Strap Units and Remote Probe Units

Temperature Sensors

Rev. 06/14/10

CE *

Clamp-On Strap Unit with J-Box

Features & Options

- Clamp-On, Strap On or Remote Probe Options
- Double Encapsulated Sensors
- Wide Selection of Temperature Sensing Elements

Clamp-On Strap, Spring-Loaded Strap and Remote Probes are designed to monitor water temperature in retrofit or filled pipe applications. The strap units fit around the outside of a pipe, greatly reducing installation cost. While the Remote Probe units are strapped directly onto the pipe.

All three units measure the water temperature by sensing the surface temperature of the pipe. The Strap Units have etched Teflon leadwires and double encapsulated sensors and come standard with a Junction Box enclosure. The Clamp-On Unit and the Remote Probes are available with an optional watertight BAPI-Box or BAPI-Box 2 enclosure. The Spring Loaded Unit is available with an optional BAPI-Box 2 enclosure.

Clamp-On Strap – This unit has a bendable copper sensing plate which forms to the curvature of the pipe. An adjustable hose clamp is used to firmly hold the unit in place around the pipes up to 4.5".
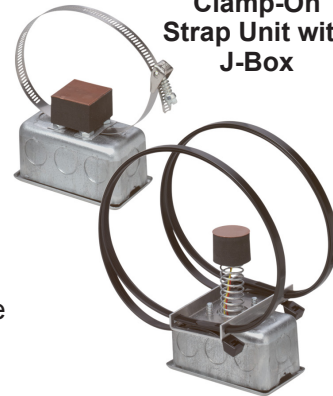
Spring-Loaded Strap – Instead of removing the pipe insulation, the spring loaded sensing pad is held against the pipe through a hole cut in the insulation. It can be used with pipes up to 14.5" with up to 2" of insulation.

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, or hard-to-access areas.

*Some items may not be CE compliant, call BAPI for additional information.
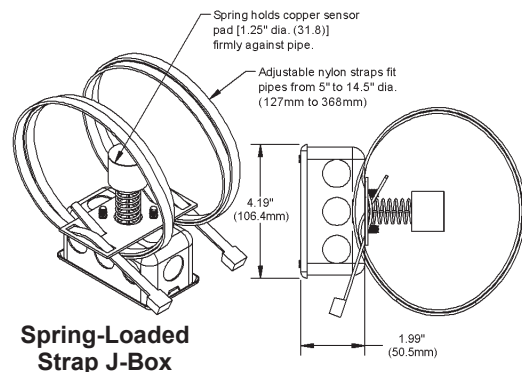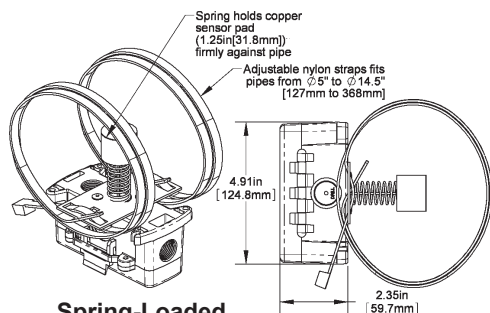
Spring Loaded Strap Unit with J-Box

Remote Probe with BAPI-Box & BAPI-Box 2

Specifications

Spring holds copper sensor pad [1.25" dia. (31.8)] firmly against pipe.

Adjustable nylon straps fit pipes from 5" to 14.5" dia. (127mm to 368mm)

4.19" (106.4mm)

1.99" (50.5mm)

Spring-Loaded Strap J-Box

Spring holds copper sensor pad (1.25in[31.8mm]) firmly against pipe

Adjustable nylon straps fits pipes from ⌀5" to ⌀14.5" [127mm to 368mm]

4.91in [124.8mm]

2.35in [59.7mm]

Spring-Loaded Strap BAPI-Box 2
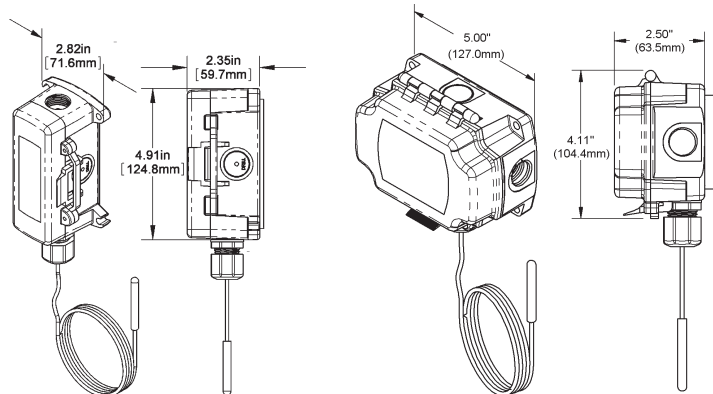
Enclosure Material:
BB or BB2 Models: Polycarbonate
J-Box: Galvanized Steel (J-Box)

Environmental Operation Range:
Temp: Clamp On: -65 ºC to 100 ºC,
Spring Loaded: -40 ºC to 85 ºC
Remote Probe: -40 ºC to 105 ºC
Humidity: 0 to 95%, non-condensing

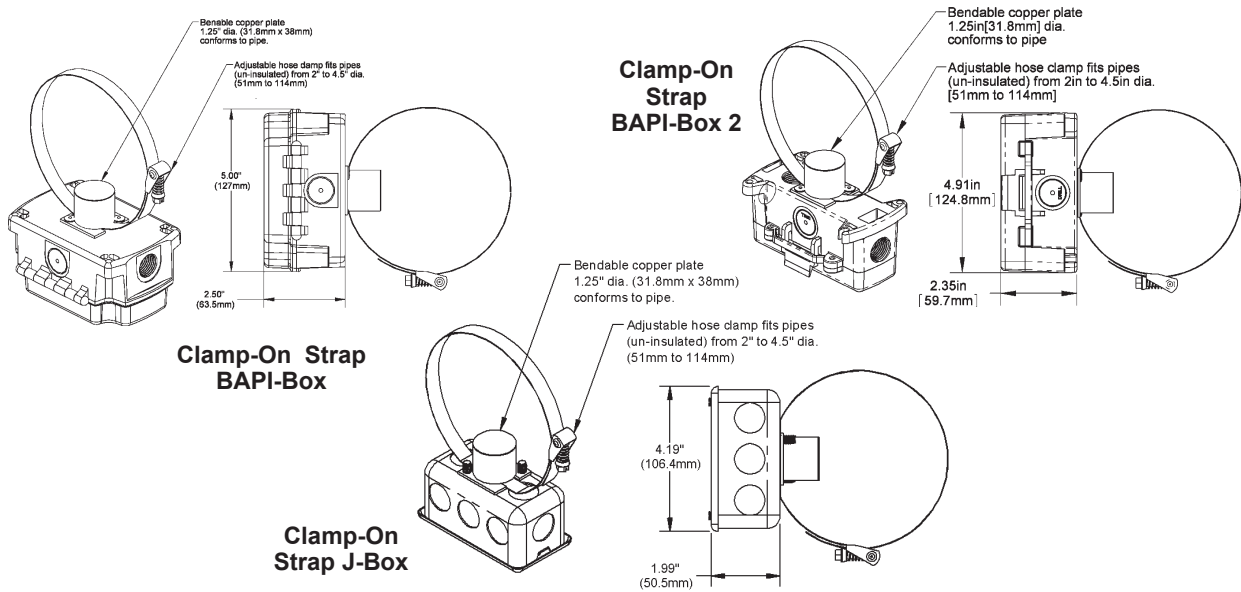**Encl. Rating:**
J-Box: NEMA 1 • BB & BB2 Models: IP66, NEMA 4

2.82in [71.6mm]

2.35in [59.7mm]

4.91in [124.8mm]

5.00" (127.0mm)

2.50" (63.5mm)

4.11" (104.4mm)

Remote Probe BAPI-Box 2

Remote Probe BAPI-Box

Specifications

Clamp-On Strap BAPI-Box

Clamp-On Strap BAPI-Box 2

Clamp-On Strap J-Box

Bendable copper plate 1.25" dia. (31.8mm x 38mm) conforms to pipe.

Adjustable hose clamp fits pipes (un-insulated) from 2" to 4.5" dia. (51mm to 114mm)

5.00" (127mm)

2.50" (63.5mm)

Bendable copper plate 1.25in[31.8mm] dia. conforms to pipe

Adjustable hose clamp fits pipes (un-insulated) from 2in to 4.5in dia. [51mm to 114mm]

4.91in [124.8mm]

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Bendable copper plate 1.25" dia. (31.8mm x 38mm) conforms to pipe.

Adjustable hose clamp fits pipes (un-insulated) from 2" to 4.5" dia. (51mm to 114mm)

4.19" (106.4mm)

1.99" (50.5mm)

Ordering Information   Clamp-On Strap, Spring-Loaded Strap and Remote Probe Units

BA/

Sensor Type   Use the designator number (shown to the left in bold) to indicate the sensor

#

THERMISTORS		RTDs	
1.8K	1.8K Ω @ 25 °C	**100**	100 Ω Platinum @ 0 °C, .385 Ω/°C temp. coeff.
3K	3K Ω @ 25 °C	**100[3W]**	3 Wire 100 Ω Plat. @ 0 °C, .385 Ω/°C temp. coeff.
3.3K	3.3K Ω @ 25 °C	**1K[375]**	1K Ω Platinum @ 0 °C, 3.75 Ω/°C temp. coeff.
10K-2	10K Ω @ 25 °C	**1K[NI]**	1K Ω Nickel @ 21°C, 5 Ω/°C temp. coeff.
10K-3	10K Ω @ 25 °C	**1K**	1K Ω Platinum @ 0 °C, 3.85 Ω/°C temp. coeff.
10K-3[11K]	5,238 Ω @ 25 °C	**2K**	2K Ω Silicon @ 20 °C, 8 Ω/°C temp. coeff.
20K	20K Ω @ 25 °C		
50K	50K Ω @ 25 °C	**SEMICONDUCTORS**	
100K	100K Ω @ 25 °C	**334**	LM334 Semiconductor
		592	AD592 Semiconductor, 273 µA @ 0 °C
		592-10K	AD592 Semicond. w/ 10 kΩ shunt resistor, 2.73 V @ 0 °C

TEMPERATURE TRANSMITTERS   *Must include a "range" figure*

T100[range]	100 Platinum RTD, 100 Ω @ 0 °C with 4 to 20 mA Output
T100M[range]	100 Platinum RTD, 100 Ω @ 0 °C with MATCHED* 4 to 20 mA Output
T1K[range]	1K Platinum RTD, 1,000 Ω @ 0 °C with 4 to 20 mA Output
T1KM[range]	1K Platinum RTD, 1,000 Ω @ 0 °C with MATCHED* 4 to 20 mA Output
T10K[range]	10K Thermistor, 10,000 Ω @ 25 °C with 4 to 20 mA Output
T10K[range]-05	10K Thermistor, 10,000 Ω @ 25 °C with 0 to 5 Volt Output
T10K[range]-10	10K Thermistor, 10,000 Ω @ 25 °C with 0 to 10 Volt Output

TEMPERATURE TRANSMITTER RANGES

Custom temperature transmitter ranges are available. Common ranges listed below

30 TO 81F	-1 TO 27C	32 TO 134F	0 TO 57C
0 TO 100F	-18 TO 38C	32 TO 212F	0 TO 100C
20 TO 120F	-7 TO 48C		

Configuration

-S	Clamp-On Strap - Fits 2" to 4.5" (5.08 to 11.4 cm) pipe with adjustable SS hose clamp.
-STP	Spring-Loaded Strap - Fits 5" to 14.5" (12.7 to 36.8 cm) pipe with adjustable nylon straps.
-RPP-18"	Remote Probe with Plenum Rated Cable - 18" Leads
-RPFEP-18"	Remote Probe with FEP Jacketed Cable - 18" Leads
-RPFEP2-18"	Remote Probe w/ FEP Jacketed Cable (suitable for extended submersion) - 18" Leads

Optional BAPI-Box Enclosure

-BB	BAPI-Box Enclosure - IP66 rated, UV-resistant polycarbonate (Only available for the Clamp-On Strap Units)
-BB2	BAPI-Box 2 Enclosure - IP66 rated, UV-resistant polycarbonate (Available for all three units)

EXAMPLE

BA/	10K-2	-S

Example Part Number: BA/10K-2-S

Your Part Number:

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