B22 Low Profile "Button" Sensor

Temperature Sensors

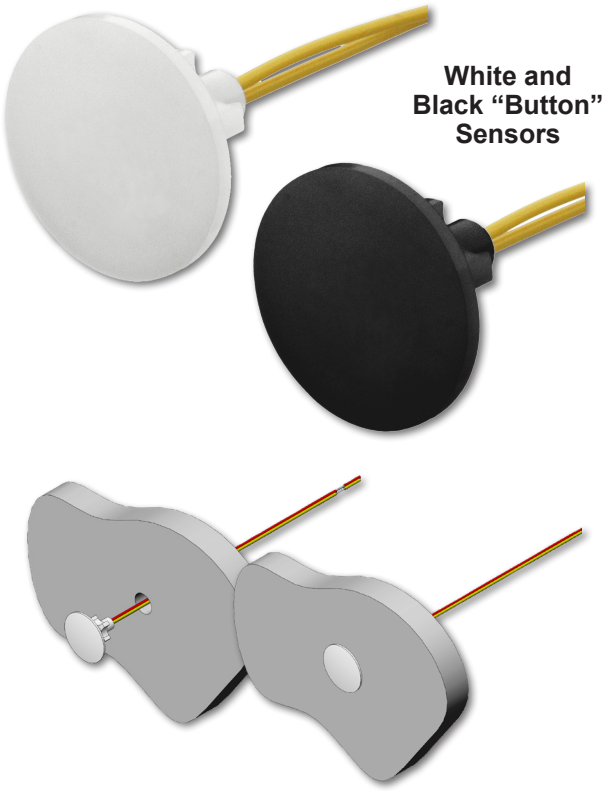
Rev. 09/15/25

Features & Options

- Small Flush Sensor Mounting
- Accurate Direct Air Measurement
- Paintable with Latex or Oil Base
- Wide Selection of Sensing Elements
- Limited Lifetime Warranty

The Low Profile "Button" Sensor is ideal for locations where aesthetics are as important as the temperature measurement. The inconspicuous wall sensor mounts easily by pushing through a 1/2" hole and secured with a peel-off insulating adhesive ring. The only visible portion is a flush 7/8" dot on the wall.

The Low Profile "Button" Sensor is available in white or black with multiple thermistor or RTD sensors as shown in the ordering grid. Other sensor types are available on request.



White and Black "Button" Sensors

Specifications

Thermistor

Temp. Output ..... Resistance
Accuracy (Std) ..... ±0.36ºF, (±0.2ºC)
Stability ..... < 0.036ºF/Year, (<0.02ºC/Year)
Heat dissipation .... 2.7 mW/ºC
Temp. Drift ..... <0.02ºC per year
Probe range ..... -40º to 221ºF (-40º to 105ºC)

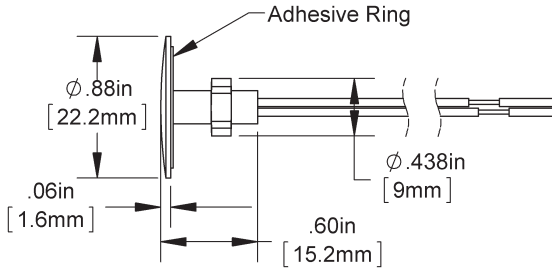
RTD

Platinum (PT)..... 100Ω or 1KΩ @0ºC, 385 curve
Platinum (PT)..... 1KΩ @0ºC, 375 curve
PT Accuracy (Std).. 0.12% @Ref, or ±0.55ºF, (±0.3ºC)
PT Stability ..... ±0.25ºF, (±0.14ºC)
PT Self Heating .... 0.4 ºC/mW @0ºC
PT Probe range .... -40º to 221ºF, (-40 to 105ºC)
Nickel (Ni) ..... 1KΩ @70ºF, JCI curve
Ni Probe range ..... -40º to 221ºF (-40 to 105ºC)

Sensitivity

Thermistor ..... Non-linear
Go to bapihvac.com "Sensor Specs"
RTD (PT) ..... 3.85Ω/ºC for 1KΩ RTD
3.75Ω/ºC for 1KΩ RTD
Nickel (Ni) ..... 2.95Ω/ºF for the JCI RTD

Wiring: One pair of 22 AWG wires



Wire Insulation:
Etched Teflon or Plenum-Rated

Mounting: 1/2" hole, push in plastic sheath with peel-off insulating adhesive ring.

Enclosure Material and Ratings:
Plastic, NEMA 1, UL94

Environmental Operating Range
Unit with Etched Teflon Wire:
-40 to 185°F (-40 to 85°C)

Unit with Plenum-Rated Wire:
-4 to 167°F (-20 to 75°C)

0 to 100% RH, Non-condensing

Agency: RoHS, CE

Building Automation Products, Inc. • 750 North Royal Avenue, Gays Mills, WI 54631 USA
Tel: +1-608-735-4800 • Fax: +1-608-735-4804 • Email: sales@bapihvac.com • Web: www.bapihvac.com

Use the Configurator below to create your custom part number. Replace the number and parenthesis with the designator for each selection. Skip the designator and dashes for optional selections that are not required in your configuration.

Button Sensor Option Selection Guide:

BA/ (**#1**) - (**#2**) - (**#3**)

#1: Temperature Sensor (required)

1K[375] ..... 1K Platinum RTD (375 curve)
1K[NI]..... 1K Nickel RTD
1K ..... 1K Platinum RTD (385 curve)
1.8K ..... 1.8K Thermistor
3K ..... 3K Thermistor
10K-2 ..... 10K-2 Thermistor
10K-3 ..... 10K-3 Thermistor
20K ..... 20K Thermistor

#2: Button Sensor Color (required)

LPW..... Button Sensor, White
LPB..... Button Sensor, Black

#3: Lead Length (optional, 6" Etched Teflon Leads are Standard)

5..... 5 Feet of Plenum-Rated Cable
10..... 10 Feet of Plenum-Rated Cable
15..... 15 Feet of Plenum-Rated Cable

Additional options are available for these units but not shown in this Selection Guide. Contact your BAPI representative for the complete list of options. Submittal sheets without List Prices can be downloaded from our website at www.bapihvac.com

Example Number: BA/ (**10K-2**) - (**LPW**) - (**5**)

Actual Number (with parenthesis removed): BA/10K-2-LPW-5

Description: 10K-2 Thermistor Temperature Sensor, White Button Sensor, 5 Feet of Plenum-Rated Leads.

Your Number: BA/