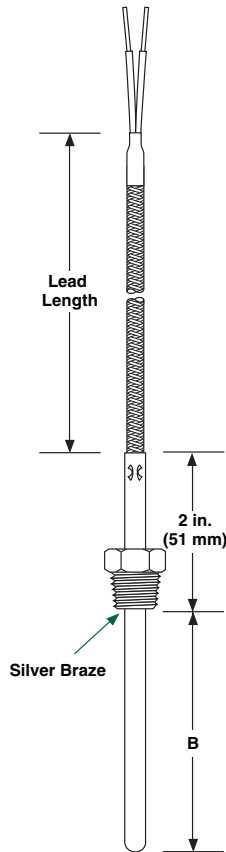


# Thermocouples

## General Applications

### Rigid Sheath with Threaded Fitting Styles 23 and 24

$\frac{1}{8}$  and  $\frac{3}{16}$  inch Diameter



Rigid sheath with threaded fitting provides accurate placement in process applications.

**Custom Ordering Information**—Items in **Bolded Green Type** are preferred with shorter lead times.

|  |   |                     |                     |                     |                     |                     |        |   |   |    |    |                   |              |                     |       |                     |       |                     |        |       |                     |              |                     |       |                     |        |  |                     |              |                     |              |                     |       |        |  |
|--|---|---------------------|---------------------|---------------------|---------------------|---------------------|--------|---|---|----|----|-------------------|--------------|---------------------|-------|---------------------|-------|---------------------|--------|-------|---------------------|--------------|---------------------|-------|---------------------|--------|--|---------------------|--------------|---------------------|--------------|---------------------|-------|--------|--|
|  | 1   | 2                   | 3                   | 4                   | 5                   | 6                   | 7      | 8 | 9 | 10 | 11 |                   |              |                     |       |                     |       |                     |        |       |                     |              |                     |       |                     |        |  |                     |              |                     |              |                     |       |        |  |
| <b>1-2. Construction Style</b>           | <ul style="list-style-type: none"> <li><b>23 = Straight sheath with <math>\frac{1}{8}</math>" NPT SS fitting</b></li> <li>24 = Straight sheath with <math>\frac{1}{2}</math>" NPT SS fitting</li> </ul>   |                     |                     |                     |                     |                     |        |   |   |    |    |                   |              |                     |       |                     |       |                     |        |       |                     |              |                     |       |                     |        |  |                     |              |                     |              |                     |       |        |  |
| <b>3. Sheath Diameter (inch), 316 SS</b> | <ul style="list-style-type: none"> <li><b>C = <math>\frac{1}{8}</math></b>    T = <math>\frac{3}{16}</math> epoxy sealed 149°C (300°F)</li> <li><b>D = <math>\frac{3}{16}</math></b></li> </ul>   |                     |                     |                     |                     |                     |        |   |   |    |    |                   |              |                     |       |                     |       |                     |        |       |                     |              |                     |       |                     |        |  |                     |              |                     |              |                     |       |        |  |
| <b>4. Calibration</b>                    | <ul style="list-style-type: none"> <li><b>J = Type J</b>    T = Type T</li> <li><b>K = Type K</b>    E = Type E</li> </ul>  |                     |                     |                     |                     |                     |        |   |   |    |    |                   |              |                     |       |                     |       |                     |        |       |                     |              |                     |       |                     |        |  |                     |              |                     |              |                     |       |        |  |
| <b>5. Lead Protection</b>                | <ul style="list-style-type: none"> <li><b>F = Fiberglass (24 gauge stranded)</b></li> <li><b>S = Fiberglass with stainless steel overbraid (24 gauge stranded)</b></li> <li>H = Fiberglass with stainless steel hose (24 gauge stranded)</li> <li>*P = Fiberglass (20 gauge stranded)</li> <li>*B = Fiberglass with stainless steel overbraid (20 gauge stranded)</li> <li>*C = Fiberglass with stainless steel hose (20 gauge stranded)</li> <li><b>T = PFA (24 gauge stranded)</b></li> <li>U = PFA with stainless steel overbraid (24 gauge stranded)</li> <li>K = PFA with stainless steel hose (24 gauge stranded)</li> <li>*V = PFA (20 gauge stranded)</li> <li>*W = PFA with stainless steel overbraid (20 gauge stranded)</li> <li>*Y = PFA with stainless steel hose (20 gauge stranded)</li> </ul> |                     |                     |                     |                     |                     |        |   |   |    |    |                   |              |                     |       |                     |       |                     |        |       |                     |              |                     |       |                     |        |  |                     |              |                     |              |                     |       |        |  |
| <b>6. Junction</b>                       | <ul style="list-style-type: none"> <li>F = Grounded, flat tip</li> <li><b>G = Grounded, round tip</b></li> <li>D = Grounded, drill point</li> <li>R = Ungrounded, flat tip</li> <li><b>U = Ungrounded, round tip</b></li> <li>P = Ungrounded, drill point</li> <li>E = Exposed</li> <li>*H = Grounded, round tip, dual element</li> <li>*S = Ungrounded, round tip, dual element</li> </ul>   |                     |                     |                     |                     |                     |        |   |   |    |    |                   |              |                     |       |                     |       |                     |        |       |                     |              |                     |       |                     |        |  |                     |              |                     |              |                     |       |        |  |
| <b>7. "B" Dimension (inches)</b>         | <table border="0" style="width: 100%;"> <tr> <td>A = <math>\frac{1}{2}</math></td> <td><b>D = 2</b></td> <td>G = 3 <math>\frac{1}{2}</math></td> <td>K = 5</td> <td>N = 6 <math>\frac{1}{2}</math></td> <td>R = 8</td> <td>U = 9 <math>\frac{1}{2}</math></td> <td>Z = 12</td> </tr> <tr> <td>B = 1</td> <td>E = 2 <math>\frac{1}{2}</math></td> <td><b>H = 4</b></td> <td>L = 5 <math>\frac{1}{2}</math></td> <td>P = 7</td> <td>S = 8 <math>\frac{1}{2}</math></td> <td>W = 10</td> <td></td> </tr> <tr> <td>C = 1 <math>\frac{1}{2}</math></td> <td><b>F = 3</b></td> <td>J = 4 <math>\frac{1}{2}</math></td> <td><b>M = 6</b></td> <td>Q = 7 <math>\frac{1}{2}</math></td> <td>T = 9</td> <td>Y = 11</td> <td></td> </tr> </table>  |                     |                     |                     |                     |                     |        |   |   |    |    | A = $\frac{1}{2}$ | <b>D = 2</b> | G = 3 $\frac{1}{2}$ | K = 5 | N = 6 $\frac{1}{2}$ | R = 8 | U = 9 $\frac{1}{2}$ | Z = 12 | B = 1 | E = 2 $\frac{1}{2}$ | <b>H = 4</b> | L = 5 $\frac{1}{2}$ | P = 7 | S = 8 $\frac{1}{2}$ | W = 10 |  | C = 1 $\frac{1}{2}$ | <b>F = 3</b> | J = 4 $\frac{1}{2}$ | <b>M = 6</b> | Q = 7 $\frac{1}{2}$ | T = 9 | Y = 11 |  |
| A = $\frac{1}{2}$                        | <b>D = 2</b>  | G = 3 $\frac{1}{2}$ | K = 5               | N = 6 $\frac{1}{2}$ | R = 8               | U = 9 $\frac{1}{2}$ | Z = 12 |   |   |    |    |                   |              |                     |       |                     |       |                     |        |       |                     |              |                     |       |                     |        |  |                     |              |                     |              |                     |       |        |  |
| B = 1                                    | E = 2 $\frac{1}{2}$   | <b>H = 4</b>        | L = 5 $\frac{1}{2}$ | P = 7               | S = 8 $\frac{1}{2}$ | W = 10              |        |   |   |    |    |                   |              |                     |       |                     |       |                     |        |       |                     |              |                     |       |                     |        |  |                     |              |                     |              |                     |       |        |  |
| C = 1 $\frac{1}{2}$                      | <b>F = 3</b>  | J = 4 $\frac{1}{2}$ | <b>M = 6</b>        | Q = 7 $\frac{1}{2}$ | T = 9               | Y = 11              |        |   |   |    |    |                   |              |                     |       |                     |       |                     |        |       |                     |              |                     |       |                     |        |  |                     |              |                     |              |                     |       |        |  |
| <b>8-10. Lead Length (inches)</b>        | <ul style="list-style-type: none"> <li><b>012, 024, 036, 040, 048, 060, 072, 079, 096 and 120</b></li> <li>Available lengths: 006 to 360, over 360 consult factory</li> </ul>   |                     |                     |                     |                     |                     |        |   |   |    |    |                   |              |                     |       |                     |       |                     |        |       |                     |              |                     |       |                     |        |  |                     |              |                     |              |                     |       |        |  |
| <b>11. Terminations/Options</b>          | <ul style="list-style-type: none"> <li><b>A = Standard, 2 <math>\frac{1}{2}</math> inch split leads</b></li> <li>B = 2 <math>\frac{1}{2}</math> inch split leads with #6 spade lugs</li> <li>C = 2 <math>\frac{1}{2}</math> inch split leads with #6 spade lugs and BX connector</li> <li><b>D = Standard male plug, quick disconnect</b></li> <li>E = Standard female jack, quick disconnect</li> <li><b>F = Miniature male plug, quick disconnect</b></li> <li>G = Miniature female jack, quick disconnect</li> <li>H = <math>\frac{1}{4}</math> inch push-on connector</li> </ul>  |                     |                     |                     |                     |                     |        |   |   |    |    |                   |              |                     |       |                     |       |                     |        |       |                     |              |                     |       |                     |        |  |                     |              |                     |              |                     |       |        |  |

\*Not available with  $\frac{1}{8}$  inch diameter sheath.

Metric sizes available for made-to-order units, consult factory. Minimum order quantity may apply.