



Product Data

A/AN Series
A/CP Series
A/3K Series
A/1.8K Series
A/20K Series

Temperature Sensor

Product Description

The A/10K-AN (Type III), A/10K-CP (Type II), A/3K, A/1.8K and A/20K 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. (See web page for complete curve chart specifications)

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 Jack, 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.

All ACI Room sensors may be ordered with an optional setpoint (see chart on the following page), override, or with a 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 Specifications

Sensor Output	10K Ohms @ 77°F (25°C) Type III 10K Ohms @ 77°F (25°C) Type II 3K Ohms @ 77°F (25°C) 1.8K Ohms @ 77°F (25°C) 20K Ohms @ 77°F (25°C)
Accuracy (0 to 70°C)	+/-0.2°C (+/-0.36°F)
Stability	+/- 0.13°C (0.23°F)
Operating Temperature Range	-40 to 302°F (-40 to 150°C)
Operating Humidity	0 to 90% RH non-condensing
Interchangeability	+/- 0.2°C (+/-0.36°F)
Power Dissipation Constant	3 mW / °C
For sensors with Display option, see LCD Series Temp display cut sheet	

Thermistor



Attributes

- Offer high accuracy and interchangeability over a wide temperature range.
- Higher resistance output relative to Platinum RTD's
- Non-polarity sensitive

Applications

- OEM / Industrial
- Light Industrial
- DDC Systems



Made in the **USA**

Automation Components, Inc.

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 Middleton, WI 53562
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Wiring Diagrams available at www.workaci.com/instructions.htm
 c0000102rev1.pdf

DISPLAYS

TEMPERATURE

RELATIVE HUMIDITY

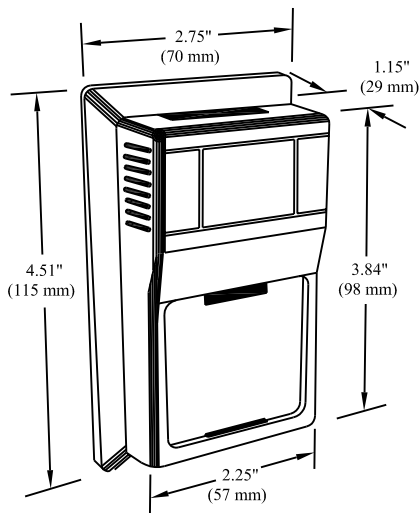
PRESSURE

CURRENT

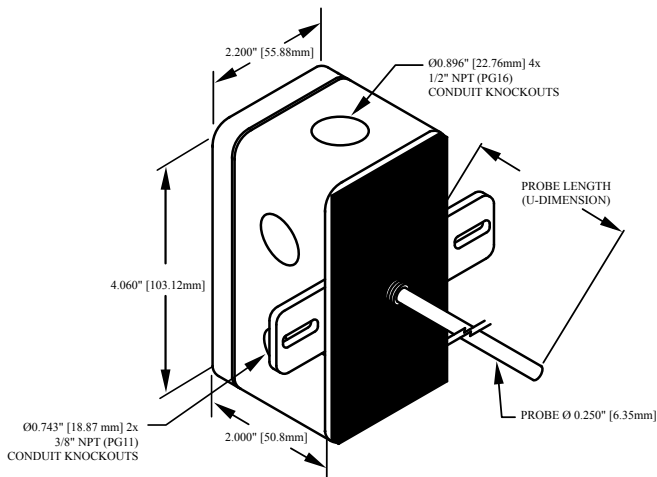
AIR QUALITY

ACCESSORIES

Room

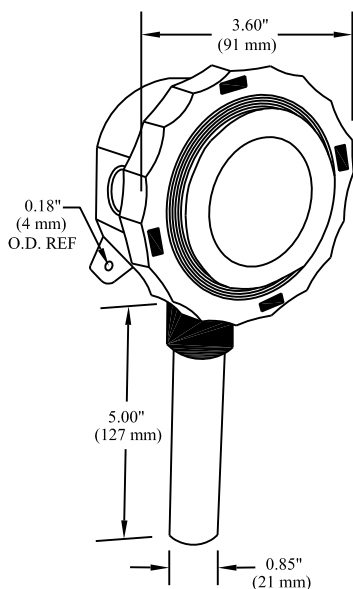


Duct / Averaging / Rigid Averaging

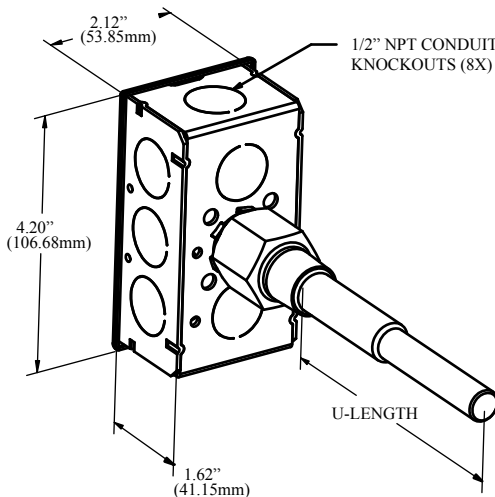


- Duct Insertion (U-Dimension)**
- 5.5" (89 mm)
- 7.5" (191 mm)
- 11.5" (292 mm)
- 17.5" (445 mm)
- Averaging**
- 8' (2.4 m)
- 12' (3.7 m)
- 24' (7.3 m)
- Rigid Averaging**
- 17.625" (448mm)
- 23.625" (600 mm)
- 35.625" (905mm)

Outside Air



Immersion³



- Well Insertion (U-Length)**
- 2.50" (64 mm)
- 4.00" (102 mm)
- 6.25" (158.75 mm)

Ordering Information

Sensor	Configuration	Communication Jack ¹	Pot Value ¹	Setpoint Indicator ¹	Pot Action ¹	Display ¹	Housing Type ²
A/ []	- []	- []	- []	- []	- []	- []	- []
CP (Type II)	R - Room	RJ4 (4 Pin RJ11)	400	Cool Warm	DA (Direct)	() No Display (Standard)	(PB) Plastic Housing (Standard)
AN (Type III)	RS - Room w/ Setpoint	RJ6 (6 Pin RJ12)	1K	55 to 85	RA (Reverse)	(DF) LCD Display (Degrees F)	(GD) Galvanized (BB) NEMA 3R
3K	RO - Room w/ Override	RS232 (Stereo Jack)	2K	10 to 30° C		(DC) LCD Display (Degrees C)	(4X) NEMA 4X
1.8K	RSO - Room w/ Setpoint & Override		3K				
20K	D - Duct 4", 8", 12", 18"		5K				
	DO - Duct without box 4", 8", 12", 18"		8.5K				
	I - Immersion³ 2.5", 4", 6"		10K				
	A - Bendable Copper Averaging 8', 12', 24'		20K				
	RA - Rigid Averaging 18", 24", 36"		100K				
	FA - Flexible Averaging (Cable) 8', 12', 24'						
	S - Strap On³						
	O - Outdoor Air						
	SP - Stainless Plate						
	BP - Bullet Probe						
	W - Raw						
	W-6⁴ - Raw Sensor w/6' Leads						
	BBS - Brass Button Sensor						
	SBS - Stainless Button Sensor						

¹ These Options are only available on ACI's Room Configurations. Resistors are available in series with pot values listed above. Contact ACI for details.

² Duct, Bendable Copper and Rigid Averaging come standard w/ plastic boxes. Optional enclosures include NEMA 3R (BB), NEMA 4X (4X) or the Galvanized Junction Box (GD).

³ Immersion and Strap-On sensors come standard with the galvanized junction box. (The plastic enclosure is also available but is rated for applications below 140 degrees F) Additional enclosures include NEMA 3R (BB) or NEMA 4X (4X) for immersion and NEMA 4X (4X) for Strap On.