

MgO Thermocouples


Ordering Information

Model No. M - - -

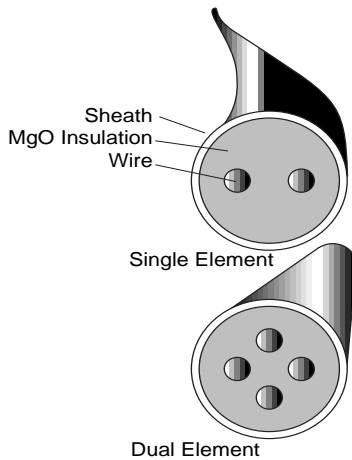
Field No. 1 2 3 4 - 5 6 7 8 9 - 10 11 12 - 13 14 15

Schedule: S2

Fields 1, 2, 3, 4 BASE MODEL

 Determine length by completing Fields 7, 8, 9

	Type	Elements	Max. Sugg	Sheath	Dia.	12" Min.	Ea. Add'l 6"
Special Limits							
MJ14 - J	single		970°F	304 SS	0.125"		
MJ15 - J	single		1150°F	304 SS	0.187"		
MJ16 - J	single		1330°F	304 SS	0.250"		
MJ16 - J	dual		1330°F	304 SS	0.250"		
MJ24 - J	single		970°F	Inconel 600	0.125"		
MJ26 - J	single		1330°F	Inconel 600	0.250"		
MJ36 - J	single		1330°F	316 SS	0.250"		
MK12 - K	single		1290°F	304 SS	0.040"		
MK13 - K	single		1600°F	304 SS	0.063"		
MK16 - K	single		1600°F	304 SS	0.250"		
MK16 - K	dual		1600°F	304 SS	0.250"		
MK22 - K	single		1290°F	Inconel 600	0.040"		
MK23 - K	single		1690°F	Inconel 600	0.063"		
MK24 - K	single		1960°F	Inconel 600	0.125"		
MK24 - K	dual		1960°F	Inconel 600	0.125"		
MK25 - K	single		2100°F	Inconel 600	0.188"		
MK26 - K	single		2100°F	Inconel 600	0.250"		
MK26 - K	dual		2100°F	Inconel 600	0.250"		
MK64 - K	single		2300°F	Hoskins 2300	0.125"		
ME16 - E	single		1510°F	304 SS	0.250"		
ME16 - E	dual		1510°F	304 SS	0.250"		
MT16 - T	single		700°F	304 SS	0.250"		
MT16 - T	dual		700°F	304 SS	0.250"		
Standard Limits							
M112 - J	single		500°F	304 SS	0.040"		
M113 - J	single		825°F	304 SS	0.063"		
M114 - J	single		970°F	304 SS	0.125"		
M114 - J	dual		970°F	304 SS	0.125"		
M115 - J	single		1150°F	304 SS	0.188"		
M115 - J	dual		1150°F	304 SS	0.188"		
M116 - J	single		1330°F	304 SS	0.250"		
M116 - J	dual		1330°F	304 SS	0.250"		
M117 - J	single		1500°F	304 SS	0.375"		
M123 - J	single		825°F	Inconel 600	0.063"		
M124 - J	single		970°F	Inconel 600	0.125"		
M125 - J	single		1150°F	Inconel 600	0.188"		
M126 - J	single		1330°F	Inconel 600	0.250"		
M126 - J	dual		1330°F	Inconel 600	0.250"		
M133 - J	single		825°F	316 SS	0.063"		
M133 - J	dual		825°F	316 SS	0.063"		
M134 - J	single		970°F	316 SS	0.125"		
M134 - J	dual		970°F	316 SS	0.125"		
M135 - J	single		1150°F	316 SS	0.188"		
M136 - J	single		1330°F	316 SS	0.250"		
M136 - J	dual		1330°F	316 SS	0.250"		
M143 - J	single		825°F	310 SS	0.063"		
M144 - J	single		970°F	310 SS	0.125"		



MgO Insulated T/C

MqO Thermocouples

Ordering Information (continued)

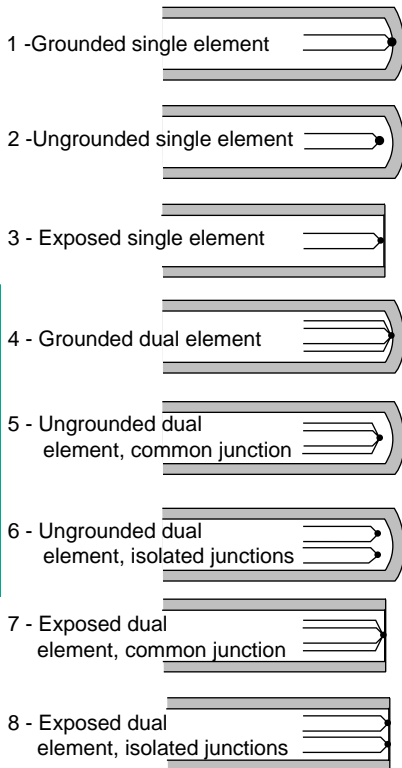
Fields 1, 2, 3, 4 BASE MODEL (continued)

	Type	Elements	Max. Sugg	Sheath	Dia.	12" Min.	Ea. Add'l 6"
M213 - K	single		1600°F	304 SS	0.063"		
M214 - K	single		1600°F	304 SS	0.125"		
M215 - K	single		1600°F	304 SS	0.188"		
M216 - K	single		1600°F	304 SS	0.250"		
M216 - K	dual		1600°F	304 SS	0.250"		
M222 - K	single		1290°F	Inconel 600	0.040"		
M223 - K	single		1690°F	Inconel 600	0.063"		
M223 - K	dual		1690°F	Inconel 600	0.073"		
M224 - K	single		1960°F	Inconel 600	0.125"		
M224 - K	dual		1960°F	Inconel 600	0.125"		
M225 - K	single		2100°F	Inconel 600	0.188"		
M225 - K	dual		2100°F	Inconel 600	0.188"		
M226 - K	single		2100°F	Inconel 600	0.250"		
M226 - K	dual		2100°F	Inconel 600	0.250"		
M227 - K	single		2100°F	Inconel 600	0.375"		
M233 - K	single		1690°F	316 SS	0.063"		
M234 - K	single		1700°F	316 SS	0.125"		
M235 - K	single		1700°F	316 SS	0.188"		
M236 - K	single		1700°F	316 SS	0.250"		
M236 - K	dual		1700°F	316 SS	0.250"		
M244 - K	single		1960°F	310 SS	0.125"		
M245 - K	single		2100°F	310 SS	0.188"		
M246 - K	single		2100°F	310 SS	0.188"		
M246 - K	dual		2100°F	310 SS	0.250"		
M313 - E	single		950°F	304 SS	0.063"		
M314 - E	single		1200°F	304 SS	0.125"		
M314 - E	dual		1200°F	304 SS	0.125"		
M315 - E	single		1350°F	304 SS	0.188"		
M316 - E	single		1510°F	304 SS	0.250"		
M334 - E	single		1200°F	316 SS	0.125"		
M336 - E	single		1600°F	316 SS	0.250"		
M336 - E	dual		1600°F	316 SS	0.250"		
M413 - T	single		500°F	304 SS	0.063"		
M414 - T	single		600°F	304 SS	0.125"		
M415 - T	single		700°F	304 SS	0.188"		
M416 - T	single		700°F	304 SS	0.250"		
M436 - T	single		660°F	316 SS	0.250"		
M436 - T	dual		660°F	316 SS	0.250"		
M624 - S	single		1800°F	Inconel 600	0.125"		
M726 - N	single		2150°F	Inconel 600	0.250"		

MgO Insulated T/C

MqO Thermocouples

Junction Styles
Field 5 codes



Field 5. JUNCTION STYLE

Note: Thermocouple will not function without a junction

Single Element Assemblies

- 0 - None, end sealed (bulk material only)
- 1 - Grounded (not available with platinum element)
- 2 - Ungrounded (not with 0.040" or 0.063" sheath)
- 3 - Exposed (not available with platinum element)

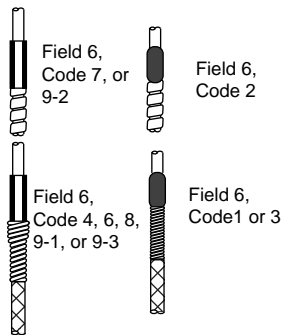
Dual Element Assemblies

- 4 - Grounded (not available with platinum element)
- 5 - Ungrounded, common junction .
- 6 - Ungrounded, isolated junctions (not with 0.040" or 0.063" sheath)
- 7 - Exposed, common junction (not available with platinum element)
- 8 - Exposed, isolated junctions (not with 0.040" or 0.063" sheath)
- 9 - None, end sealed (bulk material only)

Field 6. TRANSITION; FLEXIBLE LEAD (DIMENSION "Y")

All extension wire is solid AWG 20, except Type E is 16 gauge polyvinyl plastic.

Determine length by completing Fields 10, 11, 12



Single Element	Dual Element
Up to 24" Ea Add'l 6"	Up to 24" Ea Add'l 6"

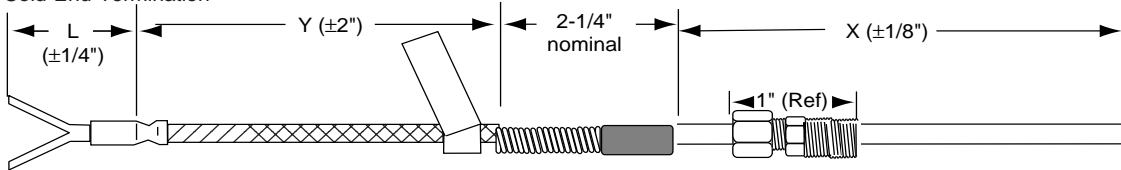
- 0 - None
- Molded (500°F)** Not applicable on 0.040" o.d.
- 1 - Fiberglass insulation
- 2 - Fiberglass with armor
- 3 - Fiberglass with SS overbraid
- Metal Potting Adapter**
- 4 - PVC (500°F)
- 6 - High temperature (1000°F); fiberglass insulation
- 7 - High temperature (1000°F); fiberglass with armor
- 8 - FEP Teflon® (Types J, K, T only) .
- 9 - Specify one of the following lead (500°F) codes on order:
 - Code 1) Fiberglass insulation*
 - Code 2) Fiberglass with armor**
 - Code 3) Fiberglass with SS overbraid *

*Nickel plated brass adapter; **stainless steel adapter

MqO Thermocouples

Ordering Information (continued)

Fields 14, 15.
Cold End Termination

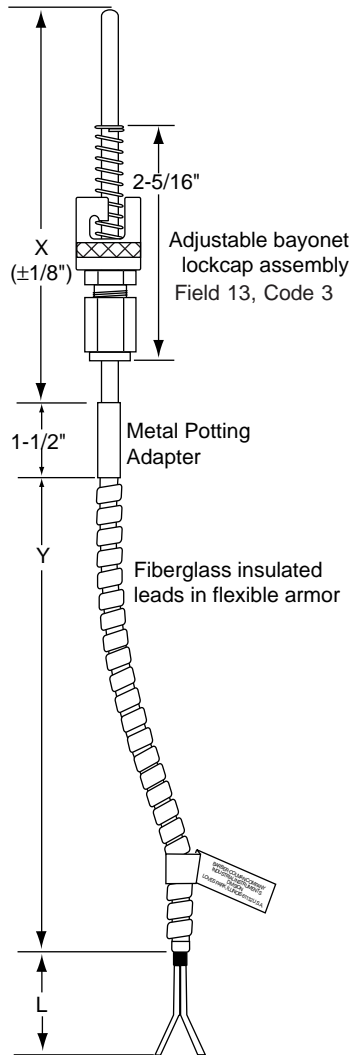


PVC; or Fiberglass insulated leads;
or Fiberglass insulated leads with
stainless steel overbraid

Molded
transition

Adjustable
compression fitting
Field 13.
Codes 1, 2, 4, 5.

MgO insulated
elements in sheath



Fields 7, 8, 9. RIGID LENGTH (DIMENSION X)

☞ Complete these Fields to determine length for Fields 1, 2, 3, 4

XXX - Actual length up to 998" in whole inches \$0
999 - Longer than 998". Specify details on order. Consult factory

Note: Maximum allowable hot length for ungrounded junction assemblies:

Sheath o.d.	J (single)	J (dual)	K (single)	K (dual)	T (single)	T (dual)	E	S
0.063"	180"	140"	100"	82"	200"	162"	90"	227"
0.125"	700"	479"	430"	282"	555"	555"	330"	921"
0.188"	1600"	1206"	877"	729"	1750"	1491"	722"	2692"
0.250"	3181"	1944"	1934"	1129"	3885"	2333"	1521"	7000"
0.375"	2340"	n/a	2087"	n/a	n/a	n/a	n/a	n/a

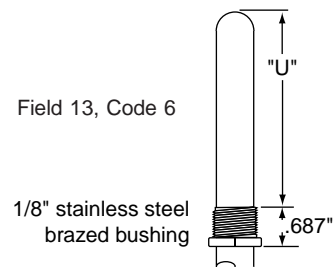
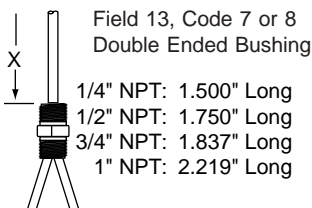
Field 10, 11, 12. FLEXIBLE LENGTH (DIMENSION "Y")

☞ Complete these Fields to determine length for Field 6

000 - None - no flexible lead (no transition)
YYY - Actual length up to 998" in whole inches
999 - Longer than 998". Specify details on order

Field 13. MOUNTING FITTING (DIMENSION "U")

- 0 - None
- 1 - 1/8" nickel plated brass compression fitting
- 2 - 1/8" stainless steel compression fitting
- 3 - Adjustable bayonet lockcap assembly (1/8" diameter only)
- 4 - 1/4" nickel plated brass compression fitting
- 5 - 1/4" stainless steel compression fitting
- 6 - 1/8" stainless steel brazed bushing (specify "U" dimension on order)
- 7 - Silver soldered SS double ended bushing (specify size on order)
- 8 - Spring loaded stainless steel double ended bushing (1/2" NPT only)



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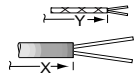
Ordering Information (continued)

Fields 14, 15

Fields 14, 15. COLD END TERMINATION (DIMENSION "L")

**Single
Element**

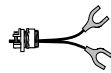
**Dual
Element**



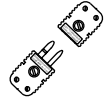
Code 00



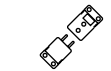
Code 01



Code 02



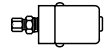
Codes 03, 04, 07,
14, 15, 16, 23, 24



Codes 18, 19, 20



Code 05



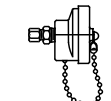
Code 06



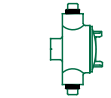
Codes 08, 09



Codes 10, 27



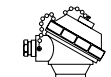
Codes 12, 17



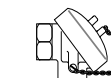
Code 22



Code 11 and
Code 31 (illustrated)



Code 32



Code 33

- 00 - Stripped leads (Note 6)
- 01 - 2-1/2" split leads, spade lugs (Note 3)
- 02 - 2-1/2" split leads, spade lugs, 1/2" NPS box connector with lock nut (Note 3)
- 03 - Solid pin quick disconnect plug
- 04 - Solid pin quick disconnect plug with mating jack
- 05 - Ceramic wafer open head (dual; 0.250" sheath only)
- 06 - Miniature head and cover (Notes 1, 2)
- 07 - Standard quick disconnect jack
- 08 - General purpose, cast iron head (Notes 1, 2)
- 09 - General purpose, aluminum head (Notes 1, 2)
- 10 - Weatherproof, cast iron head (Notes 1, 2)
- 11 - Brass, open terminal, no external mounting threads
- 12 - Weatherproof, plastic head (Notes 2, 7)
- 13 - 1-1/2" split leads, sleeve & butt connectors (Note 5)
- 14 - High temperature quick disconnect plug
- 15 - High temperature quick disconnect plug and jack
- 16 - High temperature quick disconnect jack
- 17 - High temp. plastic weatherproof head (Note 2)
- 18 - Miniature quick disconnect plug (Notes 3, 4)
- 19 - Miniature quick disconnect plug and jack (Note 4)
- 20 - Miniature quick disconnect jack (Note 4)
- 22 - Explosion proof head
- 23 - Hollow pin quick disconnect plug(s) (Type J only)
- 24 - Hollow pin quick disconnect plug(s) with mating jack(s) (Type J only) .
- 27 - Weatherproof, aluminum head (Notes 1, 2)
- 31 - Brass, open terminal, w/external process mtg. thrds.
- 32 - Aluminum, transmitter ready
- 33 - Aluminum, explosion proof, single conduit
- 99 - Extended lead. Specify length "L" (up to 36") on order, and specify termination code (from above list). Assembly with flexible armor. Add to above price Ass'y w/double ended bushing. Add to above price

Note 1: Limited to 1/8" MgO or larger

Note 2: Not available with assemblies using lead wire between MgO and connector

Note 3: Available with Field 6, codes 1, 3, 4, and 6

Note 4: Maximum sheath o.d. is 1/8" for Field 6, code 0. Single element only.

Note 5: Available with Field 6, code 0 only. Not available with 0.040" diameter.

Note 6: 1/4" stripped unless there is no transition (Field 6, code 0); then 1-1/4" stripped.

Note 7: Weatherproof plastic head accepts 1/4" bushing only (Field 13, code 7).