



TS Series

Platinum RTD Temperature Sensors

Description

The TS Series 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 $.00385 \Omega/\Omega/^\circ\text{C}$
- Available in either 100 ohm or 1000 ohm models

Specifications

General

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

Stability: $< 0.05\%$ drift per year

Repeatability: $\pm 0.1^\circ\text{C}$

Averaging sensors: $\pm 1^\circ\text{F}$ @ 70°F (21.11°C)

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

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

Reference resistance: 100 or 1000 Ω

@ 32°F (0°C)

Response time:

	Air 1 m/s	Air 3 m/s	Water
(90% response)	25 sec.	17 sec.	0.3 sec.

Interchangability: $\pm 0.3^\circ\text{C}$ @ 32°F (0°C)

Conformance: IEC 751

Environmental

Operating temperature: -50 to 375°F
(-45.6 to 190.6°C)

Electrical

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

Specifications subject to change without notice

Ordering Information

Part No.	Description
TS1020	100 Ω Platinum RTD, wall mount
TS1022	100 Ω Platinum RTD, 8" duct mount
TS1023	100 Ω Platinum RTD, outdoor air mount
TS1025	100 Ω Platinum RTD, strap-on mount
TS1026	100 Ω Platinum RTD, continuous averaging sensor, 24' length
TS1027	100 Ω Platinum RTD, universal sensor, 24" lead
TS1028	100 Ω Platinum RTD, continuous averaging sensor, 12' length
TS1029	100 Ω Platinum RTD, 4" duct mount
TS2020	100 Ω Platinum RTD, room mount
TS2027	100 Ω Platinum RTD, quick response sensor, 24" lead
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)

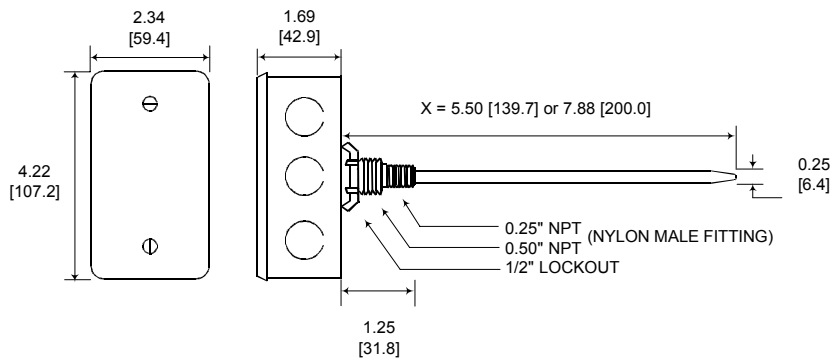
TS Series Accessories

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

Dimensions

Note: inches [mm]

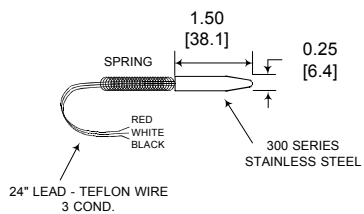
4" or 8" Duct Mount Sensor



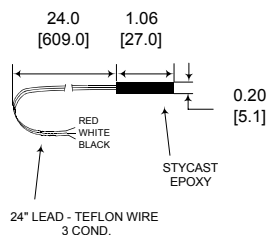
Dimensions

Note: inches [mm]

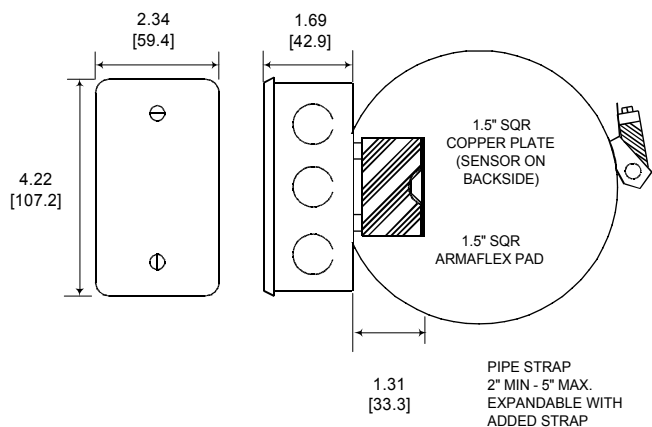
Universal Sensor



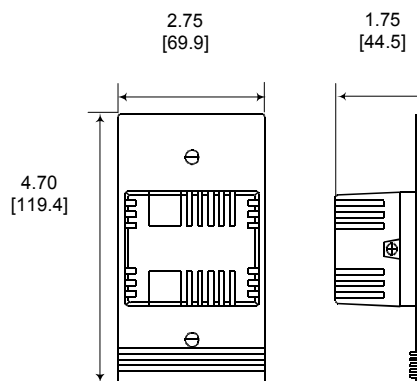
Quick Response Sensor



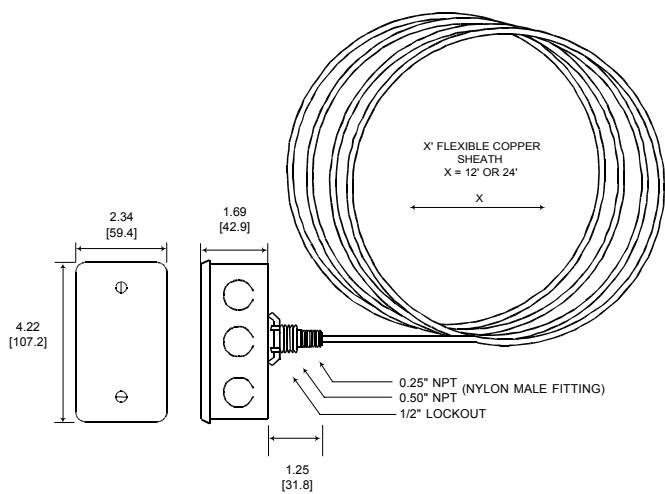
Pipe Strap-on Mount Sensor



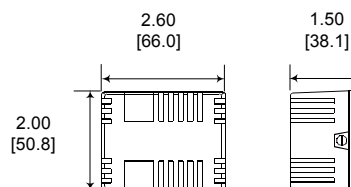
Wall Mount Sensor



Averaging Mount Sensor



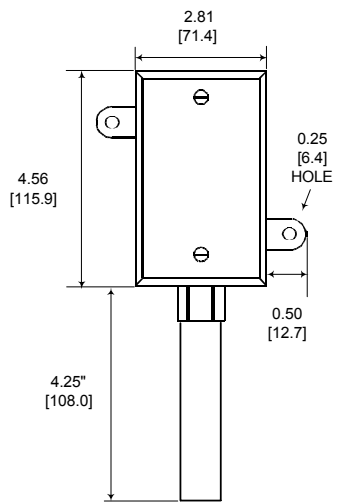
Room Mount Sensor



Dimensions

Note: inches [mm]

Outdoor Air Mount



Room Mount with Setpoint and Override

