



TS Series

Platinum RTD Temperature Sensors

Description

The TS Series 1000 Ω platinum RTD temperature sensors are designed to sense temperature in a variety of applications.

The TS Series continuous averaging sensors match the platinum R-T characteristics but are composed of a proprietary element encased within a bendable copper sheath. The continuous averaging sensors are designed to average out temperature stratification in a duct or plenum.

The TS Series features:

- Long-term stability
- Linear, drift-free operation
- Conformance to DIN IEC 751 standards
- Industry standard temperature coefficient of .00385 $\Omega/\Omega/^{\circ}\text{C}$

Specifications

General

Tolerance: +/- (0.3 + .005t) $^{\circ}\text{C}$, +/- 0.1% @ 32 $^{\circ}\text{F}$ (0 $^{\circ}\text{C}$)

Stability: < 0.05% drift per year

Repeatability: +/- 0.1 $^{\circ}\text{C}$

Averaging sensors: +/- 1 $^{\circ}\text{F}$ @ 70 $^{\circ}\text{F}$ (21.11 $^{\circ}\text{C}$)

Temperature coefficient: 0.00385 $\Omega/\Omega/^{\circ}\text{C}$

Self-heating coefficient: < 5 m $\Omega/^{\circ}\text{C}$

Reference resistance: 1000 Ω @ 32 $^{\circ}\text{F}$ (0 $^{\circ}\text{C}$)

Response time:

<u>Air 1 m/s</u>	<u>Air 3 m/s</u>	<u>Water</u>
25 sec.	17 sec.	0.3 sec.

(90% response)

Interchangability: +/- 0.3 $^{\circ}\text{C}$ @ 32 $^{\circ}\text{F}$ (0 $^{\circ}\text{C}$)

Conformance: IEC 751

Environmental

Operating temperature: -50 to 375 $^{\circ}\text{F}$
(-45.6 to 190.6 $^{\circ}\text{C}$)

Electrical

Max. current: 5 mA; recommended: 1 mA.

Specifications subject to change without notice

Ordering Information

Part No.	Description
TS1000	1000 Ω Platinum RTD, wall mount
TS1002	1000 Ω Platinum RTD, 8" duct mount
TS1003	1000 Ω Platinum RTD, outdoor air mount
TS1005	1000 Ω Platinum RTD, strap-on mount
TS1006	1000 Ω Platinum RTD, continuous averaging sensor, 24' length
TS1007	1000 Ω Platinum RTD, universal sensor, 24" lead
TS1008	1000 Ω Platinum RTD, continuous averaging sensor, 12' length
TS1009	1000 Ω Platinum RTD, 4" duct mount
TS2000	1000 Ω Platinum RTD, room mount
TS2007	1000 Ω Platinum RTD, quick response sensor, 24" lead
TS2023a	1000 Ω Platinum RTD, room mount with setpoint (to be used with SZ1025a)

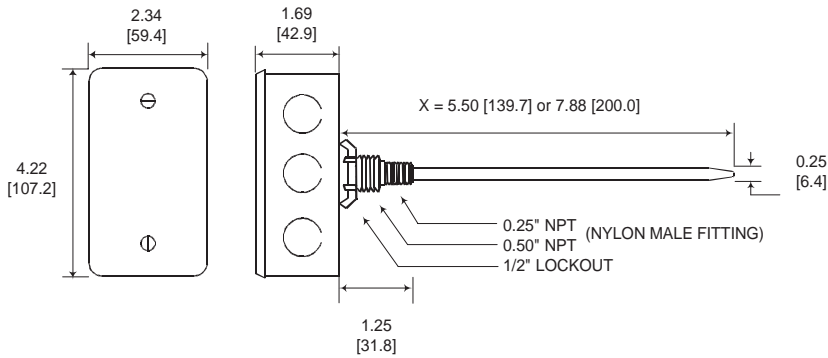
TS Series Accessories

TQ1104	4" thermowell, stainless steel
TQ1110	8" thermowell, stainless steel
TX Series	Temperature Transmitters

Dimensions

Note: inches [mm]

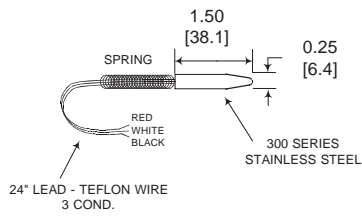
4" or 8" Duct Mount Sensor



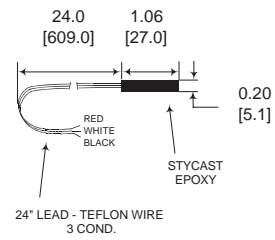
Dimensions

Note: inches [mm]

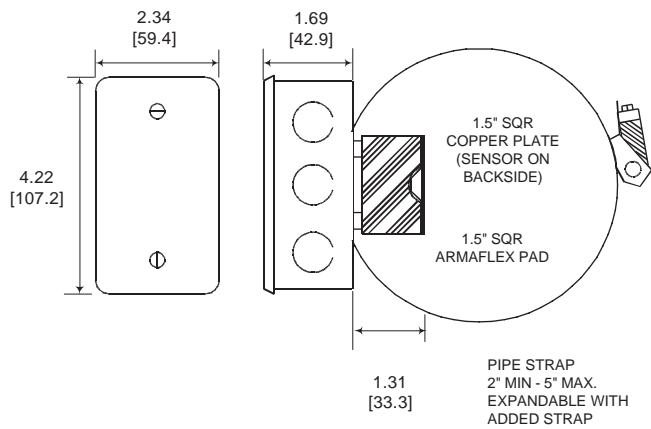
Universal Sensor



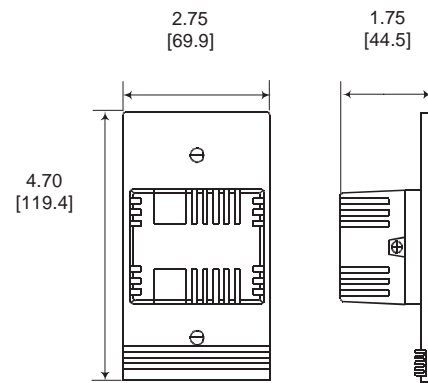
Quick Response Sensor



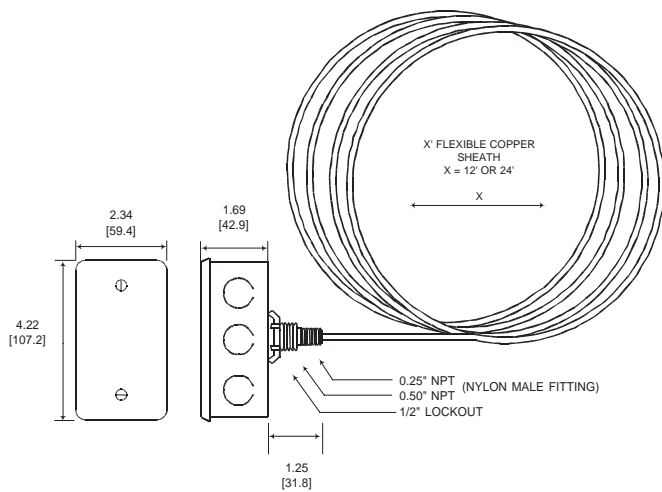
Pipe Strap-on Mount Sensor



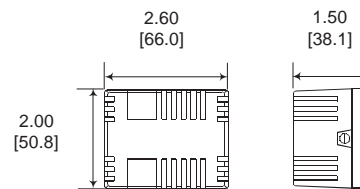
Wall Mount Sensor



Averaging Mount Sensor



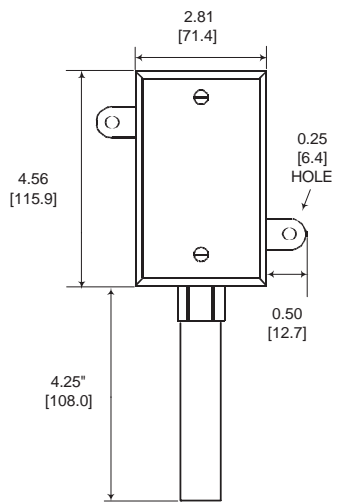
Room Mount Sensor



Dimensions

Note: inches [mm]

Outdoor Air Mount



Room Mount with Setpoint and Override

