

MODELS TMPT, & TMPRN THERMOCOUPLES



MODEL TMPT - 2 WIRE THERMOCOUPLE CONNECTOR WITH BUILT IN SIGNAL AMPLIFIER

GENERAL DESCRIPTION

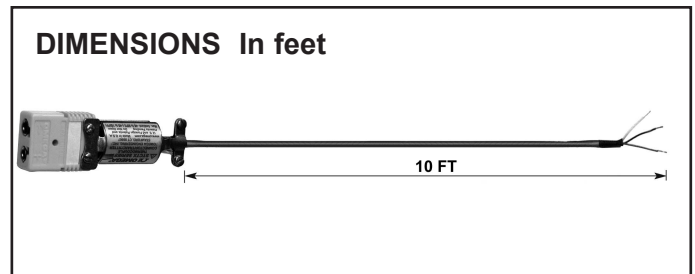
The two wire standard female thermocouple connector includes a signal amplifier that provides a 4-20 mA analog output to interface with any standard current monitoring instrumentation. It can be mated with both miniature and standard male quick disconnect style thermocouples, and is available in a variety of temperature ranges.

- COMPATIBLE WITH J, K, AND T TYPE UNGROUNDED THERMOCOUPLES
- ENCAPSULATED ELECTRONICS HOUSING
- FACTORY CALIBRATED, NO ADJUSTMENTS REQUIRED
- PROVIDES INDUSTRY STANDARD 4-20 MA ANALOG OUTPUT

SPECIFICATIONS

1. SUPPLY VOLTAGE: 9 to 24 VDC @ 30 mA
2. OUTPUT: 4 to 20 mA (2 wire)
3. ACCURACY: $\pm 0.5\%$ of full scale millivolt input @ 23° C (73° F) plus the non-linearity of the thermocouple type (note that the TMPT does not compensate for thermocouple non-linearity)
4. AMBIENT TEMP EFFECT: ± 0.002 mA/°C
5. MAX LOOP LOAD: $\Omega = (V_{\text{supply}} - 9 \text{ V})/0.020 \text{ A}$
6. TRANSMITTER OPERATING TEMPERATURE: -40° to 85° C (-40 to 185° F)
7. AGENCY APPROVAL: CE
8. OUTPUT CONNECTION: 10 foot 2-wire shielded cable
9. RESPONSE TIME: 120 ms (0 to 63% FS)
10. THERMOCOUPLE JUNCTION: Ungrounded

DIMENSIONS In feet



ORDERING INFORMATION

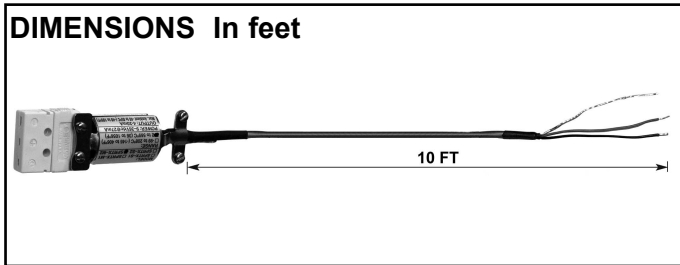
MODEL NO.	DESCRIPTION	TC ANSI TYPE	TEMPERATURE RANGE	PART NUMBER
TMPT	TC TRANSMITTER WITH FEMALE CONNECTOR	K	0 to 2000° F	TMPTRN01
		K	0 to 1000° F	TMPTRN02
		T	0 to 250° F	TMPTRN03
		T	0 to 750° F	TMPTRN04
		J	0 to 250° F	TMPTRN05
		J	0 to 1000° F	TMPTRN06

MODEL TMPRN - TWO WIRE RTD CONNECTOR WITH BUILT IN SIGNAL AMPLIFIER

GENERAL DESCRIPTION

The two wire standard female thermocouple connector includes a signal amplifier that converts the resistive change of a 100 Ω , 0.00385 RTD sensor or probe across a dedicated temperature range into an industry standard two wire, 4 to 20 mA analog output. It can be mated with both miniature and standard male quick disconnect style RTDs.

- *ENCAPSULATED ELECTRONICS HOUSING*
- *FACTORY CALIBRATED, NO ADJUSTMENTS REQUIRED*
- *PROVIDES INDUSTRY STANDARD TWO WIRE, 4 TO 20 mA ANALOG OUTPUT*
- *PROVIDES OPEN SENSOR WIRE INDICATION*



SPECIFICATIONS

1. **TEMPERATURE RANGE:** 2 - 569° C (36 - 1056° F)
2. **OUTPUT:** 4 to 20 mA (2 wire)
3. **INPUT:** 3 wire, PT100 ($\alpha = 0.00385$)
4. **OPEN SENSOR WIRE INDICATION:**
 - Leg 1: Open = 27 mA
 - Leg 2: Open = 2.2 mA
 - Leg 3: Open = 2.2 mA
5. **INPUT CONNECTION:** 3 prong miniature connector

ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION	TEMPERATURE RANGE	PART NUMBER
TMPTR	RTD TRANSMITTER WITH FEMALE CONNECTOR	2 to 569° C (36 to 1056° F)	TMPTRN07