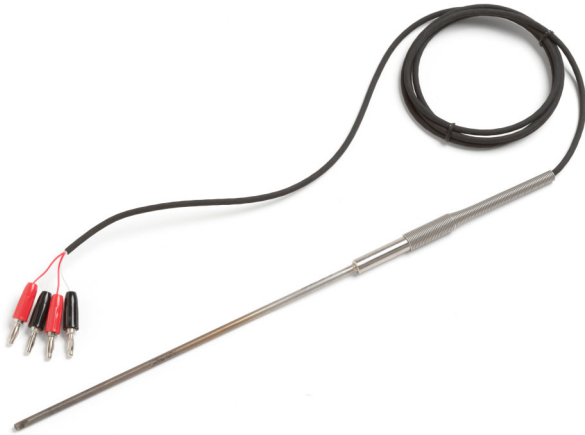


# 100 Ohm RTD Temperature Probe

## TP750 Data Sheet



### Features & Benefits

- -200 °C to 300 °C Temperature Range
- Nominal 100 Ω Resistance

### 100 Ohm RTD Temperature Probe

The TP750 probe is manufactured using a coil suspension element design for increased shock and vibration resistance. The mineral-insulated sheath provides a minimum bend radius of 19 mm for flexibility and durability. The TP750 temperature probe is compatible with the DMM4050 digital multimeter.

### Characteristics

#### Specifications

Characteristic	Description
Resistance	Nominal 100 Ω
Temperature Coefficient	0.00385 Ω/Ω °C nominal
Temperature Range	-200 °C to 300 °C (transition and cable temperature: 0 °C to 150 °C)
Drift Rate	+0.13 °C at 0 °C after 1000 hours at 300 °C
Sheath Material	316 stainless steel
Leads	Teflon™-insulated, nickel-plated stranded copper, 22 AWG
Termination	4-wire banana
Time Constant	Four seconds maximum for 63.2% response to step change in water moving at 3 fps
Bending Radius	19 mm (3/4 in.) except for 50 mm (2 in.) area of sheath near tip
Calibration	Includes manufacturer's NIST-traceable calibration and table with R vs. T values in 1 °C increments from -196 °C to 300 °C. Callendar – van Dusen coefficients included
Immersion	At least 100 mm (4 in.) recommended
Accuracy (includes calibration uncertainty and short-term stability)	±0.050 °C at -196 °C ±0.050 °C at 0 °C ±0.051 °C at 200 °C ±0.055 °C at 300 °C
Size	9 in. L × 3/16 in. diameter

### Ordering Information

#### TP750

100 Ohm RTD Temperature Probe.



Product(s) are manufactured in ISO registered facilities.



Product(s) complies with IEEE Standard 488.1-1987, RS-232-C, and with Tektronix Standard Codes and Formats.

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**For Further Information.** Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit [www.tektronix.com](http://www.tektronix.com)



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