



FLUSH MOUNT BUTTONS

Brass, Stainless Steel & Plastic Nickel RTDs



The ACI Nickel Flush Mount Button Series features a stainless steel, brass or white plastic button sensor with two, 24 inch 22 AWG Etched Teflon colored lead wires to differentiate the different sensor types. The sensors in this series are manufactured using ACI's proven encapsulation process to eliminate the effects of moisture on the sensors and to increase the thermal response time using our high quality, thermally conductive epoxy. This sensor uses a small, low profile design and should be used in applications where aesthetics is one of your primary concerns. Each unit is supplied with a mounting kit such that they can be hidden underneath cabinets or shelving units, in decorative metal plates, trim, drywall or from a 1/2" piece of conduit coming down from the ceiling or roof. Note that if painting the sensors, be sure to coat with as

little paint as possible so as to not limit the effect on the accuracy or responsiveness of the sensor. This series can be ordered with an optional NIST Certificate as designated in the product ordering grid.

Applications: Museums, Historical Buildings, Monitoring Space Temperatures, Office Buildings, Schools, Retail, Remote Sensor

PRODUCT SPECIFICATIONS

Sensor Type Sensor Curve:	Nickel RTD PTC (Positive Temperature Coefficient)
Number Sensing Points:	One
Number Wires:	Two (Non-Polarity Sensitive)
Sensor Output @ 21.1°C (70°F) Lead Wire Colors:	1000 Ohms nominal Red/Red
Sensor Accuracy:	<p>-40°C (-40°F): +/- 1.52°C (+/- 2.73°F)</p> <p>0°C (32°F): +/- 0.4°C (+/- 0.72°F)</p> <p>21.1°C (70°F): +/- 0.17°C (+/- 0.34°F)</p> <p>54.4°C (130°F): +/- 0.56°C (1.00°F)</p> <p>121°C (250°F): +/- 1.25°C (+/- 2.25°F)</p>
Din Standard Temperature Coefficient (0-100°C):	Din 43760 6370 ppm/°C
Sensor Stability:	+/- 0.05% after 1000 Hours @ 150°C (302°F)
Response Time (63% Step Change)	8 Seconds nominal
Self-Heating Maximum Operating Current:	0.3°C/mW (Still Air) 5 mA
Button Sensor Enclosure Material:	A/1K-NI-BBS: Brass A/1K-NI-SBS: 304 Stainless Steel A/1K-NI-PBS: ABS
Plastic Button Flammability Rating:	UL94-HB
Operating Storage Temperature Range:	<p>A/1K-NI-PBS: -40 to 70°C (-40 to 158°F) -40 to 85°C (-40 to 185°F)</p> <p>A/1K-NI-BBS & A/1K-NI-SBS: -40 to 121°C (-40 to 250°F) -40 to 85°C (-40 to 185°F)</p>
Operating Humidity Range:	10 to 95% RH, non-condensing
Lead Length Conductor Size:	24" (61cm) 22 AWG (0.65mm)
Lead Wire Insulation Wire Rating:	Etched Teflon (PTFE) Colored Leads Mil Spec 16878/4 Type E
Conductor Material:	Silver Plated Copper
Product Dimensions (Length x Diameter):	<p>A/1K-NI-PBS: 1.00" (25.4mm) x 0.750" (19mm)</p> <p>A/1K-NI-BBS and A/1K-NI-SBS: 1.20" (30.48mm) x 0.700" (17.78mm)</p>
Product Weight:	A/1K-NI-PBS: 0.04 lbs. (18.15g) A/1K-NI-BBS & A/1K-NI-SBS: 0.10 lbs. (45.36g)
Agency Approvals:	CE, RoHS2, WEEE





DIMENSIONAL DRAWING

Brass & Stainless Button Sensor

Front View

Right View

Plastic Button Sensor

Front View

Right View

STANDARD ORDERING

Model # Example: **A/1K-NI-PBS -OR- 125600**

Model #	Item #	Description
A/1K-NI-PBS	125600	1K Nickel Plastic Button Sensor, 24" Leads
A/1K-NI-BBS	120488	1K Nickel Brass Button Sensor, 24" Leads
A/1K-NI-SBS	120551	1K Nickel Stainless Steel Button Sensor, 24" Leads

OPTIONAL SENSOR ORDERING

Model # Example: **A/ 1K-NI PBS NIST**
A. B. C. D.

		MODEL #
A. Sensor Series <i>No Selection Required</i>	A/ →	A/
B. Model Series <i>No Selection Required</i>	1K-NI →	1K-NI
C. Configuration <i>Select One (1)</i>	PBS = Plastic Button BBS = Brass Button SBS = Stainless Steel Button	
D. NIST <i>Select One (1)</i>	---- = No NIST Certification NIST = NIST Certificate (Must Specify 1, 3 or 5 Points)	

