MEAS RTD PROBE-STRAIN RELIEF

- Transition Fitting
- Spring Strain Relief
- Variety of Configurations
- Single and Dual Elements
- Stainless Steel Case

The RTD Probe–Strain Relief is constructed with a stainless steel case. The sensing element is embedded into the tip of the sheath. With the element located in the tip of the case this is the area that needs to be in contact with the process to obtain correct temperature measurement. Fittings associated with the probe designs are related to the mounting technique required by your application. These sensors can be utilized in many different industries and applications. Probe sensors are ideal for immersion in processes.

Features

- Sheath Styles:
  - » Stainless Steel
- Elements, Single and Dual:
  - » Platinum, Cooper, Nickel
- Sheath Diameters:
  - » 0.125”, 0.188”, 0.250”
- Leadwire/Cable Options

Applications

- Process

Dimensions

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

Performance Specifications

Repeatability:
Less than ± .06% change in ice point resistance after
10 consecutive cycles between ice point and 250°C

Long Term Stability:
Less than ± .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

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			
		±.06%	±.12%	±.2%	±.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

RTD PROBE–STRAIN RELIEF			
Model	**Temperature Range**		
103M	Moderate:-50 to 250°C (-58 to 482°F)		
103H	High:-50 to 500°C (-58 to 932°F)		
103F	Full:-200 to 500°C (-328 to 932°F)		
Model	**Element**	**Accuracy**	**Temperature Coefficient**
P2A	Platinum	100 Ohm ±.06% at 0°C	.00385
P2B	Platinum	100 Ohm ±.12% at 0°C	.00385
P2C	Platinum	100 Ohm ±.5% at 0°C	.00385
P6B	Platinum	1,000 Ohm ±.12% at 0°C	.00385
G2C	Platinum	100 Ohm ±.5% at 0°C	.00392
C1D	Copper	10 Ohm ±.2% at 25°C	.00427 (Model 103M Only)
N3C	Nickel	120 Ohm ±.5% at 0°C	.00672 (Model 103M Only)
Model	**Leadwires, Element Configuration**		**Typical Color Code**
3S	Three Wire, Single		Red/Red/White
4S	Four Wire, Single		Red/Red/White/White
3D	Three Wire, Dual		Red/Red/White // Black/Green/Green (M Only)
Model	**'L' Sheath Length**		
---	Define 'L' Length in Inches Note: Minimum 1.5" / Maximum 96.0" Example: (12.0 = 12.0"; 28.5 = 28.5")		
Model	**'D' Sheath Diameter**		
A	.125" Diameter (Single Element Only) (M Only)		
B	.188" Diameter		
C	.250" Diameter		
Model	**Strain Relief**		
1	Spring Strain Relief 250°C Temperature Limit		
2	Rubber Strain Relief 150°C Temperature Limit (M Only)		
Model	**'Y' Leadwire/Cable Options**		
N	No Options, Stranded TFE Leadwires (36.0" Standard)		
W	Leadwire Options		

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