

Low Profile "Button" Sensor

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.



White and Black "Button" Sensors

Specifications

Thermistor

Temp. Output Resistance
 Accuracy (Std) $\pm 0.36^{\circ}\text{F}$, ($\pm 0.2^{\circ}\text{C}$)
 Stability $< 0.036^{\circ}\text{F}/\text{Year}$, ($< 0.02^{\circ}\text{C}/\text{Year}$)
 Heat dissipation $2.7 \text{ mW}/^{\circ}\text{C}$
 Temp. Drift $< 0.02^{\circ}\text{C}$ per year
 Probe range -40° to 221°F (-40° to 105°C)
 Sensor Type $10,000\Omega$ Type 3NTC

Sensitivity

Thermistor Non-linear

Wire Insulation: Etched Teflon, Plenum rated

Wiring: Two 22 AWG wires (non-polar)

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

Dimensions: Plastic Sheath
 Insertion 1.0" depth, into a 7/16" hole
 Sleeve $0.438"$ Diameter
 Bezel $0.875"$ Diameter

Encl. Type: Round Flush Sensor Sheath

Enclosure Ratings: NEMA 1

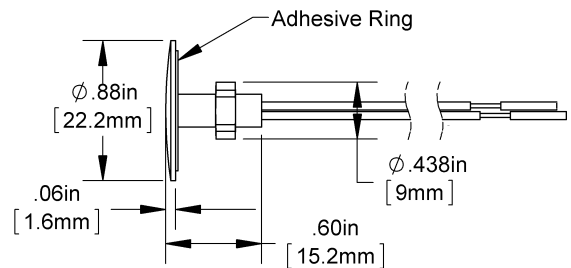
Encl. Material: Plastic, UL94

Ambient (Encl.)

0 to 100% RH, Non-condensing
 -40°F to 185°F , (-40° to 85°C)

Agency

RoHS, CE* (Thermistor's $< 10\text{K}\Omega$)
 PT= DIN43760, IEC Pub 751-1983,
 JIS C1604-1989



Button Sensor Part Number Selection Guide: TS-(#1)-(#2)-(#3)

#1: Temperature Sensor (required)

10K3 10K3 Thermistor

#2: Button Sensor Color (required)

W Button Sensor, White

B Button Sensor, Black

#3: Lead Length (required, 6" Leads are Standard)

0 6 inches of Plenum-Rated Cable

5 5 Feet of Plenum-Rated Cable

10 10 Feet of Plenum-Rated Cable

15 15 Feet of Plenum-Rated Cable

Example of Actual Number: TS10K3-W-5

Description: 10K3 Thermistor Temperature Sensor, White Button Sensor, 5 Feet of Plenum-Rated Leads.

Low Profile “Button” Sensor

Overview and Identification

The Low Profile “Button” Wall Sensor is ideal for locations where aesthetics are as important as the temperature measurement. The inconspicuous 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 Wall Sensor is available in multiple thermistor or RTD sensors as shown in the specifications. Other sensor types are available on request.

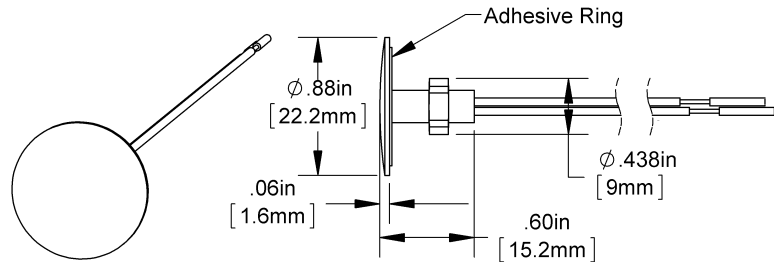


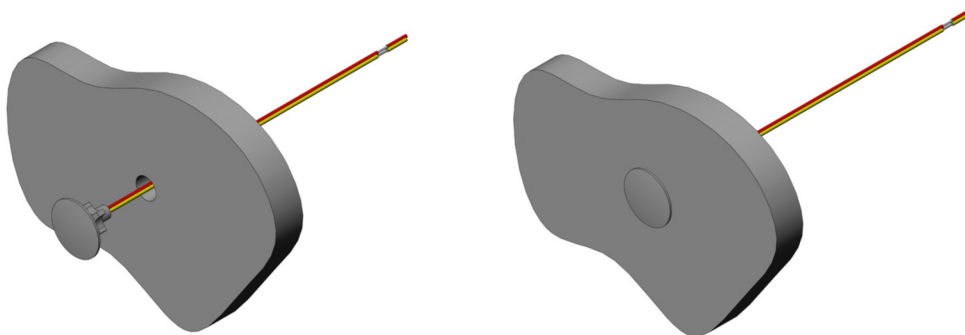
Fig 1: Low Profile “Button” Sensor Dimensions

Operation/Application

This sensor is suspended in a round button size enclosure shell so that room air can surround the sensing element for a fast and accurate temperature reading. The sensor is isolated from the mass wall temperature with internal insulators. The unit can be painted. The unit should not be covered with any material such as wall paper.

Mounting and Wire Termination

1. Select a location with a flat surface on an interior wall approximately 5' (1.5m) off the floor.
2. Drill a 1/2” hole where you want the sensor mounted.
3. Pull your zone wire through the hole and terminate the sensor using a flying lead connector (crimp or wire nut). A crimp-on sealant filled connector is recommended for protection from in wall moisture, (BA/SFC1000-100).
4. Test the sensor at the controller to be sure of your connections and sensor operation.
Note: Once installed the sensor is difficult to remove and may damage the wall.
5. Be sure the wall interior is insulated behind the sensor. In-wall drafts can affect the temperature reading.
6. Clean the wall surface from any dust or filings to make a clean mounting surface.
7. Remove the peel off strip from the mounting tape on the back of the sensor rim and push the sensor firmly into the 1/2” hole until the double stick tape adheres firmly to the wall.



Specifications subject to change without notice.