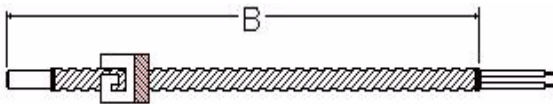




## **Miniature Adjustable Length Flex-Armor Bayonet Style**

<b>Catalog Number</b>	<b>Termination Style</b>
<b>MBT08-14</b>	1
<b>MBT08-15</b>	2
<b>MBT08-16</b>	3
<b>MBT08-17</b>	4
<b>MBT08-18</b>	5

- Termination Styles:**
- 1) **Spade lugs**
  - 2) **Standard plug**
  - 3) **Standard jack**
  - 4) **Mini-plug**
  - 5) **Mini-jack**
- Note:** for other terminations see page 50



- *The hose compresses like a spring.*
- *The caps turn along the entire length of the hose.*
- *These units fit our standard bayonet adapters*

**When building a part number:**

**Specify:**

- 1) Catalog number
- 2) Specify "B" length
- 3) Calibration type J,K,T,E
- 4) Add "U" for ungrounded junction
- 5) Add "JJ" or "KK" etc. for dual element

**Please note:**  
**Flex armor .210" OD**  
**Probe 1/8" OD**

**Notes:**

Stainless steel construction with 24-gauge stranded fiberglass insulated wire. The probe tip is 1/8" diameter and our standard unit is approximately 1/2" long but can be made longer. Adapters are NOT furnished with the thermocouples and must be ordered separately. (See page 27)

**Optional Notes:**

For other wire construction types, consult sales engineer.

**Example:**

MBT08-14-B48-J

*The example calls out a miniature adjustable type, 48" long mini armor cable, type "J" calibration, grounded junction, with 3" leads and spade lugs.*





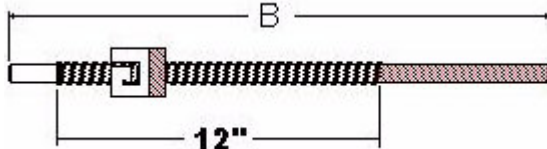
## **Adjustable Length Spring Bayonet Style**

<b>Catalog Number</b>	<b>Termination Style</b>
BT08-1	1
BT08-2	2
BT08-3	3

### **Termination Styles:**

- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

**Note:** for other terminations see page 50



### **When building a part number:**

#### **Specify:**

- 1) Catalog number
- 2) Specify "B" length
- 3) Calibration types J,K,T,E
- 4) Add "U" for ungrounded
- 5) Add "JJ" or "KK" etc. for dual element

### **Description:**

- Fits hole depth from 1" to 10".
- Cap turns along 12" spring.
- Forms to most angles.
- Wire is stainless steel braided over fiberglass

### **Construction Notes:**

- Stainless steel construction with 20 gauge stranded fiberglass wire.
- The probe tip is 3/16" diameter and our standard unit is approximately 3/8" long but can be made longer, units come standard with grounded junction.
- Adapters are NOT furnished with the thermocouples and must be ordered separately. (See page 27)

### **Optional Notes:**

- For other wire construction types, consult sales engineer.
- For 6" spring add option **Z165** at end of part number
- 12mm & 15mm metric caps also available (See page 31)

**Example:** BT08-1-B48-J

**The example calls out a spring type adjustable style, split leads with spade lugs, 48" long stainless braided leads, Type "J" calibration, grounded junction.**



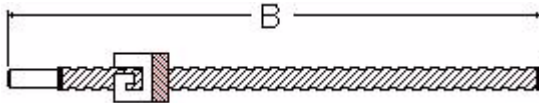


## **Adjustable Length Flex-Armor Bayonet Style**

<b>Catalog Number</b>	<b>Termination Style</b>
<b>BT08-14</b>	1
<b>BT08-15</b>	2
<b>BT08-16</b>	3

**Termination Styles**  
 1) Spade Lugs  
 2) Standard Plug  
 3) Standard Jack

**Note:** for other terminations see page 50



- Same as spring but not as flexible
- Cap turns along the entire length.
- Not as much spring tension
- Flex-armor hose acts like a spring

### **When building a part number:**

#### **Specify:**

- 1) Catalog number
- 2) "B" length
- 3) Calibration types J,K,T,E
- 4) Add "U" for ungrounded
- 5) Add "JJ" or "KK" etc. for dual element

#### **Construction Notes:**

- Stainless steel construction with 20-gauge fiberglass insulated wire stranded.
- Probe tip is 3/16" diameter tube and is approximately 3/8" long.
- Thermocouples are furnished grounded.
- Adapters are NOT furnished with thermocouple and must be ordered separately. (see pg. 27)

#### **Optional Notes:**

- For other wire constructions types, consult sales engineer.
- For 12mm metric cap add option "H436" to the end of the part number.

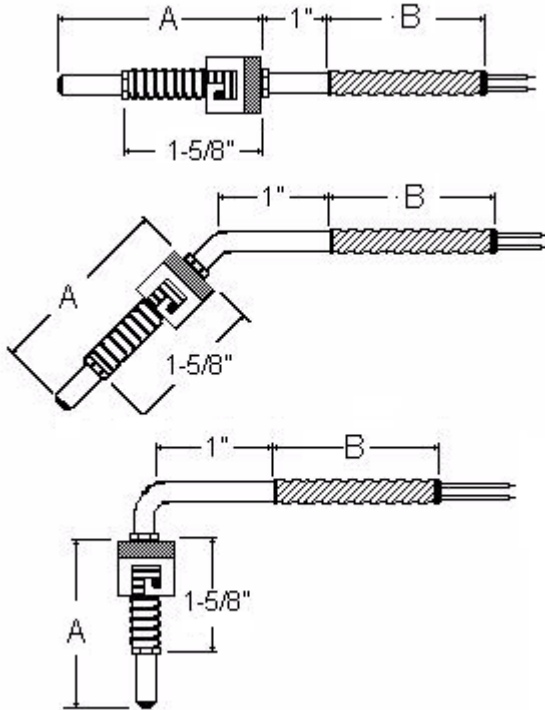
**Example:** BT08-14-B48-J

**The example calls out an adjustable length 48" long flex armor cable, type "J" calibration, grounded junction, with 4" leads and spade lugs.**





## Flex-Armor Fixed Bayonet Style



### 1/8" Diameter      3/16" Diameter

Catalog Number	Term. Style	Catalog Number	Term. Style
BT08-34	1	BT08-4	1
BT08-37	2	BT08-7	2
BT08-40	3	BT08-10	3

### 1/8" Diameter      3/16" Diameter

Catalog Number	Term. Style	Catalog Number	Term. Style
BT08-35	1	BT08-5	1
BT08-38	2	BT08-8	2
BT08-41	3	BT08-11	3

### 1/8" Diameter      3/16" Diameter

Catalog Number	Term. Style	Catalog Number	Term. Style
BT08-36	1	BT08-6	1
BT08-39	2	BT08-9	2
BT08-42	3	BT08-12	3

**When building a part number:**

**Specify:**

- 1) Catalog number
- 2) "A" length
- 3) "B" length
- 4) Calibration types J,K,T,E
- 5) Add "U" for ungrounded
- 6) Add "JJ" or "KK" etc. for dual element

**Notes:**

- 24 gauge wire for 1/8" diameter
- 20 gauge wire for 3/16" diameter
- Other internal wire construction available
- Adapters are NOT furnished with thermocouples and must be ordered separately

**Termination Styles:**

- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

**Note:** for other terminations see pg. 50

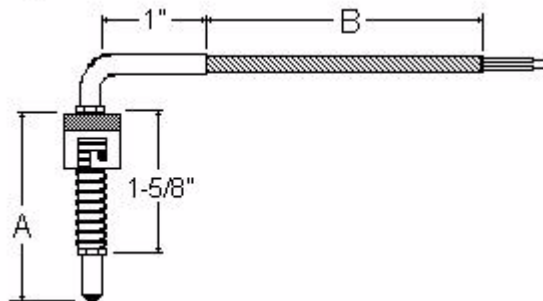
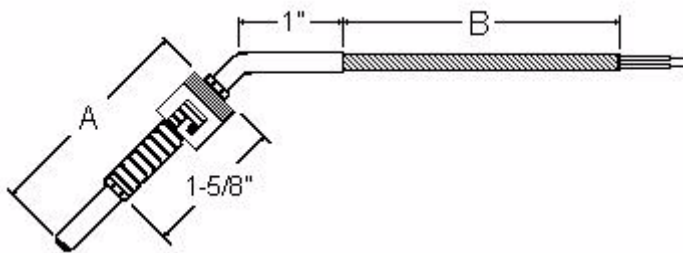
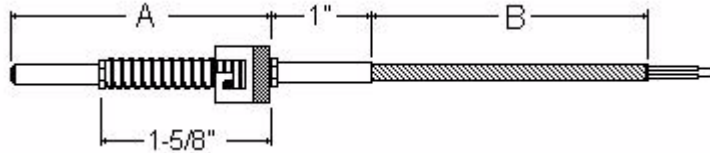
**Example:** BT08-4-A4-B48-J

***This example calls out a flex armor bayonet style thermocouple with a 4" insertion length, and 48" of flex-armor, type J.***





### Stainless Steel Braid Fixed Bayonet Style



#### 1/8" Diameter

Catalog Number	Term. Style
BT18-4	1
BT18-7	2
BT18-10	3

Catalog Number	Term. Style
BT18-14	1
BT18-17	2
BT18-20	3

#### 3/16" Diameter

Catalog Number	Term. Style
BT18-14	1
BT18-17	2
BT18-20	3

Catalog Number	Term. Style
BT18-14	1
BT18-17	2
BT18-20	3

#### 1/8" Diameter

Catalog Number	Term. Style
BT18-5	1
BT18-8	2
BT18-11	3

Catalog Number	Term. Style
BT18-5	1
BT18-8	2
BT18-11	3

#### 3/16" Diameter

Catalog Number	Term. Style
BT18-15	1
BT18-18	2
BT18-21	3

Catalog Number	Term. Style
BT18-15	1
BT18-18	2
BT18-21	3

#### 1/8" Diameter

Catalog Number	Term. Style
BT18-6	1
BT18-9	2
BT18-12	3

Catalog Number	Term. Style
BT18-6	1
BT18-9	2
BT18-12	3

#### 3/16" Diameter

Catalog Number	Term. Style
BT18-16	1
BT18-19	2
BT18-22	3

Catalog Number	Term. Style
BT18-16	1
BT18-19	2
BT18-22	3

#### When Building a part number:

##### Specify:

- 1) Catalog number
- 2) Specify "A" length
- 3) Specify "B" length
- 4) Calibration types J,K,T,E
- 5) Add "U" for ungrounded
- 6) Add "JJ" or "KK" etc. for dual element

##### Notes:

- 24 gauge wire used in 1/8" diameter
- 20 gauge wire used in 3/16" diameter
- Adapters are NOT furnished with thermocouples and must be ordered separately

**Example:** BT18-14-A4-B48-J

**This example calls out a stainless steel braided bayonet style thermocouple with a 4" insertion length, 48" of stainless steel braid, type J.**

#### Termination Styles:

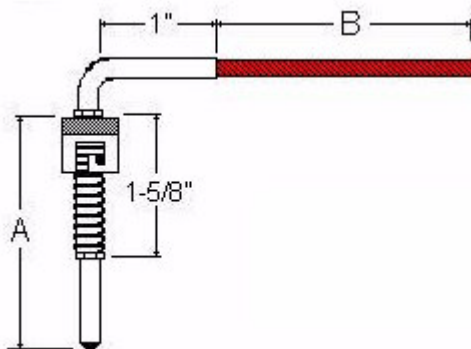
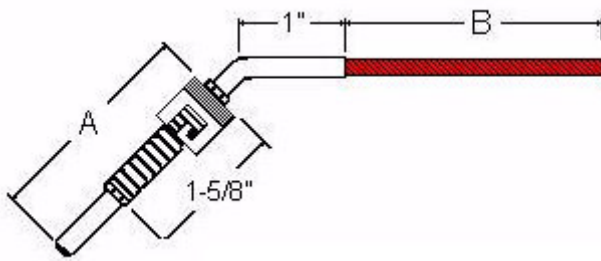
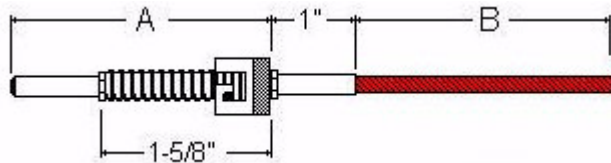
- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

**Note:** for other terminations see pg. 50





### Fiberglass Insulated Bayonet Style



1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
BT38-4	1	BT38-14	1
BT38-7	2	BT38-17	2
BT38-10	3	BT38-20	3

1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
BT38-5	1	BT38-15	1
BT38-8	2	BT38-18	2
BT38-11	3	BT38-21	3

1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
BT38-6	1	BT38-16	1
BT38-9	2	BT38-19	2
BT38-12	3	BT38-22	3

#### When building a part number:

##### Specify:

- 1) Catalog number
- 2) Specify "A" length
- 3) Specify "B" length
- 4) Calibration types J,K,T,E
- 5) Add "U" for ungrounded
- 6) Add "JJ" or "KK" etc. for dual element

##### Notes:

- 24 gauge wire used in 1/8" diameter
- 20 gauge wire used in 3/16" diameter
- Adapters are NOT furnished with thermocouples and must be ordered separately

Example: BT38-14-A4-B48-J

*This example calls out a fiberglass insulated fixed bayonet style thermocouple with a 3/16"OD probe, 4" insertion length, 48" of fiberglass lead, type J*

#### Termination Styles:

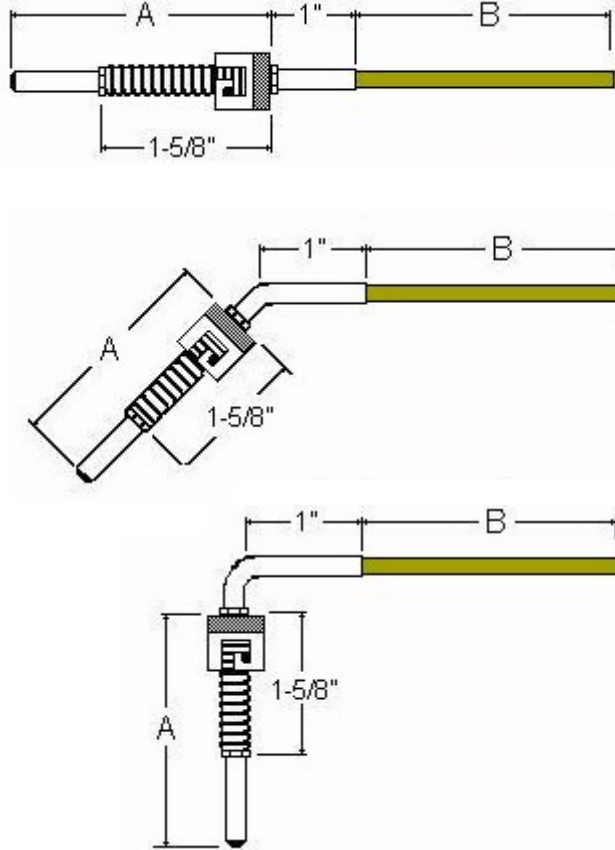
- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

Note: for other terminations see pg. 50





## Teflon Insulated Fixed Bayonet Style



1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
BT28-4	1	BT28-14	1
BT28-7	2	BT28-17	2
BT28-10	3	BT28-20	3

1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
BT28-5	1	BT28-15	1
BT28-8	2	BT28-18	2
BT28-11	3	BT28-21	3

1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
BT28-6	1	BT28-16	1
BT28-9	2	BT28-19	2
BT28-12	3	BT28-22	3

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) Specify "A" length
- 3) Specify "B" length
- 4) Calibration types J,K,T,E
- 5) Add "U" for ungrounded
- 6) Add "JJ" or "KK" etc. for dual element

#### Notes:

- 24 gauge wire used in 1/8" diameter
- 20 gauge wire used in 3/16" diameter
- Adapters are NOT furnished with thermocouples and must be ordered separately

Example: BT28-14-A4-B48-J

*This example calls out a Teflon insulated fixed bayonet style thermocouple with a 3/16" OD probe, 4" insertion length, 48" of Teflon insulated leads, type J.*

#### Termination Styles:

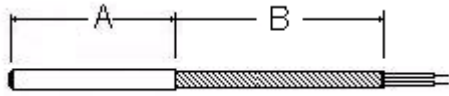
- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

Note: for other terminations see pg. 50

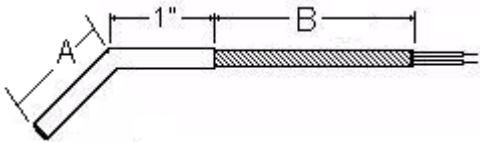




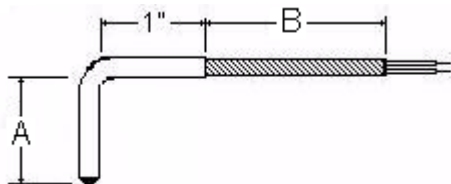
## Stainless Steel Braid Style



1/8" Diameter		3/16" Diameter		1/4" Diameter	
<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>
CT28-1	1	CT38-1	1	CT48-1	1
CT28-4	2	CT38-4	2	CT48-4	2
CT28-7	3	CT38-7	3	CT48-7	3



1/8" Diameter		3/16" Diameter		1/4" Diameter	
<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>
CT28-2	1	CT38-2	1	CT48-2	1
CT28-5	2	CT38-5	2	CT48-5	2
CT28-8	3	CT38-8	3	CT48-8	3



1/8" Diameter		3/16" Diameter		1/4" Diameter	
<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>
CT28-3	1	CT38-3	1	CT48-3	1
CT28-6	2	CT38-6	2	CT48-6	2
CT28-9	3	CT38-9	3	CT48-9	3

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) Specify "A" length
- 3) Specify "B" length
- 4) Calibration types J,K,T,E
- 5) Add "U" for ungrounded
- 6) Add "JJ" or "KK" etc. for dual element

#### Notes:

- 24 gauge wire used in 1/8" diameter
- 20 gauge wire used in 3/16", 1/4" diameter
- Adapters are NOT furnished with thermocouples and must be ordered separately

Example: CT38-1-A4-B48-J

***This example calls out a stainless steel braid style thermocouple with a 3/16"OD probe, 4" insertion, 48" of stainless steel braid, type J***

#### Termination Styles:

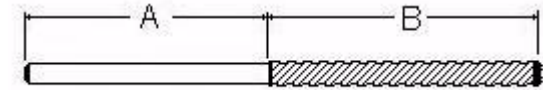
- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

***Note: for other terminations see pg. 50***

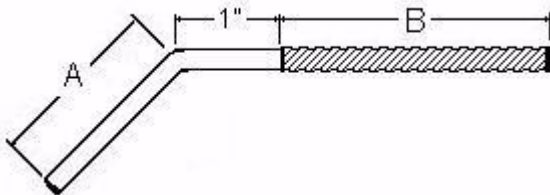




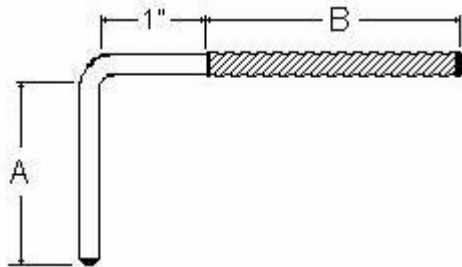
### Flex-Armor Style



1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
CT12-1	1	CT18-1	1	CT13-1	1
CT12-4	2	CT18-4	2	CT13-4	2
CT12-7	3	CT18-7	3	CT13-7	3



1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
CT12-2	1	CT18-2	1	CT13-2	1
CT12-5	2	CT18-5	2	CT13-5	2
CT12-8	3	CT18-8	3	CT13-8	3



1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
CT12-3	1	CT18-3	1	CT13-3	1
CT12-6	2	CT18-6	2	CT13-6	2
CT12-9	3	CT18-9	3	CT13-9	3

#### When building a part number:

##### Specify:

- 1) Catalog number
- 2) "A" length
- 3) "B" length
- 4) Calibration types J,K,T,E
- 5) Add "U" for ungrounded
- 6) Add "JJ" or "KK" etc. for dual element

##### Notes:

- 24 gauge wire used in 1/8" diameter
- 20 gauge wire used in 3/16", 1/4" diameter
- Adapters are NOT furnished with thermocouples and must be ordered separately

**Example:** CT18-1-A4-B48-J

**This example calls out a flex-armor style thermocouple with a 3/16"OD probe, 4" insertion length, 48" of flex-armor leads, type J.**

##### Termination Styles:

- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

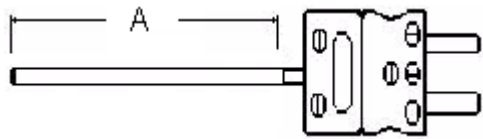
**Note:** for other terminations see pg. 50



Power Modules Inc. Suite 4-C Raymond Drive Havertown, PA 19083  
 PH: 610-292-8900 Fax: 610-292-8898 EMail: info@pmiheat.com



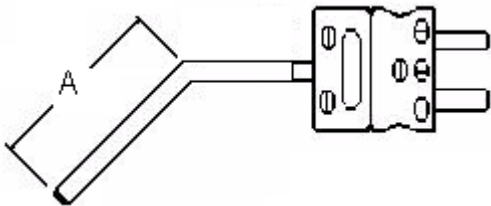
## Rigid Style Tube & Wire



1/8" Diameter	
Catalog Number	Term. Style
CT18-25	2
CT18-13	3

3/16" Diameter	
Catalog Number	Term. Style
CT18-28	2
CT18-16	3

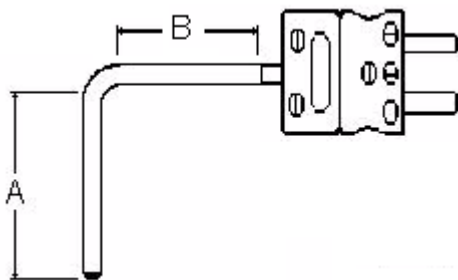
1/4" Diameter	
Catalog Number	Term. Style
CT18-31	2
CT18-19	3



1/8" Diameter	
Catalog Number	Term. Style
CT18-26	2
CT18-14	3

3/16" Diameter	
Catalog Number	Term. Style
CT18-29	2
CT18-17	3

1/4" Diameter	
Catalog Number	Term. Style
CT18-32	2
CT18-20	3



1/8" Diameter	
Catalog Number	Term. Style
CT18-27	2
CT18-15	3

3/16" Diameter	
Catalog Number	Term. Style
CT18-30	2
CT18-18	3

1/4" Diameter	
Catalog Number	Term. Style
CT18-33	2
CT18-21	3

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) "A" length
- 3) "B" length
- 4) Calibration types J,K,T,E
- 5) Add "U" for ungrounded
- 6) Add "JJ" or "KK" etc. for dual element

#### Notes:

- 24 gauge wire used in 1/8" diameter
- 20 gauge wire used in 3/16", 1/4" diameter
- Compression fittings are NOT furnished with thermocouples and must be ordered separately (*see pg. 27*)

Example: CT18-28-A4-J

*This example calls out a Rigid, tube and wire style thermocouple, with a 3/16" OD probe, 4" insertion length, with a type J male plug*

### Termination Styles:

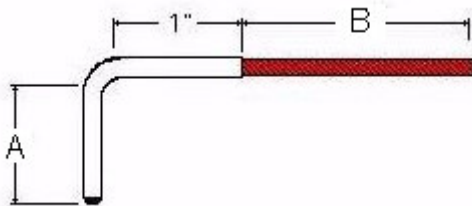
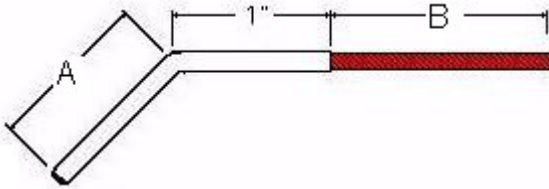
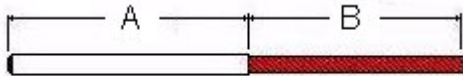
- 1) *Standard Plug*
- 2) *Standard Jack*

Note: for other termination styles see *pg. 50*





## Fiberglass Insulated Style



1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
CT17-38	1	CT18-38	1	CT19-38	1
CT17-45	2	CT18-45	2	CT19-45	2
CT17-46	3	CT18-46	3	CT19-46	3

1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
CT17-47	1	CT18-47	1	CT19-47	1
CT17-48	2	CT18-48	2	CT19-48	2
CT17-49	3	CT18-49	3	CT19-49	3

1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
CT17-50	1	CT18-50	1	CT19-50	1
CT17-51	2	CT18-51	2	CT19-51	2
CT17-52	3	CT18-52	3	CT19-52	3

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) "A" length
- 3) "B" length
- 4) Calibration types J,K,T,E
- 5) Add "U" for ungrounded
- 6) Add "JJ" or "KK" etc. for dual element

#### Notes:

- 24 gauge wire used in 1/8" diameter
- 20 gauge wire used in 3/16", 1/4" diameter
- Adapters are NOT furnished with thermocouples and must be ordered separately (see pg.27)

#### Termination Styles:

- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

**Note:** for other terminations see pg. 50

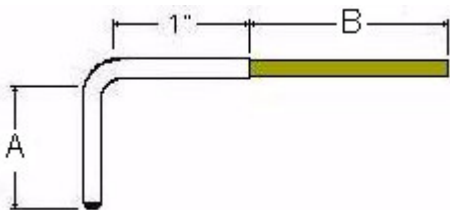
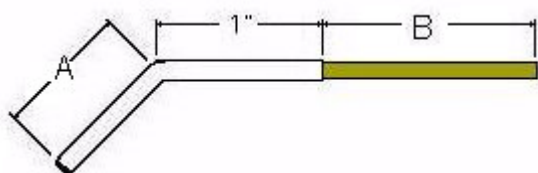
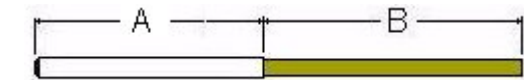
**Example:** CT18-38-A4-B48-J

*This example calls out a fiberglass insulated style thermocouple with a 3/16"OD probe, 4" insertion length, 48" of fiberglass leads, type J.*





## Teflon Insulated Style



1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
CT28-11	1	CT38-11	1	CT48-11	1
CT28-14	2	CT38-14	2	CT48-14	2
CT28-17	3	CT38-17	3	CT48-17	3

1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
CT28-12	1	CT38-12	1	CT48-12	1
CT28-15	2	CT38-15	2	CT48-15	2
CT28-18	3	CT38-18	3	CT48-18	3

1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
CT28-13	1	CT38-13	1	CT48-13	1
CT28-16	2	CT38-16	2	CT48-16	2
CT28-19	3	CT38-19	3	CT48-19	3

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) "A" length
- 3) "B" length
- 4) Calibration types J,K,T,E
- 5) Add "U" for ungrounded
- 6) Add "JJ" or "KK" etc. for dual element

#### Notes:

- 24 gauge wire used in 1/8" diameter
- 20 gauge wire used in 3/16", 1/4" diameter
- Adapters are NOT furnished with thermocouples and must be ordered separately. (see pg.27)

**Example:** CT38-11-A4-B48-J

This example calls out a Teflon insulated style thermocouple with a 3/16"OD probe, 4" insertion length, 48" of Teflon insulated leads, type J.

#### Termination Styles:

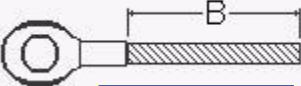
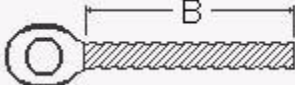
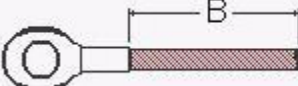
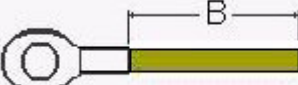
- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

**Note:** for other terminations see pg. 50





## Surface Style

	#6	#8	#10	1/4	5/16	3/8	<u>Termination Styles</u>
 <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">Stainless Steel</div>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Term. Style</i>
	ST58-67	ST58-37	ST58-17	ST58-27	ST58-57	ST58-47	1
	ST58-68	ST58-38	ST58-18	ST58-28	ST58-58	ST58-48	2
	ST58-69	ST58-39	ST58-19	ST58-29	ST58-59	ST58-49	3
 <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">Flex Armor</div>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Term. Style</i>
	ST58-64	ST58-34	ST58-14	ST58-24	ST58-54	ST58-44	1
	ST58-65	ST58-35	ST58-15	ST58-25	ST58-55	ST58-45	2
	ST58-66	ST58-36	ST58-16	ST58-26	ST58-56	ST58-46	3
 <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">Fiberglass Braid</div>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Term. Style</i>
	ST58-70	ST58-40	ST58-20	ST58-30	ST58-60	ST58-50	1
	ST58-71	ST58-41	ST58-21	ST58-31	ST58-61	ST58-51	2
	ST58-72	ST58-42	ST58-22	ST58-32	ST58-62	ST58-52	3
 <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;">Teflon Insulated</div>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Term. Style</i>
	ST58-75	ST58-79	ST58-82	ST58-85	ST58-88	ST58-91	1
	ST58-76	ST58-80	ST58-83	ST58-86	ST58-89	ST58-92	2
	ST58-77	ST58-81	ST58-84	ST58-87	ST58-90	ST58-93	3

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) "B" length
- 3) Calibration types J,K,T,E

Example: ST58-17-B48-J

*This example calls out a surface or "ring" style thermocouple, with a #10 screw hole, 48" of stainless steel braid, type J.*

#### Termination Styles:

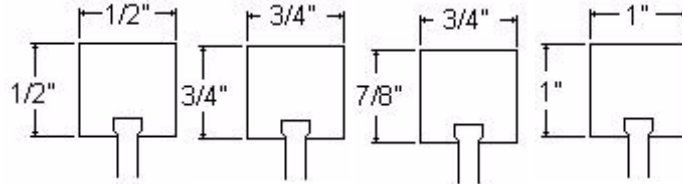
- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

Note: for other terminations see pg. 50





## Spade Style



### Termination Styles

<p style="text-align: center;"><b>Stainless Steel</b></p>	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-37</td></tr> <tr><td>SP58-38</td></tr> <tr><td>SP58-39</td></tr> </table>	<i>Catalog Number</i>	SP58-37	SP58-38	SP58-39	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-17</td></tr> <tr><td>SP58-18</td></tr> <tr><td>SP58-19</td></tr> </table>	<i>Catalog Number</i>	SP58-17	SP58-18	SP58-19	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-27</td></tr> <tr><td>SP58-28</td></tr> <tr><td>SP58-29</td></tr> </table>	<i>Catalog Number</i>	SP58-27	SP58-28	SP58-29	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-1</td></tr> <tr><td>SP58-2</td></tr> <tr><td>SP58-3</td></tr> </table>	<i>Catalog Number</i>	SP58-1	SP58-2	SP58-3	<table border="1"> <tr><td><i>Term Style</i></td></tr> <tr><td>1</td></tr> <tr><td>2</td></tr> <tr><td>3</td></tr> </table>	<i>Term Style</i>	1	2	3
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<p style="text-align: center;"><b>Flex Armor</b></p>	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-34</td></tr> <tr><td>SP58-35</td></tr> <tr><td>SP58-36</td></tr> </table>	<i>Catalog Number</i>	SP58-34	SP58-35	SP58-36	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-14</td></tr> <tr><td>SP58-15</td></tr> <tr><td>SP58-16</td></tr> </table>	<i>Catalog Number</i>	SP58-14	SP58-15	SP58-16	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-24</td></tr> <tr><td>SP58-25</td></tr> <tr><td>SP58-26</td></tr> </table>	<i>Catalog Number</i>	SP58-24	SP58-25	SP58-26	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-4</td></tr> <tr><td>SP58-5</td></tr> <tr><td>SP58-6</td></tr> </table>	<i>Catalog Number</i>	SP58-4	SP58-5	SP58-6	<table border="1"> <tr><td><i>Term Style</i></td></tr> <tr><td>1</td></tr> <tr><td>2</td></tr> <tr><td>3</td></tr> </table>	<i>Term Style</i>	1	2	3
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<p style="text-align: center;"><b>Fiberglass</b></p>	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-40</td></tr> <tr><td>SP58-41</td></tr> <tr><td>SP58-42</td></tr> </table>	<i>Catalog Number</i>	SP58-40	SP58-41	SP58-42	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-20</td></tr> <tr><td>SP58-21</td></tr> <tr><td>SP58-22</td></tr> </table>	<i>Catalog Number</i>	SP58-20	SP58-21	SP58-22	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-30</td></tr> <tr><td>SP58-31</td></tr> <tr><td>SP58-32</td></tr> </table>	<i>Catalog Number</i>	SP58-30	SP58-31	SP58-32	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-7</td></tr> <tr><td>SP58-8</td></tr> <tr><td>SP58-9</td></tr> </table>	<i>Catalog Number</i>	SP58-7	SP58-8	SP58-9	<table border="1"> <tr><td><i>Term Style</i></td></tr> <tr><td>1</td></tr> <tr><td>2</td></tr> <tr><td>3</td></tr> </table>	<i>Term Style</i>	1	2	3
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<p style="text-align: center;"><b>Teflon Insulated</b></p>	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-50</td></tr> <tr><td>SP58-51</td></tr> <tr><td>SP58-52</td></tr> </table>	<i>Catalog Number</i>	SP58-50	SP58-51	SP58-52	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-60</td></tr> <tr><td>SP58-61</td></tr> <tr><td>SP58-62</td></tr> </table>	<i>Catalog Number</i>	SP58-60	SP58-61	SP58-62	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-70</td></tr> <tr><td>SP58-71</td></tr> <tr><td>SP58-72</td></tr> </table>	<i>Catalog Number</i>	SP58-70	SP58-71	SP58-72	<table border="1"> <tr><td><i>Catalog Number</i></td></tr> <tr><td>SP58-80</td></tr> <tr><td>SP58-81</td></tr> <tr><td>SP58-82</td></tr> </table>	<i>Catalog Number</i>	SP58-80	SP58-81	SP58-82	<table border="1"> <tr><td><i>Term Style</i></td></tr> <tr><td>1</td></tr> <tr><td>2</td></tr> <tr><td>3</td></tr> </table>	<i>Term Style</i>	1	2	3
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SP58-81																									
SP58-82																									
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### When building a part number:

#### Specify:

- 1) Catalog number
- 2) "B" length
- 3) Calibration types J,K,T,E

### Termination Styles:

- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

**Note:** for other terminations see pg. 50

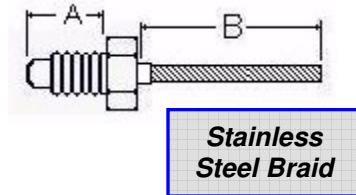
**Example:** SP58-37-B48-J

This example calls out a spade type thermocouple, the spade dimension is 1/2" x 1/2", 48" stainless steel braided leads, type J, grounded.

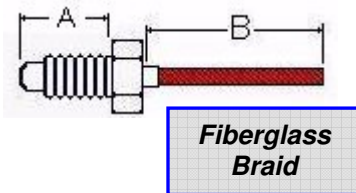




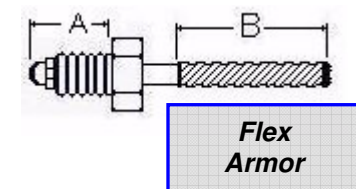
## 1/4-28 Bolt Style



Catalog Number	Termination Style
1428SB-1	1
1428SB-2	2
1428SB-3	3

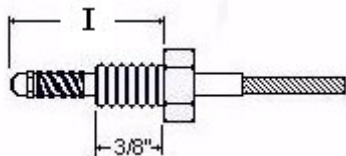


Catalog Number	Termination Style
1428GB-1	1
1428GB-2	2
1428GB-3	3



Catalog Number	Termination Style
1428FH-1	1
1428FH-2	2
1428FH-3	3

### Special Spring Type



#### When building a part number:

##### Specify:

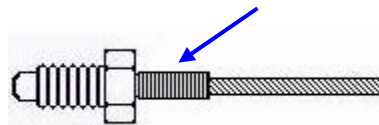
- 1) Catalog number
- 2) Specify "B" length
- 3) Calibration types J,K,T,E
- 4) Add "S" to end of part # for special spring type
- 5) Standard "A" dimension is 1/2"

- Metric and other bolt sizes available, for 1/4-20, 6mm and 8mm please consult ECS.

**Example:** 1428SB-1-B48-J

**Example:** 1428SB-1-B48-J-S (Special Spring Type) & specify "I" dimension

### Strain Relief Type: add "Z342" to end of part #



#### Termination Styles:

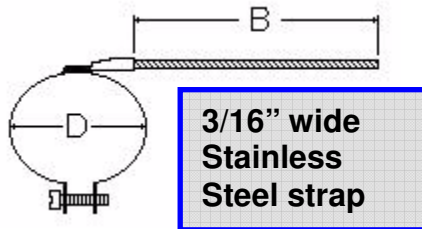
- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

**Note:** for other terminations see pg. 50





## Nozzle Clamp Style



3/16" wide  
Stainless  
Steel strap

### How to order ECS nozzle clamp style thermocouples....

Follow the 6 steps below and refer to the tables to determine the ECS part number for your thermocouple!

**Begin with: "NC"**

#### Step 1 -ISA Calibration

Code	Composition
J	Iron/ Constantan
K	Chromel/ Alumel
T	Copper/ Constantan
E	Chromel/ Constantan

#### Step 2 -Diameter "D"

Code	Diameter
16 mm	16 mm
30 mm	40 mm
40 mm	50 mm
50 mm	60 mm
60 mm	70 mm
70 mm	75 mm
75 mm	Other sizes available

#### Step 3 -Measuring Junction

Code	Junction Type
G	Grounded
U	Ungrounded

#### Step 4 -Extension Type

Code	Extension Type
SB	Stainless Steel Braid
FH	Flex Armor Cable
GB	Fiber Glass Braid

#### Step 5 -Extension Length

Specify Length in (Inches)

#### Step 6 -Termination Type

Code	Termination Type
P	Standard Plug
J	Standard Jack
SL	Spade Lugs
ST	Strip Lugs
MP	Mini Plug
MJ	Mini Jack

#### Example: NC-J-40MM-G-SB48-P

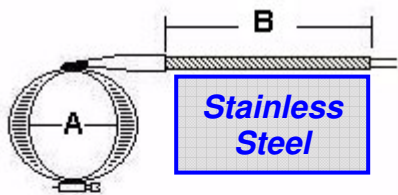
- This is a 40mm ID nozzle clamp, 48" of Stainless Steel Braid, with a standard male plug.



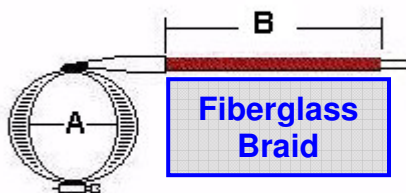


## Adjustable Hose Clamp Style

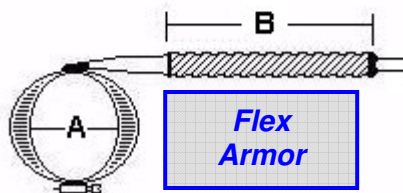
**NEW!!!!**



Catalog Number	Termination Style
HC58-37	1
HC58-38	2
HC58-39	3



Catalog Number	Termination Style
HC58-40	1
HC58-41	2
HC58-42	3



Catalog Number	Termination Style
HC58-34	1
HC58-35	2
HC58-36	3

### When Building a Part Number:

#### Specify:

- 1) Catalog Number
- 2) "A" Dimension in inches
- 3) "B" Length in inches
- 4) ISA Calibration

### Termination Styles:

- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

Note: for other terminations see pg. 50

Notes: For the "A" dimension, simply specify the inside diameter of the hose clamp

Example: HC58-37-A2-B48

- ***This example calls out a hose-clamp style thermocouple***

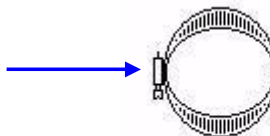




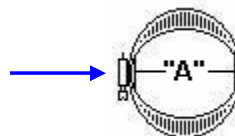
### ***Hose Clamp with attached Bayonet Adapter***

***To order East Coast Sensors hose clamps with attached bayonet adapter please follow the steps below. If you have troubles forming a part number for this item please contact your local ECS representative or contact us and we will help you.***

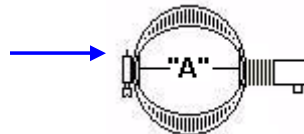
**Step 1- Catalog Number (HC58)**



**Step 2- Specify Hose Clamp Diameter**



**Step 3- Specify Bayonet Adapter**



#### **When Building a Part Number:**

##### **Specify:**

- 1) Catalog Number
- 2) "A" Dimension (inside diameter of hose clamp)
- 3) Specify type of bayonet adapter (***see pg. 27***)

**Example:** HC58-A1.5-BA-1

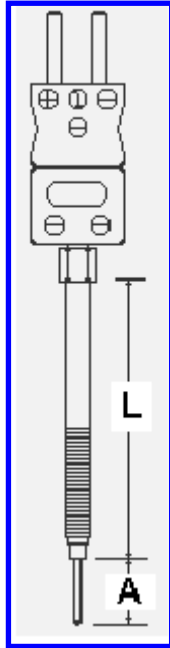
##### **Notes:**

- For the "A" dimension, simply specify the inside diameter of the hose clamp
- Choose from our wide variety of bayonet adapters on ***pg. 27***
- If you don't see what you need, please contact your local East Coast Sensors representative





## Meltbolt Rigid Style, Standard Lengths



<b>Fiberglass Insulated</b>	<b>Mineral Insulated</b>	<b>“A” Length</b>	<b>“L” Length</b>
<i>Catalog Number</i>	<i>Catalog Number</i>	<i>Probe Length</i>	<i>Bolt Length</i>
MT28-1	MT28-1M	Flush	3”
MT28-2	MT28-2M	1/4”	3”
MT28-3	MT28-3M	1/2”	3”
MT28-4	MT28-4M	3/4”	3”
MT28-5	MT28-5M	1”	3”
MT28-6	MT28-6M	Flush	6”
MT28-7	MT28-7M	1/4”	6”
MT28-8	MT28-8M	1/2”	6”
MT28-9	MT28-9M	3/4”	6”
MT28-10	MT28-10M	1”	6”

Other “A” & “L” lengths available

**When building a part number:**

**Specify:**

1. Catalog number
2. Specify “A” dimension (see diagram)
3. Specify “L” dimension (see diagram)
4. ISA calibration

**Example:** MT28-1-A0-L3-J  
*This example calls out a rigid style meltbolt thermocouple, 3” long, flush tip, grounded junction, type J.*

**Notes:**

- 1) Calibration is ISA standard grade type “J”, others can be furnished on request.
- 2) Thermocouple junction is grounded, for ungrounded, add “U”
- 3) For adjustable length melt bolts (see pg. 21)

**Optional Notes:**

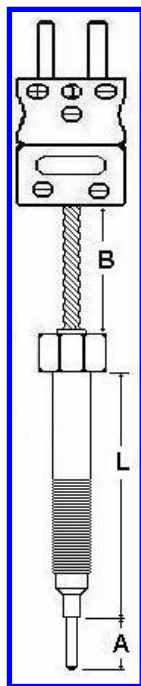
**Consult ECS for.....**

- Other “A” (probe) lengths and or “L”(bolt) lengths
- Larger tip diameters





## NEW!!! Meltbolt Extension Style, Standard Lengths



<b>Fiberglass Insulated</b>	<b>Mineral Insulated</b>	<b>“A” Length</b>	<b>“L” Length</b>
<b>Catalog Number</b>	<b>Catalog Number</b>	<b>Probe Length</b>	<b>Bolt Length</b>
MT28-21	MT28-21M	Flush	3”
MT28-22	MT28-22M	1/4”	3”
MT28-23	MT28-23M	1/2”	3”
MT28-24	MT28-24M	3/4”	3”
MT28-25	MT28-25M	1”	3”
MT28-26	MT28-26M	Flush	6”
MT28-27	MT28-27M	1/4”	6”
MT28-28	MT28-28M	1/2”	6”
MT28-29	MT28-29M	3/4”	6”
MT28-30	MT28-30M	1”	6”

Other “A” & “L” lengths available

### When building a part number:

#### Specify:

1. Catalog number
2. “A” Length (see diagram)
3. “L” Length (see diagram)
4. “B” Length, Standard “B” length is 4”
5. ISA Calibration

**Example:** MT28-21-A0-L3-B4-J

This example calls out a flush tip, 3” meltbolt, with 4” of flex-armor hose, type J, with a grounded junction, and standard male plug

#### Notes:

1. Calibration is ISA standard grade type “J”, others can be furnished on request.
2. Thermocouple junction is grounded, for ungrounded, add “U”

#### Optional Notes:

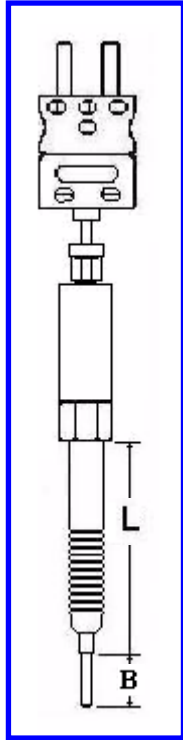
Consult ECS for.....

- Other “A” (probe) lengths and or “L”(bolt) lengths
- Larger tip diameters





## Adjustable Meltbolt Style



Step 1    
 Step 2    
 Step 3    
 Step 4

**Catalog Number**  
**AMB-B1**

**Bolt Length**  
 “L”  
 3”  
 4”  
 6”

**ISA Calibration**  
 J  
 K  
 T  
 E

**Measuring Junction**  
 “G” Grounded  
 “U” ungrounded

**Example:** AMB-B1-L3-J-U  
 This example is a Meltbolt style thermocouple with an adjustable length tip that adjusts from flush to 1”. The length “L” is 3” and is a type “J”, ungrounded.

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) “L” Length
- 3) ISA Calibration
- 4) Measuring Junction

#### Notes:

- Thermocouple junction is typically grounded for this type, for “ungrounded” add “U” at the end of the part number.
- This thermocouple adjusts from a flush tip to a 1” tip.





## Mineral Insulated Extension Type

**When Building a part # for Mineral Insulated "MI" thermocouples:**

Begin with **"MI"** then follow the 8 steps below: (Ex. MI-J-3-304-3-G-PP12-P)

### Step 1- ISA Calibration

Code	Calibration	Max Temp.
J	Type- J	1400 °F
K	Type- K	2100 °F
T	Type- T	700 °F
E	Type- E	1600 °F

### Step 4- Sheath Length

Code	Specify Length
------	----------------

### Step 5- Measuring Junction

Code	Junction Type
G	Grounded
U	Ungrounded
E	Exposed

**Note: Use "JJ" "KK" "TT" "EE" for Dual**

### Step 2- Sheath Diameter

Code	Diameter	Decimal
.020	.020	.020
.032	.032	.032
.040	.040	.040
.059	.059	.059
0	1/16"	.062
1	1/8"	.125
2	3/16"	.187
3	1/4"	.250

### Step 6- Extension Wire Material

Code	Extension Wire Type
GB	Fiberglass Braid
SB	Stainless Steel Braid
FH	Flexible Armor Hose
TT	Teflon-Teflon
PP	PVC-PVC
KK	Kapton

**Note: other diameters and sheath materials available**

### Step 7- Extension Wire Length (Inches)

Specify Length (Inches)
-------------------------

### Step 3- Sheath Material

Code	Material
304	304 Stainless
316	316 Stainless
INC	INC Inconel (I600)
446	446 Stainless

### Step 8- Termination Type

Code	Termination Type
P	Standard Male Plug
J	Standard Female Jack
SL	Spade Lugs
ST	Stripped Leads No Lugs
MP	Mini Male Plug
MJ	Mini Female Jack





## **Mineral Insulated Rigid Style**

*When building a part number start with "MI" then follow the steps below...*

### **Step 1 -ISA Calibration**

<b>Code</b>	<b>Composition</b>	<b>Temp. Range</b>
<b>J</b>	Iron/ Constantan	1400 degrees F
<b>K</b>	Chromel/ Alumel	2100 degrees F
<b>T</b>	Copper/ Constantan	700 degrees F
<b>E</b>	Chromel/ Constantan	1700 degrees F

**Note:** Use "JJ" "KK" "TT" "EE" for Dual

### **Step 2 -Sheath Diameter**

<b>Code</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Diameter</b>	1/16	1/8	3/16	1/4	3/8

### **Step 3 -Sheath Material**

<b>Code</b>	<b>Material</b>
<b>304</b>	304 Stainless Steel
<b>316</b>	316 Stainless Steel
<b>INC</b>	Inconel 600 (I600)
<b>446</b>	446 Stainless Steel

**Note:** other diameters and sheath materials available

#### **Notes:**

- See **pg. 25** for thermocouples with attached fittings

### **Step 4 -Sheath Length**

Specify length in inches

### **Step 5 -Measuring Junction**

<b>Code</b>	<b>Style</b>
<b>G</b>	Grounded
<b>U</b>	Ungrounded
<b>E</b>	Exposed

### **Step 6 -Termination Types**

<b>Code</b>	<b>Description</b>
<b>S</b>	Stripped Leads
<b>P</b>	Standard Male Plug
<b>J</b>	Standard Female Jack
<b>MP</b>	Miniature Male Plug
<b>MJ</b>	Miniature Female Jack

**Example:** MI-K-2-304-6-G-P

*This example calls out a mineral insulated thermocouple, type K, 3/16"OD, 304 stainless steel, 6" long, with a grounded junction and a standard male plug.*





## Rigid Style MGO w/Head

When building a part number start with "MI" then follow the steps below...

### Step 1 -ISA Calibration

Code	Composition	Temp. Range
J	Iron/ Constantan	1400 degrees F
K	Chromel/ Alumel	2100 degrees F
T	Copper/ Constantan	700 degrees F
E	Chromel/ Constantan	1700 degrees F

Note: Use "JJ" "KK" "TT" "EE" for Dual

### Step 2- Sheath Diameter

Code	1	2	3	4
Diameter	1/8"	3/16"	1/4"	3/8"

### Step 3 -Sheath Material

Code	Material
304	304 Stainless Steel
316	316 Stainless Steel
INC	Inconel 600 (I600)
446	446 Stainless Steel

### Step 4 -Sheath Length

Specify length in inches

#### NOTES:

- Other Sheath Diameters Available
- Other Sheath Material Available
- Other Heads Available
- For custom applications please call your local representative

### Step 5 -Measuring Junction

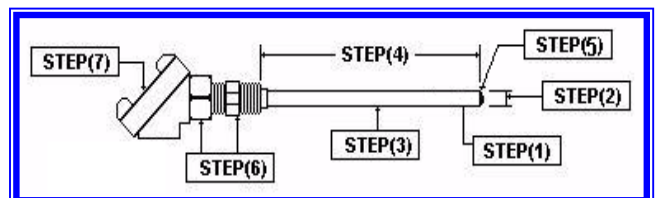
Code	Style
G	Grounded
U	Ungrounded
E	Exposed

### Step 6- Termination

Code	Material
SHA	1/2" NPT ALUMINUM HEAD
SHI	1/2" NPT CAST IRON HEAD

### Step 7- Optional Transmitter

Code	Output	Temp Range
70 MQ	4-20 MA	Specify
0	None	-



When building a part # begin with "MI" ....

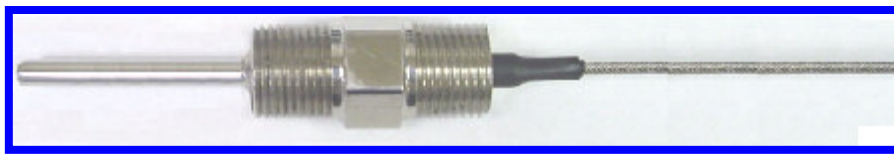
Step	1	2	3	4	5	6	7
Code	J,K,T,E	3	304	12	G	SHA	70 MQ

#### Example:

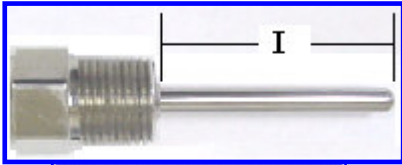
MI-J-3-304-12-G-SHA-70MQ

**Type J, 1/4" OD, 304 SS, 12" Long, Grounded, Aluminum Head, 4-20 MA Transmitter**

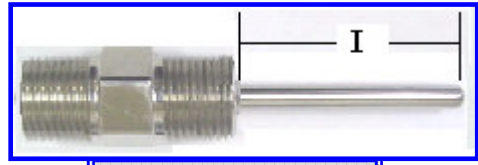




## Attached Thermocouple Fittings



**Hex Bushings**



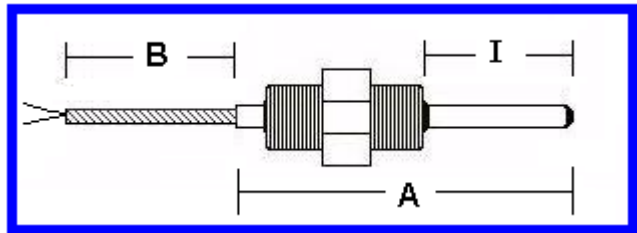
**Hex Couplings**

<u>Code</u>	<u>Description</u>	<u>Material</u>
SB1	1/8" NPT	Stainless
SB2	1/4" NPT	Stainless
SB3	1/2" NPT	Stainless
SB4	3/4" NPT	Stainless
BB1	1/8" NPT	Brass
BB2	1/4" NPT	Brass
BB3	1/2" NPT	Brass
BB4	3/4" NPT	Brass

<u>Code</u>	<u>Description</u>	<u>Material</u>
SC1	1/8" NPT	Stainless
SC2	1/4" NPT	Stainless
SC3	1/2" NPT	Stainless
SC4	3/4" NPT	Stainless
BC1	1/8" NPT	Brass
BC2	1/4" NPT	Brass
BC3	1/2" NPT	Brass
BC4	3/4" NPT	Brass

Example: CT38-1-A4-B48-J-SC2-I2"

**SEE PAGE 8** FOR THERMOCOUPLE INFORMATION

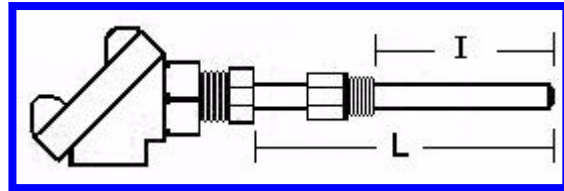


**Note:**  
Most fittings can be attached to any probe.  
See pages: 8,9,10,11,12

**NOTE:** This example calls out a compression type thermocouple with an overall probe length ("A") of 4", 48" of stainless steel braid ("B"), type J. It has a 1/4" NPT coupling with an insertion depth ("I") of 2"

Example: MI-J-3-304-12-G-SC-BB3-I6"

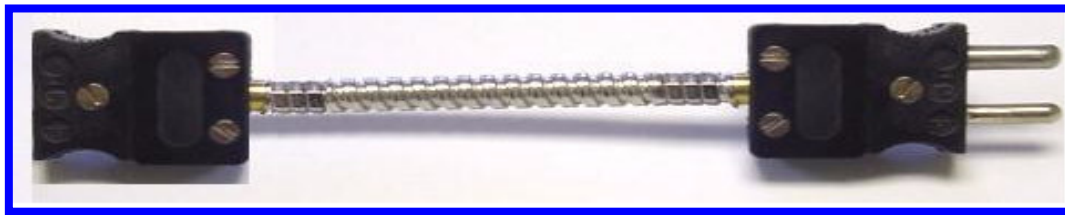
**SEE PAGE 22** FOR THERMOCOUPLE INFORMATION



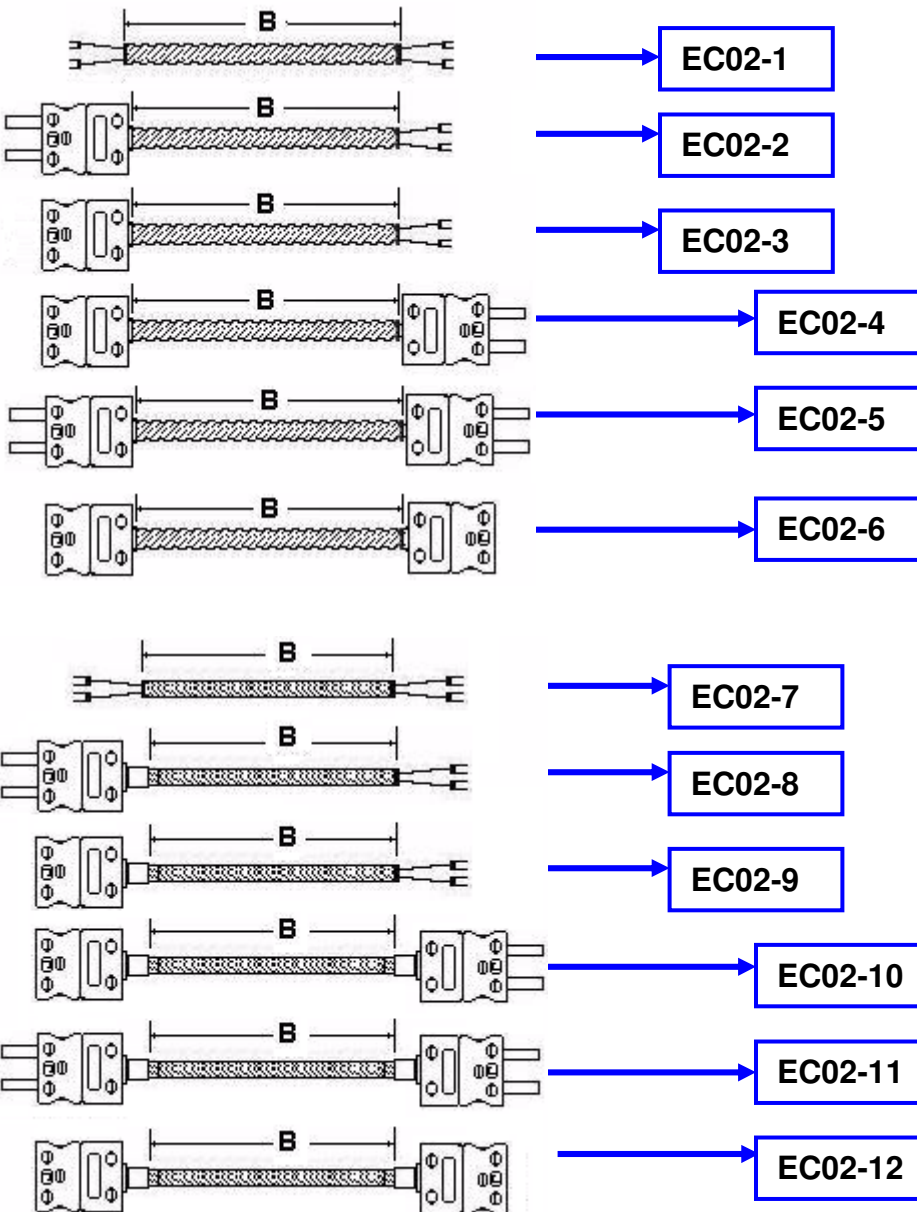
**Note:**  
Most fittings can be attached to any probe.  
See pages: 27

**NOTE:** This example calls out a mineral insulated thermocouple, type J, 1/4" diameter, composed of 304 stainless steel. The overall length of the probe ("L") is 12", it is a grounded unit, with a brass bushing, 1/2" NPT, with an insertion length ("I") of 6".





## Thermocouple Extension Cables



**Flex-Armor  
Style Extension  
Cables**

**Stainless Braid  
Style Extension  
Cables**

**To Order:  
Specify:**

- 1) Catalog Number
- 2) "B" Length (Inches)
- 3) ISA Calibration

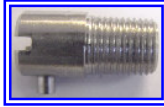
**Example:** EC02-1-B48-J

*This example calls out a flex armor extension cable with split leads on both ends, 48" long, type J*



# Thermocouple Accessories

## Bayonet Adapters



Code	Length	Thread
BA-1	7/8"	(1/8-27 NPT)
BA-2	7/8"	3/8-24
BA-3	1-1/2"	(1/8-27 NPT)
BA-4	1-1/2"	3/8-24
BA-5	2-1/2"	1/8-27 NPT
BA-6	2-1/2"	3/8-24
BA-7	3-1/2"	(1/8-27 NPT)
BA-8	3-1/2"	3/8-24

## Compression Fittings



Code	Tube "OD"	Thread	Material
CF-1	1/8"	1/8"-27NPT	Brass
CF-2	1/8"	1/8"-27NPT	Stainless
CF-3	3/16"	1/8"-27NPT	Brass
CF-4	3/16"	1/8"-27NPT	Stainless
CF-5	1/4"	1/4"-18NPT	Brass
CF-6	1/4"	1/4"-18NPT	Stainless

Compression fittings slip over tip for mounting and sealing into vessels

## Thermocouple Wire



Catalog #	Gauge	Type	Wire	Conductor Insulation	Overall Insulation
TW-1	20	J	STRANDED	FIBERGLASS	FIBERGLASS
TW-2	20	J	STRANDED	FIBERGLASS	STAINLESS BRAID
TW-3	24	J	SOLID	FIBERGLASS	FIBERGLASS
TW-4	20	J	SOLID	TEFLON	TEFLON
TW-5	20	J	SOLID	FIBERGLASS	FIBERGLASS
TW-6	20	K	SOLID	FIBERGLASS	FIBERGLASS
TW-7	24	K	SOLID	FIBERGLASS	FIBERGLASS
TW-8	20	T	SOLID	FIBERGLASS	FIBERGLASS
TW-9	24	T	SOLID	FIBERGLASS	FIBERGLASS
TW-10	20	E	SOLID	FIBERGLASS	FIBERGLASS
TW-11	20	K	SOLID	FIBERGLASS	STAINLESS BRAID
TW-12	20	K	STRANDED	FIBERGLASS	FIBERGLASS
TW-13	24	K	SOLID	FIBERGLASS	STAINLESS BRAID
TW-14	20	KX	SOLID	PVC	PVC
TW-15	16	KX	SOLID	PVC	PVC
TW-16	20	JX	SOLID	PVC	PVC

**Note:** We have several other wire types available, If you don't see what you need please don't hesitate to contact us!



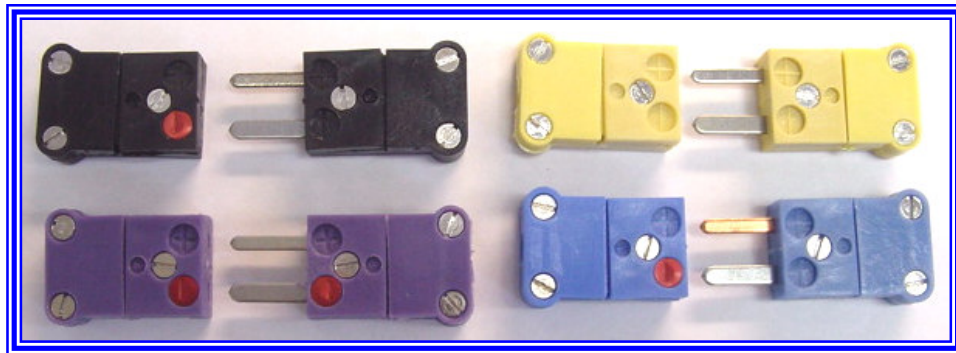


## Standard Thermocouple Plugs and Jacks

When ordering ECS plugs and jacks..... TP= Male plug, TJ= Female jack

Code	Type	Color
TP-1	J	Black
TP-2	K	Yellow
TP-3	T	Blue
TP-4	R\S	Green
TP-5	E	Purple

Code	Type	Color
TJ-1	J	Black
TJ-2	K	Yellow
TJ-3	T	Blue
TJ-4	R\S	Green
TJ-5	E	Purple



## Mini Thermocouple Plugs and Jacks

When ordering ECS plugs and jacks....."M" is mini, TP= Male plug, TJ= Female jack

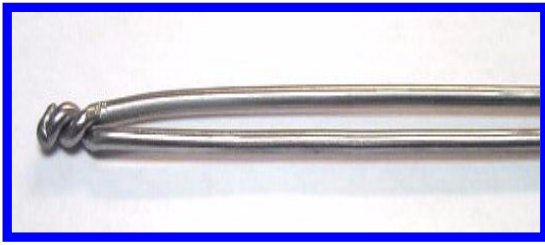
Code	Type	Color
TP-1M	J	Black
TP-2M	K	Yellow
TP-3M	T	Blue
TP-4M	R\S	Green
TP-5M	E	Purple

Code	Type	Color
TJ-1M	J	Black
TJ-2M	K	Yellow
TJ-3M	T	Blue
TJ-4M	R\S	Green
TJ-5M	E	Purple

### NOTES:

- These are just a few of our most popular types of plugs
- If there is a type of plug or jack that you don't see above please contact and ECS representative. There are many other thermocouple plugs and jacks available.





**BM**



**BMI**

## Base Metal Thermocouples

When ordering ECS Base metal thermocouples.... Start with "BM" for a bare wire type.  
Start with "BMI" for insulated type.

Then follow the steps below....

### Step 1 -ISA Calibration

Code	Composition
J	Iron/ Constantan
K	Chromel/ Alumel



### Step 2 -Wire Gauge

Code	Gauge
08	8
14	14

### Step 3 - Overall length

Specify length in inches

### Step 4 - Weld Style

	Code	
	BW	Butt Weld
	TW	Twist Weld

### Step 1 -ISA Calibration

Code	Composition
J	Iron/ Constantan
K	Chromel/ Alumel



### Step 2 -Wire Gauge

Code	Gauge
08	8
14	14

### Step 3 - Overall length

Specify length in inches

### Step 4 - Weld Style

	Code	
	BW	Butt Weld
	TW	Twist Weld

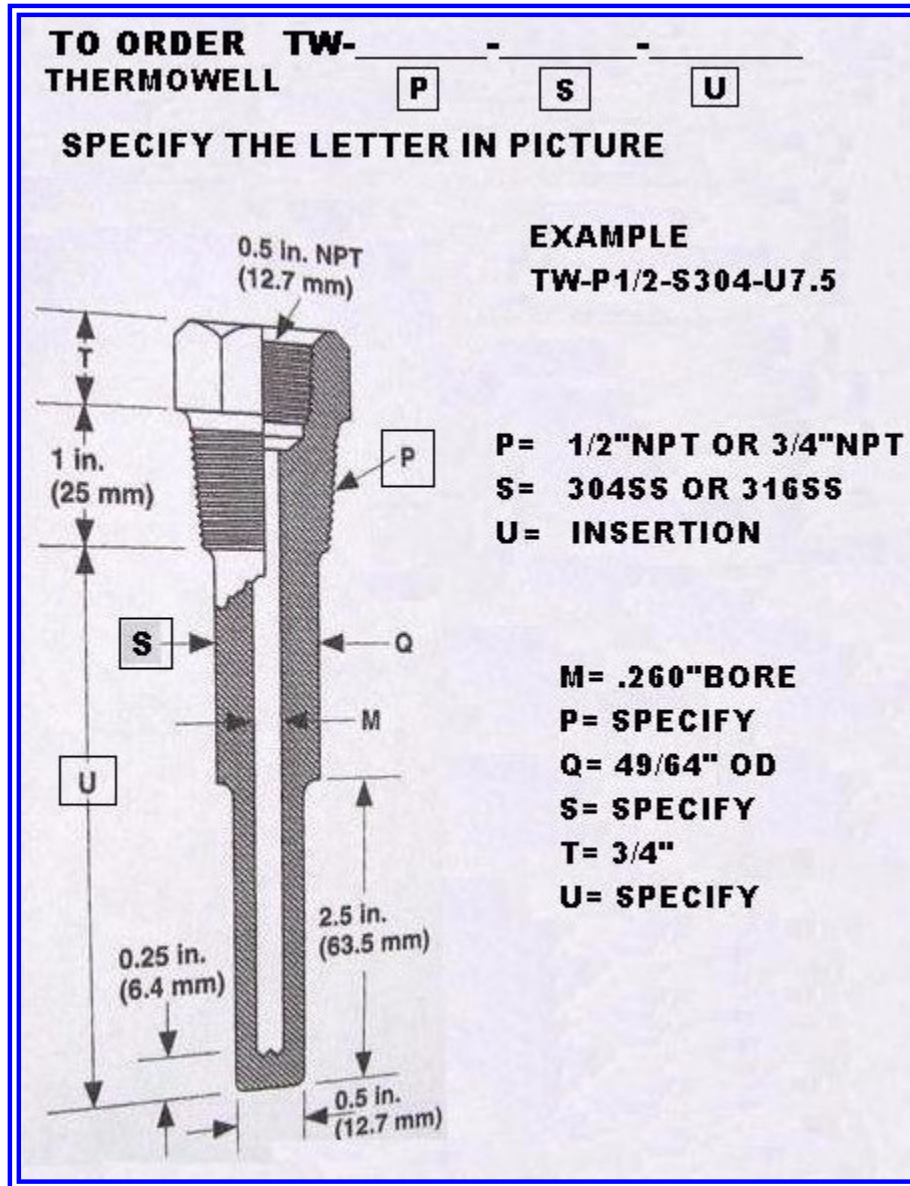
#### Notes:

- 2" leads is standard for "BMI" type





## *Tapered Step Thermowell*



**Note:** The following dimensions are fixed. "M" (.260 Bore)  
 "Q" (49/64" OD This is Standard) "T" (3/4" Height of the Hex)  
 Just Specify: "P,S,and U" dimensions.





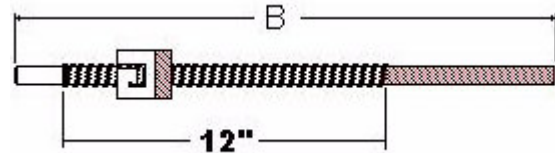
## 12-mm Metric Adjustable Length Spring Bayonet Style

<i>Catalog Number</i>	<i>Termination Style</i>
<b>MET08-1</b>	1
<b>MET08-2</b>	2
<b>MET08-3</b>	3
<b>MET08-4</b>	4
<b>MET08-5</b>	5

<i>Termination Styles:</i>
1) <i>Spade lugs</i>
2) <i>Standard plug</i>
3) <i>Standard jack</i>
4) <i>Mini Plug</i>
5) <i>Mini Jack</i>
<i>Note: for other terminations see pg. 50</i>

**Note:**

- Fits 12 mm OD metric adapter
- 15 mm caps also available



### When building a part number:

**Specify:**

- 1) Catalog number
- 2) Specify "B" length
- 3) Calibration types J, K, T, E
- 4) Add "U" for ungrounded
- 5) Add "JJ" or "KK" etc. for dual element

**Description:**

- Fits hole depth from 1" to 12".
- Cap turns along 12" spring.
- Forms to most angles.
- Wire is stainless steel braid over fiberglass

**Construction Notes:**

- Stainless steel construction with 20 gauge stranded fiberglass wire.
- The probe tip is 3/16" diameter and our standard unit is approximately 3/8" long but can be made longer, units come standard with grounded junction.
- The locking cap on this thermocouple has a double "J" slot.
- Adapters are NOT furnished with the thermocouples and must be ordered separately. (See page 27)

**Optional Notes:**

- For other wire construction types, consult sales engineer.

**Example:** MET08-1-B48-J

*The example calls out a metric adjustable length spring bayonet style, split leads with spade lugs, 48" long stainless braided leads, Type "J" calibration, grounded junction.*





## **12-mm Metric Miniature Adjustable Length Flex-Armor Bayonet Style**

<b>Catalog Number</b>	<b>Termination Style</b>
MET08-14	1
MET08-15	2
MET08-16	3
MET08-17	4
MET08-18	5

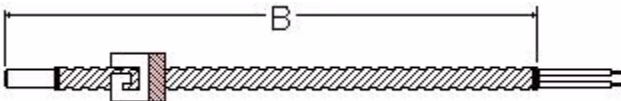
**Termination Styles:**

- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack
- 4) Mini-plug
- 5) Mini-jack

*Note: see pg. 50 for other terminations*

**Note:**

- Fits 12 mm OD metric adapter, (2 "J" slots)



**When building a part number:**

**Specify:**

- 1) Catalog number
- 2) Specify "B" length
- 3) Calibration type J,K,T,E
- 4) Add "U" for ungrounded junction
- 5) Add "JJ" or "KK" etc. for dual element

**Description**

- The hose compresses like a spring.
- The caps turn along the entire length of the hose.

**Please note:**  
**Flex armor .210" OD**  
**Probe 1/8" OD**

**Notes:**

Stainless steel construction with 24-gauge stranded fiberglass insulated wire. The probe tip is 1/8" diameter and our standard unit is approximately 1/2" long but can be made longer. Adapters are NOT furnished with the thermocouples and must be ordered separately. **(See page 27)**

**Optional Notes:**

- For other wire construction types, consult sales engineer.

**Example:** MET08-14-B48-J

**The example calls out a metric miniature adjustable length flex-armor bayonet type, 48" long mini armor cable, type "J" calibration, grounded junction, with 4" leads and spade lugs.**

**Metric**





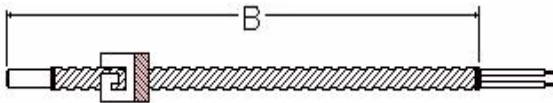
## **Adjustable Length Bayonet Style .240 Diameter Flex-Armor w/Standard Cap**

<b>Catalog Number</b>	<b>Termination Style</b>
<b>BT08-54</b>	1
<b>BT08-55</b>	2
<b>BT08-56</b>	3

### **Termination Styles:**

- 1) *Spade lugs*
- 2) *Standard plug*
- 3) *Standard jack*

**Note:** for other terminations see pg. 50



### **Description:**

- *The hose compresses like a spring.*
- *The caps turn along the entire length of the hose.*
- *These units fit our standard bayonet adapters*

### **When building a part number:**

#### **Specify:**

- 1) Catalog number
- 2) "B" length
- 3) Calibration types J,K,T,E
- 4) Add "U" for ungrounded
- 5) Add "JJ" or "KK" etc. for dual element

### **Construction Notes:**

- Stainless steel construction with 20-gauge fiberglass insulated wire stranded.
- Probe tip is 4-mm diameter tube and is approximately 3/8" long.
- Thermocouples are furnished grounded.
- Adapters are NOT furnished with thermocouple and must be ordered separately.

### **Optional Notes:**

- For other wire constructions types, consult sales engineer.

**Example:** BT08-54-B48-J

*The example calls out a .240 OD adjustable length flex armor bayonet style, 48" leads, Type "J" calibration, grounded junction, with 4" leads and spade lugs.*





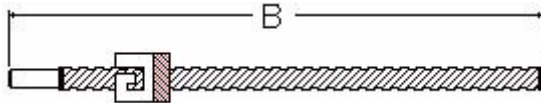
## **Adjustable Length Flex-Armor Bayonet Style .240 Diameter Flex Hose W/P Cap**

<b>Catalog Number</b>	<b>Termination Style</b>
<b>BT08-64</b>	1
<b>BT08-65</b>	2
<b>BT08-66</b>	3

### Termination Styles:

- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

Note: for other terminations see pg. 50



### Description

- Same as spring but not as flexible
- Cap turns along the entire length
- Not as much spring tension
- Flex hose acts like a spring

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) "B" length
- 3) Calibration types J,K,T,E
- 4) Add "U" for ungrounded
- 5) Add "JJ" or "KK" etc. for dual element

#### Construction Notes:

- Stainless steel construction with 20-gauge fiberglass insulated wire stranded.
- Probe tip is 4-mm diameter tube and is approximately 3/8" long.
- Thermocouples are furnished grounded.
- Adapters are NOT furnished with thermocouple and must be ordered separately.

#### Optional Notes:

- For other wire constructions types, consult sales engineer.
- Please call your representative if you do not see what you need above

Example: BT08-64-B48-J

**The example calls out a .240 adjustable length flex armor bayonet style, 48" leads, Type "J" calibration, grounded junction, with 3" leads and spade lugs.**



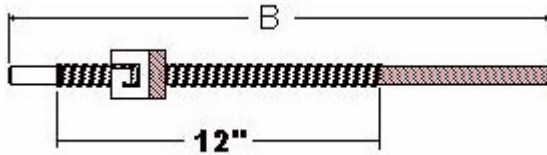


## *Adjustable Length Spring Bayonet Style RTD*

<i>Catalog Number</i>	<i>Termination Style</i>
RBT08-1	1
RBT08-2	2
RBT08-3	3

**Termination Styles:**  
 1) Bare wire leads  
 2) Standard RTD plug  
 3) Standard RTD jack

**Note:** for other terminations see pg. 50



**Description**

- Fits hole depth from 1" to 10".
- Cap turns along 12" spring.
- Forms to most angles.
- Wire is stainless steel braid over fiberglass

**When building a part number:**

**Specify:**

- 1) Catalog number
- 2) "B" length in inches
- 3) Curve: (Ohms change per degrees °C)  
 "E" (.00385) European 400° F  
 "EH" (.00385) European 800° F  
 "A" (.003916) American 400° F  
 "AH" (.003916) American 800° F
- 4) 100 Ohms at "0" degrees ° Celsius
- 5) Number of wires 2,3,4

**Construction Notes:**

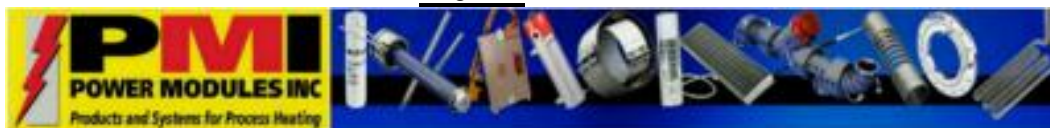
- Stainless steel construction with fiberglass or Teflon insulated stranded wire.
- The probe tip is 3/16" diameter and our standard unit is approximately 3/4" long
- Adapters are NOT furnished with RTD probes and must be ordered separately. (See page 27)

**Optional Notes:**

- For other wire construction types, consult sales engineer.
- For 6" spring add option Z165 at end of part number
- For 12mm & 15mm metric caps please consult

**Example:** RBT08-1-B48-EH100-2

*The example calls out a spring type adjustable style, 48" long stainless steel braided leads, and fiberglass insulated leads, with a two-wire construction.*





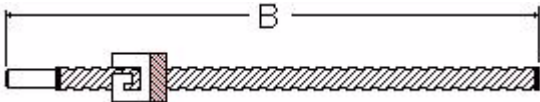
## **Adjustable Length Flex-Armor Bayonet Style RTD**

<i>Catalog Number</i>	<i>Termination Style</i>
RBT08-14	1
RBT08-15	2
RBT08-16	3

**Termination Styles:**

- 1) Bare wire leads
- 2) Standard RTD plug
- 3) Standard RTD jack

**Note:** for other terminations see pg. 50



**When building a part number:**

**Specify:**

- 1) Catalog number
- 2) "B" length in inches
- 3) Curve: (Ohms change per degrees °C)  
 "E" (.00385) European 400° F  
 "EH" (.00385) European 800° F  
 "A" (.003916) American 400° F  
 "AH" (.003916) American 800° F
- 4) 100 Ohms at "0" degrees° Celsius
- 5) Number of wires 2,3,4

**Description**

- **Same as spring but not as flexible**
- **Cap turns along the entire length**
- **Not as much spring tension**
- **Flex hose acts like a spring**

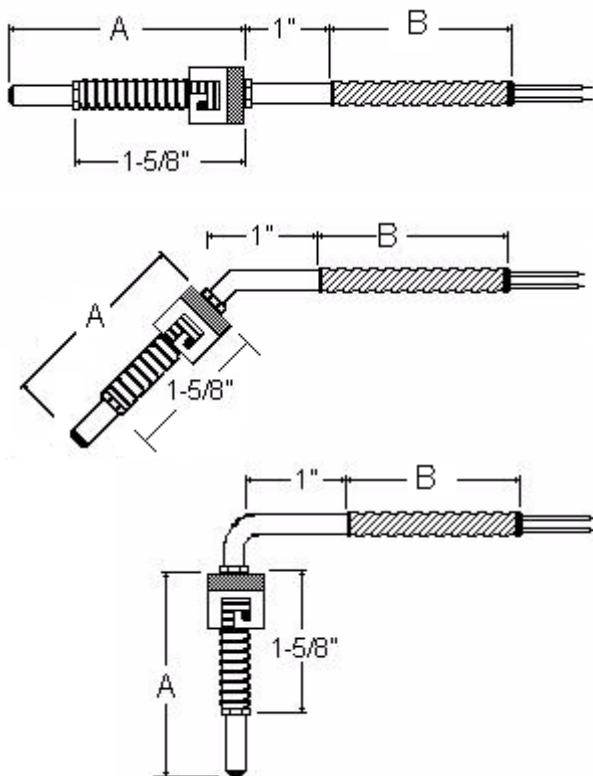
**Construction Notes:**

- Stainless steel construction with fiberglass or Teflon insulated wire inside the flex-armor.
- Probe tip is 3/16" diameter tube and is approximately 1/2" long.
- Adapters are NOT furnished with the RTD probes and must be ordered separately.

***The example calls out an adjustable length, 48" long flex armor cable type RTD, with Fiberglass insulated leads, and a two-wire construction.***



## Flex-Armor fixed Bayonet Style RTD



1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
RBT08-34	1	RBT08-4	1
RBT08-37	2	RBT08-7	2
RBT08-40	3	RBT08-10	3

1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
RBT08-35	1	RBT08-5	1
RBT08-38	2	RBT08-8	2
RBT08-41	3	RBT08-11	3

1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
RBT08-36	1	RBT08-6	1
RBT08-39	2	RBT08-9	2
RBT08-42	3	RBT08-12	3

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) "A" length in inches
- 3) "B" length in inches
- 4) Curve: (Ohms change per degrees °C)  
 "E" (.00385) European 400° F  
 "EH" (.00385) European 800° F  
 "A" (.003916) American 400° F  
 "AH" (.003916) American 800° F
- 5) 100 Ohms at "0" degrees° Celsius
- 6) Number of wires 2,3,4

#### Notes:

- Either Teflon or fiberglass wire inside the flex-armor
- Adapters are NOT furnished with thermocouples and must be ordered separately

Example: RBT08-4-A4-B48-EH100-3

*This example calls out a bayonet style RTD with a 3/16"OD probe, 4" insertion length, 48" of flex-armor, with fiberglass wire inside the hose, 3 wire construction*

**Termination Styles:**

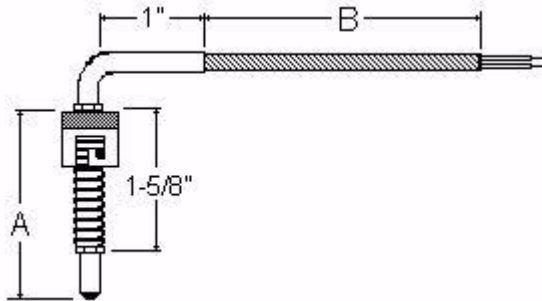
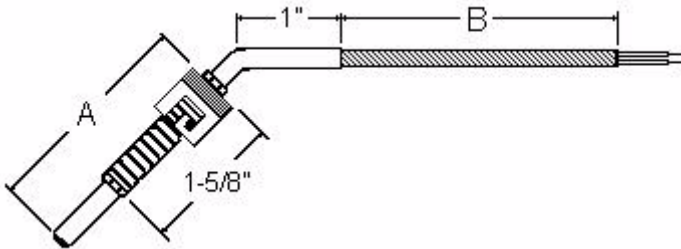
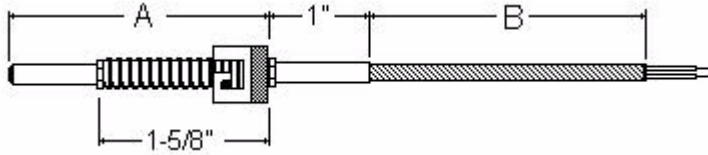
- 1) Spade lugs
- 2) Standard RTD plug
- 3) Standard RTD jack

**Note:**  
 For other terminations see pg. 50





## Stainless Steel Braided Bayonet Style RTD



1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
RBT18-4	1	RBT18-14	1
RBT18-7	2	RBT18-17	2
RBT18-10	3	RBT18-20	3

1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
RBT18-5	1	RBT18-15	1
RBT18-8	2	RBT18-18	2
RBT18-11	3	RBT18-21	3

1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
RBT18-6	1	RBT18-16	1
RBT18-9	2	RBT18-19	2
RBT18-12	3	RBT18-22	3

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) "A" length in inches
- 3) "B" length in inches
- 4) Curve: (Ohms change per degrees °C)  
 "E" (.00385) European 400° F  
 "EH" (.00385) European 800° F  
 "A" (.003916) American 400° F  
 "AH" (.003916) American 800° F
- 5) 100 Ohms at "0" degrees° Celsius
- 6) Number of wires 2,3,4

#### Notes:

- Either Teflon or fiberglass under Stainless steel braid
- Adapters are NOT furnished with thermocouples and must be ordered separately

Example: RBT18-14-A4-B48-EH100-3

*This example calls out a bayonet style RTD, with stainless steel braid leads, 3/16"OD probe, 3" insertion length, 48" leads, with a 3 wire construction*

**Termination Styles:**

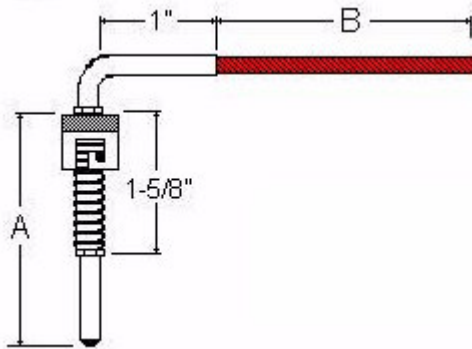
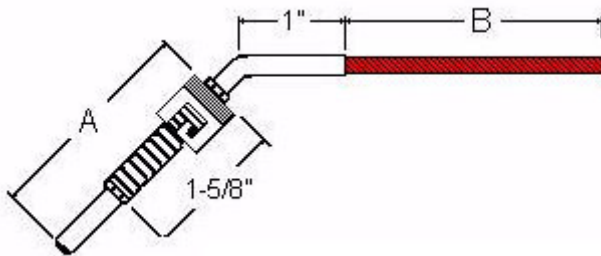
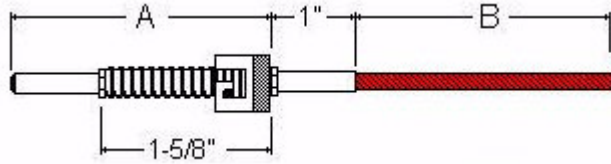
- 1) Spade Lugs
- 2) Standard RTD plug
- 3) Standard RTD jack

**Note:**  
For other terminations see pg. 50





## Fiberglass Insulated Bayonet Style RTD



1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
RBT38-4	1	RBT38-14	1
RBT38-7	2	RBT38-17	2
RBT38-10	3	RBT38-20	3

1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
RBT38-5	1	RBT38-15	1
RBT38-8	2	RBT38-18	2
RBT38-11	3	RBT38-21	3

1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
RBT38-6	1	RBT38-16	1
RBT38-9	2	RBT38-19	2
RBT38-12	3	RBT38-22	3

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) "A" length in inches
- 3) "B" length in inches
- 4) Curve: (Ohms change per degrees °C)  
 "E" (.00385) European 400° F  
 "EH" (.00385) European 800° F  
 "A" (.003916) American 400° F  
 "AH" (.003916) American 800° F
- 5) 100 Ohms at "0" degrees° Celsius
- 6) Number of wires 2,3,4

**Notes:** Stainless steel construction with fiberglass insulated wire.

**Example:** RBT38-14-A4-B48-EH100-2

**This example calls out a bayonet style RTD, 3/16"OD probe, 4' insertion, with 48" of fiberglass insulation, 2 wire construction**

### Termination Styles:

- 1) Spade Lugs
- 2) Standard RTD plug
- 3) Standard RTD jack

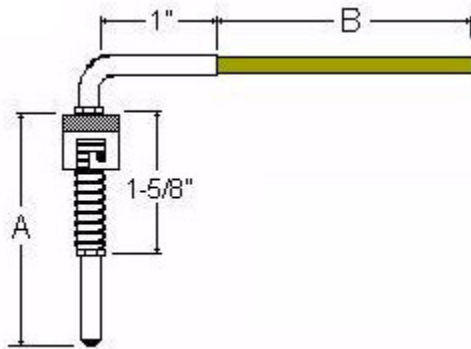
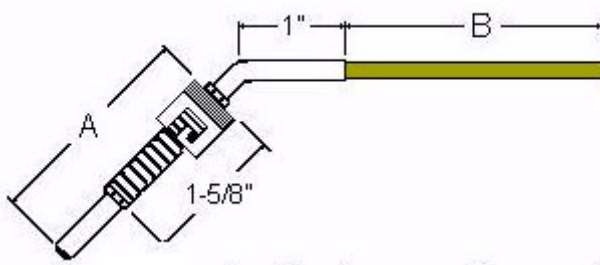
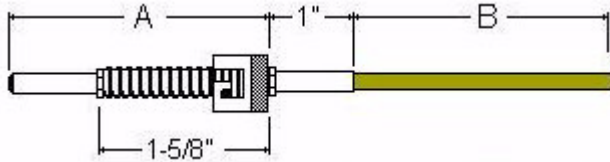
#### Note:

For other terminations styles see pg. 50





## Teflon Insulated Bayonet Style RTD



1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
RBT28-4	1	RBT28-14	1
RBT28-7	2	RBT28-17	2
RBT28-10	3	RBT28-20	3

1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
RBT28-5	1	RBT28-15	1
RBT28-8	2	RBT28-18	2
RBT28-11	3	RBT28-21	3

1/8" Diameter		3/16" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style
RBT28-6	1	RBT28-16	1
RBT28-9	2	RBT28-19	2
RBT28-12	3	RBT28-22	3

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) "A" length in inches
- 3) "B" length in inches
- 4) Curve: (Ohms change per degrees °C)
- "E" (.00385) European 400° F
- "A" (.003916) American 400° F
- 5) 100 Ohms at "0" degrees ° Celsius
- 6) Number of wires 2,3,4

**Notes:** Stainless steel construction with Teflon insulated wire.

**Example:** RBT28-14-A4-B48-E100-2

*This example calls out a bayonet style RTD with a 4" insertion length, 48" of Teflon insulated leads, with a 2 wire construction*

### Termination Styles:

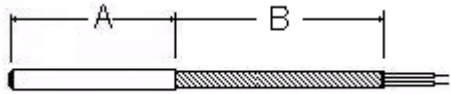
- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

**Note:** for other terminations see pg. 50

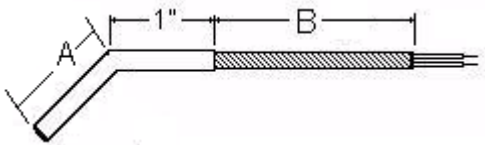




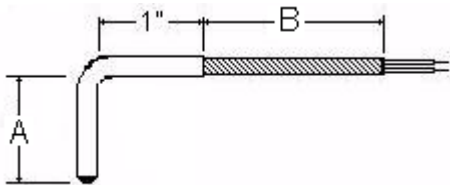
## Stainless Steel Braid Style RTD



1/8" Diameter		3/16" Diameter		1/4" Diameter	
<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>
RCT28-1	1	RCT38-1	1	RCT48-1	1
RCT28-4	2	RCT38-4	2	RCT48-4	2
RCT28-7	3	RCT38-7	3	RCT48-7	3



1/8" Diameter		3/16" Diameter		1/4" Diameter	
<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>
RCT28-2	1	RCT38-2	1	RCT48-2	1
RCT28-5	2	RCT38-5	2	RCT48-5	2
RCT28-8	3	RCT38-8	3	RCT48-8	3



1/8" Diameter		3/16" Diameter		1/4" Diameter	
<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>
RCT28-3	1	RCT38-3	1	RCT48-3	1
RCT28-6	2	RCT38-6	2	RCT48-6	2
RCT28-9	3	RCT38-9	3	RCT48-9	3

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) "A" length in inches
- 3) "B" length in inches
- 4) Curve: (Ohms change per degrees °C)  
 "E" (.00385) European 400° F  
 "EH" (.00385) European 800° F  
 "A" (.003916) American 400° F  
 "AH" (.003916) American 800° F
- 5) 100 Ohms at "0" degrees° Celsius
- 6) Number of wires 2,3,4

#### Termination Styles:

- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

*Note: for other terminations see pg. 50*

**Notes:** Stainless steel construction with Teflon or fiberglass under stainless steel braid.

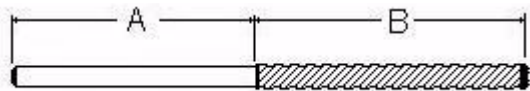
**Example:** RCT38-1-A4-B48-EH100-2

**This example calls out a compression style RTD with 48" stainless steel braid leads, 3/16" OD probe, 4" insertion with a 2-wire construction.**

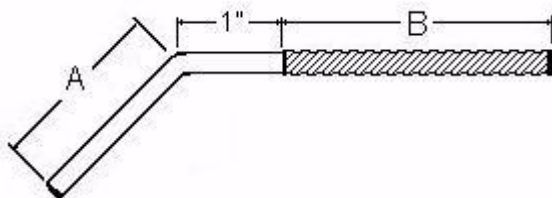




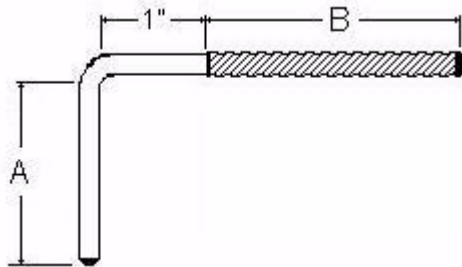
## Flex-Armor Style RTD



1/8" Diameter		3/16" Diameter		1/4" Diameter	
<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>
RCT12-1	1	RCT18-1	1	RCT13-1	1
RCT12-4	2	RCT18-4	2	RCT13-4	2
RCT12-7	3	RCT18-7	3	RCT13-7	3



1/8" Diameter		3/16" Diameter		1/4" Diameter	
<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>
RCT12-2	1	RCT18-2	1	RCT13-2	1
RCT12-5	2	RCT18-5	2	RCT13-5	2
RCT12-8	3	RCT18-8	3	RCT13-8	3



1/8" Diameter		3/16" Diameter		1/4" Diameter	
<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>	<i>Catalog Number</i>	<i>Term. Style</i>
RCT12-3	1	RCT18-3	1	RCT13-3	1
RCT12-6	2	RCT18-6	2	RCT13-6	2
RCT12-9	3	RCT18-9	3	RCT13-9	3

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) "A" length in inches
- 3) "B" length in inches
- 4) Curve: (Ohms change per degrees °C)  
 "E" (.00385) European 400° F  
 "EH" (.00385) European 800° F  
 "A" (.003916) American 400° F  
 "AH" (.003916) American 800° F
- 5) 100 Ohms at "0" degrees ° Celsius
- 6) Number of wires 2,3,4

#### Termination Styles:

- 1) *Spade lugs*
- 2) *Standard plug*
- 3) *Standard jack*

*Note: for other terminations see pg. 50*

Notes: Stainless steel construction with Teflon or fiberglass insulated wire.

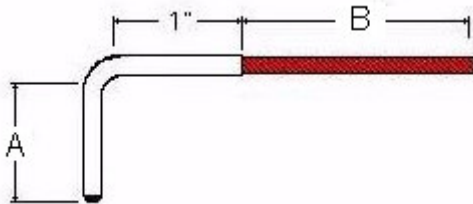
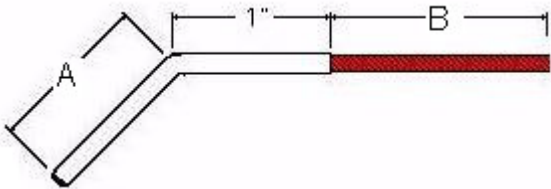
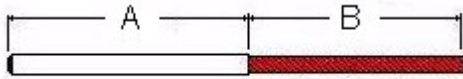
Example: RCT18-1-A4-B48-EH100-2

*This Example calls out a compression style RTD with 48" Flex-armor leads, 3/16"OD probe, 4" insertion length, with a 2-wire construction*





## *fiberglass Lead Style RTD*



1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
RCT17-38	1	RCT18-38	1	RCT19-38	1
RCT17-45	2	RCT18-45	2	RCT19-45	2
RCT17-46	3	RCT18-46	3	RCT19-46	3

1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
RCT17-47	1	RCT18-47	1	RCT19-47	1
RCT17-48	2	RCT18-48	2	RCT19-48	2
RCT17-49	3	RCT18-49	3	RCT19-49	3

1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
RCT17-50	1	RCT18-50	1	RCT19-50	1
RCT17-51	2	RCT18-51	2	RCT19-51	2
RCT17-52	3	RCT18-52	3	RCT19-52	3

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) "A" length in inches
- 3) "B" length in inches
- 4) Curve: (Ohms change per degrees °C)  
 "EH" (.00385) European 800° F  
 "AH" (.003916) American 800° F
- 5) Number of wires 2,3,4
- 6) 100 Ohms at "0" degrees ° Celsius

#### Termination Styles:

- 1) *Spade lugs*
- 2) *Standard plug*
- 3) *Standard jack*

*Note: for other terminations see pg. 50*

#### Notes:

- 24 gauge wire
- Adapters are NOT furnished with thermocouples and must be ordered separately

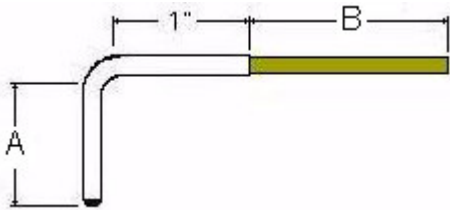
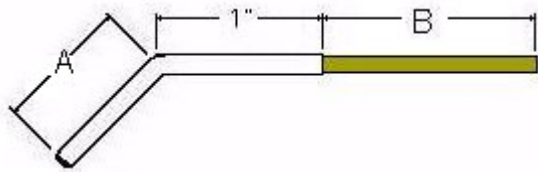
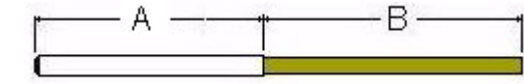
**Example:** RCT18-38-A4-B48-EH100-3

**This example calls out a compression style RTD with 48" of fiberglass-insulated leads, 3/16" OD probe, 4" insertion length, and a 3-wire construction.**





## Teflon Lead Style RTD



1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
RCT28-11	1	RCT38-11	1	RCT48-11	1
RCT28-14	2	RCT38-14	2	RCT48-14	2
RCT28-17	3	RCT38-17	3	RCT48-17	3

1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
RCT28-12	1	RCT38-12	1	RCT48-12	1
RCT28-15	2	RCT38-15	2	RCT48-15	2
RCT28-18	3	RCT38-18	3	RCT48-18	3

1/8" Diameter		3/16" Diameter		1/4" Diameter	
Catalog Number	Term. Style	Catalog Number	Term. Style	Catalog Number	Term. Style
RCT28-13	1	RCT38-13	1	RCT48-13	1
RCT28-16	2	RCT38-16	2	RCT48-16	2
RCT28-19	3	RCT38-19	3	RCT48-19	3

### When building a part number:

#### Specify:

- 1) Catalog number
- 2) "A" length in inches
- 3) "B" length in inches
- 4) Curve: (Ohms change per degrees °C)  
 "E" (.00385) European 400° F  
 "A" (.003916) American 400° F
- 5) 100 Ohms at "0" degrees ° Celsius
- 6) Number of wires 2,3,4

#### Termination Styles:

- 1) Spade lugs
- 2) Standard plug
- 3) Standard jack

**Note:** for other terminations see pg. 50

#### Notes:

- 24 gauge wire for 1/8" diameter
- Adapters are NOT furnished with thermocouples and must be ordered separately

**Example:** RCT38-11-A4-B48-E100-3

**This example calls out a compression style RTD, with 48" Teflon insulated leads, 3/16"OD probe, 4" insertion length with a 3-wire construction.**





## *Rigid Style RTD*

*When building an ECS part number.... Follow the steps below. See example on the bottom of the page.*

### **Step 1 –Platinum Element Type**

<i>Code</i>	<i>Value</i>	<i>Coefficient</i>	<i>Temp. Range</i>
<b>A</b>	100 ohm	.00392	400 °F
<b>E</b>	100 ohm	.00385	400 °F
<b>AH</b>	100 ohm	.00392	+400 °F
<b>EH</b>	100 ohm	.00392	+400 °F

### **Step 2 –Sheath Diameter**

<i>Code</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<i>Diameter</i>	1/8"	3/16"	1/4"	3/8"

### **Step 3 –Sheath Material**

<i>Code</i>	<i>Material</i>
<b>304</b>	304 Stainless
<b>316</b>	316 Stainless

### **Step 4 –Sheath Length**

Specify length in inches

### **Step 5 –Specify Number of**

<i>Code</i>	<i>Construction</i>
<b>2</b>	2 Wires
<b>3</b>	3 Wires
<b>4</b>	4 Wires

### **Step 6 –Termination Style**

<i>Code</i>	<i>Description</i>
<b>P</b>	Standard Male RTD Plug
<b>J</b>	Standard Female RTD Jack

**Note:** For other termination styles see pg. 50

**Example:** EH100-2-304-12-3-P

*This example calls out a 100-ohm .00385 curve, 3/16" OD probe, 304 stainless steel, 12" long, 3 wire, with a male plug.*





## NEW!!! Rigid Style RTD Assemblies

When ordering ECS Rigid style RTD assemblies first choose platinum element type then follow the steps below....

### Step 1- Platinum Element Type

Code	OHMS	Curve	Max Temp.
A	100, 500 or 1000	003916	400 °F
E	100, 500 or 1000	00385	400 °F
AH	100, 500 or 1000	003916	800 °F
EH	100, 500 or 1000	00385	800 °F

### Step 2- Sheath Diameter

Code	1	2	3	4
Diameter	1/8"	3/16"	1/4"	3/8"

### Step 3- Sheath Material

Code	Material
304	304 Stainless
316	316 Stainless

### Step 4- Sheath Length

Specify sheath length (Inches)

### Step 5- Lead Configuration (RTD)

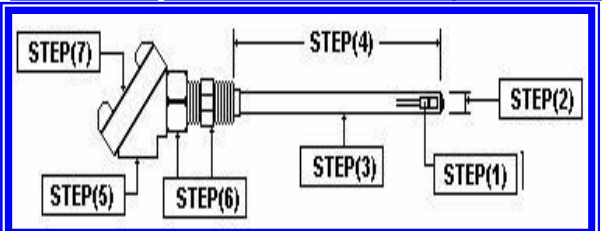
Code	Lead Configuration
2	2 Wire
3	3 Wire
4	4 Wire

### Step 6- Termination

Code	Material
SHA	1/2" NPT ALUMINUM HEAD
SHI	1/2" NPT CAST IRON HEAD

### Step 7- Optional Transmitter

Code	Output	Temp Range
70 MQ	4-20 MA	Specify
0	None	-



When building a part # begin with Choose Element type then follow the steps...

Steps	1	2	3	4	5	6	7
Code	EH100	3	304	12	G	SHA	70 MQ

**Example:**

100ohm, 1/4" OD, 304 SS, 12" Long, Aluminum Head, 4-20 MA Transmitter

### NOTES:

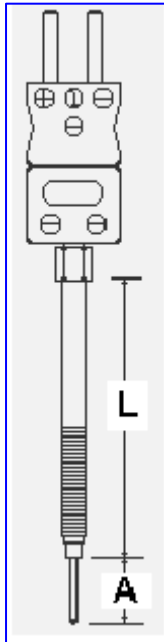
- Other Sheath Diameters Available
- Other Sheath Material Available
- Other Heads Available
- For custom applications please call your local representative





**New!!! Plastic Meltbolt Style RTD**

When building an ECS part #.... Follow the steps below. Please see example at the bottom of the page



<b>Fiberglass Insulated</b>	<b>“A” Length</b>	<b>“L” Length</b>
<b>Catalog Number</b>	<b>Probe Length</b>	<b>Bolt Length</b>
RMT28-1	Flush	3”
RMT28-2	1/4”	3”
RMT28-3	1/2”	3”
RMT28-4	3/4”	3”
RMT28-5	1”	3”
RMT28-6	Flush	6”
RMT28-7	1/4”	6”
RMT28-8	1/2”	6”
RMT28-9	3/4”	6”
RMT28-10	1”	6”

**When building a part number:**

**Specify:**

- 1) Catalog number
- 2) Curve, “EH” .00385 European Curve  
“AH” .00392 American Curve
- 3) Number of wires 2,3,4

**Notes:**

**Consult for these other options:**

- Larger Diameters
- Values other than 100 ohms (500 ohms, 1000ohms, etc.)
- Class A elements

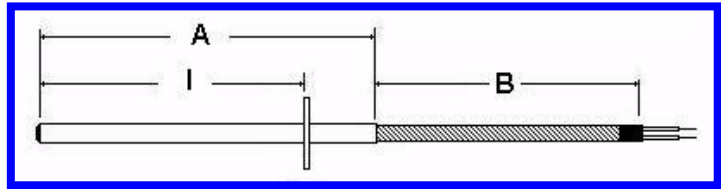
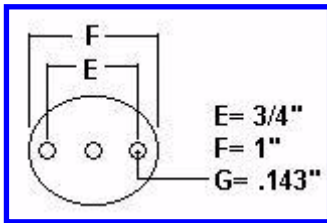
Other “A” & “L” lengths available

**Optional Notes:**

Consult ECS for other “A” (probe) lengths, as well as other “L”(bolt) lengths.

**Example:** RMT28-1-EH100-3





This example calls out a meltbolt extension style RTD, with a 3" bolt, flush tip, .00385 curve, and a 3-wire construction

## NEW!!!! Round Flange Style Thermocouple & RTD

Start part number with "FS" then follow the 9 steps below.....

### Step 1- ISA Calibration

Code	Calibration
J	Type- J
K	Type- K
T	Type- T
E	Type- E
385	00385/100 ohm
392	00392/100 ohm

### Step 2- Sheath Diameter

Code	Diameter
1	1/8"
2	3/16"
3	1/4"

### Step 3- Sheath Material

Code	Material
304	304 Stainless
316	316 Stainless

### Step 4- Sheath Length

"A" = Overall Probe Length  
"I" = Insertion Length  
1" behind the flange is Standard

### Step 5- Measuring Junction

Code	Junction Type
G	Grounded
U	Ungrounded
E	Exposed

### Step 6- Lead Wire Material

Code	Lead Wire Type
GB	Fiberglass Braid
SB	Stainless Steel Braid
FH	Flexible Armor Hose
TT	Teflon-Teflon
KK	Kapton

### Step 7- Lead Wire Length (Inches)

Specify "B" Length (Inches)

### Step 8- Termination Type

Code	Termination Type
P	Standard Male Plug
J	Standard Female Jack
SL	Spade Lugs
ST	Stripped Leads No Lugs
MP	Mini Male Plug
MJ	Mini Female Jack

### Step 9- Lead Configuration (RTD)

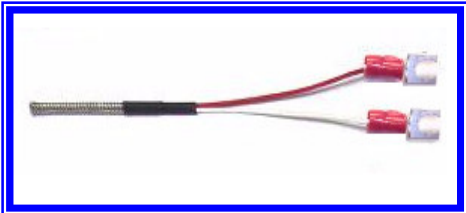
Code	Lead Configuration
2	2 Wire
3	3 Wire
4	4 Wire

**Example TC:**  
FS-J-2-304-A6-I5-G-SB48-P  
**Example RTD:**  
FS-385-2-304-A6-I5-SB48-ST-3

# Termination Styles (Thermocouples & RTDs)

## Terminations Styles for Thermocouples

Style 1



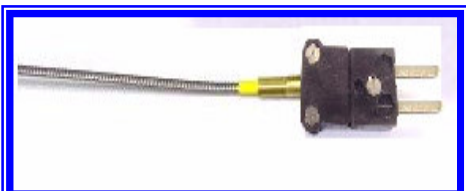
Style 2



Style 3



Style 4

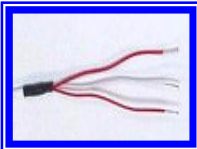
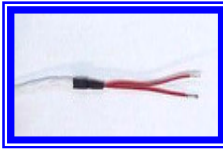


Style 5



## Terminations Styles for RTDs

Style 1  
2 or 3  
Wire



Style 2  
2  
Wire



Style 3  
2  
Wire



Style 4  
3  
Wire



Style 5  
3  
Wire



**PLEASE NOTE:** ALL THERMOCOUPLES COME WITH SPADE LUGS ON THE LEAD ENDS. ADD "Z175" TO END OF THE PART # FOR BARE WIRES



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