



## MEAS TIP SENSITIVE BEARING RTD PROBE- SPRING LOADED FITTING

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

The Tip Sensitive Bearing RTD Probe–Spring Loaded Fitting consists of a bearing probe, holder and optional connection head. The quick release spring loaded holder allows for adjustability to ensure the Copper tip remains in contact with the bearing surface for reliable readings and faster time response. Inserted at the opening on the bearing housing, they are used in electric motors and generators for continuous sensing of the bearing temperature.

The T Quick fitting has a shorter quick release knob for use with a transmitter in a connection head.

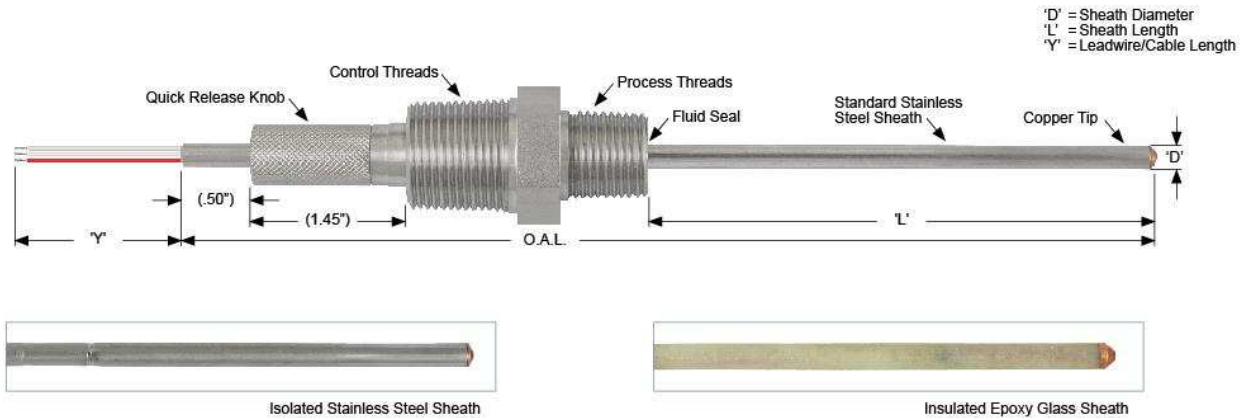
### Features

- Sheath Styles:
  - » Stainless Steel, Isolated Stainless Steel, Insulated Epoxy Glass
  - » Copper Tip
- Adjustable Spring Loaded Fitting, Fluid Sealed
- Elements, Single and Dual:
  - » Platinum, Copper, Nickel
- Sheath Diameters:
  - » 0.188", 0.250", 0.215"
- Leadwire/Cable Options

### Applications

- Electric Motors
- Generators

Dimensions



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 (6.9 bar)  
Insulated Epoxy Glass Sheath: 30 psi (2.1 bar)  
Fluid Seal Holder: 50 psi

**Fluid Sealing:**

Standard with Viton O-rings for fluid or pressure sealing

**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 Information

TIP SENSITIVE BEARING RTD PROBE-SPRING LOADED FITTING				
Model	Sheath Style	Temperature Range	Minimum / Maximum Lengths	
311A	Insulated Epoxy Glass	-50 to 155°C (-58 to 311°F)	1.5" Minimum / 44.0" Maximum	
311B	Standard Stainless Steel	-50 to 250°C (-58 to 482°F)	1.5" Minimum / 92.0" Maximum	
311C	Isolated Stainless Steel	-50 to 250°C (-58 to 482°F)	1.5" Minimum / 92.0" Maximum	
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	
4S	Four Wire, Single		Red/Red/White/White	
Model	'L' Immersion Length			
---	Define 'L' Length in Inches (See above for Minimum / Maximum Immersion Lengths) Example: (10.0 = 10.0", 6.3 = 6.3")			
Model	Connection Head (Terminal Block Included) (1/2 NPT Process thread, ¾ NPT Control Thread) Standard			
N	No Connection Head			
A	Stainless Steel			
B	Aluminum			
D	Cast Iron			
G	Small Stainless Steel			
Model	Adjustable Spring Loaded Holder Configuration			
	Holder Style	Process Threads	Control Threads	O.A.L.
1	Quick	1/2" NPT	1/2" NPT	3.35"
2	Quick	1/2" NPT	3/4" NPT	3.50"
6	Quick	1/8" NPT	None	3.50"
7	TQuick	1/2" NPT	1/2" NPT	2.75"
Model	'D' Sheath Diameter			
B	.188" Diameter			
C	.250" Diameter (Standard SS and Isolated SS Only)			
D	.215" Diameter			
Model	'Y' Leadwire/Cable Options			
N	No Options, Stranded TFE Leadwires (36.0" Standard / 4.0" Standard with Connection Head)			
W	Leadwire Options			
Model	Additional Options (Leave Model Option Blank If Not Required)			
T	Transmitter Option (Specify Transmitter Temp Range)			

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