



# BULLET PROBE

## 1" Bullet Probe, Nickel RTD



The ACI Nickel Bullet Probe Series features a one inch stainless steel probe with two, 24 inch 22 AWG Etched Teflon colored lead wires to differentiate the many 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 be used to monitor air temperatures and should not be fully submerged in water. This series can be ordered with different wire options and NIST Certification as referenced in the Ordering grid on the back of the product data sheet.

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

The ACI Nickel 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, [www.workaci.com](http://www.workaci.com).

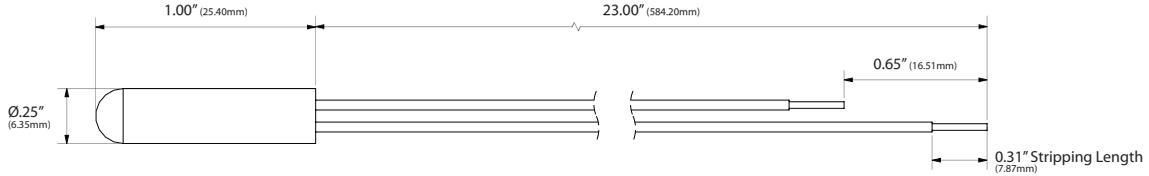
### PRODUCT SPECIFICATIONS

|  |  |
|--|--|
| <b>Sensor Type   Sensor Curve:</b>                       | Nickel RTD   PTC (Positive Temperature Coefficient)  |
| <b>Number Sensing Points:</b>                            | One  |
| <b>Number Wires:</b>                                     | Two (Non-Polarity Sensitive)   |
| <b>Sensor Output @ 21.1°C (70°F)   Lead Wire Colors:</b> | 1000 Ohms nominal   Red/Red  |
| <b>Sensor Accuracy:</b>                                  | <b>-40°C (-40°F):</b> +/- 1.52°C (+/- 2.73°F)<br><b>0°C (32°F):</b> +/- 0.4°C (+/- 0.72°F)<br><b>21.1°C (70°F):</b> +/- 0.17°C (+/- 0.34°F)<br><b>54.4°C (130°F):</b> +/- 0.56°C (1.00°F)<br><b>121°C (250°F):</b> +/- 1.25°C (+/- 2.25°F) |
| <b>Din Standard   Temperature Coefficient (0-100°C):</b> | Din 43760   6370 ppm/°C  |
| <b>Sensor Stability:</b>                                 | +/- 0.05% after 1000 Hours @ 150°C (302°F)   |
| <b>Response Time (63% Step Change):</b>                  | 8 Seconds nominal  |
| <b>Self-Heating   Maximum Operating Current:</b>         | 0.3°C/mW (Still Air)   5 mA  |
| <b>Probe Material:</b>                                   | 304 Stainless Steel  |
| <b>Operating Temperature Range:</b>                      | -40 to 121°C (-40 to 250°F)  |
| <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>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>Product Dimensions (Length x Diameter):</b>           | 1.00" (25.4mm) x 0.250" (6.35mm)   |
| <b>Product Weight:</b>                                   | 0.02 lbs. (9.07g)  |
| <b>Agency Approvals:</b>                                 | CE, RoHS2, WEEE  |





**DIMENSIONAL DRAWING**



Standard View

**STANDARD ORDERING**

Model # Example: **A/1K-NI-BP -OR- 120490**

| Model #                    | Item # | Description   |
|----------------------------|--------|---|
| <b>A/1K-NI-BP</b>          | 120490 | 1K Nickel Bullet Probe, 24" (61.0 cm) (Leads, 1" Probe)         |
| <b>A/1K-NI-BP-10'CL2P</b>  | 130028 | 1K Nickel Bullet Probe, 10' (3.05m) CL2P Plenum Leads, 1" Probe |
| <b>A/1K-NI-BP-20'CL2P*</b> | 131900 | 1K Nickel Bullet Probe, 20' (6.10m) CL2P Plenum Leads, 1" Probe |
| <b>A/1K-NI-BP-20'Z*</b>    | 130472 | 1K Nickel Bullet Probe, 20' (6.10m) Zip Cord Leads, 1" Probe    |

**Note\*:** The 20' Length is not CE Compliant but it is RoHS Compliant

**OPTIONAL SENSOR ORDERING**

Model # Example: **A/ 1K-NI BP 6'CL2P NIST**  
A. B. C. D. E.

**MODEL #**

|  |   |              |
|--|---|--------------|
| <b>A. Sensor Series</b> <i>No Selection Required</i> | <b>A/</b> _____ →   | <b>A/</b>    |
| <b>B. Model Series</b> <i>No Selection Required</i>  | <b>1K-NI</b> _____ →  | <b>1K-NI</b> |
| <b>C. Configuration</b> <i>No Selection Required</i> | <b>BP = 1" Stainless Steel Probe</b> _____ →  | <b>BP</b>    |
| <b>D. Lead Wire Type</b> <i>Select One (1)</i>       | ---- = Standard 24" Etched PTFE Colored Leads<br><b>6'CL2P</b> = 6 ft (1.83m), 2 Conductor Plenum Rated Cable<br><b>10'CL2P</b> = 10 ft (3.05m), 2 Conductor Plenum Rated Cable<br><b>20'CL2P</b> = 20 ft (6.10m), 2 Conductor Plenum Rated Cable |              |
| <b>E. NIST</b> <i>Select One (1)</i>                 | ---- = No NIST Certificate   <b>NIST</b> = NIST Certificate (Must Specify 1, 3 or 5 Points)   |              |

**ACCESSORIES ORDERING**

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

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

