



TEMPERATURE

STRAP-ON THERMISTOR AND RTD SENSORS

ST-STP* SERIES

DESCRIPTION

The Precon ST-STP* Thermistor and RTD Series strap-on sensor provides precision monitoring of a pipe surface temperature. The unique design features the sensor attached to a flexible copper plate that will conform to the pipe surface. The rubber pad provides spring tension plus surrounds the copper plate to eliminate the effects of ambient air temperature.

FEATURES

- Wide selection of thermistor and RTD curves
- Adjustable steel straps fit multiple pipe sizes
- Flexible copper plate conforms to pipe surface
- Copper plate is insulated from ambient air
- Lifetime warranty
- Ultra high accuracy optional

APPLICATION

Strap-on Applications: Where it is not practical to install immersion wells, the ST-STP* Strap on Sensor is a great substitute. The copper plate at the bottom of the flexible rubber base assures good thermal conductivity to the sensor. The sensor is positioned directly behind and attached to the copper conduction plate. Each ST-STP* utilizes a metal threaded ring clamp to secure it to the pipe and models 6" and under include a pair of high strength zip ties as an optional mounting method. A small amount of thermal conducting compound (TCC-12) helps to ensure maximum conductivity.

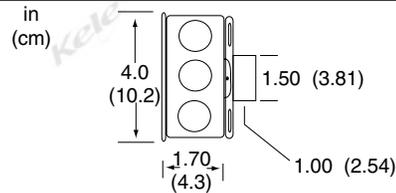


ST-STP*

Precon



DIMENSIONS



SPECIFICATIONS

Accuracy		Temperature Range	
Thermistor	±0.36°F (0.2°C)	Thermistor/RTD	-40° to 221°F (-40° to 105°C)
RTD		Temperature Stability	
Type 63	±0.72°F (0.40°C)	Thermistor	0.24°F (0.13°C) over five years
Type 71	+/-0.0774°F (0.043°C)	RTD	Max 0.04% after 1k hours @ 500 °C
Type 81, 85	±0.27°F (0.15°C)	Enclosure Rating	NEMA 1, Metal handy box
Type 91	±0.54°F (0.30°C)	Mounting	Directly to pipe using adjustable straps, 3/4" to 6" pipe standard, 10" with option 8' (2.44m), 24 AWG zipcord using crimp or solder connection, type 71 & 81 have 18" leads
Sensor Type		Wiring Terminations	
Thermistor	2.252 kΩ, 3 kΩ, 10 kΩ Type II, III & III w/11K shunt, 20 kΩ, 100 kΩ	Weight	1.0 lb (0.45 Kg)
RTD		Approvals	CE
Type 63	1000Ω Nickel	Warranty	Lifetime
Type 71, 81	100Ω Pt 385 Curve		
Type 85	1000Ω Pt 385 Curve		
Type 91	1000Ω Pt 375 Curve		

ORDERING INFORMATION

MODEL	DESCRIPTION
ST-STP3	10,000Ω strap-on thermistor @ 77°F (25°C), Type III (gray leads)
ST-STP11K	10,000Ω strap-on thermistor @ 77°F (25°C), Type III with 11K shunt (gray leads)
ST-STP21	2252Ω strap-on thermistor @ 77°F (25°C), Type II (green leads)
ST-STP22	3000Ω strap-on thermistor @ 77°F (25°C), Type II (blue leads)
ST-STP24	10,000Ω strap-on thermistor @ 77°F (25°C), Type II (yellow leads)
ST-STP27	100,000Ω strap-on thermistor @ 77°F (25°C), Type II (gray leads)
ST-STP42	20,000Ω strap-on thermistor @ 77°F (25°C), Type IV (green leads)
ST-STP63	1000Ω nickel strap-on RTD @ 32°F (0°C) (yellow leads)
ST-STP71	100Ω strap-on RTD @ 32°F (0°C) (blue leads)
ST-STP81	100Ω strap-on RTD @ 32°F (0°C) (yellow leads)
ST-STP85	1000Ω strap-on RTD @ 32°F (0°C) (blue leads)
ST-STP91	1000Ω strap-on RTD @ 32°F (0°C) (green leads)
OPTIONS	
XPA	Ultra high accuracy, thermistors only, ±0.135°F (0.075°C)
XW	Weather resistant housing
X10	10" (25.4 cm) maximum pipe size

ST-STP3-XW Example: ST-STP3-XW 10,000Ω strap-on thermistor sensor with weather resistant 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
TCC-111	Thermal conductive compound 111 ml tub
TCC-12	Thermal conductive compound tube, 12 ml
UR	Moisture-resistant three-wire butt splice