

TEMPERATURE

MINI PROBE THERMISTOR AND RTD SENSOR ST-MP* SERIES



Precon



ST-MP*

DESCRIPTION

The Precon ST-MP* Series Thermistor and RTD temperature probe is designed for applications requiring a small sensor with a fast thermal response. Constructed with stainless steel housing, the probe is available with a choice of several thermistor and RTD sensor curves.

FEATURES

- Lifetime warranty
- Wide selection of thermistor and RTD curves
- Fast response time
- 0.19" round x 0.50" long (0.48 x 1.27 cm) housing

SPECIFICATIONS

Accuracy		Temperature Coefficient	
Thermistor	±0.36°F (0.2°C)	Thermistor	Negative temperature coefficient
RTD		RTD	Positive temperature coefficient
Type 63	±0.72°F (0.40°C)	Temperature Stability	
Type 71	+/-0.0774°F (0.043°C)	Thermistor	0.24°F (0.13°C) over five years
Type 81,85	±0.27°F (0.15°C) ±0.05°	RTD	<0.09°F (0.05°C) over 5 years
Type 91	F (0.03°C)	Heat Dissipation	2.7 mW/°C (power needed to raise the temperature by 1°C)
Sensor Type		Mounting	Directly to surface
Thermistor	2.252 kΩ, 3Ω, 10 kΩ Type II, III & III w/11K shunt, 20 kΩ, 100 kΩ	Wiring Terminations	24 AWG, UL low voltage to 105°C Connections 8' (2.4m) of 24 AWG prestripped pigtails, type 71 & 81 sensors have 18" leads
RTD		Weight	0.25 lb (0.11 Kg)
Type 63	1000Ω Nickel	Approvals	CE
Type 71, 81	100Ω Pt 385 Curve	Warranty	Lifetime
Type 85	1000Ω Pt 385 Curve		
Type 91	1000Ω Pt 375 Curve		
Temperature Range			
Thermistor/RTD	-40° to 221°F (-40° to 105°C)		

ORDERING INFORMATION

MODEL	DESCRIPTION
ST-MP3	10,000Ω mini probe thermistor @ 77°F (25°C), Type III (gray leads)
ST-MP11K	10,000Ω mini probe thermistor @ 77°F (25°C), Type III with 11K shunt (gray leads)
ST-MP21	2252Ω mini probe thermistor @ 77°F (25°C), Type III (green leads)
ST-MP22	3000Ω mini probe thermistor @ 77°F (25°C), Type III (blue leads)
ST-MP24	10,000Ω mini probe thermistor @ 77°F (25°C), Type III (yellow leads)
ST-MP27	100,000Ω mini probe thermistor @ 77°F (25°C), Type III (gray leads)
ST-MP42	20,000Ω mini probe thermistor @ 77°F (25°C), Type III (green leads)
ST-MP63	1000Ω nickel mini probe RTD @ 32°F (0°C), Type III (yellow leads)
ST-MP71	100Ω ultra high accurat mini probe RTD @ 32°F (0°C), 385 Platinum Curve (blue leads)
ST-MP81	100Ω mini probe RTD @ 32°F (0°C), 385 Platinum Curve (yellow leads)
ST-MP85	1000Ω mini probe RTD @ 32°F (0°C), 385 Platinum Curve (blue leads)
ST-MP91	1000Ω mini probe RTD @ 32°F (0°C), 375 Platinum Curve (green leads)
OPTIONS	
R	Rugged moistureproof coating 3.5"
R#	Rugged moistureproof coating. # equals number of feet of the coating
X25	25' (7.6m) lead length 24 AWG
XN	NIST certificate of conformance
XN1	NIST certificate, one reference point 32°F (0°C)
XN2	NIST certificate, two reference points 32°F/158°F (0°C/70°C)
XN3	NIST certificate, three reference points 32°F/77°F/158°F (0°C/25°C/70°C)
XP	Matched sensor pair, matched to ±0.1°F, 0.05°C (must order two sensors)
XPA	Ultra high accuracy, thermistors only, ±0.135°F (0.075°C)
XZ	Three wire RTD connections (Type 81 only)

ST-MP3 - XN1 Example: ST-MP3-XN1 10,000Ω mini probe sensor with NIST one reference point certificate

RELATED PRODUCTS

T81U-XR	100 ohm, Type 81 4-20 mA temperature transmitter, custom rangeable
T85U-XR	1000 ohm, Type 85 4-20 mA temperature transmitter, custom rangeable
T91U-XR	1000 ohm, Type 91 4-20 mA temperature transmitter, custom rangeable
TCC-12	Thermal conductive compound tube, 12 ml