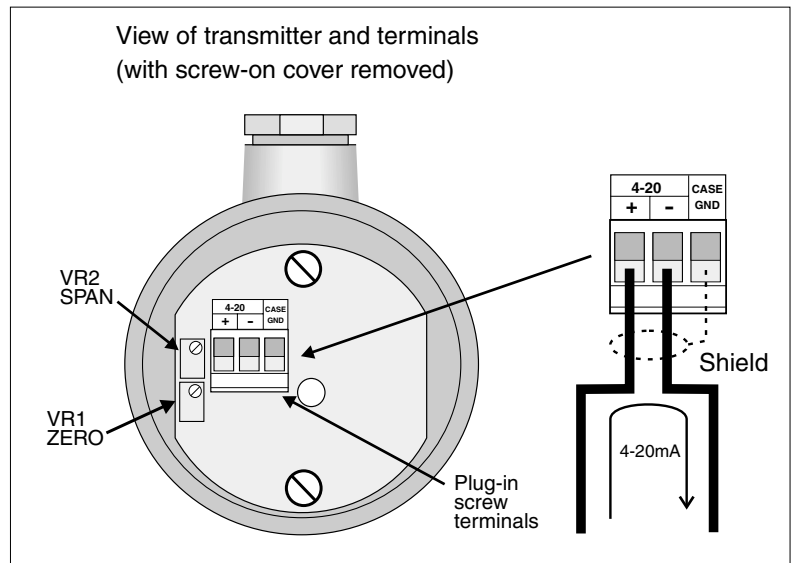
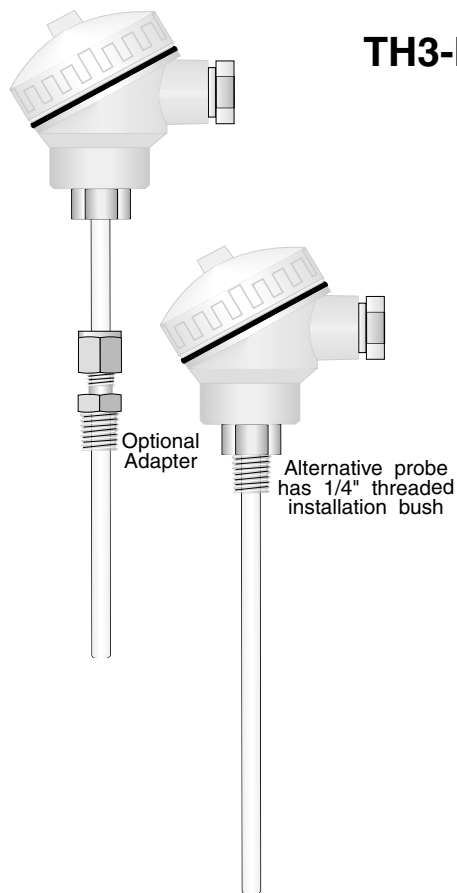


Application note TH3-RT trimming procedure



Calibration trimming procedure

The TH3-RT is scaled prior to shipment the ZERO and SPAN potentiometers are sealed and should not be altered unless calibration trimming is required. The procedure for trimming the 4-20mA output is:

1. Place a mA meter in series with the 4-20mA loop.
2. Place the probe in the temperature required for a 4mA output e.g. an ice bath, ice point reference or temperature calibrator set at zero degrees if a 4mA output is required at zero degrees.
3. Adjust the ZERO potentiometer VR1 until the reading on the mA meter is 4mA.
4. Place the probe in the temperature required for a 20mA output.
5. Adjust the SPAN potentiometer VR2 until the reading on the mA meter is 20mA.
6. Repeat steps 3 to 5 until no further adjustment is needed i.e. until the reading settles at 4mA and 20mA the two reference temperatures without any need for adjustment.

Transmitter specifications

Range: Factory set
 Output: 2 wire 4-20mA loop powered
 Accuracy: Better than 0.1% of full scale when calibrated
 Linearity: Better than 0.1%
 Thermal drift: Typically $\pm 20\text{ppm}/^\circ\text{C}$
 Protection: Reverse polarity and over voltage protected
 Loop supply: 11 to 36VDC
 Ambient temperature: 0 to 60°C
 Humidity: 5-95% non-condensing

