Miniature Low-Cost Temperature Transmitters

MTX

- **Two-Wire Design**
- **4-20 mA dc Output**
- **±0.1% Accuracy**
- **Upscale Break Protection**
- **Non-Isolated**
- **Mountable in Any Standard Protection Head**
- **Accepts J, K, T, E Thermocouple or 100ohm Platinum RTD Inputs**

---

1 YEAR WARRANTY CE

---

scroll below To Order Manuals Manuals CAD Mechanical

The non-isolated, low-cost MTX Series transmitters convert thermocouple or RTD signals into a 4-20 mA dc signal output that is directly referenced to the mV input of a thermocouple or resistance of a 100 ohm platinum RTD.

For Thermocouple transmitters, the 4-20mA output is not linearized. T/C transmitters are available for type K, J, T, and E with color coding for each T/C type. The transmitters for RTD's are available with the 4-20mA output directly proportional to the input resistance or with the 4-20mA output linearized to temperature.

Note: *RTD's are slightly non-linear with the resistance diverging from actual temperature by approximately 1% at the mid point of full scale. (For linearized RTD transmitters, specify "RTD-L". Non-linearized transmitters are the more popular choice).*

The MTX transmitters mount directly in NEWPORT's standard protection heads for connection to your sensor.

Click here for Ultra-Miniature Transmitters

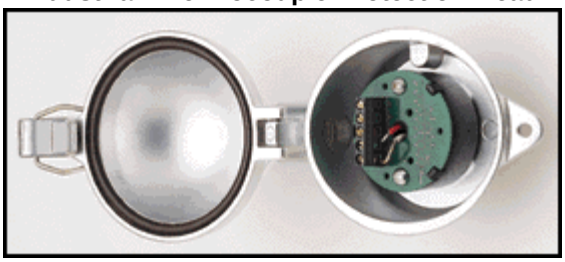
SPECIFICATIONS

Output Range: 4-20 mA dc
Zero and Span Adjustment Range: ±25% for °F and ±10% for °C
Accuracy: ±0.1% of span (includes effects of linearity, hysteresis and repeatability) refernced to the mV input
Frequency Response: 3dB @ 3 Hz
Operating Temperature Range:
-40 to 85°C (-40 to 185°F)
Storage Temperature Range:
-46 to 121°C (-50 to 250°F)
Supply Voltage:
8-50 Vdc, 24V recommended

Max Loop Resistance: $\frac{Vs - 8}{0.020A}$

Dimensions: 44.5 mm Dia. x 31.75 mm H (1.75" x 1.25")
Weight: 15 g (0.53 oz.);
34 g (1.23 oz.) ***Note:*** *Thermocouple Models output proportional to mV output of thermocouple. Not linearized to temperature.*

Industrial Thermocouple Protection Head



Available from Newport

RANGE CODES

Range	J	K	T	E	RTD	RTD-L
-40 to 140°F	-	-	-	-	P01	P01-L
0 to 200°F	J01	K01	T01	E01	P02	P02-L
0 to 300°F	J02	K02	T02	E02	P03	P03-L
0 to 500°F	J03	K03	T03	E03	P04	P04-L
0 to 750°F	J04	K04	T04	E04	P05	P05-L
0 to 1000°F	J05	K05	-	E05	P06	P06-L
0 to 100°C	J06	K06	T06	E06	P07	P07-L
0 to 150°C	J07	K07	T07	E07	P08	P08-L
0 to 250°C	J08	K08	T08	E08	P09	P0-L9
0 to 400°C	J09	K09	T09	E09	P10	P10-L
0 to 500°C	J10	K10	-	E10	-	-
FS	FS	FS	FS	FS	FS	FS

- Not an available range

Product Selection (Specify Model Number, see variations below in partnumber builder table)

Part Number	Description	Qty.
Thermocouple Transmitters		
MTX-K01	Thermocouple K transmitter with 0 to 200°F range	
MTX-J03	Thermocouple J transmitter with 0 to 500°F	