

Melt Bolt Thermocouples

Melt Bolt Thermocouples for Plastic Extruders or Injection Molding Machines

Design Features

* **Bolt Material**

Stainless Steel
1/2-20 UNF Thread

* **Probe Material**

Stainless Steel

* **Probe Diameters**

Standard 1/8"

* **Calibration**

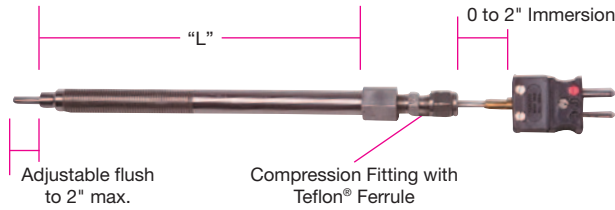
ANSI Type J
(Iron-Constantan)

* **Junction Style**

Closed End Grounded

Style A—Adjustable Tip

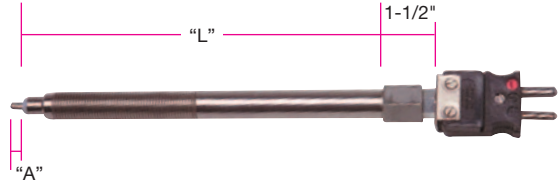
- * Eliminates excess inventory.
- * Tip can be field adjusted from flush to 2 inches.
- * MgO insulated.
- * Can be installed wherever standard melt thermocouples are in use.
- * Bolt with Teflon® insert at tip has a maximum operating temperature of 500°F (260°C). Without insert 1400°F (760°C).



Thermocouple Diameter	Part Number			
	Without Teflon® Insert		With Teflon® Insert	
	L = 3"	L = 6"	L = 3"	L = 6"
1/8"†	TMB00001	TMB00002	TMB00003	TMB00004
3/16"	TMB00005	TMB00006	N/A	N/A

†For 1/8" diameter, it is not recommended to immerse tip more than 1" due to bending and breakage in melt flow.

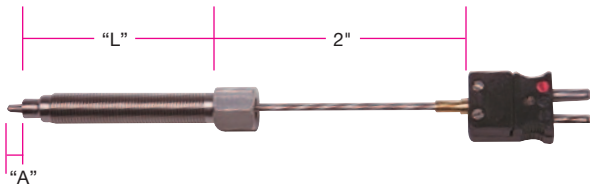
Style R—Fixed Immersion with No Extension



Insulation—MgO or Fiberglass

Part Number MgO Insulation	"A" (in)	"L" (in)	Part Number Fiberglass Insulation
TMB00027	Flush	3	TMB00037
TMB00028	1/4	3	TMB00038
TMB00029	1/2	3	TMB00039
TMB00030	3/4	3	TMB00040
TMB00031	1	3	TMB00041
TMB00032	Flush	6	TMB00042
TMB00033	1/4	6	TMB00043
TMB00034	1/2	6	TMB00044
TMB00035	3/4	6	TMB00045
TMB00036	1	6	TMB00046

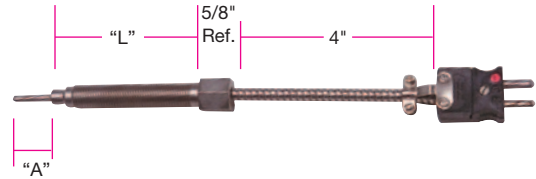
Style E—Fixed Immersion with Rigid Extension



Insulation—MgO or Fiberglass

Part Number MgO Insulation	"A" (in)	"L" (in)	Part Number Fiberglass Insulation
TMB00007	Flush	3	TMB00017
TMB00008	1/4	3	TMB00018
TMB00009	1/2	3	TMB00019
TMB00010	3/4	3	TMB00020
TMB00011	1	3	TMB00021
TMB00012	Flush	6	TMB00022
TMB00013	1/4	6	TMB00023
TMB00014	1/2	6	TMB00024
TMB00015	3/4	6	TMB00025
TMB00016	1	6	TMB00026

Style F—Fixed Immersion with Flexible Extension



Insulation—Fiberglass only

Stock Items Are Shown In RED

"A" (in)	"L" (in)	Part Number Fiberglass Insulation
Flush	3	TMB00047
1/4	3	TMB00048
1/2	3	TMB00049
3/4	3	TMB00050
1	3	TMB00051
Flush	6	TMB00052
1/4	6	TMB00053
1/2	6	TMB00054
3/4	6	TMB00055
1	6	TMB00056



See page 14-101 for Blank Melt Bolts

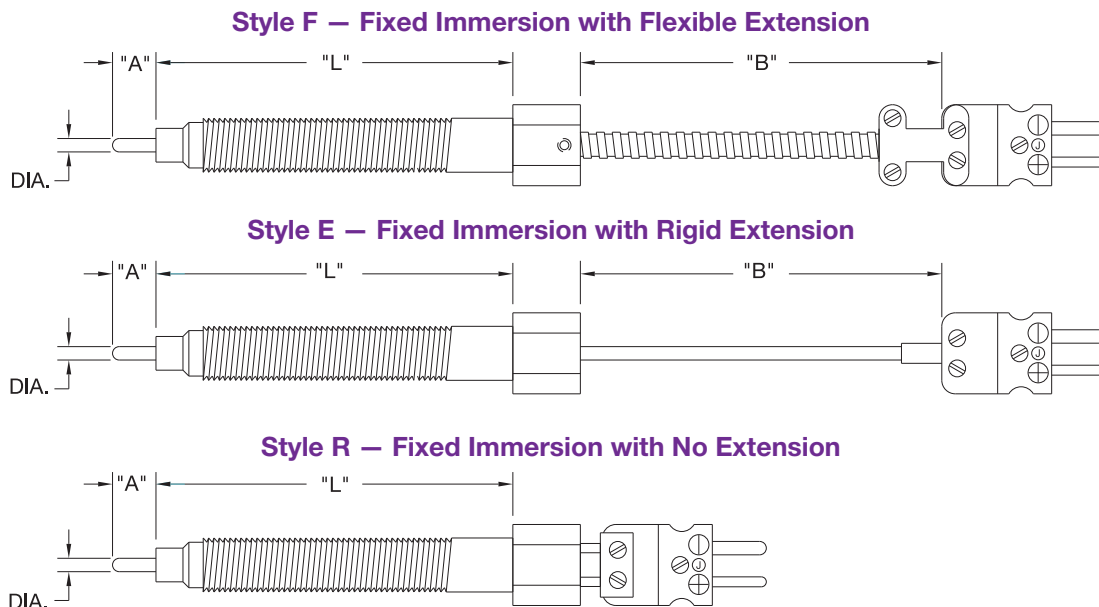
Melt Bolt Thermocouples (Custom Engineered/Manufactured)

Design Features

- * Designed to Measure the Temperature of Plastic Stream of an Extruder or Injection Molding Machine
- * 304 Stainless Steel Construction
- * 900°F (482°C) Operating Temperature
- * 1/2-20 UNF Thread

Ordering Information

TMB Melt Bolt Thermocouples are offered with the options listed in the worksheet below. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements, and a part number will be assigned.



Ordering Code: TMB -

Style BOX 1
F = w/ Flexible Extension
E = w/ Rigid Extension
R = w/ No Extension

Tip Diameter BOX 2
F = 0.125 (Standard)
G = 0.188
X = Other (Specify)

Melt Bolt Length BOX 3
 "L" Dim.
03 = 3" **09** = 9"
04 = 4" **10** = 10"
06 = 6" **12** = 12"

Calibration BOX 4
 ANSI Standard Tolerances **J** **K** **E** **T** **N**

"A" Dimension BOX 5
 Whole inches
0 to **9** (Enter 0 if less than 1)

Junction BOX 7
G = Grounded
U = Ungrounded

"B" Dimension BOX 8
 Whole inches
 Example: Enter **006** for 6 inches
 Enter **000** for Style R

"A" Dimension BOX 6
 Fractional inches
0 = 0" **3** = 3/8" **6** = 3/4"
1 = 1/8" **4** = 1/2" **7** = 7/8"
2 = 1/4" **5** = 5/8"

Termination BOX 9 †
B = 2-1/2 in. Split Leads (Style F only) **P** = Standard Plug
S = Spade Lugs (Style F only) **J** = Standard Jack
C = Spade Lugs with BX Conn. (Style F only) **K** = Standard Plug and Jack
X = Other (Specify)

Special Requirements BOX 10
X = Specify
0 = None

† See page 14-9 for Termination Style descriptions

⚠ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

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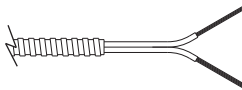
Optional Thermocouple Termination Styles

Optional Termination Styles

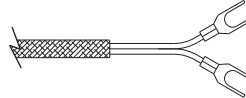
Available for the following thermocouples:

Style	Page
TTW	14-2
TCP	14-3 through 14-5
TRW	14-6
TSW	14-6
TPW	14-7
TNW	14-7
TWW	14-8
TMW	14-8
MTA1	14-15

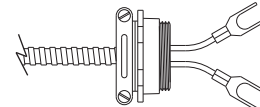
Style B—Plain Ends



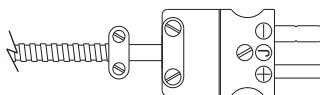
Style S—Spade Lugs



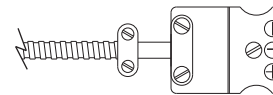
Style C—Spade Lugs with BX connector



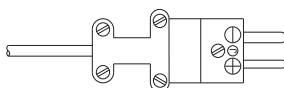
Style P—Standard Plug



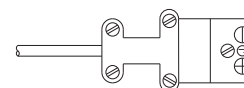
Style J—Standard Jack



Style D—Miniature Plug



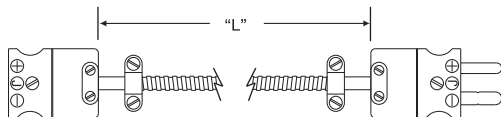
Style E—Miniature Jack



Thermocouple Extension Assemblies

Termination 1

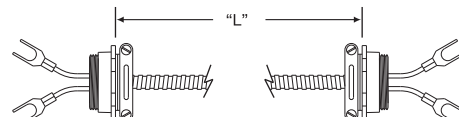
Termination 2



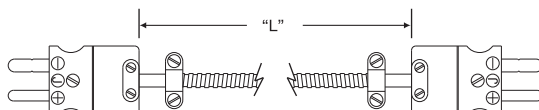
Jack to Plug

Termination 1

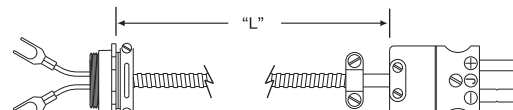
Termination 2



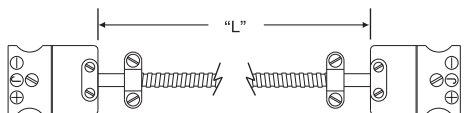
BX Connector to BX Connector



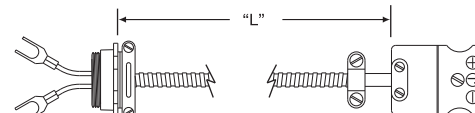
Plug to Plug



BX Connector to Plug



Jack to Jack



BX Connector to Jack

Ordering Information

ECA Thermocouple Extension Assemblies are offered with the options listed in the worksheet below. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements, and a part number will be assigned.

Ordering Code: **ECA** -

Termination 1 & 2 BOX 1 & 2 †

S = Spade Lugs **B** = 2-1/2 in. Split Leads
C = Spade Lugs with BX Conn. **D** = Miniature Plug
P = Standard Plug **E** = Miniature Jack
J = Standard Jack **X** = Other (Specify)

Calibration BOX 3

ANSI Standard Tolerances **J K E T N**

† See above for Termination Style descriptions

"L" Dimension BOX 4

Whole inches **006** to **999**

Lead Insulation BOX 5

	Standard	w/ SS Overbraid	w/ SS Armor Cable
Fiberglass 900°F (482°C)	S	B	A
Teflon® 400°F (204°C)	T	D	F

Special Requirements BOX 6

X = Specify
0 = None

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