMA-107 with a Peaktronics feedback potentiometer and mounting kit provides a complete package that can provide an actuator with a precise and reliable 4-20mA feedback signal.

Prior to calibrating the unit, install the feedback potentiometer so that the potentiometer wiper is half the total resistance when the actuator is at its mid-stroke position. To calibrate the unit, position the actuator to the zero position and adjust the XMA-107 zero ("Z") to achieve the desired output (usually 4mA). Then, position the actuator to the span position and adjust the XMA-107 span ("S") to achieve the desired output (usually 20mA). Repeat this process until the zero and span positions yield the desired output without further adjustment.



SPECIFICATIONS

POWER REQUIREMENTS

Minimum Voltage	6 VDC
Maximum Voltage	28 VDC
Maximum Reverse Voltage	40 VDC
Maximum Power Dissipation	0.56 W

INPUT SPECIFICATIONS

Zero (output = 4.0mA)	0 to 50% (0 to 0.62 VDC)
Span (output = 20.0mA)	10 to 100% (0.12 to 1.23 VDC)
Input Impedance	200K ohms

FEEDBACK POTENTIOMETER (total resistance)

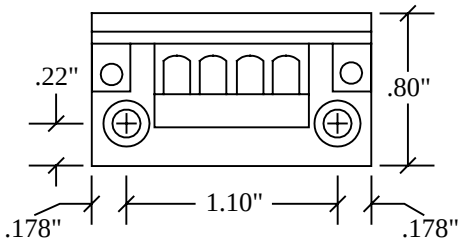
1K to 10K ohms

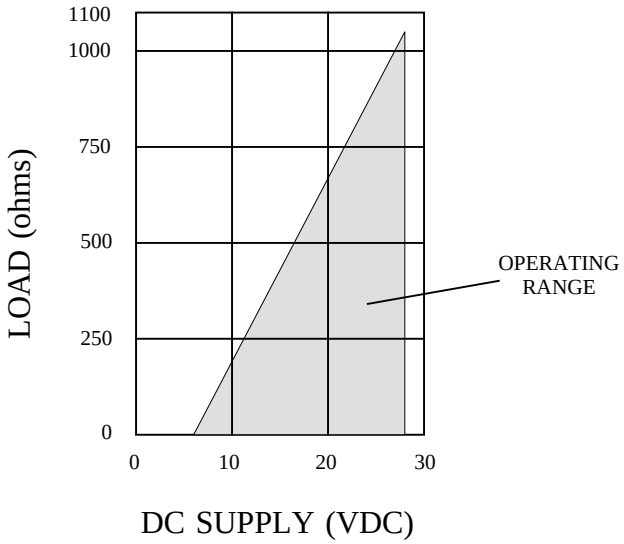
ENVIRONMENTAL

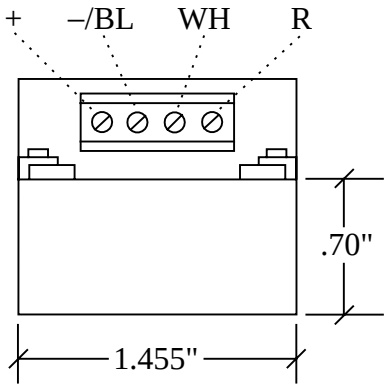
Operating Temperature Range	0 to 85 °C
Storage Temperature	-40 to 85 °C
Relative Humidity	0 to 90 % (non-condensing)

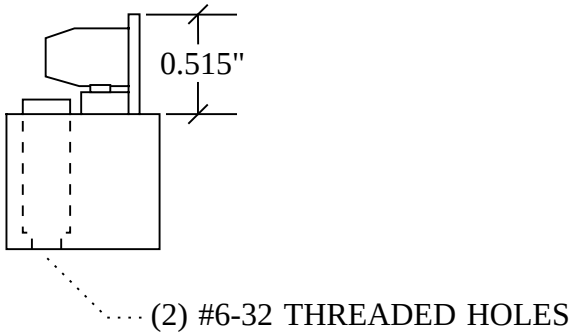
ENVIRONMENTAL STABILITY

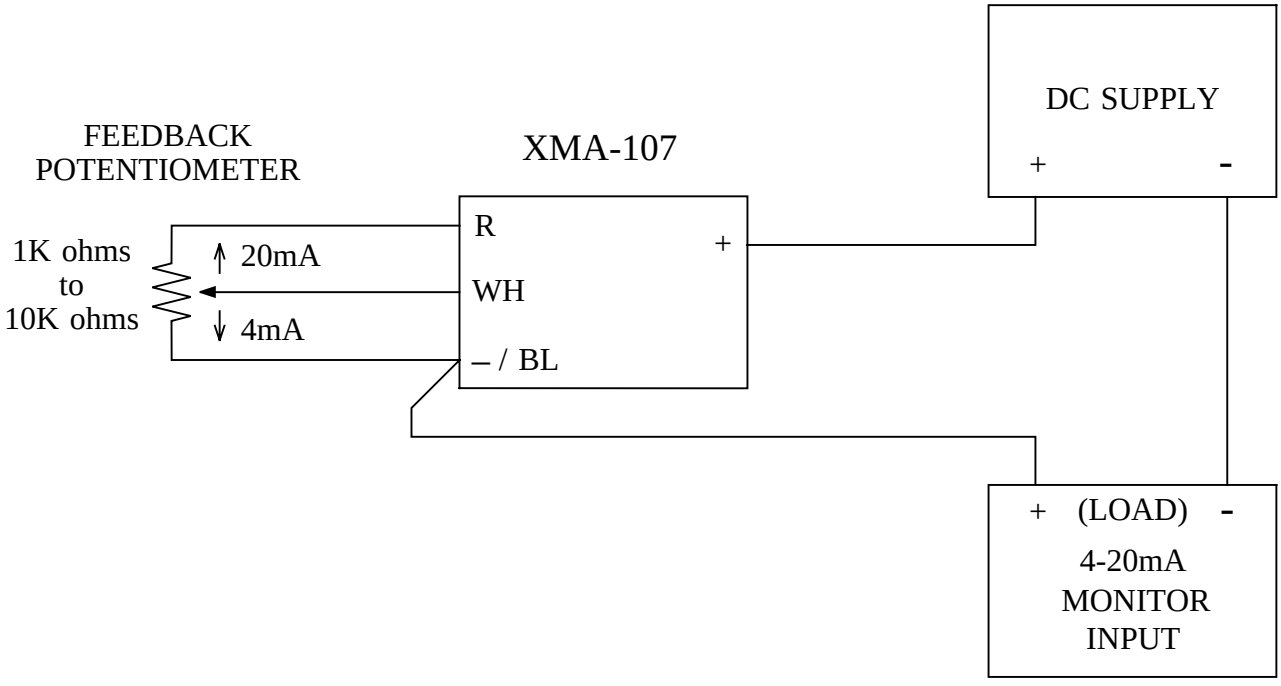
Zero	0.020% of zero per °C maximum
Span	0.010% of span per °C maximum


.22"
.80"
1.10"
.178"
.178"


1100
1000
750
500
250
0
LOAD (ohms)
OPERATING RANGE
0
10
20
30
DC SUPPLY (VDC)


+
–/BL
WH
R
.70"
1.455"


0.515"
(2) #6-32 THREADED HOLES


FEEDBACK POTENTIOMETER
1K ohms to 10K ohms
20mA
4mA
XMA-107
R
WH
– / BL
+
DC SUPPLY
+
-
+ (LOAD) -
4-20mA MONITOR INPUT