

Bullet Probe I Thermistor

Bullet Probe, Thermistor



Automation Components
a DwyerOmega brand

The ACI Thermistor Bullet Probe Series features a 25.4 mm (1 in) stainless steel probe with two, 61 cm (24 in), 0.65 mm (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

Warranty

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.

Specifications

Sensor Type: Thermistor

Sensor Curve: Non-Linear, NTC (Negative Temperature Coefficient)

Number Sensing Points: One

Number Wires: Two (Non-Polarity Sensitive)

Sensor Output @ 25 °C (77 °F) (Standard Lead Wire Colors)

A/1.8K: 1.8 k Ω nominal I (Red/Yellow)

A/CSI: 10 k Ω nominal I (Green/Yellow)

A/2252: 2.252k Ω nominal I (White/Red)

A/10KS: 10 k Ω nominal I (White/Blue)

A/3K: 3 k Ω nominal I (White/Brown)

A/10K-E1: 10 k Ω nominal I (Orange/Gray)

A/5K: 5 k Ω nominal I (Red/Gray)

A/20K: 20 k Ω nominal I (Brown/Blue)

A/AN (Type III): 10 k Ω nominal I (White/White)

A/50K: 50 k Ω nominal I (Brown/Yellow)

A/AN-BC: 5.238 k Ω nominal I (White/Yellow)

A/100KS: 100 k Ω nominal I (Black/Yellow)

A/CP (Type II): 10 k Ω nominal I (White/Green)

Accuracy from 0 °C to 70 °C (32 °F to 158 °F): ± 0.2 °C (± 0.36 °F) except:

A/10K-E1 Series: ± 0.3 °C (± 0.54 °F)

A/1.8K Series: ± 0.5 °C at 25 °C (77 °F) and ± 1.0 °C (± 1.8 °F)

Stability: Sensor dependent; Contact ACI for more information on the sensor in question

Response Time (63 % Step Change): 10 seconds nominal

Power Dissipation Constant: 3 mW / °C, except:

A/1.8K Series: 1 mW / °C nominal

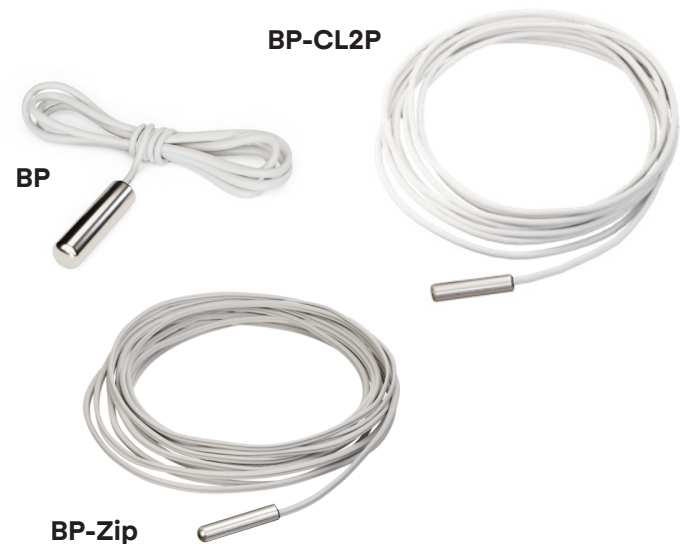
A/10K-E1 Series: 2 mW / °C nominal

Probe Material: 304 Stainless Steel

Storage Temperature Range: -40 °C to 85 °C (-40 °F to 185 °F)

Operating Humidity Range: 10 % to 95% RH, non-condensing

Product Dimensions (Length x Diameter): 25.4 mm x 6.35 mm (1 in x 0.25 in)



Product Weight: 9.07 g (0.02 lb)

Agency Approvals: CE, UKCA, RoHS2, WEEE

Standard Wire

Lead Length: 61 cm (24 in)

Conductor Size: 0.65 mm (22 AWG)

Lead Wire Insulation I Wire Rating: Etched Teflon Colored Leads I MIL-W-16878/4 (Type E)

Conductor Material: Silver Plated Copper

Operating Temperature Range: -40 °C to 150 °C (-40 °F to 302 °F)

Rated Applications: Suitable for Indoor and Outdoor (wet) location. Oil, Moisture, Acids, Oils and Moisture Resistant

Plenum Wire

Lead Length: See Ordering Grid

Conductor Size: 0.65 mm (22 AWG)

Lead Wire Insulation: FEP (Fluorinated Ethylene Propylene)

Wire Rating: TYPE CL2P - TYPE CMP 22 AWG (UL), C(UL) FEP/FEP E130356 ROHS, FT-6

Conductor Material: Tinned Copper

Operating Temperature Range: -40 °C to 150 °C (-40 °F to 302 °F)

Rated Applications: Suitable for Indoor and Outdoor (wet) location. Oil, Gas, Sunlight, Abrasion Acid Resistant

Zip Wire

Lead Length: 6.10 m (20 ft)

Conductor Size: 0.65 mm (22 AWG)

Lead Wire Insulation: PVC (Poly Vinyl Chloride)

Wire Rating: 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

Conductor Material: Tinned Copper

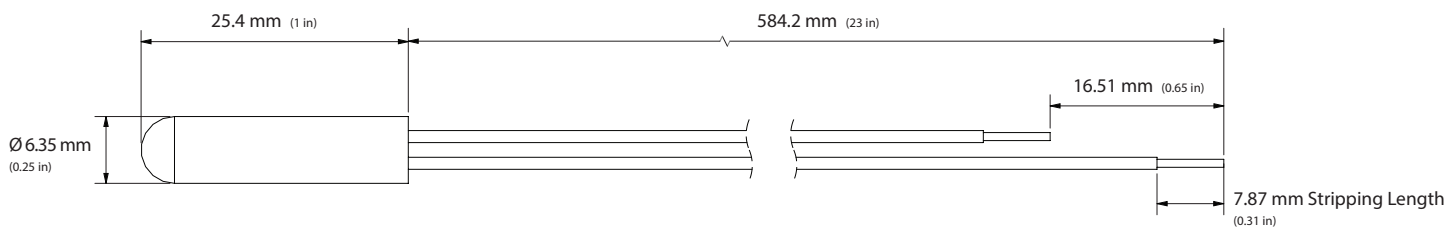
Operating Temperature Range: -20 °C to 90 °C (-4 °F to 194 °F)

Rated Applications: Suitable for Indoor use only. Not for Outdoor use or UV Light Applications

Lead Color: White



Dimensions



Standard Ordering

Model #	Item #	Description
A/1.8K-BP	124579	1.8K Bullet Probe, 61 cm (24 in) Leads, 25.4 mm (1 in) Probe
A/2252-BP	120713	2252 Bullet Probe, 61 cm (24 in) Leads, 25.4 mm (1 in) Probe
A/3K-BP	121001	3K Bullet Probe, 61 cm (24 in) Leads, 25.4 mm (1 in) Probe
A/5K-BP	121239	5K Bullet Probe, 61 cm (24 in) Leads, 25.4 mm (1 in) Probe
A/AN-BP	121336	AN (Type III) Bullet Probe, 61 cm (24 in) Leads, 25.4 mm (1 in) Probe
A/AN-BC-BP	121349	AN-BC Bullet Probe, 61 cm (24 in) Leads, 25.4 mm (1 in) Probe, 11K Shunt
A/CP-BP	121942	CP (Type II) Bullet Probe, 61 cm (24 in) Leads, 25.4 mm (1 in) Probe
A/CSI-BP	122308	CSI Bullet Probe, 61 cm (24 in) Leads, 25.4 mm (1 in) Probe
A/10KS-BP	120198	10KS Bullet Probe, 61 cm (24 in) Leads, 25.4 mm (1 in) Probe
A/10K-E1-BP	126744	10K-E1 Bullet Probe, 61 cm (24 in) Leads, 25.4 mm (1 in) Probe
A/20K-BP	120588	20K Bullet Probe, 61 cm (24 in) Leads, 25.4 mm (1 in) Probe
A/100KS-BP	120117	100KS Bullet Probe, 61 cm (24 in) Leads, 25.4 mm (1 in) Probe

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

Optional Sensor Ordering

Options and Descriptions		Model #
A. Sensor Series No Selection Required	A/	A/
B. Model Series Select One (1)	1.8K 2252 3K 5K AN AN-BC CP CSI 10KS 10K-E1 20K 50K 100KS	
C. Configuration No Selection Required	BP = 25.4 mm (1 in) Stainless Steel Probe	BP
D. Lead Wire Options Select One (1)	---- = Standard 61 cm (24 in) Etched PTFE Colored Leads	
	6'CL2P = 1.83 m (6 ft), 2 Conductor Plenum Rated Cable	
	10'CL2P = 3.05 m (10 ft), 2 Conductor Plenum Rated Cable	
	20'CL2P = 6.10 m (20 ft), 2 Conductor Plenum Rated Cable	
E. NIST Select One (1)	20'Z = 6.10 m (20 ft), 2 Conductor White Zip Wire	
	---- = No NIST Certificate	NIST = NIST Certificate (Must Specify 3 Points)

Model # Example:

A/	1.8K	BP	6'CK2P	NIST
A.	B.	C.	D.	E.



Accessories Ordering

Model #	Item #	Description	Galvanized Metal	Plastic w/ Adhesive
A/MOUNTING CLIP-1/4"	143351	Hardware, 6.35 mm (1/4 in) Mounting Clip	•	
A/MOUNTING U-CLIP-1/4"	143352	Hardware, 6.35 mm (1/4 in) U-Mounting Clip Adhesive		•

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

