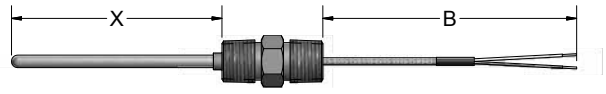
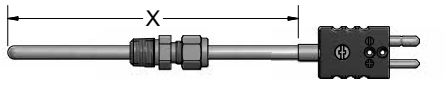
MgO

Configuration Code Mg01
MgO Insulated Thermocouples with Extension Leadwire
Configuration Code Mg02
MgO Insulated Thermocouples with Sheath Terminations

A Pyromation MgO thermocouple assembly consists of a thermocouple element swaged in hard-packed, standard-purity (96%) Magnesium Oxide mineral insulation and encased in a metal sheath. Thermocouple sheaths have been fully annealed; they can be formed into many configurations, and can be bent into a radius of twice the size of its outer sheath. The tables found on this page and the following pages allow customer selection of standard thermocouple types, sheath diameters, mounting fittings and terminations. Custom built products are available upon request.









ORDER CODES

Example Order Number:

1-1	1-2	1-3	1-4	1-4 A		1-5		
K	**4**	**8**	**G**	**M**	**-**	**012**	**-**	For Optional Sheath Mounting Fittings See Page MgO-2

1-1 Thermocouple Types

CODE		
SINGLE	***DUPLEX***	***TRIPLEX***
E	EE	-
J	JJ	JJJ
K	KK	KKK
T	TT	-
N	NN	-

1-2 Sheath Diameters

CODE	DIAMETER (inches)
1	1/16 [1]
2	1/8
3	3/16
4	1/4
6	3/8
[1] 1/16" will be coiled unless otherwise specified for 36" and longer lengths.	

1-3 Sheath Materials

CODE	MATERIAL	STANDARD AVAILABLE TYPES
3	Alloy 600	K, N
4	310 Stainless steel	K
5	446 Stainless steel	K[1]
8	316 Stainless steel	E, J, K, T
[1] All sensors with 446SS sheaths must have an ungrounded measuring junction.		

1-5 "X" Dimension

Insert three digit sheath length ("X" Dimension) in inches
Sheath lengths over 72" will be shipped in a coiled configuration unless otherwise specified.

1-4 A Special Options

CODE	DESCRIPTION
M	Special limits of error
H	High-Purity MgO Insulation (99.4% Pure)
Use this table only if options are desired.	

1-4 Measuring Junctions

CODE	DESCRIPTION
G	Grounded junction
U	Ungrounded junction
E[1]	Exposed junction
S	Exposed shielded junction
[1] Not available with 1/16" O.D..	

1-2 A Reduced-Tip MgO Thermocouples

CODE	NORMAL SHEATH DIA. O.D. (inches)	TIP DIA. (inches)	TIP LENGTH (inches)	MATERIAL
88R48	1/2	1/4	1 (1/4)	316 SS
68R38	3/8	3/16	1 (1/4)	316 SS
48R28	1/4	1/8	1 (1/4)	316 SS

Table 1-2 A lists thermocouple elements with reduced-tip sheaths. To order, use order code numbers from Tbl. 1-2 A in place of straight sheath order code numbers from Tbl. 1-2 and 1-3. EXAMPLE: J88R48