

# POTENTIOMETER TYPE, INFINITE RESOLUTION CURRENT LOOP PRESSURE TRANSMITTER MODEL 3100

- Designed to Meet ISA-S50.1 (1975) Standard, Type 2, Class L, H and U
- These new Pressure Transmitters are compatible with all 2-wire 4 to 20 mA. instrumentation and measuring systems
- The Transmitters utilize the same High Accuracy Conductive Plastic Film Potentiometric sensors featured in our standard Pressure Transducer line.

## FUNCTIONAL SPECIFICATIONS

- Service: Liquid, Gas or Vapor compatible with Ni-Span C, Brass and Stainless Steel
- Ranges: Any range to suit from 50 to 5000 PSI Gauge or Absolute; Overpressure 20% of Full Scale Pressure.
- Output: True 2 Wire 4 to 20 mA with Reverse Polarity Protection
- Trims: Non-Interacting Zero and Span Trimmers, (Preset at the Factory to  $\pm 0.5\%$  of FS)
- Damping: Time Constant fixed at 0.1 Second. Other values available.
- Power: External Loop Power Supply required, 10 to 42.5 VDC; Loop Resistance range 0 to 1525 ohms (See Chart)
- Insulation: 500 Megohms min at 50 VDC

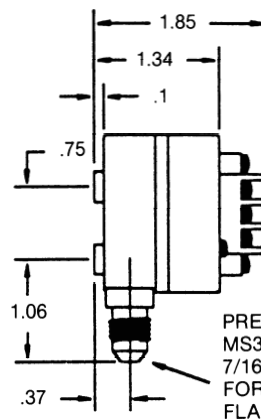
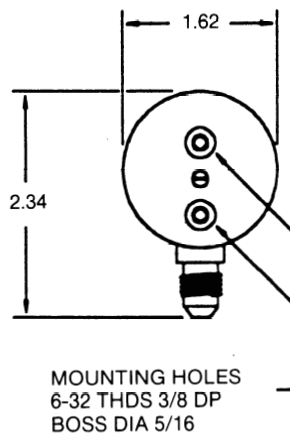
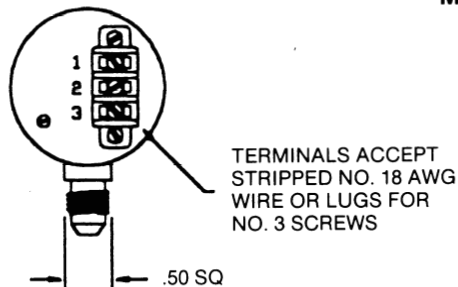
## PERFORMANCE SPECIFICATIONS

- Ind. Linearity: to  $\pm 0.5\%$  FS
- Repeatability:  $\pm 0.1\%$  FS
- Supply Sensitivity: 0.0025% FS/VDC
- Temp. Sensitivity:  $\pm 0.2\%/^{\circ}\text{C}$
- Life: to 10,000,000 cycles (depending on application)

## ENVIRONMENTAL SPECIFICATIONS

- Operating Temp Range:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- Acceleration Error:  $\pm 0.1\%/G$  up to 20.0G
- Immune to RFI Noise

## MECHANICAL OUTLINE



**CONNECTIONS:**  
1 - LOOP PLUS  
2 - LOOP COMMON  
3 - CASE GROUND

TERMINAL DUST COVER  
OPTIONAL

## SAFE OPERATING AREA

