

MLT404 RTD Temperature Probe

Spare Parts

Description

The MLT404 RTD Temperature Probe is suitable for fluid temperature measurement in the range of -60 °C to 200 °C. The probe can be hand held and has a stainless steel sheath. The probe is suitable for connection to the FE165 pH Amp.



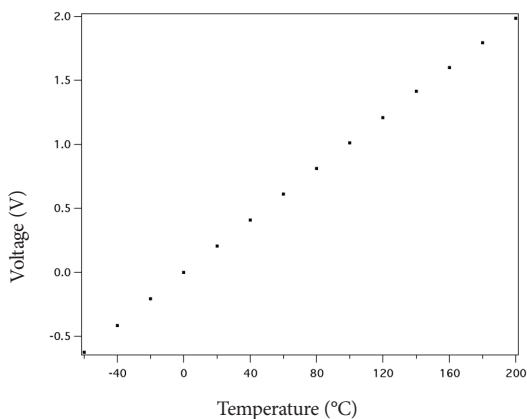
Operation

A resistance temperature device (RTD) operates on the principle that the electrical resistance in a platinum wire will change linearly as a function of its temperature. The plot below shows the output voltage versus temperature for the RTD Temperature Probe. Changes in the resistance of the RTD element are measured by converting the resistance to a voltage which is then amplified.

Application

The RTD Temperature Probe is suitable for general purpose liquid temperature measurements in the range of -60 °C to 200 °C.

Voltage/Temperature Curve



Caution

Read "Statement of Intended Use" on our website or in "Getting Started with PowerLab" before use.

Specifications

Excitation voltage:	10 V DC nominal (12 V DC max.)
Sensor element:	100 Ω Platinum RTD
Operating range:	-60 $^{\circ}$ C to 200 $^{\circ}$ C
Sensitivity:	0.385 $\Omega/^{\circ}$ C (from 0 $^{\circ}$ C to 100 $^{\circ}$ C) complies with IEC 751 specifications
Tolerances:	Temp. Range ($^{\circ}$ C) Tolerance (\pm° C)
	-60 $^{\circ}$ C to 0 $^{\circ}$ C 0.8 $^{\circ}$ C
	0 $^{\circ}$ C to 100 $^{\circ}$ C 0.8 $^{\circ}$ C
	0 $^{\circ}$ C to 200 $^{\circ}$ C 1.3 $^{\circ}$ C
Thermal response time:	1.6 s up to 100 $^{\circ}$ C
Nominal resistance @ 0 $^{\circ}$ C:	100 Ω
Probe length:	100 mm (3.9")
Probe diameter:	4 mm (0.16")
Cable length:	1.5 m (5')

All specifications were tested at the time of printing and are subject to change.

Ordering Information:

MLT404 RTD Temperature Probe

For use with:

FE165 pH Amp