

*Thermistor Temperature Sensors*



**ACI/1.8K Series**  
**ACI/20K Series**  
**ACI/100K Series**



**Product Description**

The ACI/1.8K, ACI/20K and ACI/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 operating temperature range.

A thermistor's 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 Plate, Raw, Bendable Copper and Stainless Steel Rigid Averaging, Strap-On, Bullet Probe, Button Sensor, and Outdoor Air Configurations.

Setpoint options include a linear 400 Ohm, 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.

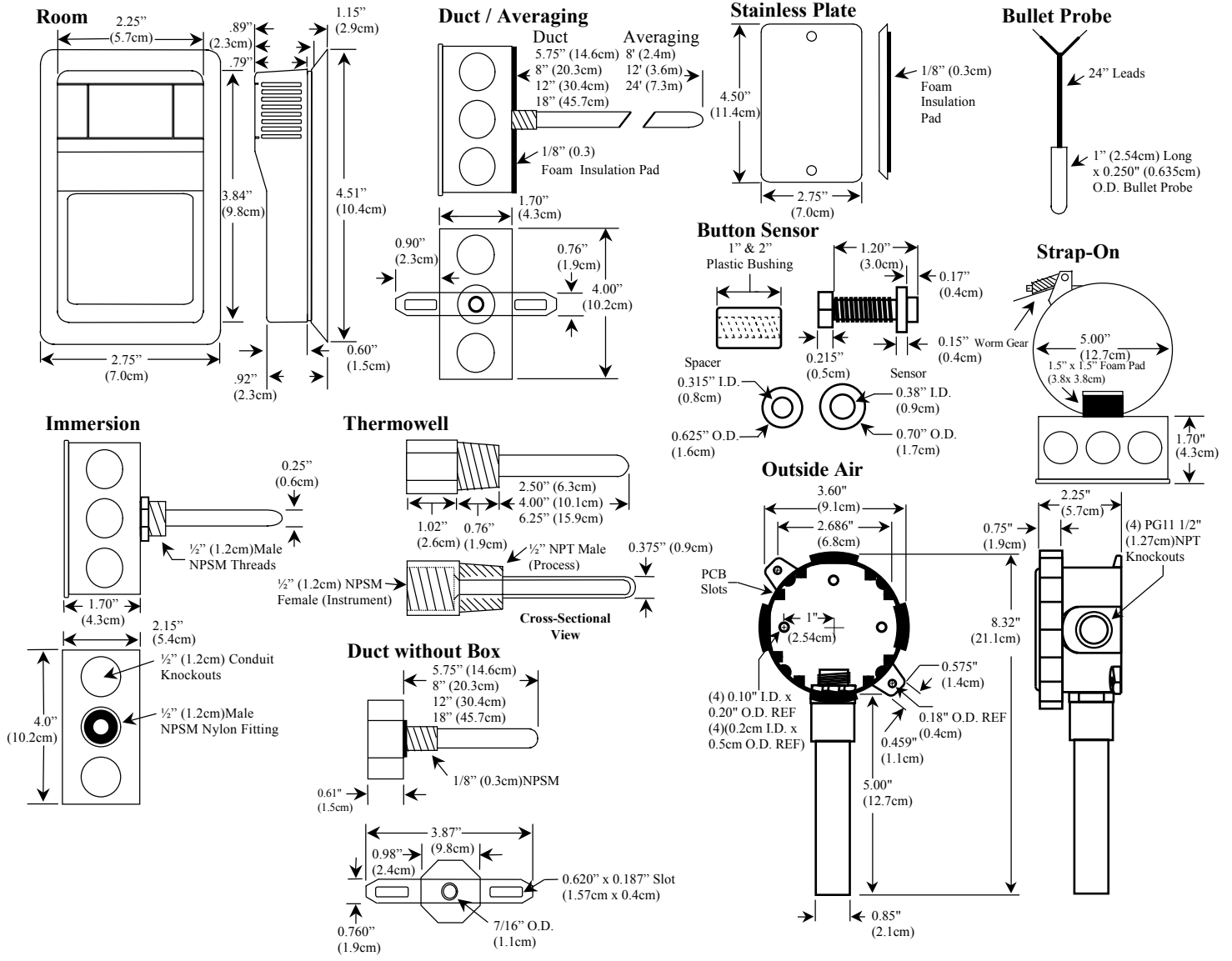
All ACI sensors also come with optional 4 pin RJ11, 6 pin RJ12, or 1/8" RS232 stereo communication jack with terminal blocks for remote programming.

All of these units come with a two year factory warranty. Please contact ACI for further information regarding these products.

**Product Specifications**

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

# Dimensions



## Ordering Information

Sensor	Configuration	Communication Jack	Pot Value	Setpoint Indication	Pot Action
A/	-	-	-	-	-
↑	↑	↑	↑	↑	↑
<b>1.8K</b>	<b>R - Room</b>	<b>RJ4 (4 Pin RJ11)</b>	<b>400 Ohm</b>	<b>Cool   Warm</b>	<b>DA (Direct)</b>
<b>20K</b>	<b>RS - Room w/Setpoint</b>	<b>RJ6 (6 Pin RJ12)</b>	<b>1K</b>	<b>55 to 85</b>	<b>RA (Reverse)</b>
<b>100K</b>	<b>RO - Room w/Override</b>	<b>232 (1/8" Stereo Jack)</b>	<b>2K</b>	<b>10 to 30°C</b>	
	<b>RSO - Room w/Setpoint &amp; Override</b>		<b>3K</b>	<b>Specify</b>	
	<b>D - Duct 4", 8", 12", 18"</b>		<b>5K</b>		
	<b>DO - Duct without Box 4", 8", 12", 18"</b>		<b>8.5K</b>		
	<b>I - Immersion 2.5", 4", 8"</b>		<b>10K</b>		
	<b>A - Averaging 8", 12", 24"</b>		<b>20K</b>		
	<b>RA - Rigid Averaging 18", 24", 36"</b>		<b>100K</b>		
	<b>S - Strap - On</b>				
	<b>O - Outdoor Air</b>				
	<b>BP - 1" Bullet Probe</b>				
	<b>RP - Remote Probe 6' Lead Wires</b>				
	<b>SP - Stainless Plate</b>				
	<b>W - Raw w/18" Leads</b>				
	<b>BBS - Brass Button Sensor</b>				
	<b>SBS - Stainless Button Sensor</b>				

**CE** For CE compliance, sensor leads must be no longer than 3 meters in length. Additionally, certain product variations may not be CE compliant. Contact ACI for further details

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

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