Tip Sensitive Bearing RTD Probe–Bayonet

Variety of Configurations
Cut-To-Length
Fast Response
Tip Sensitive
Single and Dual Elements
Custom Designs

The **Tip Sensitive Bearing RTD–Bayonet** consists of a bearing probe and bayonet holder. Bayonet mounting provides a simple and inexpensive spring loaded option for installing probes where a fluid seal is not required. We also offer a 1/8” NPT mounting adaptor to assist with locking the sensor in position.

Bearing sensors in which the sensing element is encased in a copper alloy tip. This allows for increased accuracy and sensitivity to temperature changes at the point of contact in bearings. Inserted at an opening on the bearing housing, they are used in electric motors and generators for continuous sensing of the bearing temperature.

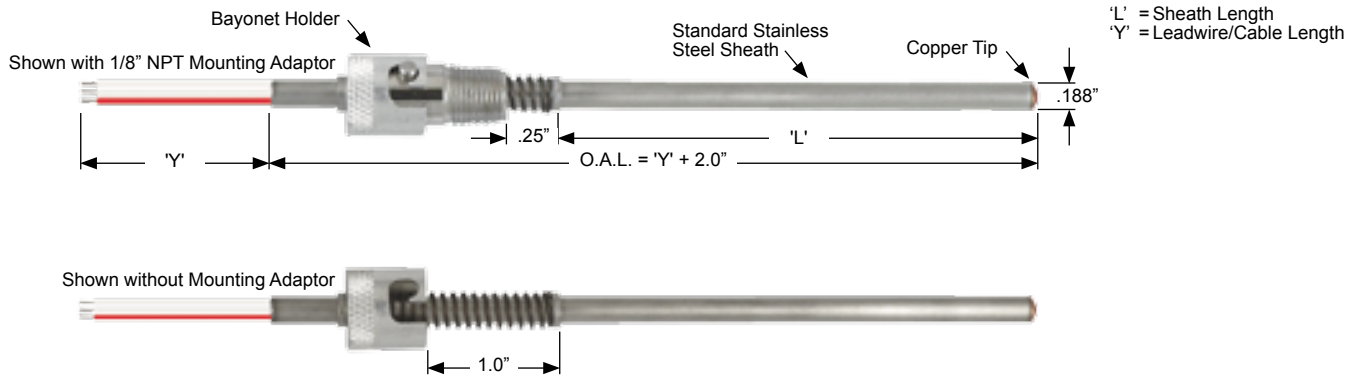
FEATURES

- Sheath Styles:
  - » Stainless Steel, Isolated Stainless Steel, Insulated Epoxy Glass
  - » Copper Tip
- Elements, Single and Dual:
  - » Platinum, Copper, Nickel
- Sheath Diameters:
  - » 0.188”
- Leadwire/Cable Options

APPLICATIONS

- Electric Motors
- Generators

dimensions



Isolated Stainless Steel Sheath

Insulated Epoxy Glass Sheath

Tip Sensitive Bearing RTD Probe–Bayonet

performance specifications

Insulation Resistance:
Single or Dual Elements:
1,000 megohms @ 500 VDC, leads to case
Dual Elements:
100 megohms @ 50 VDC between elements

Time Constant (typical in 3 ft/sec moving water)**:**
Stainless Steel Sheath and Isolated Stainless Steel Sheath:
Single Element: 2.0 seconds
Dual Element: 3.0 seconds
Insulated Epoxy Glass Sheath: 2.5 seconds

Pressure Rating:
Standard Stainless Steel Sheath: 100 psi (6.9 bar)
Isolated Stainless Steel Sheath: 100 psi (69. bar)
Insulated Epoxy Glass Sheath: 30 psi (2.1 bar)
Fluid Seal Holder: 50 psi

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

RTD Temperature Accuracy Specifications:

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

ordering info

Tip Sensitive Bearing RTD Probe–Bayonet			
Model	**Sheath Style**	**Temperature Range**	
312A	Insulated Epoxy Glass	-50 to 155°C (-58 to 311°F)	
312B	Standard Stainless Steel	-50 to 250°C (-58 to 482°F)	
312C	Isolated Stainless Steel	-50 to 250°C (-58 to 482°F)	
Model	**Element**	**Accuracy**	**Temperature Coefficient**
P2B	Platinum	100 Ohm ±.12% at 0°C	.00385
P2C	Platinum	100 Ohm ±.5% at 0°C	.00385
G2C	Platinum	100 Ohm ±.5% at 0°C	.00392
C1D	Copper	10 Ohm ±.2% at 25°C	.00427
N3C	Nickel	120 Ohm ±.5% at 0°C	.00672
Model	**Leadwires, Element Configuration**		**Typical Color Code**
3S	Three Wire, Single		Red/White/White
3D	Three Wire, Dual		Red/White/White // Blue/Yellow/Yellow
Model	**'L' Immersion Length**		
---	Define 'L' Length in Inches (12 = 12.0") Note: Minimum 1.5" / Maximum 36.0"		
Model	**'Y' Leadwire/Cable Options**		
N	No Options, Stranded TFE Leadwires (36.0" Standard)		
W	Leadwire Options		
Model	**Additional Options** (Leave Model Option Blank If Not Required)		
A	1/8" NPT Mounting Adaptor (7/8" Standard)		

联系方式

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