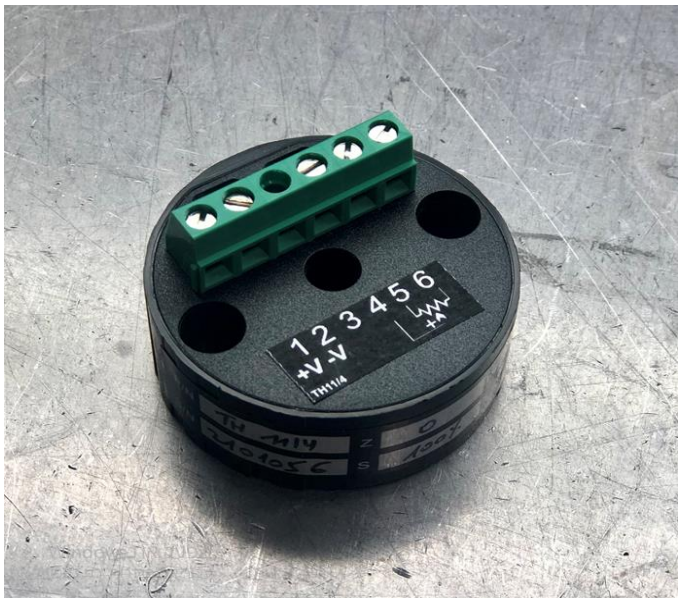
Universal Non-Isolate 2-Wire Transmitters Thermal Head Mounted - Series TH-11U

User selectable for all TC types, mV, and Pt-100 RTD



The Mescon TH-11U is a low cost, non-isolated temperature transmitter designed to fit in a standard thermal head. A new design features a unique circuitry that enables the use of a single transmitter for the measurements of either Pt-100 RTD, Thermocouple input or mV. When set to Thermocouple mode, the TH-11U accepts all known Thermocouple types. The advantages of using the TH-11U transmitter are:

- Reduced inventory levels for both in-plant users and distributors.
- Ease of maintenance through product standardization.
- Better measurement stability through improved circuitry and enhanced RFI-EMI rejection.

The TH-11U is constructed of an upper and lower section. The lower section contains the signal conditioning electronics, while the upper half contains the "personality" components that define the input sensor type and the measurement range. The two halves snap into each other for a perfect fit, yet enable easy disassembly for the purpose of input and range changes .

Specifications:

Output Span: 4-20mA, limiting @ <28mA
Input: RTD - Pt-100 ,2 or 3 wire connection 20°C minimum, 500°C maximum. TC - all known types. 10mV min. span.
Input span: RTD - 20°C min. 500°C max. (36°F min. 900°F max)
Burnout Detection: Upscale –standard
Supply Voltage: 8-38 VDC polarity protected
Maximum Load: Rmax = 8 - ylppusV)V)/20mA
Ambient Temp: - 20°C to +70°
Humidity: 0 – 95%RH, Non-condensing
Linearity: RTD: better than ±0.05% of span referred to sensor temperature. TC/mV: better than ±0.03% of span referred to mV input level.
Stability: Pt-100°(100 C span): 0.03% of span/°C (For both zero and span.)
TC/mV (25mV input): 0.04% of span/°C
CJ Compensation: For TC - 0.05°C/°C of ambient temp

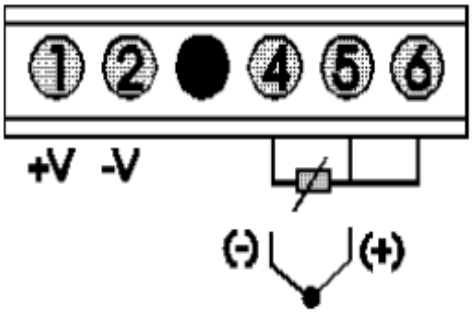
Calibration and adjustments:

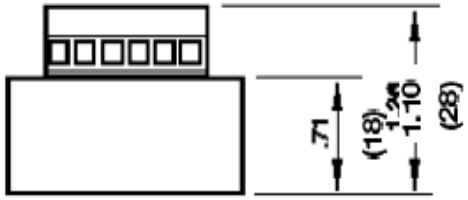
It is assumed that the unit undergoing calibration has been properly ranged at the factory or the workshop

1. Pt-100 RTD: Connect the Pt-100 sensor simulator to the TH11 input terminals according to the wiring diagram. Turn the power on ORT/C: Connect the Thermocouple sensor simulator to the TH-11 input terminals according to the wiring diagram. Turn the power on .

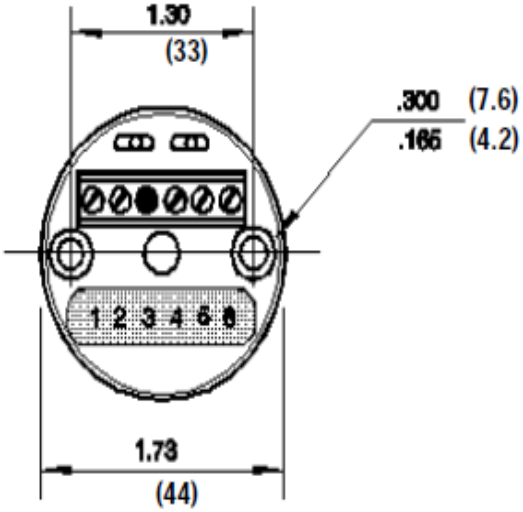
For optimum performance allow 15 minutes for temperature gradients to equalize.

2. Set the input to and adjust the ZERO pot until the current indicator reads 4.00 mA.
3. Set the input to and adjust the SPAN pot until the current indicator reads 20.00 mA.
4. Repeat steps 2 and 3 until no further adjustment is needed.



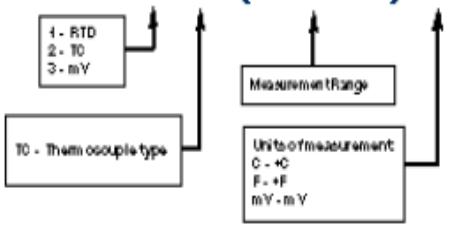


ALL DIMENSIONS ARE IN INCHES. (mm)



ORDERING INFORMATION

TH11/X-X-(X-XXX)-X



Please request our ordering and calibration diskette describing the rest of Mescon's products.