

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.

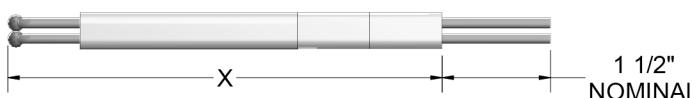
## BARE ELEMENT



## 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<br>(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<br>GAUGE | INSULATOR DIMENSIONS<br>(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<br>(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<br>(inches)  | LENGTH<br>(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. |                    |