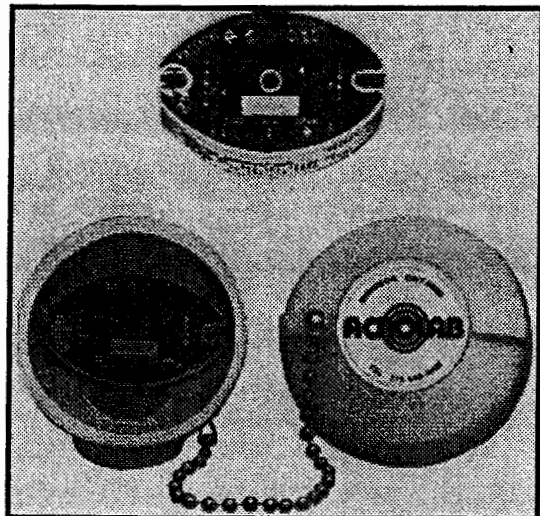


RTD Temperature Transmitters

GENERAL

The temperature transmitter is designed to produce a linearized 4-20 mA current signal, which is directly proportional to the temperature of the sensing element. A variety of models are available for sensor inputs of different materials, values and temperature coefficients.

FEATURES



- Small size allows universal mounting inside series 300 Screw Cover Heads, series 200 Explosion-Proof Polypropylene Heads, Thermostat Housings, Electrical Handibox Enclosures, and Panel Surface Mounting.
- Linearized 4-20 mA output.
- Degrees Fahrenheit or Celsius ranges
- Screw terminal connections
- Accepts two or three-wire RTD's
- Adjustable zero + span
- Each unit calibrated after a minimum of 48 hours burn-in and checkout time

STANDARD MODEL SPECIFICATIONS

Sensor Input: Platinum RTD (0.00385 T.C.) Platinum

Output Span: 4-20 mA

Supply Voltage: 13 to 40 VDC
(Loop Powered) (Note 1)

Isolation: Non - Isolated

Calibrated Accuracy: $\pm .1\%$ of Span

Ambient Temp. Limits: -30° to 165°F

Power Supply Effect: .001% per volt

Dimensions (Figure 1): 1.5" diameter x 1.080"high

Minimum Current: 3.4 mA

Maximum Current: 30 mA

Upscale Burnout: Standard

Reverse Polarity Protection: Standard

Conformity: .1% of Span (linearized RTD's only)

Nominal Zero Adjustment: $\pm 10\%$

Nominal Span Adjustment: $\pm 10\%$

Connections (Figure 1): Screw Terminals
(2 or 3 wire RTD's)

NOTE 1: Transmitters are designed for a nominal 24 VDC power supply. Use the following formulas to determine maximum resistance loading (RL) allowed for power supply used or to determine supply voltage (V) required for fixed resistance loads.

MINIMUM POWER SUPPLY VOLTAGE

$$V = .02 \times RL + 13 \text{ V}$$

EXAMPLE: 650 Ohm Impedance Load

$$V = .02 \times 550 + 13$$

V = 24 VDC Minimum Power Supply

MAXIMUM RESISTANCE LOAD

$$RL = \frac{V - 13}{.02}$$

Example: 24 VDC Power Supply

$$RL = \frac{24 - 13}{.02}$$

RL = 550 Ohms Maximum Impedance Load