

# RTD Probe–Compression Fitting

Variety of Configurations  
 Single and Dual Elements  
 Stainless Steel Case

Custom Designs Available with:

- Degree Specific Case Bends
- Fast Response Time
- Connector Options
- Special Cable or Leadwires



The **RTD Probe–Compression Fitting** 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.

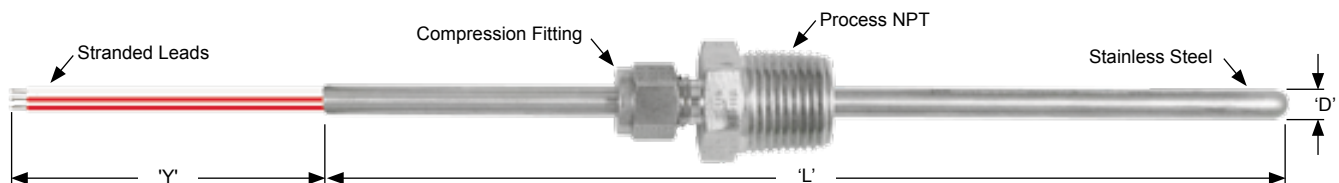
## FEATURES

- Sheath Styles:
  - » Stainless Steel
- Elements, Single and Dual:
  - » Platinum, Copper, 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

# RTD Probe–Compression Fitting

## performance specifications

### Repeatability:

Less than  $\pm .06\%$  change in ice point resistance after 10 consecutive cycles between ice point and 250°C

### Long Term Stability:

Less than  $\pm .2\%$  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			
		$\pm .06\%$	$\pm .12\%$	$\pm .2\%$	$\pm .5\%$
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 info

### RTD Probe–Compression Fitting

#### Model Temperature Range

101M Moderate: -50 to 250°C (-58 to 482°F)  
101H High: -50 to 500°C (-58 to 932°F)  
101F Full: -200 to 500°C (-328 to 932°F)

Model	Element	Accuracy	Temperature Coefficient
P2A	Platinum	100 Ohm $\pm .06\%$ at 0°C	.00385
P2B	Platinum	100 Ohm $\pm .12\%$ at 0°C	.00385
P2C	Platinum	100 Ohm $\pm .5\%$ at 0°C	.00385
P6B	Platinum	1,000 Ohm $\pm .12\%$ at 0°C	.00385
G2C	Platinum	100 Ohm $\pm .5\%$ at 0°C	.00392
C1D	Copper	10 Ohm $\pm .2\%$ at 25°C	.00427 (Model 100 M Only)
N3C	Nickel	120 Ohm $\pm .5\%$ at 0°C	.00672 (Model 100 M Only)

#### Model Leadwires, Element Configuration

3S Three Wire, Single  
3D Three Wire, Dual  
4D Four Wire, Dual

#### Typical Color Code

Red/Red/White  
Red/Red/White // Black/Green/Green  
Red/Red/White/White // Black/Black/Green/Green

#### Model 'L' Sheath Length

--- Define 'L' Length in Inches (12 = 12.0") Note: Minimum 1.5" / Maximum 36.0"

#### Model 'D' Sheath Diameter

A .125" Diameter (Single Element Only) (1/8" or 1/4" NPT Only)  
B .188" Diameter (1/8" or 1/4" NPT Only)  
C .250" Diameter

#### Model Fitting Thread Size

1 1/8" NPT  
2 1/4" NPT  
3 3/8" NPT  
4 1/2" NPT  
5 3/4" NPT

#### Model Compression Fitting Material

A 316 SS (TFE Ferrule Included)  
B 316 SS (SS Ferrule Included)  
C Brass (Brass Ferrule Included)

#### Model 'Y' Leadwire/Cable Options

N No Options, Stranded TFE Leadwires (36.0" Standard)  
W Leadwire Options

## 联系方式



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