



## Features & Options

- Probe Lengths: 2", 4" & 8" (fit standard BAPI Thermowell lengths)
- Series 304 Stainless Steel Probes and four Enclosure Styles
- Double Encapsulated Sensors & Etched Teflon Leadwires

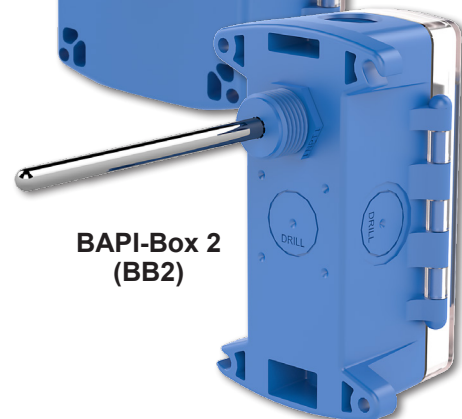
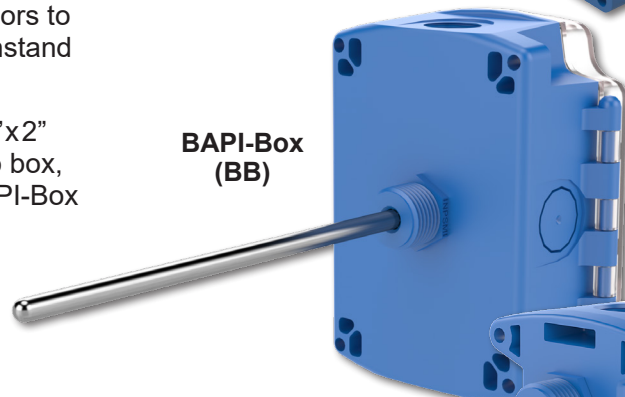
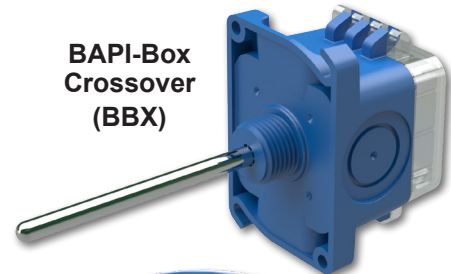
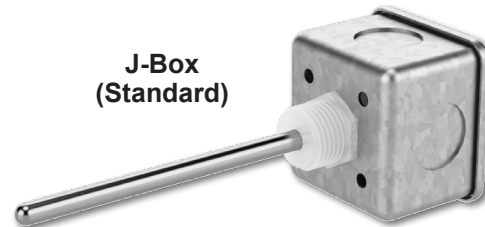
Immersion Units are available in 2", 4" and 8" probe lengths. The sensor is potted inside a 1/4" stainless steel probe with thermally conductive compound.

All Immersion Units have etched Teflon leadwires and double encapsulated sensors to create a watertight package that can withstand high humidity and condensation.

Immersion Units come standard with a 2"x2" steel J-Box but are also available with no box, the BAPI-Box, the BAPI-Box 2 or the BAPI-Box Crossover enclosures.

### BAPI Thermowells

Immersion Unit Probes are designed to be inserted into a Thermowell. For more info on Thermowells, see page B44.



## Specifications

### Environmental Operation Range:

Temperature:

BBX: -40 to 185°F (-40 to 85°C)

Other Enclosures: -40 to 212°F (-40 to 100°C)

Humidity: 0 to 100%, non-condensing

### Sensing Element:

Thermistor or RTD (See Sensors Section for Specs.)

### Probe Material:

Stainless Steel, 1/4" diameter

### Enclosure Material:

J-Box: Galvanized Steel

BBX: Polycarbonate (UL94 V-0) & Nylon (UL94 HB)

BB & BB2: UV-Resistant Polycarb. (UL94 V-0)

### Enclosure Rating:

J-Box: IP20, NEMA 1

BBX: IP10, NEMA 1

IP44 with knockout plug in open port

BB & BB2: IP66, NEMA 4

### Enclosure Dimensions: H x W x D

BBX: 3.1 x 2.2 x 1.9" (79 x 56 x 49mm)

J-Box: 2.1 x 2.1 x 1.94" (54.6 x 54.6 x 49mm)

BB: 5 x 4.1 x 2.5" (127 x 104 x 63.5mm)

BB2: 4.9 x 2.8 x 2.35" (125 x 71.6 x 60mm)

(For enclosure dimension drawings, see the end of the section.)



Use the Option Selection Guides 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. Additional options are available but not shown above. Contact BAPI for the complete list of options.



**Option Selection Guide**

### Immersion w/ Nylon Fitting Temperature Sensors

BA/ ( #1 ) - ( #2 ) - ( #3 ) - ( #4 )

**#1: Temp Sensor (Required)**

1.8K ..... 1.8K Thermistor  
 3K ..... 3K Thermistor  
 10K-2 ..... 10K-2 Thermistor  
 10K-3 ..... 10K-3 Thermistor  
 10K-3[11K]... 10K-3[11K] Thermistor  
 20K ..... 20K Thermistor  
 1K[375] ..... 1K Plat. RTD (375 curve)  
 1K ..... 1K Plat. RTD (385 curve)  
 1K[NI]..... 1K Nickel RTD

**#2: Probe Length (Required)**

I-2" ..... 2" (51mm) length  
 I-4" ..... 4" (102mm) length  
 I-8" ..... 8" (203mm) length

**#3: Enclosure (Optional)**  
 (J-Box comes standard if nothing selected)  
 BBX ..... BAPI-Box Crossover (IP10, NEMA 1)  
 BB ..... BAPI-Box (IP66, NEMA 4)  
 BB2 ..... BAPI-Box 2 (IP66, NEMA 4)

**#4: Test & Balance or Terminal Strip (Optional)**  
 (requires a BBX, BB or BB2 enclosure above)  
 TB ..... Test & Balance Switch  
 TS ..... Terminal Strip Connection

**Option Selection Guide**

### Immersion w/ Nylon Fitting Temperature Transmitters

BA/ ( #1 ) ( #2 ) - ( #3 ) - ( #4 ) - ( #5 )

**#1: Output (Required)**

T1K ..... 4 to 20mA Output  
 TXS05 ..... 0 to 5V Output\*  
 TXS10 ..... 0 to 10V Output\*  
 TXS12 ..... 2 to 10V Output\*  
 TXS15 ..... 1 to 5V Output\*

**#2: Temperature Range (Required)**

[32 TO 212F] ... 32 to 212°F Range  
 [20 TO 120F] ... 20 to 120°F Range  
 [0 TO 100F] ..... 0 to 100°F Range  
 [0 TO 100C] ..... 0 to 100°C Range  
 [-7 TO 49C] ..... -7 to 49°C Range  
 [-18 TO 38C] ..... -18 to 38°C Range

**#3: Probe Length (Required)**

I-2" ..... 2" (51mm) length  
 I-4" ..... 4" (102mm) length  
 I-8" ..... 8" (203mm) length

**#4: Enclosure (Required)**

BBX ..... BAPI-Box Crossover (IP10, NEMA 1)  
 BB ..... BAPI-Box (IP66, NEMA 4)  
 BB2 ..... BAPI-Box 2 (IP66, NEMA 4)

**#5: Terminal Strip (Optional)**

TS ..... Terminal Strip Connection

\*Voltage outputs are field selectable

**Example Number:**

BA/(10K-2) - (I-4") - (BBX) - ( )  
BA/10K-2-I-4"-BBX (no parenthesis)

**Description:** 10K-2 Thermistor, 4" Probe, BAPI-Box Crossover Enclosure

**Example Number:**

BA/(T1K)([32 TO 212F]) - (I-4") - (BBX) - ( )  
BA/T1K[32 TO 212F]-I-4"-BBX (no parenthesis)

**Description:** 4 to 20mA Transmitter, 32 to 212°F Range, 4" Probe, BAPI-Box Crossover Enclosure

Your Number: BA/

