Automation Components, Inc.

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FLUSH MOUNT BUTTONS
Brass, Stainless Steel & Plastic Platinum RTDs

BBS

PBS

SBS

The ACI Platinum Flush Mount Button Series features a stainless steel, brass or white plastic button sensor with Etched Teflon colored lead wires to differentiate the different sensor types. The three-wire "-3W" option should be ordered when using a 3-Wire temperature transmitter or sensor configuration on your building management system or PLC (Programmable Logic Controller). The purpose of the 3rd wire is to compensate for external lead wire resistance that will affect your sensor output. ACI recommends the use of 18 AWG lead wires to reduce the external lead wire resistance when using a Platinum RTD. Sensors in this series are manufactured using ACI's proven double encapsulation process to eliminate the effects of moisture on the sensor and to increase 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 to aid in the installation process so that they can be easily hidden or blended into the environment or space. Note that if painting the sensors, be sure to coat with as little paint as possible, to limit the effect on accuracy and responsiveness of the sensor. This series can be ordered with optional NIST Certificates as referenced in the product ordering grid.

Applications: Museums, Historical Buildings, Space Temperatures, Office Buildings, Schools, Retail, Remote Sensors, Commercial Spaces

The Platinum Flush Mount Button 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.
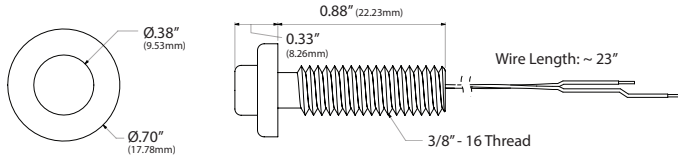
PRODUCT SPECIFICATIONS

Sensor Type | Sensor Curve:	Platinum RTD | PTC (Positive Temperature Coefficient)
Number Sensing Points:	One
Number Wires:	**A/100-2W-XXX** and **A/1K-2W-XXX:** Two (Non-Polarity Sensitive)
	A/100-3W-XXX and **A/1K-3W-XXX:** Three (Polarity Sensitive)
Sensor Output @ 0ºC (32ºF):	**A/100-xW-XXX:** 100 Ohms nominal | **A/1K-xW-XXX:** 1000 Ohms nominal
Sensor Accuracy @ 0ºC (32ºF):	+/- 0.06% Class A (**Tolerance Formula:** +/- ºC = (0.15ºC + (0.002 * |t|))
	where |t| is the absolute value of Temperature above or below 0ºC in ºC)
	-40ºC (-40ºF): +/- 0.23ºC (+/- 0.414ºF) | **0ºC (32ºF):** +/- 0.15ºC (+/- 0.27ºF)
	70ºC (158ºF): +/- 0.29ºC (+/- 0.53ºF) | **200ºC (392ºF):** +/- 0.55ºC (+/- 0.99ºF)
Din Standard | Temperature Coefficient:	DIN EN 60751 (IEC 751) | 3850 ppm / ºC
Sensor Stability:	+/- 0.03% after 1000 Hours @ 300ºC (572ºF)
Response Time (63% Step Change):	8 Seconds nominal
Self-Heating | Maximum Operating Current:	**100 Ohm RTD:** 7 mW/ºC (Still Air) | 5 mA | **1K Ohm RTD:** 4mW/ºC (Still Air) | 3 mA
Button Sensor Enclosure Material:	**A/100/1K-BBS:** Brass | **A/100/1K-SBS:** 304 Stainless Steel | **A/100/1K-PBS:** ABS Plastic
Plastic Button "-PBS" Flammability Rating:	UL94-HB
Operating | Storage Temperature Range:	**A/100/1K-PBS:** -40 to 70ºC (-40 to 158ºF | -40 to 85ºC (-40 to 185ºF)
	A/100/1K-BBS & A/100/1K-SBS: -40 to 200ºC (-40 to 392ºF) | -40 to 85ºC (-40 to 185ºF)
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):	**A/100/1K-PBS:** 1.00" (25.4mm) x 0.750" (19mm)
	A/100/1K-BBS and **A/100/1K-SBS:** 1.20" (30.48mm) x 0.700" (17.78mm)
Product Weight:	**A/100/1K-PBS:** 0.06 lbs. (27.72g) | **A/100/1K-BBS & A/100/1K-SBS:** 0.12 lbs. (54.44g)
Agency Approvals:	CE, RoHS2, WEEE

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DIMENSIONAL DRAWING

Brass & Stainless Button Sensor

Ø.38" (9.53mm)

Ø.70" (17.78mm)

0.88" (22.23mm)

0.33" (8.26mm)

Wire Length: ~ 23"

3/8" - 16 Thread

Plastic Button Sensor

Ø.74" (18.67mm)

1.00" (25.40mm)

.06" (1.40mm)

Probe Pushes Into Threaded Insert

Threaded Insert Fits Inside 3/4" Hole

Front & Top / Right Views	Spacers / Anchors

STANDARD ORDERING

Model # Example: A/100-2W-PBS -OR- 129782

Model #	Item #	Description
A/100-2W-PBS	129782	100 Ohm RTD, 2-Wire, Plastic Button Sensor, 24" Leads, Brown/Brown Leads, Anchor
A/100-2W-BBS	135454	100 Ohm RTD, 2-Wire, Brass Button Sensor, 24" Leads, Brown/Brown Leads, Spacers & Brass Nut
A/100-2W-SBS	119980	100 Ohm RTD, 2-Wire, Stainless Button Sensor, 24" Leads, Brown/Brown Leads, Spacers & Brass Nut
A/100-3W-PBS	132081	100 Ohm RTD, 3-Wire, Plastic Button Sensor, 24" Leads, Brown/Brown/Black Leads, Anchor
A/100-3W-BBS	119984	100 Ohm RTD, 3-Wire, Brass Button Sensor, 24" Leads, Brown/Brown/Black Leads, Spacers & Brass Nut
A/100-3W-SBS	120060	100 Ohm RTD, 3-Wire, Stainless Button Sensor, 24" Leads, Brown/Brown/Black Leads, Spacers & Brass Nut
A/1K-2W-PBS	128969	1K Ohm RTD, 2-Wire, Plastic Button Sensor, 24" Leads, Black/Black Leads, Anchor
A/1K-2W-BBS	120261	1K Ohm RTD, 2-Wire, Brass Button Sensor, 24" Leads, Black/Black Leads, Spacers & Brass Nut
A/1K-2W-SBS	120372	1K Ohm RTD, 2-Wire, Stainless Button Sensor, 24" Leads, Black/Black Leads, Spacers & Brass Nut
A/1K-3W-PBS	142473	1K Ohm RTD, 3-Wire, Plastic Button Sensor, 24" Leads, Black/Black/White Leads, Anchor
A/1K-3W-BBS	142476	1K Ohm RTD, 3-Wire, Brass Button Sensor, 24" Leads, Black/Black/White Leads, Spacers & Brass Nut
A/1K-3W-SBS	131951	1K Ohm RTD, 3-Wire, Stainless Button Sensor, 24" Leads, Black/Black/White Leads, Spacers & Brass Nut

OPTIONAL SENSOR ORDERING

Model # Example: A/ 100 2W PBS NIST
A.   B.   C.   D.   E.

		MODEL #
		A/
A. Sensor Series *No Selection Required*	A/ ⟶	
B. Model Series *Select One (1)*	**100** = 100 Ohm Platinum RTD │ **1K** = 1K Ohm Platinum RTD	
C. Number of Wires *Select One (1)*	**2W** = Two Wires │ **3W** = Three Wires	
D. Configuration *Select One (1)*	**PBS** = Plastic Button │ **BBS** = Brass Button │ **SBS** = Stainless Steel Button	
E. NIST *Select One (1)*	**----** = No NIST Certification │ **NIST** = NIST Certificate (3 Points)	

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