

# BULLET PROBE

## 1" Bullet Probe, Thermistor

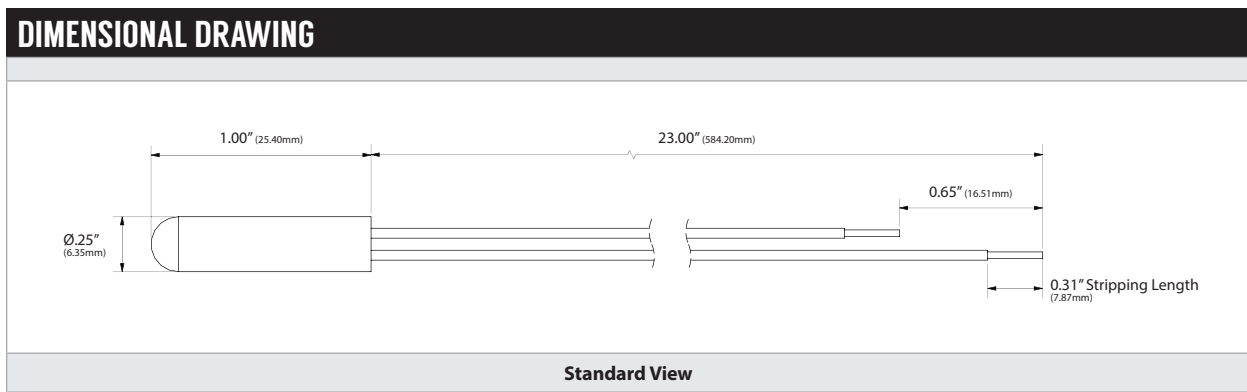
The ACI Thermistor Bullet Probe Series features a one inch stainless steel probe with two, 24 inch 22 AWG Etched Teflon colored lead wires to differentiate the different NTC sensor types. The sensors in this series are manufactured using ACI's proven double encapsulation process to eliminate the effects of moisture upon the sensors and to increase the thermal response times using our high quality, thermally conductive epoxy. The bullet style sensor is designed to monitor air temperatures and should not be fully submerged in water. This series can be ordered with different wire options and NIST certificates.

**Applications:** Roof Top Units, Air Handlers, Discharge Air/Supply/Return/Mixed Air Duct Temperature, Remote Temperature Sensing.

The ACI Thermistor Bullet Probe Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, [workaci.com](http://workaci.com).

### PRODUCT SPECIFICATIONS

<b>Sensor Type:</b>	Thermistor
<b>Sensor Curve:</b>	Non-Linear, NTC (Negative Temperature Coefficient)
<b>Number Sensing Points:</b>	One
<b>Number Wires:</b>	Two (Non-Polarity Sensitive)
<b>Sensor Output @ 25°C (77°F)   (Standard Lead Wire Colors):</b>	<b>A/1.8K:</b> 1.8KΩ nominal   (Red/Yellow)
	<b>A/2.25K:</b> 2.25KΩ nominal   (White/Red)
	<b>A/3K:</b> 3KΩ nominal   (White/Brown)
	<b>A/5K:</b> 5KΩ nominal   (Red/Gray)
	<b>A/AN (Type III):</b> 10KΩ nominal   (White/White)
	<b>A/AN-BC:</b> 5.238KΩ nominal   (White/Yellow)
	<b>A/CP (Type II):</b> 10KΩ nominal   (White/Green)
<b>A/CSI:</b> 10KΩ nominal   (Green/Yellow)	
<b>A/10KS:</b> 10KΩ nominal   (White/Blue)	
<b>A/10K-E1:</b> 10KΩ nominal   (Orange/Gray)	
<b>A/20K:</b> 20KΩ nominal   (Brown/Blue)	
<b>A/50K:</b> 50KΩ nominal   (Brown/Yellow)	
<b>A/100KS:</b> 100KΩ nominal   (Black/Yellow)	
<b>Accuracy 0-70°C (32-158°F):</b>	+/-0.2°C (+/-0.36°F) except <b>A/10K-E1 Series:</b> +/- 0.3°C (+/-0.54°F) <b>A/1.8K Series:</b> +/- 0.5°C @ 25°C (77°F) and (+/-1.0°C) (+/-1.8°F)
<b>Stability:</b>	Sensor Dependent; Contact ACI for more information on the sensor in question.
<b>Response Time (63% Step Change):</b>	10 Seconds nominal
<b>Power Dissipation Constant:</b>	3 mW/°C except <b>A/1.8K Series:</b> 1 mW/°C   <b>A/10K-E1 Series:</b> 2 mW/°C
<b>Probe Material:</b>	304 Stainless Steel
<b>Storage Temperature Range:</b>	-40 to 85°C (-40 to 185°F)
<b>Operating Humidity Range:</b>	10 to 95% RH, non-condensing
<b>Standard Wire</b>	<b>Lead Length   Conductor Size:</b> 24" (61cm)   22 AWG (0.65mm)
	<b>Lead Wire Insulation Wire Rating:</b> Etched Teflon Colored Leads   MIL-W-16878/4 (Type E)
	<b>Conductor Material:</b> Silver Plated Copper
	<b>Operating Temperature Range:</b> -40 to 150°C (-40 to 302°F)
	<b>Rated Applications:</b> Suitable for Indoor and Outdoor (wet) location. Oil, Moisture, Acids, Oils and Moisture Resistant
<b>Plenum Wire</b>	<b>Lead Length   Conductor Size:</b> See Ordering Grid   22 AWG (0.65mm)
	<b>Lead Wire Insulation   Wire Rating:</b> FEP (Fluorinated Ethylene Propylene)   TYPE CL2P - TYPE CMP 22 AWG (UL), C(UL) FEP/FEP E130356 ROHS, FT-6
	<b>Conductor Material:</b> Tinned Copper
	<b>Operating Temperature Range:</b> -40 to 150°C (-40 to 302°F)
<b>Zip Wire</b>	<b>Lead Length   Conductor Size:</b> 20' (6.10m)   22 AWG (0.65mm)
	<b>Lead Wire Insulation   Wire Rating:</b> PVC (Poly Vinyl Chloride)   22 AWG UL AWM style 1007 or STYLE 1569 105c 300v vw-1---CSA 208394 TR-64 90C OR AWM I A/B 105C 300V FT-1
	<b>Conductor Material:</b> Tinned Copper
	<b>Operating Temperature Range:</b> -20 to 90°C (-4 to 194°F)
	<b>Rated Applications:</b> Suitable for Indoor use only. Not for Outdoor use or UV Light Applications
<b>Lead Color:</b> White	
<b>Product Dimensions (Length x Diameter):</b>	1.00" (25.4mm) x 0.250" (6.35 mm)
<b>Product Weight:</b>	0.02 lbs. (9.07g)
<b>Agency Approvals:</b>	UKCA , CE, RoHS2, WEEE



### STANDARD ORDERING

Model # Example: **A/AN-BP** -OR- **121336**

Model #	Item #	Description
A/1.8K-BP	124579	1.8K Bullet Probe, 24" (61.0 cm) Leads, 1" Probe
A/2252-BP	120713	2252 Bullet Probe, 24" (61.0 cm) Leads, 1" Probe
A/3K-BP	121001	3K Bullet Probe, 24" (61.0 cm) Leads, 1" Probe
A/5K-BP	121239	5K Bullet Probe, 24" (61.0 cm) Leads, 1" Probe
A/AN-BP	121336	AN (Type III) Bullet Probe, 24" (61.0 cm) Leads, 1" Probe
A/AN-BC-BP	121349	AN-BC Bullet Probe, 24" (61.0 cm) Leads, 1" Probe, 11K Shunt
A/CP-BP	121942	CP (Type II) Bullet Probe, 24" (61.0 cm) Leads, 1" Probe
A/CSI-BP	122308	CSI Bullet Probe, 24" (61.0 cm) Leads, 1" Probe
A/10KS-BP	120198	10KS Bullet Probe, 24" (61.0 cm) Leads, 1" Probe
A/10K-E1-BP	126744	10K-E1 Bullet Probe, 24" (61.0 cm) Leads, 1" Probe
A/20K-BP	120588	20K Bullet Probe, 24" (61.0 cm) Leads, 1" Probe
A/100KS-BP	120117	100KS Bullet Probe, 24" (61.0 cm) Leads, 1" Probe

### CUSTOM ORDERING

Model # Example: **A/ 1.8K BP 6'CL2P NIST**

		<b>MODEL #</b>
<b>A. Sensor Series</b> <i>No Selection Required</i>	A/ _____ →	A/
<b>B. Model Series</b> <i>Select One (1)</i>	<b>1.8K   2252   3K   5K   AN   AN-BC   CP   CSI   10KS   10K-E1   20K   50K   100KS</b>	
<b>C. Configuration</b> <i>No Selection Required</i>	BP = 1" Stainless Steel Probe _____ →	BP
<b>D. Lead Wire Options</b> <i>Select One (1)</i>	---- = Standard 24" Etched PTFE Colored Leads <b>6'CL2P</b> = 6 ft (1.83m), 2 Conductor Plenum Rated Cable <b>10'CL2P</b> = 10 ft (3.05m), 2 Conductor Plenum Rated Cable <b>20'CL2P</b> = 20 ft (6.10m), 2 Conductor Plenum Rated Cable <b>20'Z</b> = 20 ft (6.10m), 2 Conductor White Zip Wire	
<b>E. NIST</b> <i>Select One (1)</i>	---- = No NIST Certificate   <b>NIST</b> = NIST Certificate (Must Specify 3 Points)	

### ACCESSORIES ORDERING

Model # Example: **A/MOUNTING U-CLIP-1/4"** -OR- **143352**

Model #	Item #	Description	Galvanized Metal	Plastic w/Adhesive
A/MOUNTING CLIP-1/4"	143351	Hardware, 1/4" Mounting Clip	•	
A/MOUNTING U-CLIP-1/4"	143352	Hardware, 1/4" U-Mounting Clip Adhesive		•