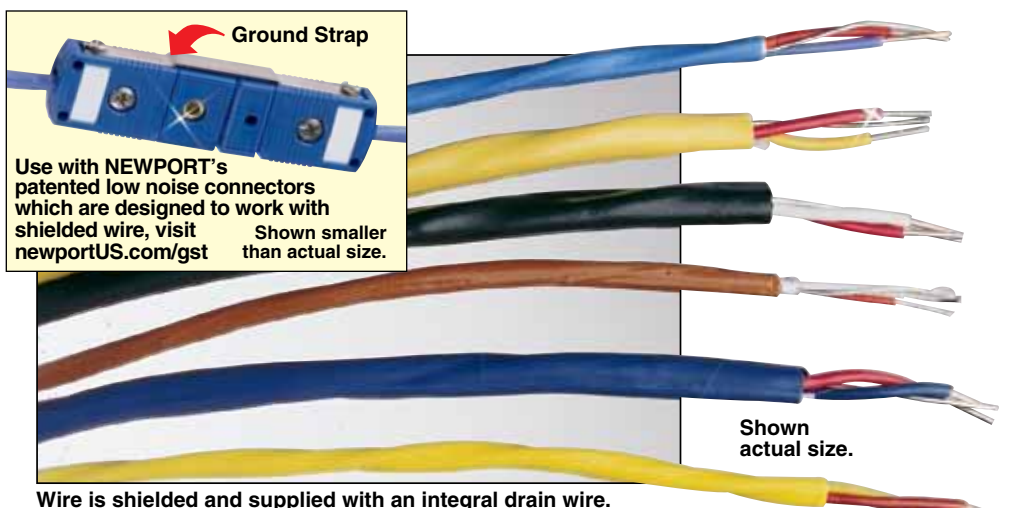


## Twisted/Shielded Thermocouple Wire

- ✓ Maintains Electrical Ground from Probe Sheath to Instrument
- ✓ Polyvinyl, FEP, and PFA Insulations Available
- ✓ Complements Low Noise Thermocouple Probes and Connectors
- ✓ Extension and Thermocouple Grades
- ✓ Custom Wire Design Available
- ✓ 7.5 to 300 m (25 to 1000') Spools Available from Stock



### Thermocouple Grade PFA Insulation

| AWG† | Model Number<br>ANSI Color Code | Nominal Size<br>mm (inch) | Thermocouple<br>Type |
|------|---------------------------------|---------------------------|----------------------|
| 20   | TT-J-20-TWSH                    | 3.7 (0.15)                | J                    |
|      | TT-K-20-TWSH                    | 3.7 (0.15)                | K                    |
|      | TT-T-20-TWSH                    | 3.7 (0.15)                | T                    |
|      | TT-E-20-TWSH                    | 3.7 (0.15)                | E                    |
| 20S* | TT-J-20S-TWSH                   | 3.8 (0.15)                | J                    |
|      | TT-K-20S-TWSH                   | 3.8 (0.15)                | K                    |
|      | TT-T-20S-TWSH                   | 3.8 (0.15)                | T                    |
|      | TT-E-20S-TWSH                   | 3.8 (0.15)                | E                    |
| 24   | TT-J-24-TWSH                    | 2.7 (0.11)                | J                    |
|      | TT-K-24-TWSH                    | 2.7 (0.11)                | K                    |
|      | TT-T-24-TWSH                    | 2.7 (0.11)                | T                    |
|      | TT-E-24-TWSH                    | 2.7 (0.11)                | E                    |
| 24S* | TT-J-24S-TWSH                   | 2.9 (0.12)                | J                    |
|      | TT-K-24S-TWSH                   | 2.9 (0.12)                | K                    |
|      | TT-T-24S-TWSH                   | 2.9 (0.12)                | T                    |
|      | TT-E-24S-TWSH                   | 2.9 (0.12)                | E                    |

### Thermocouple Grade FEP Insulation

| AWG† | Model Number<br>ANSI Color Code | Nominal Size<br>mm (inch) | Thermocouple<br>Type |
|------|---------------------------------|---------------------------|----------------------|
| 20   | FF-J-20-TWSH                    | 3.7 (0.15)                | J                    |
|      | FF-K-20-TWSH                    | 3.7 (0.15)                | K                    |
|      | FF-T-20-TWSH                    | 3.7 (0.15)                | T                    |
|      | FF-E-20-TWSH                    | 3.7 (0.15)                | E                    |
| 20S* | FF-J-20S-TWSH                   | 3.8 (0.15)                | J                    |
|      | FF-K-20S-TWSH                   | 3.8 (0.15)                | K                    |
|      | FF-T-20S-TWSH                   | 3.8 (0.15)                | T                    |
|      | FF-E-20S-TWSH                   | 3.8 (0.15)                | E                    |
| 24   | FF-J-24-TWSH                    | 2.7 (0.11)                | J                    |
|      | FF-K-24-TWSH                    | 2.7 (0.11)                | K                    |
|      | FF-T-24-TWSH                    | 2.7 (0.11)                | T                    |
|      | FF-E-24-TWSH                    | 2.7 (0.11)                | E                    |
| 24S* | FF-J-24S-TWSH                   | 2.9 (0.12)                | J                    |
|      | FF-K-24S-TWSH                   | 2.9 (0.12)                | K                    |
|      | FF-T-24S-TWSH                   | 2.9 (0.12)                | T                    |
|      | FF-E-24S-TWSH                   | 2.9 (0.12)                | E                    |

Visit [newportUS.com/TWSH](http://newportUS.com/TWSH) for Pricing and Details

### Extension Grade Polyvinyl Insulation

| AWG† | Model Number<br>ANSI Color Code | Nominal Size<br>mm (inch) | Thermocouple<br>Type |
|------|---------------------------------|---------------------------|----------------------|
| 16   | EXPP-J-16-TWSH                  | 6.4 (0.250)               | J                    |
|      | EXPP-K-16-TWSH                  | 6.4 (0.250)               | K                    |
|      | EXPP-T-16-TWSH                  | 6.4 (0.250)               | T                    |
|      | EXPP-E-16-TWSH                  | 6.4 (0.250)               | E                    |
| 16S* | EXPP-J-16S-TWSH                 | 6.9 (0.270)               | J                    |
|      | EXPP-K-16S-TWSH                 | 6.9 (0.270)               | K                    |
|      | EXPP-T-16S-TWSH                 | 6.9 (0.270)               | T                    |
|      | EXPP-E-16S-TWSH                 | 6.9 (0.270)               | E                    |
| 20   | EXPP-J-20-TWSH                  | 5.1 (0.200)               | J                    |
|      | EXPP-K-20-TWSH                  | 5.1 (0.200)               | K                    |
|      | EXPP-T-20-TWSH                  | 5.1 (0.200)               | T                    |
|      | EXPP-E-20-TWSH                  | 5.1 (0.200)               | E                    |
| 20S* | EXPP-J-20S-TWSH                 | 5.5 (0.215)               | J                    |
|      | EXPP-K-20S-TWSH                 | 5.5 (0.215)               | K                    |
|      | EXPP-T-20S-TWSH                 | 5.5 (0.215)               | T                    |
|      | EXPP-E-20S-TWSH                 | 5.5 (0.215)               | E                    |

\* Stranded wire. † Please visit [newportUS.com/colorcodes](http://newportUS.com/colorcodes) for AWG dimensions. Extension grade wire also available in R and S calibrations. Consult Sales Department for pricing information.

**Note:** Minimum bending radius is 4 times the nominal diameter.

**Note:** Published prices are based on market value at time of printing and are subject to change due to Nickel surcharges, Chromium and precious-metal market fluctuations.

### Extension Grade FEP Insulation

| AWG† | Model Number<br>ANSI Color Code | Nominal Size<br>mm (inch) | Thermocouple<br>Type |
|------|---------------------------------|---------------------------|----------------------|
| 16   | EXFF-J-16-TWSH                  | 4.3 (0.17)                | J                    |
|      | EXFF-K-16-TWSH                  | 4.3 (0.17)                | K                    |
|      | EXFF-T-16-TWSH                  | 4.3 (0.17)                | T                    |
|      | EXFF-E-16-TWSH                  | 4.3 (0.17)                | E                    |
| 16S* | EXFF-J-16S-TWSH                 | 4.5 (0.18)                | J                    |
|      | EXFF-K-16S-TWSH                 | 4.5 (0.18)                | K                    |
|      | EXFF-T-16S-TWSH                 | 4.5 (0.18)                | T                    |
|      | EXFF-E-16S-TWSH                 | 4.5 (0.18)                | E                    |
| 20   | EXFF-J-20-TWSH                  | 3.7 (0.15)                | J                    |
|      | EXFF-K-20-TWSH                  | 3.7 (0.15)                | K                    |
|      | EXFF-T-20-TWSH                  | 3.7 (0.15)                | T                    |
|      | EXFF-E-20-TWSH                  | 3.7 (0.15)                | E                    |
| 20S* | EXFF-J-20S-TWSH                 | 3.8 (0.15)                | J                    |
|      | EXFF-K-20S-TWSH                 | 3.8 (0.15)                | K                    |
|      | EXFF-T-20S-TWSH                 | 3.8 (0.15)                | T                    |
|      | EXFF-E-20S-TWSH                 | 3.8 (0.15)                | E                    |

PFA insulation also available. Change "FF" in Model Number to "TT" Example: EXTT-J-16-TWSH Consult Sales for pricing.

†† To order special limits of error wire, add "-SLE" to model number before spool length. **Ordering Example:** FF-K-20S-TWSH-SLE-1000, 1000' of 20 gage twisted/shielded Type K Neoflon coated wire.