



**Product:** [3115A](#)

Type JX Thermocouple, 2 Pr #20+22 Sol, PVC Ins Wht, Red, IS/OS, Blk PVC Jkt, 300V PLTC ITC CMG

[Request Sample](#)

Product Description

Type JX Thermocouple, 2 Pair 20+22AWG (Solid) Iron+Constantan, PVC Insulation Wht, Red Color Code, Individual & Overall Beldfoil® Shield, Black PVC Outer Jacket, PLTC ITC CMG AWM 2464 SUN RES DIR BUR

Technical Specifications

Product Overview

|                        |   |
|------------------------|---|
| Suitable Applications: | Industrial Control, Raceways Cable trays and ducts, Digital Control, Instruments (4-20ma, 0-10v, ...),low voltage digital control (24v, ...),RTD, control circuits, distributed control system (DCS),programmable logic controller (PLC), Solenoids, Valves, actuators, positioners |
|------------------------|---|

Construction Details

Conductor

| Element | No. of Elements | Size   | Stranding | Material          |
|---------|-----------------|--------|-----------|-------------------|
| Pair(s) | 2               | 20 AWG | Solid     | Iron & Constantan |
| Comm    | 1               | 22 AWG | 7x30      | BC - Bare Copper  |

Insulation

| Element | Material                 | Nom. Thickness     | Nom. Insulation Diameter | Color Code                 |
|---------|--------------------------|--------------------|--------------------------|----------------------------|
| Pair(s) | PVC - Polyvinyl Chloride | 0.021 in (0.53 mm) | 0.074 in (1.9 mm)        | Red and White and Numbered |
| Comm    | PVC - Polyvinyl Chloride | 0.019 in (0.48 mm) | 0.067 in (1.7 mm)        | Orange                     |

Inner Shield

| Element | Shield Type | Material                | Coverage | Drainwire Type   |
|---------|-------------|-------------------------|----------|------------------|
| Pair(s) | Tape        | Bi-Laminate (Alum+Poly) | 100%     | 20 AWG (7x28) TC |

Outer Shield

| Shield Type | Material                | Coverage | Drainwire Type   |
|-------------|-------------------------|----------|------------------|
| Tape        | Bi-Laminate (Alum+Poly) | 100%     | 22 AWG (7x30) TC |

Outer Jacket

| Material                 | Nom. Thickness    | Nom. Diameter |
|--------------------------|-------------------|---------------|
| PVC - Polyvinyl Chloride | 0.042 in (1.1 mm) | 0.378 in      |

|                                   |          |
|-----------------------------------|----------|
| Overall Cable Diameter (Nominal): | 0.328 in |
|-----------------------------------|----------|

Electrical Characteristics

Electricals

| Element    | Nom. Conductor DCR            | Nom. Inner Shield DCR      | Max. Current                 |
|------------|-------------------------------|----------------------------|------------------------------|
| Iron       | 69 Ohm/1000ft                 | 8.7 Ohm/1000ft (29 Ohm/km) |                              |
| Constantan | 293 Ohm/1000ft (961 Ohm/km)   |                            |                              |
| Comm       | 17.2 Ohm/1000ft (56.4 Ohm/km) |                            | 5 Amps per Conductor at 25°C |

Voltage

| UL Voltage Rating |
|-------------------|
| 300 V             |

Mechanical Characteristics

Temperature

| UL Temperature            | Operating       |
|---------------------------|-----------------|
| UL: 105°C, AWM 2464: 80°C | -20°C to +105°C |

Bend Radius

| Stationary Min.   | Installation Min. |
|-------------------|-------------------|
| 3.28 in (83.3 mm) | 3.28 in           |

|                    |                  |
|--------------------|------------------|
| Max. Pull Tension: | 445 lbs (202 kg) |
| Bulk Cable Weight: | 68 lbs/1000ft    |

Standards and Compliance

|                                  |   |
|----------------------------------|---|
| Environmental Suitability:       | Indoor, Outdoor, Sunlight Resistance  |
| Flammability / Reaction to Fire: | UL1685 FT4 Loading, FT4, IEEE 1202 FT4  |
| NEC / UL Compliance:             | Article 725, Article 727, Article 800   |
| AWM Compliance:                  | AWM 2464  |
| CEC / C(UL) Compliance:          | CMG   |
| European Directive Compliance:   | EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance:                 | China RoHS II (GB/T 26572-2011)   |
| Other Standard Compliance(s):    | ISA MC 96.1-1982 Type JX  |

Product Notes

|        |  |
|--------|--|
| Notes: | Iron & Constantan = ""Constantan is a Hoskins Manufacturing Company trademark."" |
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History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.426 Revision Date: 02-03-2025 |
|----------------------|--|

Part Numbers

Variants

| Item #        | Color | Putup Type | Length   | UPC          | Footnote |
|---------------|-------|------------|----------|--------------|----------|
| 3115A 0105000 | Black | Reel       | 5,000 ft | 612825141952 | C Z      |

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