

# Spring Loaded Thermocouple Probe— Twin Threaded Fitting

Ideal for Thermowell Applications  
1/2" x 1/2" NPT Threaded Fitting  
Variety of Configurations  
Single and Dual Junctions  
Stainless Steel Case

Custom Designs Available with:

- Connection Heads
- Transmitters



The **Spring Loaded Thermocouple Probe—Twin Threaded Fitting** is constructed with a stainless steel sheath and utilizes 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.

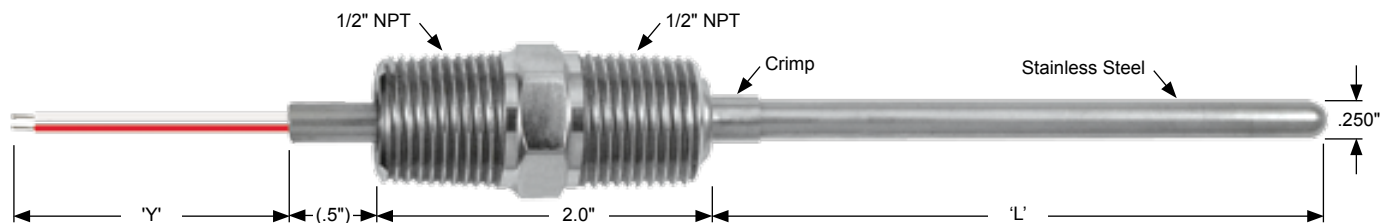
## FEATURES

- Sheath Styles:
  - » Stainless Steel
- Junction Types, Single and Dual:
  - » J, K, T, E
  - » Grounded or Ungrounded
- Sheath Diameters:
  - » 0.250"
- Leadwire/Cable Options

## APPLICATIONS

- Process

## dimensions



'L' = Sheath Length  
'Y' = Leadwire/Cable Length

# Spring Loaded Thermocouple Probe— Twin Threaded Fitting



## performance specifications

### Insulation Resistance – Ungrounded Models:

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

### Pressure Rating:

1,500 psi

### Thermocouple Temperature Accuracy Specifications:

Type	Temp Range	Standard Limits of Error	Special Limits of Error
T	-200 to 0°C	±1°C or 1.5%	Not ASTM Defined
	0 to 350°C	±1°C or 0.75%	±0.5°C or 0.4%
J	0 to 750°C	±2.2°C or 0.75%	±1.1°C or 0.4%
E	-200 to 0°C	±1.7°C or 1%	Not ASTM Defined
	0 to 900°C	±1.7°C or 0.5%	±1°C or 0.4%
K	-200 to 0°C	±2.2°C or 2%	Not ASTM Defined
	0 to 1,250°C	±2.2°C or 0.75%	±1.1°C or 0.4%

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## ordering info

### Spring Loaded Thermocouple Probe—Twin Thread Fitting

<b>Model</b>	<b>Temperature Range</b>		
221M	Moderate: -50 to 250°C (-58 to 482°F)		
221H	High: Mineral Insulated (Consult Factory)		
<b>Model</b>	<b>Thermocouple Type</b>	<b>Junction</b>	<b>Color Code</b>
J	J	Single	Red/White [Constantan/Iron]
K	K	Single	Red/Yellow [Alumel/Chromel]
T	T	Single	Red/Blue [Constantan/Copper]
E	E	Single	Red/Purple [Constantan/Chromel]
JJ	JJ	Dual	Red/White // Red/White
KK	KK	Dual	Red/Yellow // Red/Yellow
TT	TT	Dual	Red/Blue // Red/Blue
EE	EE	Dual	Red/Purple // Red/Purple
<b>Model</b>	<b>Junction Style</b>		
G	Grounded Junction		
U	Ungrounded Junction		
<b>Model</b>	<b>Limits of Error</b>		
A	Standard Limits of Error		
B	Special Limits of Error		
<b>Model</b>	<b>Connection Head (Terminal Block Included)</b>		
N	No Connection Head		
A	Stainless Steel		
B	Aluminum		
C	Polypropylene (Model 210M Only)		
D	Cast Iron		
G	Small Stainless Steel		
<b>Model</b>	<b>'L' Immersion Length</b>		
	Define 'L' Length in Inches (12 = 12.0") Note: Minimum 1.5" / Maximum 36.0"		
<b>Model</b>	<b>Sheath Material</b>		
B	Stainless Steel		
E	Inconel (H Only)		
<b>Model</b>	<b>'Y' Leadwire/Cable Options</b>		
N	No Options, Stranded TFE Leadwires (36.0" Standard)		
W	Leadwire Options		
<b>Model</b>	<b>Additional Options (Leave Code Blank if Not Required)</b>		
T	Transmitter Options		