# Low Profile "Button" Sensor
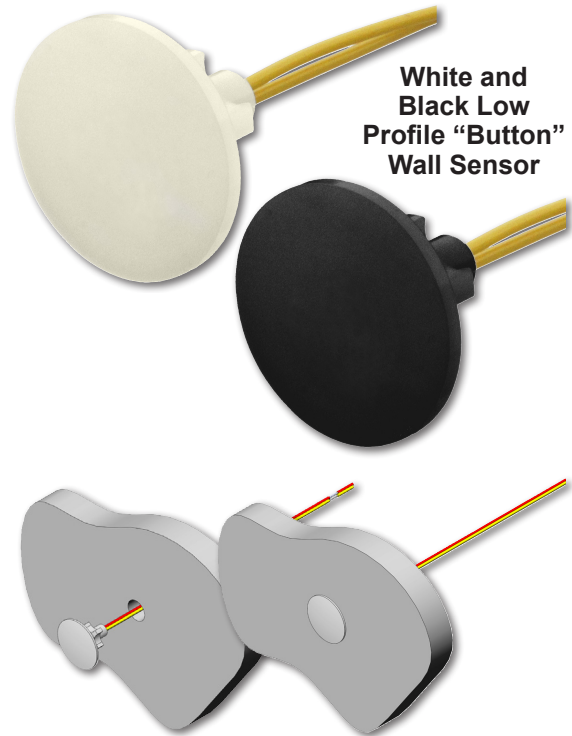
## *Temperature Sensors*

CE *

Rev. 11/30/16

## 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 tape strip. 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.

\* All Passive Thermistors 20KΩ and smaller are CE compliant.

**White and Black Low Profile "Button" Wall Sensor**

## Specifications

**Thermistor**
Temp. Output ............ Resistance
Accuracy (Std) ......... ±0.36ºF, (±0.2ºC)
Accuracy (High) ........ ±0.18ºF, (±0.1ºC), **[XP]** option
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)
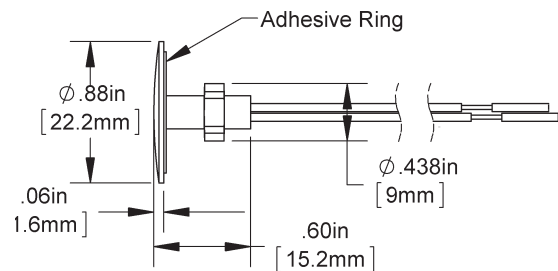
**RTD**
Platinum (PT) ............ 100Ω or 1KΩ @0ºC, 385 curve
Platinum (PT) ............ 1KΩ @0ºC, 375 curve
PT Accuracy (Std) ..... 0.12% @Ref, or ±0.55ºF, (±0.3ºC)
PT Accuracy (High) .. 0.06% @Ref, or ±0.277ºF, (±0.15ºC), **[A]** option
PT Stability .............. ±0.25ºF, (±0.14ºC)
PT Self Heating ....... 0.4 ºC/mW @0ºC
PT Probe range ....... -40º to 221ºF, (-40 to 105ºC)
Nickel (Ni) ............... 1000Ω @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
            0.385Ω/ºC for 100Ω RTD
Nickel (Ni) ....2.95Ω/ºF for the JCI RTD

**Wiring:** Two or Three conductor, 22 AWG wires

Adhesive Ring

⌀.88in [22.2mm]
.06in 1.6mm]
⌀.438in [9mm]
.60in [15.2mm]

**Wire Insulation:** Etched Teflon, Plenum rated

**Mounting:** 1/2" hole, push in plastic sheath with peel off tape strip.

**Enclosure Ratings:** NEMA 1

**Encl. Material:** Plastic, UL94

**Ambient (Encl.)**
0 to 100% RH, Non-condensing
-40ºF to 185ºF, (-40º to 85ºC)

**Agency**
RoHS, CE* (Thermistor's ≤ 20KΩ)
PT= DIN43760, IEC Pub 751-1983,
JIS C1604-1989

BAPI

| Ordering Information | | Low Profile "Button" Sensor  - Temperature | | |
|---|---|---|---|---|
| **BA/** | | | | |
| | **Sensor Type** | **Use the designator number (shown to the left in bold) to indicate the sensor** | | |
| | **#** | **THERMISTORS**<br>**1.8K**  1.8K Ω @ 25 °C<br>**2.2K**  2.2K Ω @ 25 °C<br>**3K**  3K Ω @ 25 °C<br>**3.25K**  3.25K Ω @ 25 °C (T30 type)*<br>**3.3K**  3.3K Ω @ 25 °C<br>**10K-2**  10K Ω @ 25 °C<br>**10K-3**  10K Ω @ 25 °C<br>**10K-3[11K]**  5,238 Ω @ 25 °C*<br>**10K-5**  10K Ω @ 25 °C<br>**20K**  20K Ω @ 25 °C<br>**30K**  30K Ω @ 25 °C<br>**47K**  47K Ω @ 25 °C<br>**50K**  50K Ω @ 25 °C<br>**100K**  100K Ω @ 25 °C | **RTDs**<br>**1K[375]**  1K Ω Platinum @ 0 °C, 3.75 Ω/°C temp. coeff.<br>**1K[NI]**  1K Ω Nickel @ 21°C, 5 Ω/°C temp. coeff.<br>**1K**  1K Ω Platinum @ 0 °C, 3.85 Ω/°C temp. coeff.<br>**2K**  2K Ω Silicon @ 20 °C, 8 Ω/°C temp. coeff. | |
| | **Wall Mount Fitting** | | | |
| | **-LPW** | White Low Profile Flush Mounting Sheath w/ 6" Teflon Leads | | |
| | **-LPB** | Black Low Profile Flush Mounting Sheath w/ 6" Teflon Leads | | |
| | | **Optional Lead Lengths       6" leads are standard** | | |
| | | **-5** | 5 feet of Plenum Rated Cable | |
| | | **-10** | 10 feet of Plenum Rated Cable | |
| | | **-15** | 15 feet of Plenum Rated Cable | |
| EXAMPLE | | | | |
| **BA/** | **10K-2** | **-LP** | | |
| Example Part Number: BA/10K-2-LPW        White Low Profile "Button" Sensor, 10K-2 thermistor | | | | |
| **Your Part Number:** | | | | |

*Note: 3.25K Thermistor and 10K-3[11K] Thermistor are only available with 6" leads.

Call BAPI if you have questions about the above ordering grid or the configuration of the product you are ordering.