



TEMPERATURE

BUTTON STYLE THERMISTOR AND RTD SENSORS

ST-B* SERIES

DESCRIPTION

The Precon ST-B* Series Button Style Flush-Mount Thermistor and RTD Sensors provide precision room temperature sensing for building automation systems. The active sensing element is made of a highly stable, precision thermistor material or platinum RTD. This design provides moisture/vapor resistance and is bonded to either brass, steel or aluminum button style housing easily mountable into any wall. This sensor is intended for interior use only.



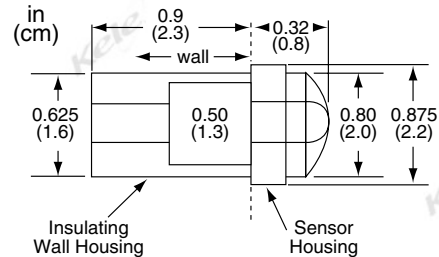
Precon



FEATURES

- Lifetime warranty
- $\pm 0.36^{\circ}\text{F}$ ($\pm 0.2^{\circ}\text{C}$) thermistor accuracy
- $\pm 0.27^{\circ}\text{F}$ ($\pm 0.15^{\circ}\text{C}$) or $\pm 0.54^{\circ}\text{F}$ ($\pm 0.30^{\circ}\text{C}$) RTD accuracy
- Ultra high accuracy available
- Wide selection of thermistor and RTD curves
- Optional brass, steel, aluminum metal button style housing
- Small, nearly invisible footprint

DIMENSIONS



SPECIFICATIONS

Accuracy	$\pm 0.36^{\circ}\text{F}$ (0.2°C)	Thermistor	Negative temperature coefficient
Thermistor		RTD	Positive temperature coefficient
RTD		Temperature Stability	
Type 63	$\pm 0.72^{\circ}\text{F}$ (0.40°C)	Thermistor	0.24 $^{\circ}\text{F}$ (0.13°C) over five years
Type 71	$\pm 0.054^{\circ}\text{F}$ (0.03°C)	RTD	Max 0.04% after 1k hours @ 500 $^{\circ}\text{C}$
Type 81, 85	$\pm 0.27^{\circ}\text{F}$ (0.15°C)	Heat Dissipation	2.7 mW/ $^{\circ}\text{C}$ (power needed to raise the temperature by 1 $^{\circ}\text{C}$)
Type 91	$\pm 0.54^{\circ}\text{F}$ (0.30°C)	Enclosure Rating	NEMA 1, Brass, aluminum, 304 Stainless steel housing
Sensor Type		Mounting	Directly to the wall
Thermistor	2.252 k Ω , 3 k Ω , 10 k Ω Type II, III & III w/11K shunt, 20 k Ω , 100 k Ω	Wiring Terminations	8' (2.4m) of 24 AWG pigtailed with prestripped ends, type 71 & 81 have 18" leads
RTD		Weight	0.2 lb (0.1 Kg)
Type 63	1000 Ω Nickel	Approvals	CE
Type 71, 81	100 Ω Pt 385 Curve	Warranty	Lifetime
Type 85	1000 Ω Pt 385 Curve		
Type 91	1000 Ω Pt 375 Curve		
Temperature Range			
Thermistor/RTD	-40 $^{\circ}$ to 221 $^{\circ}\text{F}$ (-40 $^{\circ}$ to 105 $^{\circ}\text{C}$)		
Temperature Coefficient			

ORDERING INFORMATION

MODEL	DESCRIPTION
ST-B3	10,000 Ω button style thermistor @ 77 $^{\circ}\text{F}$ (25 $^{\circ}\text{C}$), Type III (gray leads)
ST-B11K	10,000 Ω button style thermistor @ 77 $^{\circ}\text{F}$ (25 $^{\circ}\text{C}$), Type III with 11K shunt (gray leads)
ST-B21	2,252 Ω button style thermistor @ 77 $^{\circ}\text{F}$ (25 $^{\circ}\text{C}$), Type II (green leads)
ST-B22	3,000 Ω button style thermistor @ 77 $^{\circ}\text{F}$ (25 $^{\circ}\text{C}$), Type II (blue leads)
ST-B24	10,000 Ω button style thermistor @ 77 $^{\circ}\text{F}$ (25 $^{\circ}\text{C}$), Type II (yellow leads)
ST-B27	100,000 Ω button style thermistor @ 77 $^{\circ}\text{F}$ (25 $^{\circ}\text{C}$), Type II (gray leads)
ST-B42	20,000 Ω button style thermistor @ 77 $^{\circ}\text{F}$ (25 $^{\circ}\text{C}$), Type IV (green leads)
ST-B63	1,000 Ω button style nickel RTD @ 32 $^{\circ}\text{F}$ (0 $^{\circ}\text{C}$), (yellow leads)
ST-B71	100 Ω ultra high accuracy button style RTD @ 32 $^{\circ}\text{F}$ (0 $^{\circ}\text{C}$), 385 platinum curve (blue leads)
ST-B81	100 Ω button style RTD @ 32 $^{\circ}\text{F}$ (0 $^{\circ}\text{C}$), 385 platinum curve (yellow leads)
ST-B85	1,000 Ω button style RTD @ 32 $^{\circ}\text{F}$ (0 $^{\circ}\text{C}$), 385 platinum curve (blue leads)
ST-B91	10,000 Ω button style RTD @ 32 $^{\circ}\text{F}$ (0 $^{\circ}\text{C}$), 375 platinum curve (green leads)
OPTIONS	
B	Brass housing
A	Aluminum housing
S	Steel housing

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
TB-A	Aluminum button enclosure only
TB-B	Brass button enclosure only
TB-S	Stainless Steel button enclosure only