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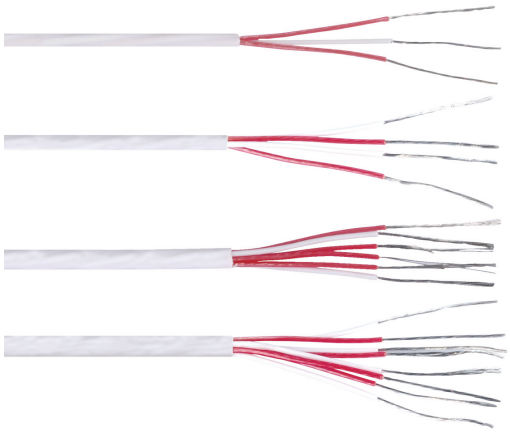
# FEP Insulated Resistance Temperature Detector (RTD) Wire

**Feature**

- Used for extending RTD and thermistor signal leads
- Available with Fiberglass, Teflon and PVC insulation
- Wire available with 2, 3, 4, 6 and 8 conductors
- Spool lengths in meters

**Specification**

- Conductor: Silver-plated copper wire
- Inuslation material: FEP
- Max. temp. : 200℃
- Color code: 3CU: Red/Red/White
  4CU: Red/Red/White/White
  6CU: Red/Red/Red/Red/White/White



| Order Code | Number of Conductors | Wire Size (AWG) | Wire Type | Insulation | | Inner Shield | Outer Shield |
|---|---|---|---|---|---|---|---|
| | | | | Conductor | Jacket | | |
| FEP-FEP-3CU-24 | 3 | 24 | Solid | FEP | FEP | - | - |
| FEP-FEP-3CU-24S | 3 | 24 7/32 | Stranded | FEP | FEP | - | - |
| FEP-SSB-FEP-3CU-24 | 3 | 24 | Solid | FEP | FEP | Stainless steel | - |
| FEP-SSB-FEP-3CU-24S | 3 | 24 7/32 | Stranded | FEP | FEP | Stainless steel | - |
| FEP-FEP-SSB-3CU-24 | 3 | 24 | Solid | FEP | FEP | - | Stainless steel or Tinned copper |
| FEP-FEP-SSB-3CU-24S | 3 | 24 7/32 | Stranded | FEP | FEP | - | Stainless steel or Tinned copper |
| FEP-FEP-4CU-24 | 4 | 24 | Solid | FEP | FEP | - | - |
| FEP-FEP-4CU-24S | 4 | 24 7/32 | Stranded | FEP | FEP | - | - |
| FEP-SSB-FEP-4CU-24 | 4 | 24 | Solid | FEP | FEP | Stainless steel | - |
| FEP-SSB-FEP-4CU-24S | 4 | 24 7/32 | Stranded | FEP | FEP | Stainless steel | - |
| FEP-FEP-SSB-4CU-24 | 4 | 24 | Solid | FEP | FEP | - | Stainless steel or Tinned copper |
| FEP-FEP-SSB-4CU-24S | 4 | 24 7/32 | Stranded | FEP | FEP | - | Stainless steel or Tinned copper |
| FEP-FEP-6CU-24 | 6 | 24 | Solid | FEP | FEP | - | - |
| FEP-FEP-6CU-24S | 6 | 24 7/32 | Stranded | FEP | FEP | - | - |
| FEP-SSB-FEP-6CU-24 | 6 | 24 | Solid | FEP | FEP | Stainless steel | - |
| FEP-SSB-FEP-6CU-24S | 6 | 24 7/32 | Stranded | FEP | FEP | Stainless steel | - |
| FEP-FEP-SSB-6CU-24 | 6 | 24 | Solid | FEP | FEP | - | Stainless steel or Tinned copper |
| FEP-FEP-SSB-6CU-24S | 6 | 24 7/32 | Stranded | FEP | FEP | - | Stainless steel or Tinned copper |

Note: The above order codes represent the more popular constructions. However, other designs are available upon request.

# Fiberglass Insulated Resistance Temperature Detector (RTD) Wire

**Feature**

- Used for extending RTD and thermistor signal leads
- Available with Fiberglass, Teflon and PVC insulation
- Wire available with 2, 3, 4, 6 and 8 conductors
- Spool lengths in meters

**Specification**

- Conductor: Silver-plated copper wire
- Inuslation material: Fiberglass
- Max. temp. : 480℃
- Color code: 2CU: Red/White
  3CU: Red/Red/White
  4CU: Red/Red/White/White

| Order Code | Number of Conductors | Wire Size (AWG) | Wire Type | Insulation | | Inner Shield | Outer Shield |
|---|---|---|---|---|---|---|---|
| | | | | Conductor | Jacket | | |
| FB-FB-2CU-24 | 2 | 24 | Solid | Fiberglass braid | Fiberglass braid | - | - |
| FB-FB-2CU-24S | 2 | 24 7/32 | Stranded | Fiberglass braid | Fiberglass braid | - | - |
| FB-SSB-FB-2CU-24 | 2 | 24 | Solid | Fiberglass braid | Fiberglass braid | Stainless steel | - |
| FB-SSB-FB-2CU-24S | 2 | 24 7/32 | Stranded | Fiberglass braid | Fiberglass braid | Stainless steel | - |
| FB-FB-SSB-2CU-24 | 2 | 24 | Solid | Fiberglass braid | Fiberglass braid | - | Stainless steel or Tinned copper |
| FB-FB-SSB-2CU-24S | 2 | 24 7/32 | Stranded | Fiberglass braid | Fiberglass braid | - | Stainless steel or Tinned copper |
| FB-FB-3CU-24 | 3 | 24 | Solid | Fiberglass braid | Fiberglass braid | - | - |
| FB-FB-3CU-24S | 3 | 24 7/32 | Stranded | Fiberglass braid | Fiberglass braid | - | - |
| FB-SSB-FB-3CU-24 | 3 | 24 | Solid | Fiberglass braid | Fiberglass braid | Stainless steel | - |
| FB-SSB-FB-3CU-24S | 3 | 24 7/32 | Stranded | Fiberglass braid | Fiberglass braid | Stainless steel | - |
| FB-FB-SSB-3CU-24 | 3 | 24 | Solid | Fiberglass braid | Fiberglass braid | - | Stainless steel or Tinned copper |
| FB-FB-SSB-3CU-24S | 3 | 24 7/32 | Stranded | Fiberglass braid | Fiberglass braid | - | Stainless steel or Tinned copper |
| FB-FB-4CU-24 | 4 | 24 | Solid | Fiberglass braid | Fiberglass braid | - | - |
| FB-FB-4CU-24S | 4 | 24 7/32 | Stranded | Fiberglass braid | Fiberglass braid | - | - |
| FB-SSB-FB-4CU-24 | 4 | 24 | Solid | Fiberglass braid | Fiberglass braid | Stainless steel | - |
| FB-SSB-FB-4CU-24S | 4 | 24 7/32 | Stranded | Fiberglass braid | Fiberglass braid | Stainless steel | - |
| FB-FB-SSB-4CU-24 | 4 | 24 | Solid | Fiberglass braid | Fiberglass braid | - | Stainless steel or Tinned copper |
| FB-FB-SSB-4CU-24S | 4 | 24 7/32 | Stranded | Fiberglass braid | Fiberglass braid | - | Stainless steel or Tinned copper |

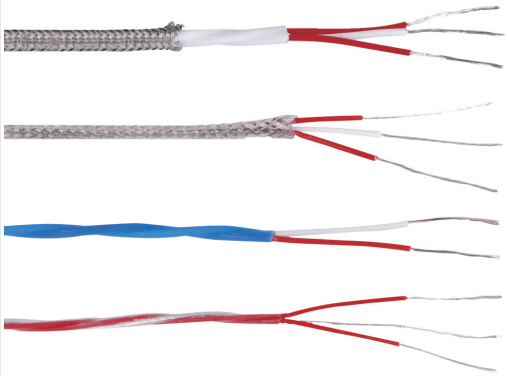
Note: The above order codes represent the more popular constructions. However, other designs are available upon request.

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# PFA Insulated Resistance Temperature Detector (RTD) Wire

**Feature**

- Used for extending RTD and thermistor signal leads
- Available with Fiberglass, Teflon and PVC insulation
- Wire available with 2, 3, 4, 6 and 8 conductors
- Spool lengths in meters



**Specification**

- Conductor: Silver-plated copper wire
- Inuslation material: PFA
- Max. temp. : 260℃
- Color code: 2CU: Red/White
  3CU: Red/Red/White
  4CU: Red/Red/White/White

| Order Code | Number of Conductors | Wire Size (AWG) | Wire Type | Insulation | | Inner Shield | Outer Shield |
|---|---|---|---|---|---|---|---|
| | | | | Conductor | Jacket | | |
| PFA-PFA-2CU-24 | 2 | 24 | Solid | PFA | PFA | - | - |
| PFA-PFA-2CU-24S | 2 | 24 7/32 | Stranded | PFA | PFA | - | - |
| PFA-SSB-PFA-2CU-24 | 2 | 24 | Solid | PFA | PFA | Stainless steel | - |
| PFA-SSB-PFA-2CU-24S | 2 | 24 7/32 | Stranded | PFA | PFA | Stainless steel | - |
| PFA-PFA-SSB-2CU-24 | 2 | 24 | Solid | PFA | PFA | - | Stainless steel or Tinned copper |
| PFA-PFA-SSB-2CU-24S | 2 | 24 7/32 | Stranded | PFA | PFA | - | Stainless steel or Tinned copper |
| PFA-PFA-3CU-24 | 3 | 24 | Solid | PFA | PFA | - | - |
| PFA-PFA-3CU-24S | 3 | 24 7/32 | Stranded | PFA | PFA | - | - |
| PFA-SSB-PFA-3CU-24 | 3 | 24 | Solid | PFA | PFA | Stainless steel | - |
| PFA-SSB-PFA-3CU-24S | 3 | 24 7/32 | Stranded | PFA | PFA | Stainless steel | - |
| PFA-PFA-SSB-3CU-24 | 3 | 24 | Solid | PFA | PFA | - | Stainless steel or Tinned copper |
| PFA-PFA-SSB-3CU-24S | 3 | 24 7/32 | Stranded | PFA | PFA | - | Stainless steel or Tinned copper |
| PFA-PFA-4CU-24 | 4 | 24 | Solid | PFA | PFA | - | - |
| PFA-PFA-4CU-24S | 4 | 24 7/32 | Stranded | PFA | PFA | - | - |
| PFA-SSB-PFA-4CU-24 | 4 | 24 | Solid | PFA | PFA | Stainless steel | - |
| PFA-SSB-PFA-4CU-24S | 4 | 24 7/32 | Stranded | PFA | PFA | Stainless steel | - |
| PFA-PFA-SSB-4CU-24 | 4 | 24 | Solid | PFA | PFA | - | Stainless steel or Tinned copper |
| PFA-PFA-SSB-4CU-24S | 4 | 24 7/32 | Stranded | PFA | PFA | - | Stainless steel or Tinned copper |

Note: The above order codes represent the more popular constructions. However, other designs are available upon request.

# Bare Thermocouple Wire

## Features

- Thermocouple is the most adapted method for meas-uring temperatures, sometimes the only available method.
- Thermocouples can be created with various combinations of alloys.
- Our thermocouple alloys wire can be used to measure temperatures from -200 ℃ to higher temperatures up to 1260℃.



## Chemical Composition

| Type | Polarity | Chemical Composition | Type | Polarity | Chemical Composition | Type | Polarity | Chemical Composition |
|---|---|---|---|---|---|---|---|---|
| J | JP<br>JN | Fe<br>Cu Ni 44 | JX | JPX<br>JNX | Fe<br>Cu Ni 44 | | | |
| K | KP | Ni Cr 10 | | KPX | Ni Cr 10 | KCB | KCPB<br>KCNB | Cu<br>Cu Ni 44 |
| | KN | Ni Si ++<br>Cu ++ | KX | KNX | Ni ++<br>Si ++<br>Cu ++ | KCA | KCPA<br>KCNA | Fe<br>Cu Ni 43 |
| T | TP<br>TN | Cu<br>Cu Ni 44 | TX | TPX<br>TNX | Cu<br>Cu Ni 44 | | | |
| E | EP<br>EN | Ni Cr 10<br>Cu Ni 44 | EX | EPX<br>ENX | Ni Cr 10<br>Cu Ni 44 | | | |

## Order Code

| Calibration | Polarity | Chemical Composition | Wire Size (AWG) | Stranding | |
|---|---|---|---|---|---|
| | | | | N × OD (mm) | N × OD (Inches) |
| J (Iron-Constantan) | JP | Fe | 8 | 1 × 3.251 | 1 × 0.128 |
| | JN | Cu Ni44 | 10 | 1 × 2.591 | 1 × 0.102 |
| K (Chromel-Alumel) | KP | Ni Cr10 | 12 | 1 × 2.057 | 1 × 0.081 |
| | KN | Ni Si | 12 (7/20) | 7 × 0.813 | 7 × 0.032 |
| T (Copper-Constantan) | TP | Cu | 14 | 1 × 1.626 | 1 × 0.064 |
| | TN | Cu Ni44 | 14 (7/22) | 7 × 0.635 | 7 × 0.025 |
| E (Chromel-Constantan) | EP | Ni Cr10 | 16 | 1 × 1.295 | 1 × 0.051 |
| | EN | Cu Ni44 | 16 (7/24) | 7 × 0.508 | 7 × 0.020 |
| | | | 18 | 1 × 1.016 | 1 × 0.040 |
| | | | 18 (7/26) | 7 × 0.406 | 7 × 0.016 |
| | | | 20 | 1 × 0.813 | 1 × 0.032 |
| | | | 20 (7/28) | 7 × 0.330 | 7 × 0.013 |
| | | | 22 | 1 × 0.635 | 1 × 0.025 |
| | | | 22 (7/30) | 7 × 0.254 | 7 × 0.010 |
| | | | 24 | 1 × 0.508 | 1 × 0.020 |
| | | | 24 (7/32) | 7 × 0.203 | 7 × 0.008 |
| | | | 26 | 1 × 0.406 | 1 × 0.016 |
| | | | 28 | 1 × 0.330 | 1 × 0.013 |
| | | | 30 | 1 × 0.254 | 1 × 0.010 |
| | | | 32 | 1 × 0.203 | 1 × 0.008 |

## Standard of Reference

- European standard IEC 584
- American standard ANSI MC 96.1