

The patented Pyromation RTD transmitters are designed to produce a linearized 4 - 20 mADC output current signal, which is directly proportional to the temperature of the RTD temperature sensing element. A variety of models are available for RTD sensor inputs of different element values and temperature coefficients. The model described is designed for use with RTDs that have platinum measuring elements with temperature coefficients of .00385 and .00392. Consult factory for other available models.



FEATURES

- Small size allows universal mounting in all Pyromation screw cover heads, thermostat housings, electrical handboxes, and surface mounting on panel subplates
- Linearized 4 - 20 mADC outputs
- Degrees Fahrenheit or Celsius ranges
- Loop Powered
- Accepts 2 or 3 wire RTD's
- Zero and span adjustments
- 48 hour burn-in prior to calibration and shipment
- Reverse polarity protection

STANDARD MODEL SPECIFICATIONS

Platinum RTD Inputs

Linearized 4-20 mA Output for Platinum RTD Inputs

Minimum Temperature Span: 50°F (28°C)

Maximum Temperature Span: 1000°F (556°C)

Non Isolated

Ambient Temperature Limit: -30 to 165°F (-34 to 74°C)

Screw Terminal Connections: 28 to 14 Ga. Wire

Loop Powered Supply Voltage: 13 - 40 VDC

Power Supply Effect: .001% per Volt

Minimum Current: 3.4 mA

Maximum Current: 30 mA

Burnout Protection: Upscale or Downscale

Calibration Accuracy: ± .1% (± .016 mA)

Conformity: ± .1% of Span

Zero Adjustment: ± 10%

Span Adjustment: ± 10%

NOTE : 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

Example: 550 Ohm Impedance Load

$$V = .02 \times RL + 13 \text{ V} \quad V = .02 \times 550 + 13$$

V = 24 VDC Minimum Power Supply

MAXIMUM RESISTANCE LOAD

Example: 24 VDC Power Supply

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

RL = 550 Ohms Maximum Impedance Load