



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.

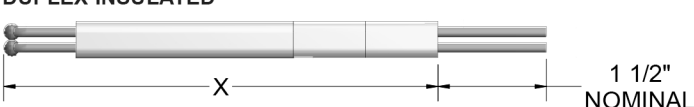
BARE ELEMENT




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 |
| 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

| 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 |

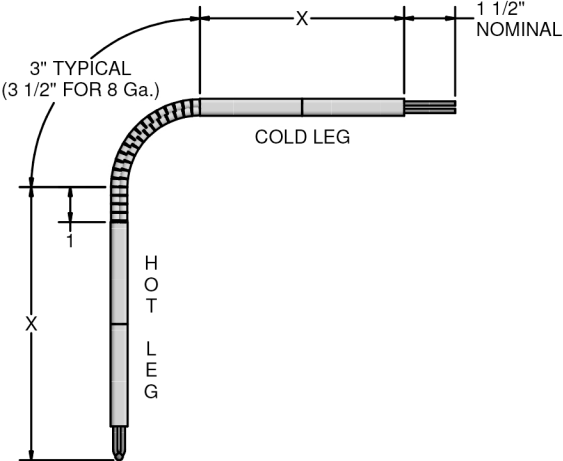
3 Element "X" Length

| 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. | |

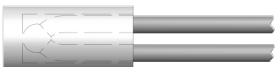
INDUSTRIAL

Configuration Code ID01
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.




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) | | |

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 |

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. | |

3 Hot Leg "X" Length

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