

TVI-100 Series TVI-1000 Series

PLATINUM TEMPERATURE SENSORS



Product Description

The TVI-100 And TVI-1000 Series temperature sensors incorporate a Class A thin film platinum RTD sensor which conforms to DIN-IEC-751 platinum RTD standards.

These Sensors are available in either two or three wire configurations incorporating high accuracy and interchangeability throughout a wide operating temperature range.

These units are offered in Room, Room with Set Point, Room with Override, Room with Set point and Override, and Room with Set point, Override, and RJ11 Jack; Stainless Steel Duct and Duct without Box, Immersion, Stainless Plate, Raw, Bendable Copper and Stainless Steel Rigid Averaging, Strap-On, Bullet Probe and Outdoor Air Configurations.

Set point options include a linear 400 ohm, 1K, 2K, 3K, 5K, 10K, 20K, or 100K potentiometer. An optional series resistor allows for any offset of the set point potentiometer. Set point potentiometers may be set up as either Direct or Reverse Acting.

Indication stickers for set point include Cool/Warm, 55 to 85°F, and 10 to 30°C. Others are available upon request.

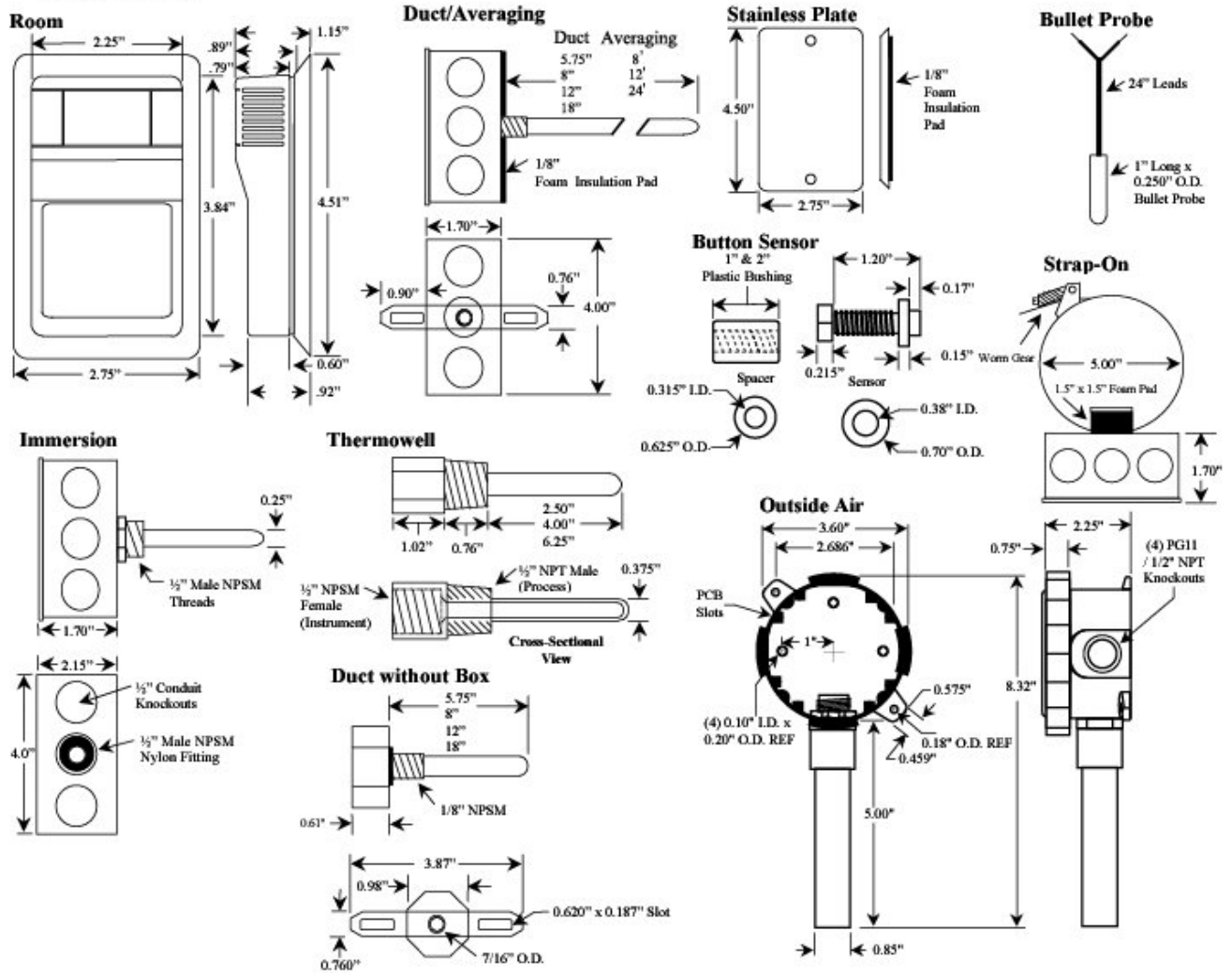
Override options include a N/O switch in parallel with the sensor or a separate 2 pole terminal block for Tenant override.

All TVI Room sensors may be ordered with an optional 4 pin RJ11 or 6 pin RJ12 communication jack with terminal blocks for remote programming. These units are also available with a 1/8" RS232 Stereo Jack.

Product Specification

| | | | |
|--------------------------|---|-----------------------------------|---|
| Output | 100 ohms @ 32°F (0°C) 1K ohms @ 32°F (0°C) | Resistance Characteristics | +/-0.06% Class A (Standard) +/-0.12% Class B (Averaging) |
| Temp. Coefficient | 0.00385 ohm/ohm/°C | Repeatability | +/-0.1°C |
| Standardization | DIN-IEC-751 (formerly DIN 43760) | Stability | less than +/-0.1°C drift |
| Accuracy | +/-0.06% @ 32°F Single Point +/-1.0 ohm @ 70°F (Averaging) | Single Point Temp Span | -58 to 392°F (-50 to 200°C) |
| | | Averaging Temp Span | -50 to 275°F (-45.5 to 134.8°C) |

Dimensions



Ordering Information

| | Sensor | #Wires | Configuration | Communication Jack | Pot Value | Set point Indicator | Pot Action |
|-------------|------------|-----------------------|--|---|--|--|------------------------|
| TVI- | [] | -[] | -[] | -[] | -[] | -[] | -[] |
| | 100 | 2W (2-Wire) | R – Room | RJ4 (4 Pin RJ11) | 400 | Cool/Warm | DA (Direct) |
| | 1K | 3W (3-Wire) | RS – Room w/Set point RO – Room /Override RSO – Room w/Set point & Override D – Duct 4", 8", 12", 18" DO – Duct without box 4", 8", 12", 18" I – Immersion 2.5", 4", 8" A – Bendable Copper Averaging 12', 24' RA – Rigid Averaging 18", 24", 36" S – Strap On O – Outdoor Air SP – Stainless Plate BP – Bullet Probe W - Raw BBS – Brass Button Sensor SBS – Stainless Button Sensor | RJ6 (6 Pin RJ12) RS232 (Stereo Jack) | 1K 2K 3K 5K 8.5K 10K 20K 100K | 55 to 85°F 10 to 30°C | RA (Reverse) |

Example: TVI-100 – 2W – RSO – RJ6 – 20K – 55 to 85 – DA or TVI-1K – 3W – D – 8" or TVI-1K – A – 24"