### Type K Thermocouple Extension Wire

#### Overview

- Available in Shielded and Unshielded
- PVC, Fiberglass, FEP, and Silica insulations
- 20AWG and 16AWG
- Cut to length (1 ft. increments, 20 ft. minimum length)
- Standard ASTM/ANSI color codes

|                        |               |                   | Thern  | nocouple l  | Extensio  | n Wire               |                                       |                             |            |                                |                      |
|------------------------|---------------|-------------------|--|---|---|----------------------|---------------------------------------|-----------------------------|------------|--------------------------------|----------------------|
| Part Number            | Gauge,<br>AWG | Conductors        | Conductor Insulation   | Shield and<br>Drain Wire                                | Jacket<br>Material                                | Limits of<br>Error** | Continuous<br>Temperature<br>Range    | Nominal<br>Size<br>(inches) | Wt<br>(lb) | Minimum<br>Cut Length<br>(ft)* | Price<br>per<br>foot |
|                        |               |                   |  |   |   |                      |                                       |                             |            |                                |                      |
|                        |               |                   |  |   |   |                      |                                       |                             |            |                                |                      |
| <u>THMWK-20-1U-P-1</u> | 20            | 2, solid          | PVC<br>Red = Negative<br>Yellow = Positive                                 | None  | PVC, Yellow                                       | Standard             | -20°F to 221°F<br>(-29°C to 105°C)    | 0.095 x 0.158               | 0.02       | 20                             | \$0.45               |
|                        |               | 28282787          |  |   |   |                      |                                       |                             |            |                                |                      |
|                        |               |                   |  |   |   |                      |                                       |                             |            |                                |                      |
| THMWK-20-1U-G-1        | 20            | 2, solid          | Fiberglass braid<br>Red = Negative<br>Yellow = Positive                    | None  | Fiberglass<br>Braid, Brown<br>w/ Yellow<br>tracer | Standard             | 32°F to 900°F<br>(0°C to 482°C)       | 0.059 x 0.097               | 0.01       | 20                             | \$0.55               |
|                        |               |                   |  |   |   |                      |                                       |                             |            |                                |                      |
|                        |               |                   |  |   |   |                      |                                       |                             |            |                                |                      |
| THMWK-20-1S-P-1        | 20            | 2, twisted, solid | PVC<br>Red = Negative<br>Yellow = Positive                                 | Aluminum Mylar<br>shield and copper<br>22AWG drain wire | PVC, Yellow                                       | Standard             | -20°F to 221°F<br>(-29°C to 105°C)    | 0.170 O.D.                  | 0.03       | 20                             | \$0.63               |
|                        | •             |                   |  |   |   |                      |                                       |                             |            |                                |                      |
|                        |               |                   |  |   |   |                      |                                       |                             |            |                                |                      |
|                        |               |                   |  |   |   |                      |                                       |                             |            |                                |                      |
| THMWK-20-1U-F-1        | 20            | 2, twisted, solid | Extruded FEP Red = Negative Yellow = Positive                              | None  | Extruded<br>FEP, Brown                            | Standard             | -20°F to 400°F<br>(-29°C to 204°C)    | 0.068/0.116                 | 0.02       | 20                             | \$0.94               |
|                        |               |                   | 545040.274.27  |   |   |                      |                                       |                             |            |                                |                      |
|                        |               |                   |  |   |   |                      |                                       |                             |            |                                |                      |
| THMWK-20-1U-HG-1       | 20            | 2, twisted, solid | Braided Fiberglass Yam Red = Negative Yellow = Positive                    | None  | Fiberglass,<br>Brown                              | Standard             | 32°F to 1300°F***<br>(0°C to 704°C)   | 0.084/0.142                 | 0.02       | 20                             | \$0.78               |
|                        | •             |                   |  |   |   |                      |                                       |                             |            |                                |                      |
|                        |               |                   |  |   |   |                      |                                       |                             |            |                                |                      |
| <u>THMWK-20-1U-S-1</u> | 20            | 2, twisted, solid | Braided Vitreous Silica White/Red Stripe = Negative Solid White = Positive | None  | Braided<br>Vitreous Silica,<br>Grey               | Standard             | 32°F, to 1800°F<br>(0°C to 982°C)**** | 0.098/0.162                 | 0.02       | 20                             | \$2.09               |
|                        |               |                   |  |   |   |                      |                                       |                             |            |                                |                      |
|                        |               |                   |  |   |   |                      |                                       |                             |            |                                |                      |
| <u>THMWK-16-1U-P-1</u> | 16            | 2, twisted, solid | Extruded PVC Red = Negative Yellow = Positive                              | None  | Extruded<br>PVC, Yellow                           | Standard             | -20°F to 221°F<br>(-29°C to 105°C)    | 0.109/0.188                 | 0.04       | 20                             | \$1.12               |

<sup>\*</sup> See web store for maximum cut engths

Note: Special connectors and terminal blocks are required to connect thermocouples to a control device. Both are available from www.automationdirect.com Note: Maximum recommended distance between thermocouple and control device is 100 feet.





<sup>\*\*</sup> Per ASTM E230 / E230M-12

<sup>\*\*\* 1600°</sup>F single exposure

<sup>\*\*\*\*2000°</sup>F single exposure

# **Type J Thermocouple Extension Wire**

### Overview

- · Available in Shielded and Unshielded
- PVC, Fiberglass, and FEP
- 20AWG and 16AWG
- Cut to length (1 ft. increments, 20 ft. minimum length)
- Standard ASTM/ANSI color codes

|                        |               |                   | The  | rmocouple   | <b>Extensi</b>             | on Wire              | e                                  |                             |            |                                |                   |
|------------------------|---------------|-------------------|--|---|----------------------------|----------------------|------------------------------------|-----------------------------|------------|--------------------------------|-------------------|
| Part Number            | Gauge,<br>AWG | Conductors        | Conductor<br>Insulation                                | Shield and<br>Drain Wire                                | Jacket<br>Material         | Limits of<br>Error** | Continuous<br>Temperature<br>Range | Nominal<br>Size<br>(inches) | Wt<br>(lb) | Minimum<br>Cut Length<br>(ft)* | Price<br>per foot |
|                        |               |                   |  |   |                            |                      |                                    |                             |            |                                |                   |
|                        |               |                   |  |   |                            |                      |                                    |                             |            |                                |                   |
| THMWJ-20-1U-P-1        | 20            | 2, solid          | PVC<br>Red = Negative<br>White = Positive              | None  | PVC, Black                 | Standard             | -20°F to 221°F<br>(-29°C to 105°C) | 0.095 x 0.158               | 0.02       | 20                             | \$0.30            |
| 200                    |               |                   |  |   |                            |                      |                                    |                             |            |                                |                   |
|                        |               |                   |  |   |                            |                      |                                    |                             |            |                                |                   |
| <u>THMWJ-20-1U-G-1</u> | 20            | 2, solid          | Fiberglass braid<br>Red = Negative<br>White = Positive | None  | Fiberglass<br>braid, Brown | Standard             | 32°F to 900°F<br>(0°C to 482°C)    | 0.059 x 0.097               | 0.01       | 20                             | \$0.40            |
|                        |               |                   |  |   |                            |                      |                                    |                             |            |                                |                   |
|                        |               |                   |  |   |                            |                      |                                    |                             |            |                                |                   |
| THMWJ-20-1S-P-1        | 20            | 2, twisted, solid | PVC<br>Red = Negative<br>White = Positive              | Aluminum Mylar<br>shield and copper<br>22AWG drain wire | PVC, Black                 | Standard             | -20°F to 221°F<br>(-29°C to 105°C) | 0.170 O.D.                  | 0.03       | 20                             | \$0.46            |
|                        |               |                   |  |   |                            |                      |                                    |                             |            |                                |                   |
|                        |               |                   |  |   |                            |                      |                                    |                             |            |                                |                   |
| THMWJ-20-1U-F-1        | 20            | 2, solid          | Extruded FEP Red = Negative White = Positive           | None  | Extruded FEP, Brown        | Standard             | -20°F to 400°F<br>(-29°C to 204°C) | 0.068/0.116                 | 0.02       | 20                             | \$0.71            |
|                        |               |                   |  |   |                            |                      |                                    |                             |            |                                |                   |
|                        |               |                   | E (  |   |                            |                      |                                    |                             |            | •                              |                   |
| THMWJ-16-1U-P-1        | 16            | 2, solid          | Extruded PVC Red = Negative White = Positive           | None  | Extruded<br>PVC, Black     | Standard             | -20°F to 221°F<br>(-29°C to 105°C) | 0.109/0.188                 | 0.02       | 20                             | \$0.71            |

<sup>\*</sup> See web store for maximum cut engths

Note: Special connectors and terminal blocks are required to connect thermocouples to a control device. Both are available from www.automationdirect.com Note: Maximum recommended distance between thermocouple and control device is 100 feet.





<sup>\*\*</sup> Per ASTM E230 / E230M-12

## **Type T Thermocouple Extension Wire**

### Overview

- · Available in Shielded and Unshielded
- PVC and Fiberglass insulations
- 20AWG
- Cut to length (1 ft. increments, 20 ft. minimum length)
- Standard ASTM/ANSI color codes

|                 |               |                   | Th  | ermocoupl   | e Extens                                     | ion Wir              | re                                 |                             |            |                                |                   |
|-----------------|---------------|-------------------|---|---|--|----------------------|------------------------------------|-----------------------------|------------|--------------------------------|-------------------|
| Part Number     | Gauge,<br>AWG | Conductors        | Conductor<br>Insulation                               | Shield and<br>Drain Wire                                | Jacket<br>Material                           | Limits of<br>Error** | Continuous<br>Temperature<br>Range | Nominal<br>Size<br>(inches) | Wt<br>(lb) | Minimum<br>Cut Length<br>(ft)* | Price<br>per foot |
|                 |               |                   |   |   |  |                      |                                    |                             |            |                                |                   |
|                 | •             |                   |   |   |  |                      |                                    |                             |            |                                |                   |
| THMWT-20-1U-P-1 | 20            | 2, solid          | PVC<br>Red = Negative<br>Blue = Positive              | None  | PVC, Blue                                    | Standard             | -20°F to 221°F<br>(-29°C to 105°C) | 0.059 x 0.097               | 0.02       | 20                             | \$0.34            |
|                 |               |                   |   |   |  |                      |                                    |                             |            |                                |                   |
|                 |               |                   |   |   |  |                      |                                    |                             |            |                                |                   |
| THMWT-20-1U-G-1 | 20            | 2, solid          | Fiberglass braid<br>Red = Negative<br>Blue = Positive | None  | Fiberglass<br>braid, Brown<br>w/ Blue tracer | Standard             | 32°F to 900°F<br>(0°C to 482°C)    | 0.059 x 0.097               | 0.01       | 20                             | \$0.40            |
|                 |               |                   |   |   |  |                      |                                    |                             |            |                                |                   |
|                 |               |                   |   |   |  |                      |                                    |                             |            |                                |                   |
|                 |               | 1                 | DVO   | 1   |  | ı                    |                                    | T                           |            |                                | 1                 |
| THMWT-20-1S-P-1 | 20            | 2, twisted, solid | PVC<br>Red = Negative<br>Blue = Positive              | Aluminum Mylar<br>shield and copper<br>22AWG drain wire | PVC, Blue                                    | Standard             | -20°F to 221°F<br>(-29°C to 105°C) | 0.059 x 0.097               | 0.03       | 20                             | \$0.51            |

<sup>\*</sup> See web store for maximum cut engths

Note: Special connectors and terminal blocks are required to connect thermocouples to a control device. Both are available from www.automationdirect.com

Note: Maximum recommended distance between thermocouple and control device is 100 feet.





<sup>\*\*</sup> Per ASTM E230 / E230M-12

# **UL Listed Type K & J Thermocouple Extension Wire**

#### Overview

- UL Listed PLTC-UL13
- Available in Shielded and Unshielded
- PVC and FEP insulations

- 20AWG and 16AWG
- Cut to length (1 ft. increments, 20 ft. minimum length)
- Standard ASTM/ANSI color codes

|                   |               |                   | The                     | ermocouple  | Extensi                 | on Wire              |                                    |                             |            |                                |                   |
|-------------------|---------------|-------------------|-------------------------|---|-------------------------|----------------------|------------------------------------|-----------------------------|------------|--------------------------------|-------------------|
| Part Number       | Gauge,<br>AWG | Conductors        | Conductor<br>Insulation | Shield and<br>Drain Wire                                | Jacket<br>Material      | Limits of<br>Error** | Continuous<br>Temperature<br>Range | Nominal<br>Size<br>(inches) | Wt<br>(lb) | Minimum<br>Cut Length<br>(ft)* | Price<br>per foot |
|                   |               |                   |                         |   |                         |                      |                                    | -                           |            |                                |                   |
| HMWK-UL-20-1U-P-1 | 20            | 2, twisted, solid | Extruded<br>PVC         | None  | Extruded<br>PVC, Yellow | Standard             | -20°F to 105°F<br>(-29°C to 41°C)  | 0.136/0.198                 | 0.02       | 20                             | \$0.72            |
|                   |               |                   |                         |   |                         |                      |                                    |                             |            |                                |                   |
| HMWK-UL-20-1S-F-1 | 20            | 2, twisted, solid | Extruded<br>FEP         | Aluminum Mylar<br>shield and copper<br>22AWG drain wire | Extruded<br>FEP, Yellow | Standard             | 32°F to 392°F<br>(0°C to 200°C)    | 0.150                       | 0.04       | 20                             | \$0.74            |
|                   |               |                   |                         |   |                         |                      |                                    |                             |            |                                |                   |
| ЧМWK-UL-16-1S-F-1 | 16            | 2, twisted, solid | Extruded<br>FEP         | Aluminum Mylar<br>shield and copper<br>18AWG drain wire | Extruded<br>FEP, Yellow | Standard             | 32°F to 392°F<br>(0°C to 200°C)    | 0.188                       | 0.05       | 20                             | \$2.00            |
|                   |               |                   |                         |   |                         |                      |                                    |                             |            |                                |                   |
| HMWK-UL-16-1S-P-1 | 16            | 2, twisted, solid | Extruded<br>PVC         | Aluminum Mylar<br>shield and copper<br>20AWG drain wire | Extruded<br>PVC, Yellow | Standard             | -20°F to 221°F<br>(-29°C to 105°C) | 0.256                       | 0.05       | 20                             | \$1.34            |
|                   |               |                   |                         |   |                         |                      |                                    | 3                           |            | •                              |                   |
| HMWJ-UL-20-1U-P-1 | 20            | 2, solid          | Extruded PVC            | None  | Extruded PVC, Black     | Standard             | 32°F to 200°F<br>(0°C to 93°C)     | 0.136/0.198                 | 0.02       | 20                             | \$0.35            |
|                   |               |                   |                         |   |                         |                      |                                    |                             |            |                                |                   |
| HMWJ-UL-20-1S-F-1 | 20            | 2, solid          | Extruded<br>FEP         | Aluminum Mylar<br>shield and copper<br>22AWG drain wire | Extruded<br>FEP, Black  | Standard             | 32°F to 200°F<br>(0°C to 93°C)     | 0.150                       | 0.04       | 20                             | \$0.95            |
|                   |               |                   |                         |   |                         |                      |                                    |                             |            |                                |                   |
| HMWJ-UL-16-1S-F-1 | 16            | 2, solid          | Extruded<br>FEP         | Aluminum Mylar<br>shield and copper<br>18AWG drain wire | Extruded<br>FEP, Black  | Standard             | -20°F to 200°F<br>(-29°C to 93°C)  | 0.184                       | 0.05       | 20                             | \$1.52            |
|                   |               |                   |                         |   |                         | _                    |                                    |                             |            |                                |                   |
| HMWJ-UL-16-1S-P-1 | 16            | 2, solid          | Extruded<br>PVC         | Aluminum Mylar<br>shield and copper<br>18AWG drain wire | Extruded PVC, Black     | Standard             | 32°F to 105°F<br>(0°C to 40°C)     | 0.256                       | 0.05       | 20                             | \$0.89            |

<sup>\*</sup> See web store for maximum cut engths

Note: Special connectors and terminal blocks are required to connect thermocouples to a control device. Both are available from www.automationdirect.com Note: Maximum recommended distance between thermocouple and control device is 100 feet.





<sup>\*\*</sup> Per ASTM E230 / E230M-12