

Thermistor Temperature Sensors



I/1.8K Series
I/20K Series
I/100K Series



Product Description

The I/1.8K, I/20K and I/100K 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 temperature range.

A thermistor's higher resistance relative to Platinum RTD's, create 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 Set Point, Room with Override, Room with Setpoint and Override, and Room w/ Setpoint, Override, and RJ11 or RS232 Jacks; Duct, Duct without Box, Immersion, Stainless Plate, Raw, Averaging, Strap-On, Bullet Probe, Averaging, and Outside Air Configurations.

Setpoint options include a linear 400 Ohm, 1K, 2K, 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.

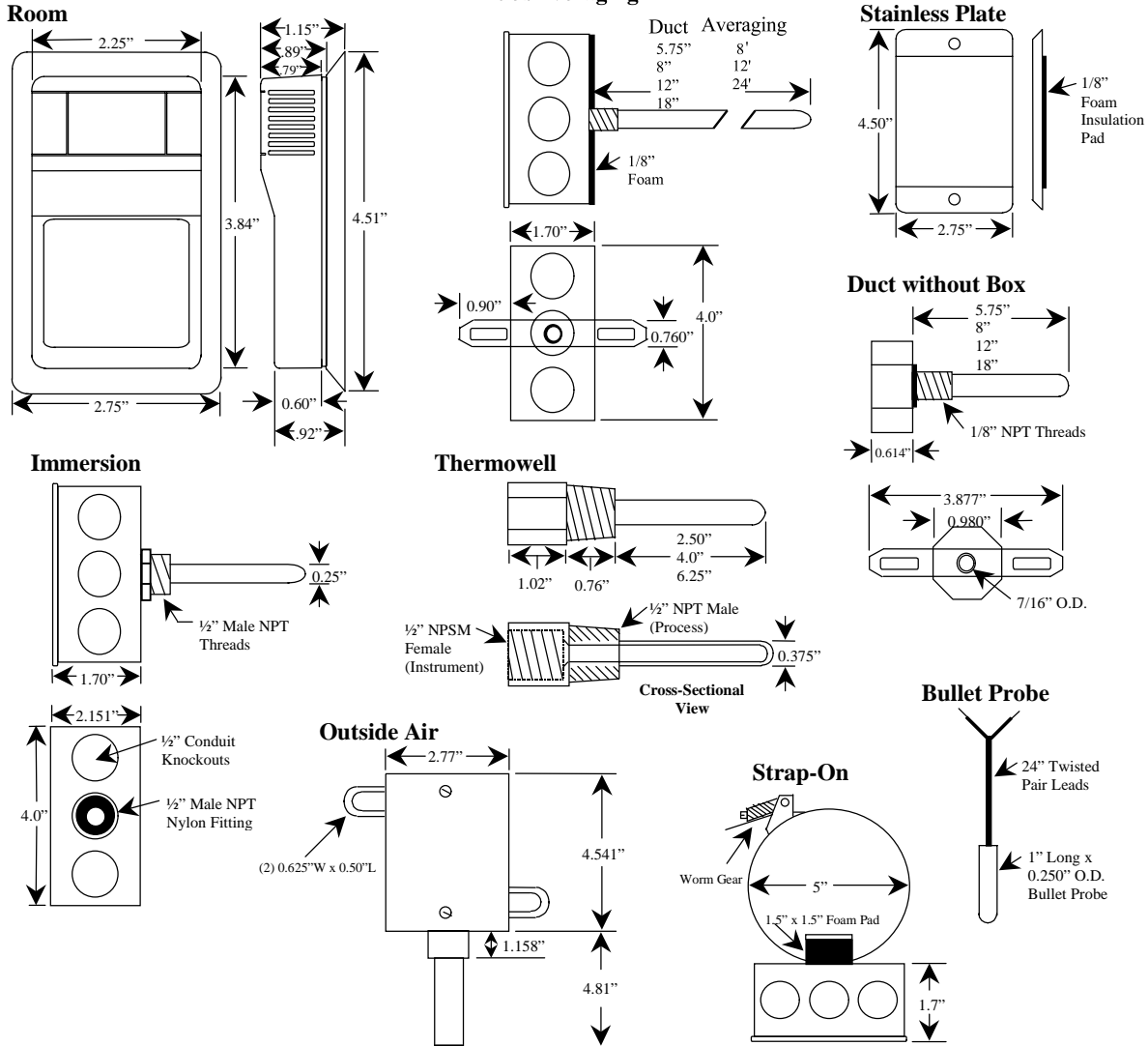
Override options include a N/O switch in parallel with the sensor or a separate 2 pole terminal block for Tenant override.

All I sensors also come with optional 4 or 6 pin RJ11 or RS232 communication jacks with terminal blocks for remote programming.

Product Specifications

Output	1,800 Ohms @ 77°F (25°C) 20,000 Ohms @ 77°F (25°C) 100,000 Ohms @ 77°F (25°C)	Dissipation Constant	3 mW / °C
Temperature Range	-40 to 302°F (-40 to 150°C)	Accuracy	+/- 0.2°C (0 to 70°C)
Interchangeability	+/- 0.2°C (0 to 70°C)	Operating Humidity	10 to 90% RH non-condensing

Dimensions



Ordering Information

I/	Sensor	Configuration	Communication Jack	Pot Value	Setpoint Indication	Pot Action
	[]	- []	- []	- []	- []	- []
	↑	↑	↑	↑	↑	↑
	1.8K	R - Room	232 (RS232)	400	Cool Warm	DA (Direct)
	20K	RS - Room w/ Setpoint	RJ4 (4 Pin)	1K	55 to 85	RA (Reverse)
	100K	RO - Room w/ Override	RJ6 (6 Pin)	2K	10 to 30°C	
		RSO - Room w/ Setpoint & Override		5K	Specify	
		D - Duct 4", 8", 12", 18"		8.5K		
		DO - Duct without box 4", 8", 12", 18"		10K		
		I - Immersion 2.5", 4", 8"		20K		
		A - Averaging 8', 12', 24'		100K		
		S - Strap-On				
		O - Outside Air				
		SP - Stainless Plate				
		BP - Bullet Probe 1"				
		W - Raw w/ 24" Leads				

Example: I/20K -RSO -232 -8.5K -55 to 85 -RA or I/100K -I -4" or I/20K -RSO -8.5K -55 to 85 -RA