



Temperature Sensors

Rev. 06/09/11

Features & Options

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

These units 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.

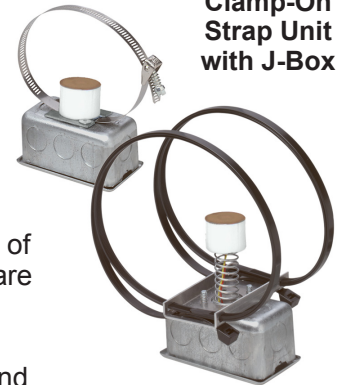
All three units measure the water temperature by sensing the surface temperature of the pipe. The Strap Units have etched Teflon leadwires and double encapsulated sensors and come standard with a Junction Box enclosure. The Clamp-On Unit and the Remote Probes are available with an optional watertight 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 holds 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 on any size pipe, or hard-to-access areas.

* All Passive Thermistors 10K Ω and smaller are CE compliant.



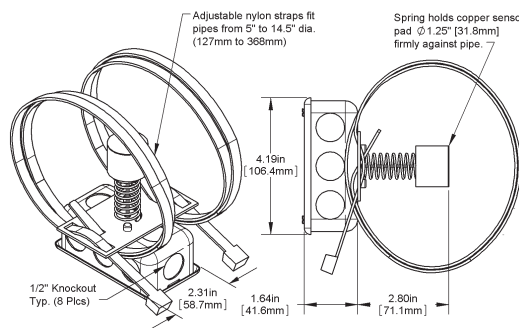
Clamp-On Strap Unit with J-Box

Spring Loaded Strap Unit with J-Box

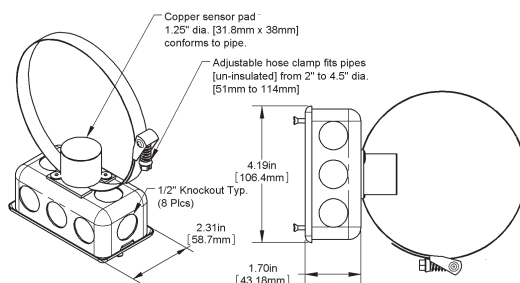


Remote Probe with BAPI-Box & BAPI-Box 2

Specifications



Spring-Loaded Strap J-Box



Clamp-On Strap J-Box

Enclosure Material:

BB or BB2 Models: Polycarbonate
J-Box: Galvanized Steel (J-Box)

Environmental Operation Range:

Temperature Sensor:

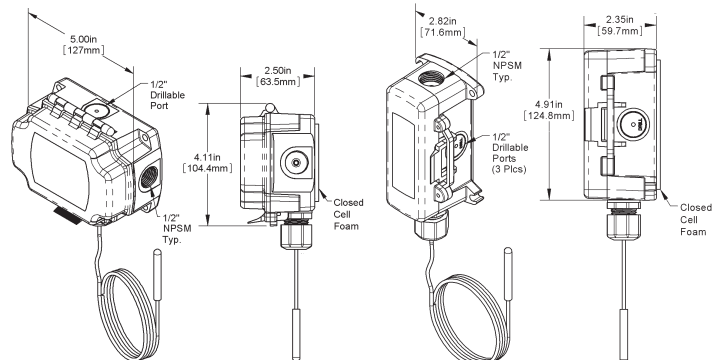
Clamp On: -65 °C to 100 °C,
Spring Loaded: -40 °C to 85 °C
Remote Probe: -40 °C to 105 °C

Temperature Transmitter: -20 °C to 70 °C

Humidity: 0 to 95%, non-condensing

Encl. Rating:

J-Box: NEMA 1 • BB & BB2 Models: IP66, NEMA 4



BAPI-Box (BB)

BAPI-Box 2 (BB2)



Strap Units and Remote Probe Units

A67

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Ordering Grids without List Prices are available on our website at www.bapihvac.com

Ordering Information		Clamp-On Strap, Spring-Loaded Strap and Remote Probe Units		List Price	Your Order
BA/					
Sensor Type		Use the designator number (shown to the left in bold) to indicate the sensor			
#	<p>THERMISTORS</p> <p>1.8K 1.8K Ω @ 25 °C 2.2K 2.2K Ω @ 25 °C 3K 3K Ω @ 25 °C 3.25K 3.25K Ω @ 25 °C (T30 type) 3.3K 3.3K Ω @ 25 °C 10K-2 10K Ω @ 25 °C 10K-3 10K Ω @ 25 °C 10K-3[11K] 5,238 Ω @ 25 °C 20K 20K Ω @ 25 °C 47K 47K Ω @ 25 °C 50K 50K Ω @ 25 °C 100K 100K Ω @ 25 °C</p> <p>RTDs</p> <p>100 100 Ω Platinum @ 0 °C, .385 Ω/°C temp. coeff. 100[3W] 3 Wire 100 Ω Plat. @ 0 °C, .385 Ω/°C temp. coeff. 1K[375] 1K Ω Platinum @ 0 °C, 3.75 Ω/°C temp. coeff. 1K[Ni] 1K Ω Nickel @ 21 °C, 5 Ω/°C temp. coeff. 1K 1K Ω Platinum @ 0 °C, 3.85 Ω/°C temp. coeff. 2K 2K Ω Silicon @ 20 °C, 8 Ω/°C temp. coeff.</p> <p>SEMICONDUCTORS</p> <p>334 LM334 Semiconductor 592 AD592 Semiconductor, 273 μA @ 0 °C 592-10K AD592 Semicond. w/ 10 kΩ shunt resistor, 2.73 V @ 0 °C</p> <p>TEMPERATURE TRANSMITTERS <i>Must include a "range" figure. Requires an enclosure.</i></p> <p>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** T10K5[range] 10K Thermistor, 10,000 Ω @ 25 °C with 0-5 VDC Output** T10K10[range] 10K Thermistor, 10,000 Ω @ 25 °C with 0-10 VDC Output**</p> <p>TEMPERATURE TRANSMITTER RANGES</p> <p>Custom temperature transmitter ranges are available. Common ranges listed below</p> <p>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 49C</p>	<p>Thermistors \$18 Each</p> <p>RTD's \$25 Each or \$35 for 1K[Ni]</p> <p>Semi-conductors \$25 Each</p> <p>Temperature Transmitters \$125 for T100, T1K & T10K</p> <p>\$280 for T100M & T1KM</p>			
Configuration					
-S	Clamp-On Strap - Fits 2" to 4.5" (5.08 to 11.4 cm) pipe with adjustable SS hose clamp.			\$10	\$ _____
-STP	Spring-Loaded Strap - Fits 5" to 14.5" (12.7 to 36.8 cm) pipe with adjustable nylon straps.			\$25	\$ _____
-RPP-18"	Remote Probe with Plenum Rated Cable - 18" Leads			\$0	\$ _____
-RPFEP-18"	Remote Probe with FEP Jacketed Cable - 18" Leads			\$3	\$ _____
-RPFEP2-18"	Remote Probe w/ FEP Jacketed Cable (suitable for extended submersion) - 18" Leads			\$10	\$ _____
Optional BAPI-Box Enclosure J-Box comes standard on Strap Units					
-BB	BAPI-Box Enclosure - IP66 rated, UV-resistant polycarbonate (Not available on the Spring-Loaded Strap Units)			\$12	\$ _____
-BB2	BAPI-Box 2 Enclosure - IP66 rated, UV-resistant polycarbonate			\$12	\$ _____
Optional Terminal Block BB or BB2 enclosure required					
-TS	Terminal Strip Connection (BB or BB2 required)***				
EXAMPLE					
BA/	10K-2	-S			
Example Part Number: BA/10K-2-S				Total =	\$ _____
Your Part Number:					

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

*Transmitters with matched outputs require a Class A sensor.

**Range is limited to -40 to 185°F (-40 to 85°C)

***TS option is not available with the 100[3W] RTD sensor, the 592-10K Semiconductor sensor or the T10K transmitters.