

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 $\times$ 3/16 in. diameter

Ordering Information

TP750

100 Ohm RTD Temperature Probe.



Tektronix is registered to ISO 9001 and ISO 14001 by SRI Quality System Registrar.



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

Contact Tektronix:

- ASEAN / Australasia (65) 6356 3900
- Austria 00800 2255 4835*
- Balkans, Israel, South Africa and other ISE Countries +41 52 675 3777
- Belgium 00800 2255 4835*
- Brazil +55 (11) 3759 7627
- Canada 1 800 833 9200
- Central East Europe and the Baltics +41 52 675 3777
- Central Europe & Greece +41 52 675 3777
- Denmark +45 80 88 1401
- Finland +41 52 675 3777
- France 00800 2255 4835*
- Germany 00800 2255 4835*
- Hong Kong 400 820 5835
- India 000 800 650 1835
- Italy 00800 2255 4835*
- Japan 81 (3) 6714 3010
- Luxembourg +41 52 675 3777
- Mexico, Central/South America & Caribbean 52 (55) 56 04 50 90
- Middle East, Asia, and North Africa +41 52 675 3777
- The Netherlands 00800 2255 4835*
- Norway 800 16098
- People's Republic of China 400 820 5835
- Poland +41 52 675 3777
- Portugal 80 08 12370
- Republic of Korea 001 800 8255 2835
- Russia & CIS +7 (495) 7484900
- South Africa +41 52 675 3777
- Spain 00800 2255 4835*
- Sweden 00800 2255 4835*
- Switzerland 00800 2255 4835*
- Taiwan 886 (2) 2722 9622
- United Kingdom & Ireland 00800 2255 4835*
- USA 1 800 833 9200

* European toll-free number. If not accessible, call: +41 52 675 3777

Updated 10 February 2011

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



Copyright © Tektronix, Inc. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX and TEK are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks, or registered trademarks of their respective companies.

02 Oct 2011

3MW-24454-1

