



MEAS SPRING LOADED RTD PROBE-TWIN THREADED FITTING

- Ideal for Thermowell Applications
- 1/2" x 1/2" NPT Threaded Fitting
- Variety of Configurations
- Single and Dual Elements
- Stainless Steel Case
- Custom Designs Available with:
 - » Connection Heads
 - » Transmitters

The Spring Loaded RTD Probe–Twin Threaded Fitting is constructed with a stainless steel sheath and utilize a spring loaded fitting to provide positive contact between the tip and the process. Positive contact can decrease the time response of the sensor as well as provide a more consistent temperature reading. Our crimped twin threaded hex fitting sensors are generally designed for use with thermowells, however they can be used in any application that requires the spring action. The dual threaded fitting also allows the use of a connection head.

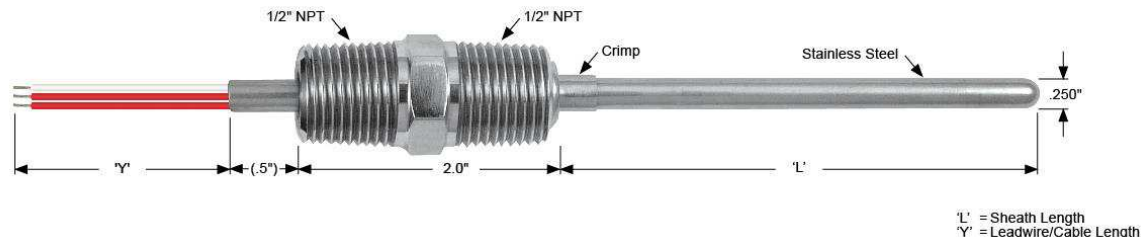
Features

- Sheath Styles:
 - » Stainless Steel
- Elements:
 - » Platinum, Copper, Nickel
- Sheath Diameter:
 - » 0.250"
- Leadwire/Cable Options

Applications

- Process

Dimensions



Performance Specifications

Repeatability:

Less than $\pm .06\%$ change in ice point resistance after 10 consecutive cycles between ice point and 250°C

Long Term Stability:

Less than $\pm .2\%$ ice point resistance shift after 1,000 hours at 250°C

Self-Heating:

10 mW/C in water moving 3 feet/sec

Pressure Rating:

1,500 psi (sheath tip only)

Insulation Resistance:

1,000 megohms @ 500 V, leads to case

Vibration:

Withstands 5 to 500 Hz at 3 g-level peak for 3 hours. Per ASTM E 644, Sec. 10.

Shock:

Withstands 50 g-level peak sine wave shock of 11 milliseconds duration. Per ASTM E 644, Sec. 11

RTD TEMPERATURE ACCURACY SPECIFICATIONS:

Element Material	TCR	Standard Tolerances at 0°C			
		$\pm .06\%$	$\pm .12\%$	$\pm .2\%$	$\pm .5\%$
Platinum	0.00385	0.15°C , 0.06Ω	0.30°C , 0.12Ω	0.50°C , 0.19Ω	1.20°C , 0.46Ω
Platinum	0.00392	N/A	N/A	N/A	1.20°C , 0.46Ω
Copper	0.00427	N/A	N/A	0.71°C , 0.028Ω	1.49°C , 0.058Ω
Nickel	0.00672	N/A	N/A	N/A	0.85°C , 0.68Ω

Ordering Information

SPRING LOADED RTD PROBE-TWIN THREADED FITTING

Model Temperature Range

121M	Moderate: -50 to 250°C (-58 to 482°F)
121H	High: -50 to 500°C (-58 to 932°F)
121F	Full: -200 to 500°C (-328 to 932°F)

Model	Element	Accuracy	Temperature Coefficient
P2A	Platinum	100 Ohm $\pm$.06% at 0°C	.00385
P2B	Platinum	100 Ohm $\pm$.12% at 0°C	.00385
P2C	Platinum	100 Ohm $\pm$.5% at 0°C	.00385
P6B	Platinum	1,000 Ohm $\pm$.12% at 0°C	.00385
G2C	Platinum	100 Ohm $\pm$.5% at 0°C	.00392
C1D	Copper	10 Ohm $\pm$.2% at 25°C	.00427 (Model 121M Only)
N3C	Nickel	120 Ohm $\pm$.5% at 0°C	.00672 (Model 121M Only)

Model	Leadwires, Element Configuration	Typical Color Code
3S	Three Wire, Single	Red/Red/White
3D	Three Wire, Dual	Red/Red/White // Black/Green/Green
4D	Four Wire, Dual	Red/Red/White/White // Black/Black/Green/Green

Model 'L' Immersion Length

---	Define 'L' Length in Inches Note: Minimum 1.5" / Maximum 94.0" Example: (12.0 = 12.0"; 6.75 = 6.75")
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Model Connection Head

N	No Connection Head
A	Stainless Steel
B	Aluminum
C	Polypropylene (Model 121M Only)
D	Cast Iron
G	Small Stainless Steel

Model 'Y' Leadwire/Cable Options

N	No Options, Stranded TFE Leadwires (36.0" Standard)
W	Leadwire Options

Model Additional Options (Leave Code Blank if Not Required)

T	Transmitter Option (Specify Temperature Range)
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NORTH AMERICA

Measurement Specialties, Inc.,
a TE Connectivity Company
Tel: 800-522-6752
customercare.ando@te.com

EUROPE

Measurement Specialties (Europe), Ltd.,
a TE Connectivity Company
Tel: 800-440-5100
customercare.tlse@te.com

ASIA

Measurement Specialties (China), Ltd.,
a TE Connectivity Company
Tel: 0400-820-6015
customercare.chdu@te.com

te.com/sensorsolutions

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