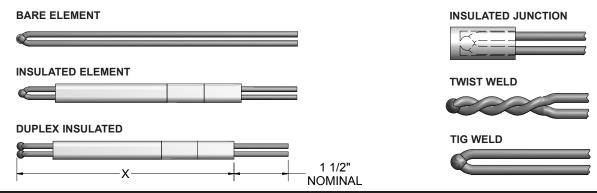
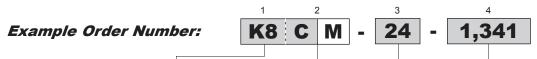


The straight base metal thermocouple elements illustrated on this catalog page are replacement elements for use in Pyromation's complete industrial thermocouple assemblies as found elsewhere in this catalog section. These replacement elements are also compatible for use in other manufacturers' thermocouple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



# **ORDER CODES**



### 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

#### **DUPLEX STRAIGHT ELEMENTS**

Use thermocouple type code letter twice. Example: JJ14 or KK11. Dual elements with ceramic insulators are supplied as two single elements.

#### 2 Element Insulation

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

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

### **Element Options**

CODE	DESCRIPTION
М	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)"		

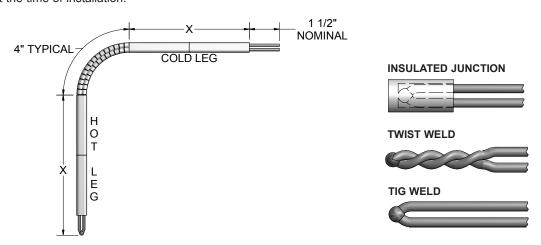
Actual cut length will be 1(1/2)" longer than specified length to allow for terminal connections.



## **Angle Base-Metal Thermocouple Elements**



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.



### **ORDER CODES**

Example Order Number: K8 A - 12 - 18 - 1, L, 341

### 1 Single Angle Element Type

CODE (Type + Wire Gauge)		ire 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
	Two hole oval ceramic insulators	8 Ga.	0.500 x 0.281
Α	on hot and cold legs. Ball and	11 Ga.	0.500 x 0.286
	socket insulators at bend	14 Ga.	0.375 x 0.218
The above insulated elements are supplied with refractory insulators:			

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

## **Element Options**

Charles limits wire types I and K (consult factory for at	
M Special limits wire - types J and K (consult factory for ot types)	other

#### 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"	

Specify other lengths in 1" increments.

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

