



TEMPERATURE

BUTTON STYLE TEMPERATURE SENSOR

ST-B* SERIES



DESCRIPTION

The Precon **ST-B* Series Button Style flush-Mount 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.

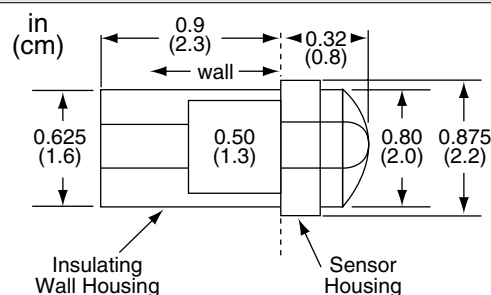
FEATURES

- **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**



ST-B*A

DIMENSIONS



SPECIFICATIONS

Accuracy		Type 71		-58° to 572°F (-50° to 300°C)
Thermistor	$\pm 0.36^{\circ}\text{F}$ (0.2°C)	Type 81, 85, 91		-67° to 240°F (-55° to 115°C)
RTD		Temperature response		
Type 63	$\pm 0.72^{\circ}\text{F}$ (0.40°C)	Thermistor		Negative temperature coefficient
Type 71	$\pm 0.054^{\circ}\text{F}$ (0.03°C)	RTD		Positive temperature coefficient
Type 81, 85	$\pm 0.27^{\circ}\text{F}$ (0.15°C)	Stability		
Type 91	$\pm 0.54^{\circ}\text{F}$ (0.30°C)	Thermistor		0.24°F (0.13°C) over five years
Sensor types available		RTD		<0.09°F (0.05°C) over five years
Thermistor	2.252 k Ω , 3 k Ω , 10 k Ω , 20 k Ω , 100 k Ω	Heat dissipation		2.7 mW/°C (power needed to raise the temperature by 1°C)
RTD		Connections		8' (2.4m) of 24 AWG prestripped pigtails
Type 63	1000 Ω Nickel	Mounting		Directly to wall
Type 71	1000 Ω , Pt 385 Curve	Enclosure		Brass, steel or aluminum
Type 81, 85	100 Ω , Pt 385 Curve	Weight		0.2 lb (0.09 kg)
Type 91	1000 Ω , Pt 375 Curve	Warranty		Lifetime
Temperature range				
RTD				
Type 63	-76° to 392°F (-60° to 200°C)			

ORDERING INFORMATION

MODEL	DESCRIPTION
ST-B3	10,000 Ω button style thermistor @ 77°F (25°C), Type III (gray leads)
ST-B21	2252 Ω button style thermistor @ 77°F (25°C), Type II (green leads)
ST-B22	3000 Ω button style thermistor @ 77°F (25°C), Type II (blue leads)
ST-B24	10,000 Ω button style thermistor @ 77°F (25°C), Type II (yellow leads)
ST-B27	100,000 Ω button style thermistor @ 77°F (25°C), Type II (gray leads)
ST-B42	20,000 Ω button style thermistor @ 77°F (25°C), Type IV (green leads)
ST-B63	1000 Ω button style nickel RTD @ 70°F (21°C), (yellow leads)
ST-B71	100 Ω ultra high accuracy button style RTD @ 32°F (0°C), 385 platinum curve (blue leads)
ST-B81	100 Ω button style RTD @ 32°F (0°C), 385 platinum curve (yellow leads)
ST-B85	1000 Ω button style RTD @ 32°F (0°C), 385 platinum curve (blue leads)
ST-B91	1000 Ω button style RTD @ 32°F (0°C), 375 platinum curve (green leads)
OPTIONS (List options in alphabetical order with dashes)	
B	Brass housing
A	Aluminum housing
S	Steel housing