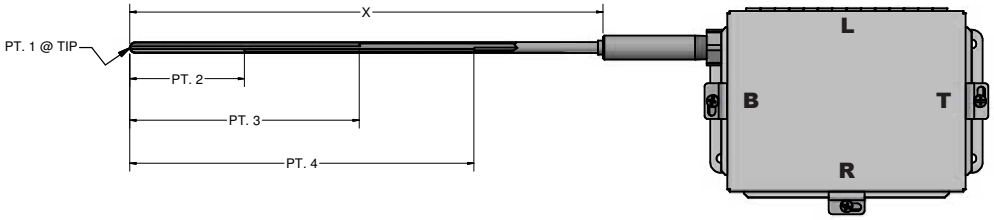
Configuration Code MP01

MgO Multi-Point Sensors with Termination Enclosures

Pyromation's multi-point thermocouples with enclosures accurately measure temperatures at various points along the sheath allowing for a temperature profile across a specified length. The design consists of smaller diameter MgO thermocouples placed inside a single outer sheath, which allows for profiling the temperature at various points along a single line. Applications where these products are used include vessels, holding tanks, furnaces, ovens, reactors, heat exchangers, air ducts and more. The tables found on this page allow customer selection of standard thermocouple types, up to 16 temperature points, various sheath diameters, mounting fittings and termination enclosures. Custom-designed products are available upon request.



ORDER CODES

Example Order Number:

1-0	1-1	1-2	1-3	1-4		2-0		2-1		3-0		4-0		5-0
K	(4)	4	8	U	-	072	-	(0,4,8,12)	-	00	-	8PN4	,NT	- 20

1-0 Thermocouple Types

CODE	DESCRIPTION
J	Type J
K	Type K

1-1 Number of Points

CODE
2 to 16 Points
Specify number of points in parenthesis. Example: (6) = 6 points. Maximum number of points is based on sheath diameter, see table 1-2 for maximum number of points

1-2 Sheath Diameters

CODE	DIAMETER (INCHES)	MAX NUMBER OF POINTS[1]
2	1/8"	5
3	3/16"	10
4	1/4"	12
6	3/8"	16
8	1/2"	16
[1] Maximum number of points apply to sensors 20 feet or less. For lengths above 20 feet, consult factory.		

1-3 Sheath Material

CODE	DESCRIPTION
8	316 Stainless Steel

1-4 Measuring Junctions

CODE	DESCRIPTION
U	Ungrounded junction

1-5 Special Options

CODE	DESCRIPTION
M	Special limits of error

2-0 "X" Dimension

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

2-1 Sensor Location

Specify location of junctions from tip in inches where 0 = tip. Ex: 0,4,8,12

3-0 Sheath Mounting Fittings

CODE	DESCRIPTION	
00	No Fitting	
Compression Fittings		**NPT SIZE (inches)**
05A	316 Stainless steel	1/8
05B	316 Stainless steel	1/4
05C	316 Stainless steel	1/2
12A	316 SS Readjustable	1/8
12B	316 SS Readjustable	1/4
12C	316 SS Readjustable	1/2
19C	303 SS Spring-loaded well fitting	1/2
Fixed Bushings		**NPT SIZE (inches)**
8A_ _[1]	316 SS welded bushing	1/8
8B_ _[1]	316 SS welded bushing	1/4
8C_ _[1]	316 SS welded bushing	1/2
8D_ _[1]	316 SS welded bushing	3/4

[1] When ordering fixed bushings, specify order code above plus insert length "U", as measured from hot tip to bottom of threaded bushing. EXAMPLE: order code 8A06 is 1/8" NPT, 316 SS bushing located 6" from hot tip.

4-0 Head Mounting Fittings

CODE	DESCRIPTION	MAX NUMBER OF POINTS
8PN_[1]	1/2" NPT Pipe nipple, 4" long minimum, 316 SS	Up to 8 points
8PND_[1]	3/4" NPT Pipe nipple, 6" long minimum, 316 SS	Up to 16 points
Options		
NT	No process threads	
[1] For longer lengths, insert the length in inches		

5-0 Termination Enclosures

CODE	DESCRIPTION	MAX NUMBER OF POINTS
20	General-Purpose painted steel wall mount panel enclosure - 8"x6"x4" NEMA 4	16
30	General Purpose SS wall mount panel enclosure - 8"x6"x4" NEMA 4X	16
31	Aluminum screw-cover head (NEMA 4X, IP66)	4
34	Cast iron screw-cover head (NEMA 4X, IP66)	4
91	316L stainless steel screw-cover head (NEMA 4X, IP66)	4
93	Aluminum explosion-proof connection head	4
94	316L stainless steel explosion-proof connection head	4
52	Malleable iron explosion-proof connection head	6
Options		
I	Stainless steel tag	
SB	1/2" NPT conduit reducer bushing	
D2	Class 1 Div. 2 rating for termination 31, 34, 91	
CHB[1]	3/4" NPT conduit hub located on bottom	
CHR[1]	3/4" NPT conduit hub located on right	
CHT[1]	3/4" NPT conduit hub located on top	
CHL[1]	3/4" NPT conduit hub located on left	
[1] Only applies to option 20 or 30		