MEAS 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

Performance Specifications

Insulation Resistance – Ungrounded Model:
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 was 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%

Ordering Information

Spring Loaded Thermocouple Probe–Twin Thread Fitting			
Model	**Temperature Range**		
221M	Moderate: -50 to 250°C (-58 to 482°F)		
221H	High: Mineral Insulated (Consult Factory)		
Model	**Thermocouple Type**	**Junction**	**Color Code**
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
Model	**Junction Style**		
G	Grounded Junction		
U	Ungrounded Junction		
Model	**Limits of Error**		
A	Standard Limits of Error		
B	Special Limits of Error		
Model	**Connection Head** (Terminal Block Included)		
N	No Connection Head		
A	Stainless Steel		
B	Aluminum		
C	Polypropylene (Model 210M Only)		
D	Cast Iron		
G	Small Stainless Steel		
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")		
Model	**Sheath Material**		
B	Stainless Steel		
E	Inconel (H Only)		
Model	**'Y' Leadwire/Cable Options**		
N	No Options, Solid TFE Leadwires (36.0" Standard)		
W	Leadwire Options		
Model	**Additional Options** (Leave Code Blank if Not Required)		
T	Transmitter Options (Specify Temperature Range)		

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