

The straight base metal thermocouple elements illustrated on this catalog page are replacement elements for use in Pyromation's complete industrial thermocouple assemblies as found elsewhere in this catalog section. These replacement elements are also compatible for use in other manufacturers' thermocouple assemblies. These thermocouples are available as bare wire or ceramic insulated elements, with options as listed below, and with special construction designs.

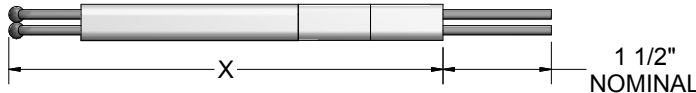
**BARE ELEMENT**



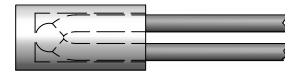
**INSULATED ELEMENT**



**DUPLEX INSULATED**



**INSULATED JUNCTION**



**TWIST WELD**



**TIG WELD**



## ORDER CODES

**Example Order Number:**

1      2      3      4  
**K8 C M - 24 - 1,341**

**1 Single Straight Element Type**

CODE (Type + Wire Gauge)				DESCRIPTION
J8		J14	J20	Iron - Constantan
K8	K11	K14	K20	Chromel - Alumel
N8		N14		Nicrosil - Nisil
<b>DUPLEX STRAIGHT ELEMENTS</b>				
Use thermocouple type code letter twice. Example: JJ14 or KK11. Dual elements with ceramic insulators are supplied as two single elements.				

**2 Element Insulation**

CODE	DESCRIPTION	WIRE GAUGE	INSULATOR DIMENSIONS (inches)	
			SINGLE	DUPLEX
O	Bare Element		None Used	
C	Oval Ceramic	8 Ga.	0.500 x 0.281	
		11 Ga.	0.375 x 0.218	
		14 Ga.	0.313 x 0.188	
R	Round Ceramic	8 Ga.	0.465 O.D.	0.500 O.D.
		11 Ga.	0.465 O.D.	0.500 O.D.
		14 Ga.	0.250 O.D.	0.320 O.D.
		20 Ga.	0.150 O.D.	0.188 O.D.

The above insulated elements are supplied with refractory insulators: 1277 °C [2330 °F] maximum temperature.

**Element Options**

CODE	DESCRIPTION
M	Special limits wire - types J and K (consult factory for other types)

**4 Element Options**

CODE	DESCRIPTION
0	Standard weld as noted below
1	Twist and tig weld (not available with 8 gauge duplex)
2	Tig weld without twist
L	Insulated hot junction
341	Single terminal block on element
342	Duplex terminal block on element

Unless specified by option numbers above, all 8, 11, and 14 gauge elements will be provided with Opt. 2 (tig weld without twist). 20 gauge elements will be provided with Opt. 1 (twist and tig weld). All elements, regardless of gauge, over 96" will be supplied with Opt. 1 (twist and tig weld).

**3 Element "X" Length**

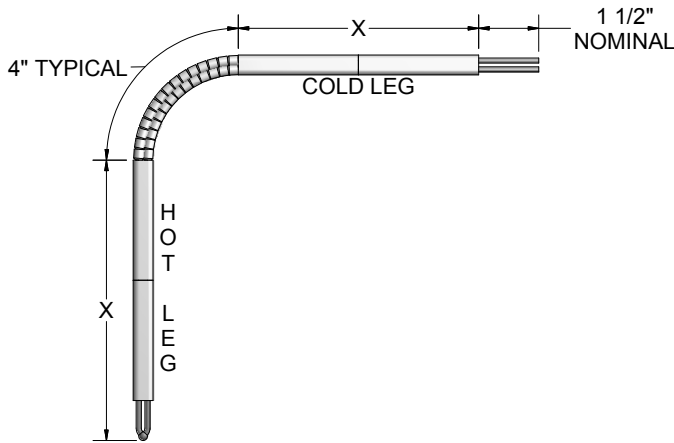
LENGTH (inches)	LENGTH (inches)
12	30
18	36
24	

Specify other lengths in 1" increments.

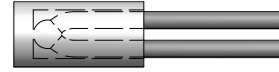
Actual cut length will be 1(1/2)" longer than specified length to allow for terminal connections.



The angle base metal thermocouple elements illustrated on this catalog page are replacement elements for use in Pyromation's complete angle thermocouple assemblies as found elsewhere in this catalog section. These replacement elements are also compatible for use in other manufacturers' angle thermocouple assemblies. These thermocouples are available with the options listed below and with special construction designs. These replacement elements are shipped in a straight configuration and are to be bent at the time of installation.



**INSULATED JUNCTION**



**TWIST WELD**



**TIG WELD**



## ORDER CODES

**Example Order Number:**

1      2      3      4      5  
**K8 A - 12 - 18 - 1, L, 341**

**1 Single Angle Element Type**

CODE (Type + Wire Gauge)		DESCRIPTION
J8	J14	Iron - Constantan
K8	K11 K14	Chromel - Alumel
N8	N14	Nicrosil - Nisil

**DUPLEX ANGLE ELEMENTS**

Requires the use of 2 single elements.

**2 Element Insulation**

CODE	INSULATOR DESCRIPTION	WIRE GAUGE	INSULATOR DIMENSIONS (inches)
			SINGLE
A	Two hole oval ceramic insulators on hot and cold legs. Ball and socket insulators at bend	8 Ga.	0.500 x 0.281
		11 Ga.	0.500 x 0.286
		14 Ga.	0.375 x 0.218

The above insulated elements are supplied with refractory insulators: 1277 °C [2330 °F] maximum temperature.

**Element Options**

CODE	DESCRIPTION
M	Special limits wire - types J and K (consult factory for other types)

**3 Hot Leg "X" Length**

LENGTH (inches)	LENGTH (inches)
12	30
18	36
24	Specify Other Lengths

**5 Element Options**

CODE	DESCRIPTION
0	Standard weld as noted below
1	Twist and tig weld
2	Tig weld without twist
L	Insulated hot junction
341	Single terminal block on element
342	Duplex terminal block on element

Unless specified by option numbers above, all 8, 11, and 14 gauge elements will be provided with Opt. 2 (tig weld without twist).

All elements, regardless of gauge, over 96" will be supplied with Option 1 (twist and tig weld).

**4 Cold Leg "X" Length**

LENGTH (inches)	LENGTH (inches)
12	30
18	36
24	

Specify other lengths in 1" increments.

Actual cut length will be 1(1/2)" longer than specified length to allow for terminal connections.