



# QUICK CONNECTS

## Plenum Rated Cable, Thermistor



The ACI Thermistor Quick Connect Series features a 1/4" diameter stainless steel probe with a 2 conductor Plenum rated cable and 1/4" Female Insulated Spade Connectors (Quick Connects). The sensors in this series are manufactured using ACI's proven double encapsulation process to eliminate the effects of moisture upon the sensors as well as increased thermal response times using our high quality, thermally conductive epoxy. The duct style sensor is a single point sensor designed to be used in smaller duct applications and includes an insulation pad for properly sealing your duct as well as to dampen vibration. For best results, the sensor length should be determined by the actual width or diameter of your duct such that the tip of the probe is in the approximate center of the duct. On larger ducts, you may want to refer to our Rigid or Bendable Copper Averaging sensor for increased sensing points and better

temperature control. The Thermistor Quick Connect Series can be ordered with optional plenum rated cables, jacket materials and standard lead lengths. Please contact ACI for more information regarding this sensor or to discuss whether it will meet your specific requirements.

**Applications:** Roof Top Units, Air Handlers, Monitoring Supply/Discharge/Return/Mixed Air Temperatures

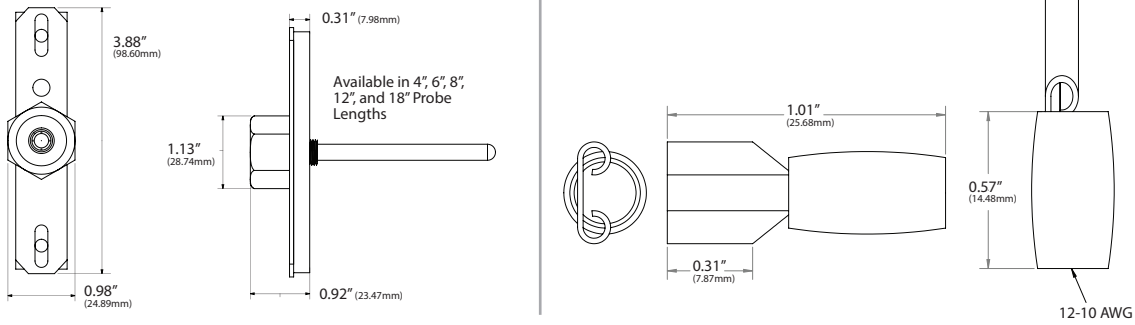
**The ACI Thermistor Quick Connect Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, [www.workaci.com](http://www.workaci.com).**

PRODUCT SPECIFICATIONS	
<b>Sensor Type   Sensor Curve:</b>	Thermistor   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) (Lead Wire Colors):</b>	<p><b>A/1.8K Series:</b> 1.8KΩ nominal (Red/Yellow)</p> <p><b>A/3K Series:</b> 3KΩ nominal (White/Brown)</p> <p><b>A/AN Series (Type III):</b> 10KΩ nominal (White/White)</p> <p><b>A/AN-BC Series:</b> 5.238KΩ nominal (White/Yellow)</p> <p><b>A/CP Series (Type II):</b> 10KΩ nominal (White/Green)</p> <p><b>A/CSI Series:</b> 10KΩ nominal (Green/Yellow)</p> <p><b>A/10KS Series:</b> 10KΩ nominal (White/Blue)</p> <p><b>A/10K-E1 Series:</b> 10KΩ nominal (Gray/Orange)</p> <p><b>A/20K Series:</b> 20KΩ nominal (Brown/Blue)</p> <p><b>A/100KS Series:</b> 100KΩ nominal (Black/Yellow)</p>
<b>Sensor Accuracy 0-70°C (32-158°F):</b>	<p>+/-0.2°C (+/-0.36°F) except <b>A/10K-E1 Series:</b> +/- 0.3°C (+/-0.54°F)</p> <p><b>A/1.8K Series:</b> +/- 0.5°C @ 25°C (77°F) and (+/-1.0°C) (+/-1.8°F)</p>
<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>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>Operating Temperature Range:</b>	-40 to 115°C (-40 to 239°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>Probe Material   Flange Material:</b>	304 Stainless Steel   Galvanized Steel
<b>Fitting Material   Flammability Rating:</b>	Polyamide 66 (High Performance Nylon)   UL94-HB
<b>Foam Pad Material   Flammability Rating:</b>	Neoprene/EPDM/SBR Polymer   UL94-HBF; FMVSS-302; MIL-R-6130C
<b>Lead Length   Conductor Size:</b>	96" (8 ft (2.44m)); 120" (10 ft (3.05m)) or 240" ** (20 ft (6.10m))   22 AWG (0.65mm)
<b>Lead Wire Insulation   Wire Rating:</b>	FEP/FEP Teflon Jacketed Cable
<b>Conductor Material:</b>	Tin Plated Copper
<b>Sensor Connections:</b>	Two, 1/4" Insulated Female Quick Connects (Amp® Part# 2-520264-2)
<b>Product Dimensions / Product Weight:</b>	See table on back of Product Data sheet
<b>Probe Diameter:</b>	0.250" (6.35mm)
<b>Agency Approvals:</b>	CE, RoHS2, WEEE





**DIMENSIONAL DRAWING**



Standard View: Probe, Fitting & Flange

Standard View: Female Head

**SENSOR ORDERING**

Model # Example: **A/** **CP** **DO** **6"** **120** **CL2P** **QC**

**MODEL #**

	A/	CP	DO	6"	120	CL2P	QC	
	A.	B.	C.	D.	E.	F.	G.	H.
<b>A. Sensor Series</b> <i>No Selection Required</i>	A/							<b>A/</b>
<b>B. Model Series</b> <i>Select One (1)</i>	1.8K   3K   AN   AN-BC   CP   CSI   10KS   10K-E1   20K   100KS							
<b>C. Configuration</b> <i>No Selection Required</i>	DO = Duct without Box (Mounting Flange Only)							<b>DO</b>
<b>D. Probe Length</b> <i>Select One (1)</i>	4" = 4" Probe   6" = 6" Probe   8" = 8" Probe   12" = 12" Probe   18" = 18" Probe							
<b>E. Lead Length</b> <i>Select One (1)</i>	96" = 96 In. (8 ft (2.44m))   120" = 120 In. (10 ft (3.05m))   240" = 240 In.** (20 ft (6.10m))							
<b>F. Lead Wire Type</b> <i>Select One (1)</i>	CL2P = 2 Conductor FEP/FEP Plenum / CMP Rated Cable							<b>CL2P</b>
<b>G. Connector Style</b> <i>Select One (1)</i>	QC = Two, 1/4" Quick Connects							<b>QC</b>
<b>H. NIST</b> <i>Select One (1)</i>	---- = No NIST Certificate   NIST = NIST Certificate (3 Points)							

Note\*\*: The 240" (6.10m) Length is not CE Compliant but it is RoHS Compliant

