Duct Averaging Units

**Features & Options**

- Averaging Lengths: 8’, 12’ and 24’
- Three Enclosure Styles
- Limited Lifetime Warranty

BAPI Duct Averaging Units feature closed cell foam to seal the probe insertion hole and absorb vibration. Mounting tabs allow for easy installation to the duct. All units have etched Teflon leadwires and encapsulated sensors to create a watertight package that can perform under real world conditions.

Averaging probes should be used wherever there is a chance for stratified layers of hot and cold air. Averaging probes are made of bendable aluminum tubing and measure temperature along their entire length. Nylon tie straps are provided for mounting.

Duct Averaging Units come standard with a 2”x4” steel J-Box but are also available with no box or the new BAPI-Box Crossover enclosure.

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**Specifications**

**Environmental Operation Range:**
- Temperature:
  - BAPI-Box Crossover: -40 to 85 °C
  - Other Enclosures: -40 to 100 °C
- Humidity: 0 to 95%, non-condensing

**Sensing Element:**
- Thermistor or RTD (See Sensors Section for Specs.)

**Probe Material:**
- Bendable Aluminum, 3/16” diameter

**Enclosure Material:**
- Junction Box: Galvanized Steel
- BAPI-Box Crossover: UV-resistant polycarbonate, UL94, V-0

**Enclosure Rating:**
- Junction Box: IP20, NEMA 1
- BAPI-Box Crossover (BBX):
  - IP10, NEMA 1
  - IP44 with knockout plug in open port

**Encl. Dimensions:**
- BAPI-Box Crossover:
  - 3.1 x 2.2 x 1.9” (79 x 56 x 49mm)
- Junction Box
  - 4.2 x 3.9 x 1.94” (106 x 98.4 x 49mm)

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

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The new BAPI-Box Crossover features a hinged cover with thumb latch for easy termination. A pierceable knockout plug is available for the open port. See the Accessories section for more info.

(Units shown with knockplug plug sold separately.)
Use the Option Selection Guide 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.

**Duct Averaging Sensor Option Selection Guide**

### #1: Temperature Sensor (required)
- 1.8K Thermistor
- 3K Thermistor
- 10K-2 Thermistor
- 10K-3 Thermistor
- 10K-3[11K] Thermistor
- 20K Thermistor
- 1K[375] Platinum RTD (375 curve)
- 1K[NI] Nickel RTD
- 1K Platinum RTD (385 curve)

Transmitters below require a BAPI-Box Crossover Enclosure:
- T1K[32 TO 212F] Platinum RTD Transmitter, 4 to 20 mA Output, 32 to 212°F Range
- T1K[20 TO 120F] Platinum RTD Transmitter, 4 to 20 mA Output, 20 to 120°F Range
- T1K[0 TO 100F] Platinum RTD Transmitter, 4 to 20 mA Output, 0 to 100°F Range
- T1K[-7 TO 49C] Platinum RTD Transmitter, 4 to 20 mA Output, -7 to 49°C Range
- T1K[-18 TO 38C] Platinum RTD Transmitter, 4 to 20 mA Output, -18 to 38°C Range

**Matched Transmitters are also available. Contact your BAPI representative for ordering.**

### #2: Probe Type and Length (required)
- A-8' Flexible Averaging, 8' (2.4m) length
- A-12' Flexible Averaging 12' (3.7m) length
- A-24' Flexible Averaging 24' (7.3m) length

### #3: Enclosure and Lead Length (optional, J-Box comes standard)
- BBX BAPI-Box Crossover (IP10, NEMA 1)
- NB No Box (comes with 6" Etched Teflon Leads)

### #4: Test & Balance or Terminal Strip (optional, requires a BAPI-Box Crossover Enclosure)
- TB Test & Balance Switch
- TS Terminal Strip Connection

Additional options are available for these units but not shown in the configurator above. Contact your BAPI representative for the complete list of options.

**Example Number:** BA/ (10K-2) - (A-8') - (BBX) - ( )

**Actual Number (with parenthesis removed):** BA/10K-2-A-8'-BBX

**Description:** 10K-2 Thermistor, Duct Averaging Sensor, BAPI-Box Crossover Enclosure