# Strap Units and Remote Probe Units

*Temperature Sensors*

Rev. 07/06/26

## Features & Options

- Clamp-On, Spring-Loaded or Remote Probes
- Junction Box or BAPI-Box Crossover Enclosure

These units are designed to monitor water temperature in retrofit or filled pipe applications. The strap units fit around the outside of a pipe, while the remote probes are strapped directly onto the pipe. All three units measure the water temperature by sensing the surface temperature of the pipe.

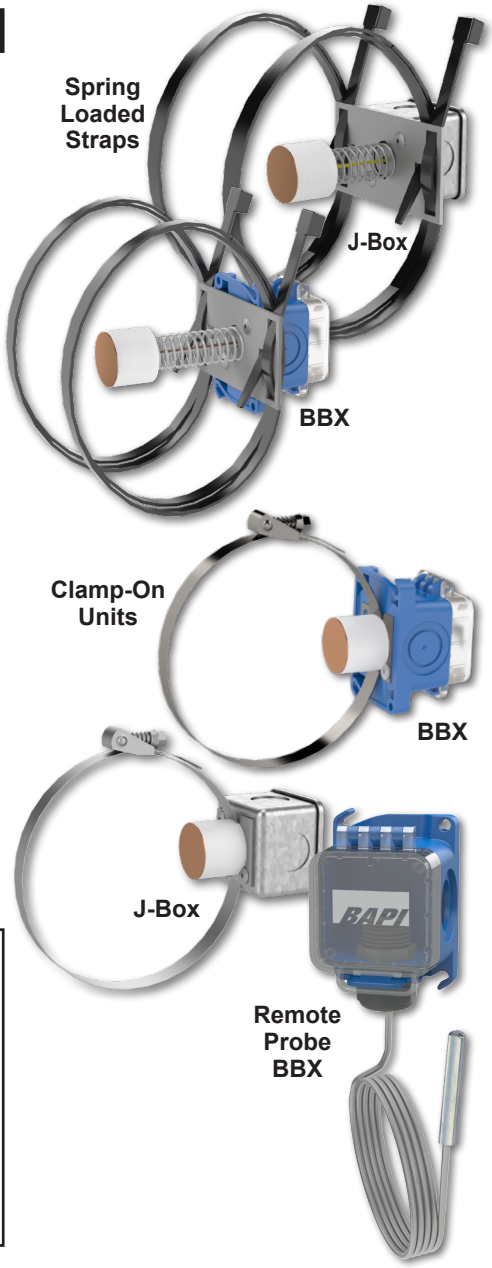
Strap Units and Remote Probes come standard with a Junction Box enclosure but are also available with a BAPI-Box Crossover enclosure.

**Clamp-On Strap –** This unit has a bendable copper sensing plate which forms to the curvature of the pipe. An adjustable hose clamp holds the unit in place around the pipes from 2 to 4.5” (5 to 11.4 cm) in diameter.

**Spring-Loaded Strap –** Instead of removing the pipe insulation, the spring loaded sensing pad is held against the pipe through a hole cut in the insulation. It can be used with 5 to 14.5” (13 to 37 cm) dia. pipes with up to 2” of insulation.

**Remote Probes -** These units have a 1.75” long stainless steel probe with either Plenum-Rated Cable or FEP-Jacketed Cable with a lead length of 18” (Other lengths are available by calling BAPI). Remote Probes are ideal for strap-on applications on any size pipe, or hard-to-access areas.

(See pg B50 for more Remote Probe Options.)






### The BAPI-Box Crossover

The BAPI-Box Crossover enclosure 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. *(Shown with knockout plug sold separately.)*

## Specifications

**Enclosure Material:**
Junction Box: Galvanized Steel
BAPI-Box Crossover:
Cover: Polycarbonate, UL94 V-0
Base: Nylon, UL94 HB

**Environmental Operation Range:**
Temperature Sensor:
Clamp On: -40 to 85 °C,
Spring Loaded: -40 to 85 °C
Remote Probe w/ Plen. Cable: -40 to 105ºC
Remote Probe w/ FEP Cable: -20 to 75ºC
Temperature Transmitter: -20 to 70 °C
Humidity: 0 to 95%, non-condensing

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

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

**Encl. Dimensions: H x W x D**
BAPI-Box Crossover:..3.1 x 2.2 x 1.9” (79 x 56 x 49mm)
Junction Box:.....2.1 x 2.1 x 1.94” (54.6 x 54.6 x 49mm)

(For encl. dimension drawings, turn to the end of the section.)

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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*

## *Strap & Remote Probe 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: Configuration (Required)**

S ..... Clamp-On Strap
STP ..... Spring Loaded Strap
RPP ..... Remote Probe, Plenum Cable*
RPFEP-18" ... Remote Probe, FEP Cable*
RPFEP2-18" .... Remote Pr., Subm. FEP Cable*

**#3: Enclosure (Optional)**

(J-Box comes standard if nothing selected)
BBX ..... BAPI-Box Crossover (IP10, NEMA 1)

**#4: Test & Balance or Terminal Strip (Optional)**

(requires a BBX enclosure above)
TB ..... Test & Balance Switch
TS ..... Terminal Strip Connection

*18" cable length

**Example Number:**
BA/(**10K-2**) - (**S**) - (**BBX**) - ( )
BA/10K-2-S-BBX (no parenthesis)

**Description:** 10K-2 Thermistor, Clamp-On Strap, BAPI-Box Crossover Enclosure

*Option Selection Guide*

## *Strap & Remote Probe 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: Configuration (Required)**

S ..... Clamp-On Strap
STP ..... Spring Loaded Strap
RPP ..... Remote Probe, Plenum Cable**
RPFEP-18" ... Remote Probe, FEP Cable**
RPFEP2-18" .... Remote Pr., Subm. FEP Cable**

**#4: Enclosure (Required)**

BBX ..... BAPI-Box Crossover (IP10, NEMA 1)

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

TS ..... Terminal Strip Connection

*Voltage outputs are field selectable
**18" cable length

**Example Number:**
BA/(**T1K**)(**[32 TO 212F]**) - (**S**) - (**BBX**) - ( )
BA/T1K[32 TO 212F]-S-BBX (no parenthesis)

**Description:** 4 to 20mA Transmitter, 32 to 212°F Range, Clamp-On Strap, BAPI-Box Crossover Enclosure

**Your Number:** BA/

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