

TEMPERATURE | PLATINUM RTDS | FLUSH MOUNT BUTTONS



FLUSH MOUNT BUTTONS

Brass, Stainless Steel & Plastic Platinum RTDs

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. Please contact ACI for more information regarding these sensors or to discuss your application in further detail. Other options may be available upon request.

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

| 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 @ 0°C (32°F): | A/100-xW-XXX: 100 Ohms nominal A/1K-xW-XXX: 1000 Ohms nominal | | | | | |
| Sensor Accuracy @ 0°C (32°F): | +/- 0.06% Class A (Tolerance Formula: +/- °C = (0.15°C + (0.002 * t)) | | | | | |
| | where t is the absolute value of Temperature above or below 0°C in °C) | | | | | |
| | -40°C (-40°F): +/- 0.23°C (+/- 0.414°F) 0°C (32°F): +/- 0.15°C (+/- 0.27°F) | | | | | |
| | 70°C (158°F): +/- 0.29°C (+/- 0.53°F) 200°C (392°F): +/- 0.55°C (+/- 0.99°F) | | | | | |
| Din Standard Temperature Coefficient: | DIN EN 60751 (IEC 751) 3850 ppm / ℃ | | | | | |
| Sensor Stability: | +/- 0.03% after 1000 Hours @ 300°C (572°F) | | | | | |
| Response Time (63% Step Change): | 8 Seconds nominal | | | | | |
| Self-Heating Maximum Operating Current: | : 100 Ohm RTD: 7 mW/°C (Still Air) 5 mA 1K Ohm RTD: 4mW/°C (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 70°C (-40 to 158°F -40 to 85°C (-40 to 185°F) | | | | | |
| | A/100/1K-BBS & A/100/1K-SBS: -40 to 200°C (-40 to 392°F) -40 to 85°C (-40 to 185°F) | | | | | |
| 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 | | | | | |





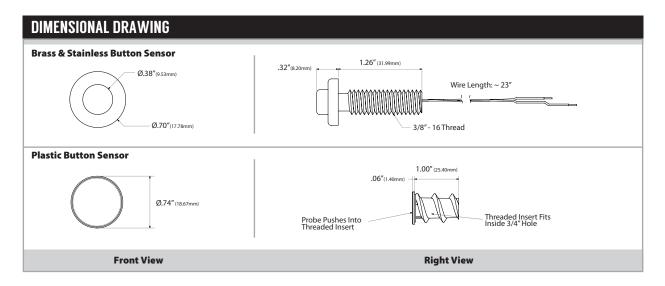






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| STANDARD ORD | ERING | Model # Example: A/100-2W-PBS -OR 129782 |
|--------------|--------|--|
| Model # | Item # | Description |
| A/100-2W-PBS | 129782 | 100 Ohm RTD, 2-Wire, Plastic Button Sensor, 24" Leads, Brown/Brown Leads |
| A/100-2W-BBS | 135454 | 100 Ohm RTD, 2-Wire, Brass Button Sensor, 24" Leads, Brown/Brown Leads |
| A/100-2W-SBS | 119980 | 100 Ohm RTD, 2-Wire, Stainless Button Sensor, 24" Leads, Brown/Brown Leads |
| A/100-3W-PBS | 132081 | 100 Ohm RTD, 3-Wire, Plastic Button Sensor, 24" Leads, Brown/Brown/Black Leads |
| A/100-3W-BBS | 119984 | 100 Ohm RTD, 3-Wire, Brass Button Sensor, 24" Leads, Brown/Brown/Black Leads |
| A/100-3W-SBS | 120060 | 100 Ohm RTD, 3-Wire, Stainless Button Sensor, 24" Leads, Brown/Brown/Black Leads |
| A/1K-2W-PBS | 128969 | 1K Ohm RTD, 2-Wire, Plastic Button Sensor, 24" Leads, Black/Black Leads |
| A/1K-2W-BBS | 120261 | 1K Ohm RTD, 2-Wire, Brass Button Sensor, 24" Leads, Black/Black Leads |
| A/1K-2W-SBS | 120372 | 1K Ohm RTD, 2-Wire, Stainless Button Sensor, 24" Leads, Black/Black Leads |
| A/1K-3W-PBS | 142473 | 1K Ohm RTD, 3-Wire, Plastic Button Sensor, 24" Leads, Black/Black/White Leads |
| A/1K-3W-BBS | 142476 | 1K Ohm RTD, 3-Wire, Brass Button Sensor, 24" Leads, Black/Black/White Leads |
| A/1K-3W-SBS | 131951 | 1K Ohm RTD, 3-Wire, Stainless Button Sensor, 24" Leads, Black/Black/White Leads |

| OPTIONAL SENSOR ORDERING | | Model # Example: | A/ A. | 100 B. | 2W C. | PBS D. | NIST E. | MODEL |
|--|---|---------------------|----------|-----------|----------|-----------|------------|-------|
| A. Sensor Series No Selection Required | A/ | | | | | | | A/ |
| B. Model Series Select One (1) | 100 = 100 Ohm Platinum RTD 1K = 1K Oh | nm 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 | Butto | n | | | |
| E. NIST Select One (1) | = No NIST Certification NIST = NIST Co | ertificate (Must Sp | ecify | 1, 3 or | 5 Poir | nts) | | |







