

TVI-1.8K Series

THERMISTOR TEMPERATURE SENSORS



Product Description

The TVI-1.8K Series temperature sensors are thermistor type sensors.

These sensors provide a predictable output over a specified temperature range to meet each manufacturer's required input values. Thermistors offer a high accuracy and interchangeability over a wide operating temperature range.

A thermistor higher resistance relative to Platinum RTD's, creates a larger signal with the same measuring current, negating most lead wire resistance problems and eliminating the need for signal conditioners.

These units are offered in Room, Room with Setpoint, Room with Override, Room with Setpoint and Override, and Room w/Setpoint, Override and RJ11 or RS232 Jacks, Stainless Steel Duct and Duct without Box, Immersion, Stainless Steel Plate, Raw, Bendable Copper and Stainless Steel Rigid Averaging, Strap-on, Bullet Probe, Button Sensor and Outdoor Air Configurations.

Setpoint options include a linear 400Ohm, 1K, 2K, 3K, 5K, 8.5K, 10K, 20K or 100K slide potentiometer. An optional series resistor allows for any offset of the setpoint potentiometer. These may be either Direct or Reverse Acting.

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

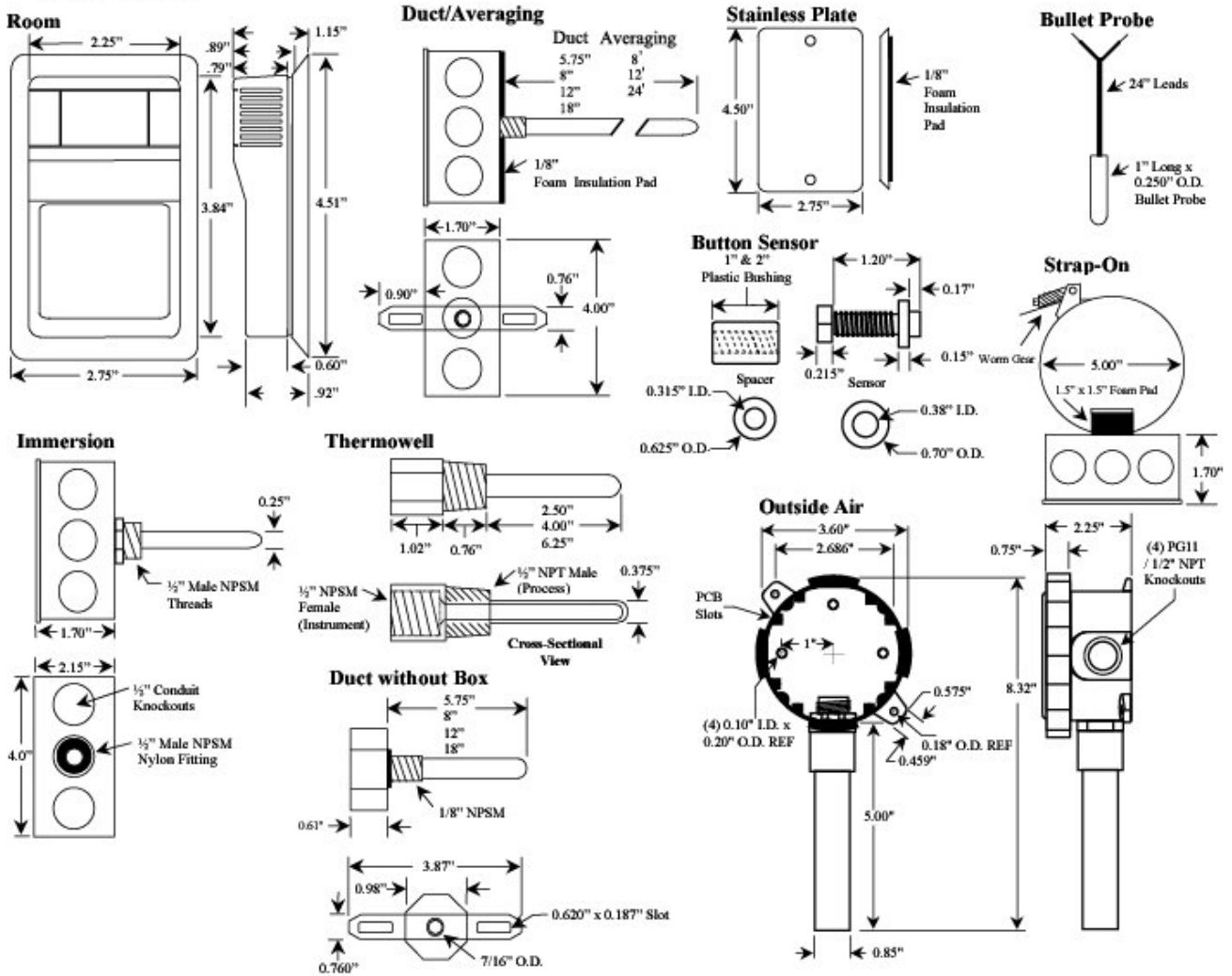
Override options include a N/O switch in parallel with the sensor or a separate 2 pole terminal block for Tenant override.

All TVI sensors also come with optional 4 pin RJ11, 6 pin RJ12, or 1/8" RS232 stereo communication jack with terminal blocks for remote programming.

Product Specification

Output	1,800 Ohms @ 77°F(25°C) 20,000Ohms @ 77°F(25°C) 100,000Ohms@ 77°F(25°C)	Accuracy	20K & 100K: +/-0.2°C(0 to 70°C) 1.8K: +/-0.2°C at 25°C (77°F) +/-1°C from 0-70°C(32 to 158°F)
Temperature Range	-40 to 302°F (-40 to 150°C)		
Interchangeability	See Accuracy		
Operating Humidity	0 to 90% RH on-condensing		
Dissipation Constant	20K & 100K -3mW/°C 1.8K - 1mW/°C nominal		

Dimensions



Ordering Information

	Sensor	Configuration	Communication Jack	Pot Value	Set point Indicator	Pot Action
TVI-	[]	- []	- []	- []	- []	- []
	1.8K	R – Room	RJ4 (4 Pin RJ11)	400	Cool/Warm	DA (Direct)
	20K	RS – Room w/Set point	RJ6 (6 Pin RJ12)	1K	55 to 85°F	RA (Reverse)
	100K	RO – Room /Override	RS232 (Stereo Jack)	2K	10 to 30°C	
		RSO – Room w/Set point & Override		3K	Specity	
		D – Duct 4", 8", 12", 18"		5K		
		DO – Duct without box 4", 8", 12", 18"		8.5K		
		I – Immersion 2.5", 4", 8"		10K		
		A – Averaging 8', 12', 24'		20K		
		RA – Rigid Averaging 18", 24", 36"		100K		
		S – Strap On				
		O – Outdoor Air				
		SP – Stainless Plate				
		BP – 1" Bullet Probe				
		W – Raw with 18" Leads				
		BBS – Brass Button Sensor				
		SBS – Stainless Button Sensor				
		RP – Remote Probe 6' Lead wires				

Example: TVI-1.8K-RSO-RS232-1K-Cool/Warm-RA or TVI-1.8K-I-4"