

Miniature thermocouple assemblies have very small swaged sheath diameters containing standard-purity MgO (96%) insulated thermocouple elements. The small sheath size provides accurate and fast response time temperature measurement in a variety of laboratory, process, and special applications. These units are only offered with ungrounded junctions to prolong their useful life. Illustrated below are the most commonly used assemblies, however, other sensor configurations are available upon request.

X

B

X

1-1

1-2

1-3

1-4

2

3

4

5

Example Order Number:

J

040

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U

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16

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1-1 Thermocouple Types

CODE
J
K

1-2 Sheath Diameter

CODE	DIAMETER (INCHES)
032	0.032
040	0.040

1-3 Sheath Material

CODE	MATERIAL
3	Alloy 600
8	316 Stainless steel

1-4 Measuring Junction

CODE	MATERIAL
U	Ungrounded junction
M	Special limits (consult factory)

2 "X" Dimension

Insert three digit sheath length ("X" Dimension) in inches

3 Sheath Terminations

CODE	DESCRIPTION
4	Standard plug
5	Standard jack
6	Miniature plug
7	Miniature jack
Options	
MC	Mating connector
Leadwire Transitions	
15	Extension leadwire transition fitting with relief spring 204 °C [400 °F]
16	Extension leadwire transition fitting with heat-shrink tubing 104 °C [220 °F]
19	Extension leadwire transition ftg. w/o relief spring or heat-shrink tubing 204 °C [400 °F]
Options	
HT <sup>[1]</sup>	High Temperature Potting 538 °C [1000 °F]
[1] Not available with option 16. When specifying flex armor, Option 19 must be selected.	

MgO

Configuration Code Mg03  
Extension Leadwire and Leadwire Terminations

Select desired extension leadwire type (in inches) and leadwire termination and options (if desired) by order code number from the tables below.

OPTIONS 4 OR 4,MC

OPTIONS 6 OR 6,MC

OPTION 3

OPTION 2

Example Order Number:

J0408UM

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F1048

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6

4 Extension Leadwire

	CODE	DESCRIPTION	AVAILABLE CALIBRATIONS		TEMP. RATING
Fiberglass	F1	Fiberglass insulation - solid conductor	J	K	482 °C [900 °F]
	F1A	Fiberglass insulation - solid conductor - flexible armor	J	K	482 °C [900 °F]
	F1B	Fiberglass insulation - solid conductor - stainless steel overbraid	J	K	482 °C [900 °F]
	F3	Fiberglass insulation - stranded conductor	J	K	482 °C [900 °F]
	F3B	Fiberglass insulation - stranded conductor - stainless steel overbraid	J	K	482 °C [900 °F]
Fluoropolymer	T1	Fluoropolymer insulation - solid conductor	J	K	204 °C [400 °F]
	T1A	Fluoropolymer insulation - solid conductor - flexible armor	J	K	204 °C [400 °F]
	T3	Fluoropolymer insulation - stranded conductor	J	K	204 °C [400 °F]
PVC	P5	PVC insulation - solid conductor	J	K	105 °C [221 °F]
Insert wire code number and 3 digit "B" length code. Example: F1036 = 36" "B" Length					

5 Terminations

CODE	DESCRIPTION
0	Leads not stripped
2	2" split leads, 1/4" stripped
3	2" split leads with spade lugs
4	Standard plug
5	Standard jack
6	Miniature plug
7	Miniature jack
Options	
MC	Mating connector
CC	Plug or jack secured to leads with cable clamp