



**Product:** [3111A](#)

Type JX Thermocouple, 1 Pr #20 Sol, PVC Ins Wht, Red, OS, Blk PVC Jkt, 300V PLTC ITC CMG

[Request Sample](#)

### Product Description

Type JX Thermocouple, 1 Pair 20AWG (Solid) Iron+Constantan, PVC Insulation Wht, Red Color Code, 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, ...), Thermocouple, distributed control system (DCS), programmable logic controller (PLC) |
|------------------------|--|

#### Construction Details

##### Conductor

| Element | Number of Element | Size   | Stranding | Material          |
|---------|-------------------|--------|-----------|-------------------|
| Pair(s) | 1                 | 20 AWG | Solid     | Iron & Constantan |

##### Insulation

| Element | Material                 | Nom. Thickness     | Color Code  |
|---------|--------------------------|--------------------|-------------|
| Pair(s) | PVC - Polyvinyl Chloride | 0.021 in (0.53 mm) | White & Red |

##### 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      | Ripcord |
|--------------------------|--------------------|--------------------|---------|
| PVC - Polyvinyl Chloride | 0.037 in (0.94 mm) | 0.226 in (5.74 mm) | Yes     |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.226 in (5.74 mm) |
|-----------------------------------|--------------------|

#### Electrical Characteristics

##### Electricals

| Element |
|---------|
| Pair(s) |

##### Voltage

| UL Voltage Rating                           |
|---|
| 300 V (PLTC, CMG, UL AWM 2464), 150 V (ITC) |

#### Mechanical Characteristics

##### Temperature

| UL Temperature | Operating       |
|----------------|-----------------|
| 105°C          | -30°C to +105°C |

##### Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
|                 |                   |

|                |                |
|----------------|----------------|
| 2.3 in (58 mm) | 2.3 in (58 mm) |
|----------------|----------------|

|                    |                |
|--------------------|----------------|
| Max. Pull Tension: | 29 lbs (13 kg) |
|--------------------|----------------|

|                    |               |
|--------------------|---------------|
| Bulk Cable Weight: | 26 lbs/1000ft |
|--------------------|---------------|

## Standards and Compliance

|                            |  |
|----------------------------|--|
| Environmental Suitability: | Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance |
|----------------------------|--|

|                                  |                                 |
|----------------------------------|---------------------------------|
| Flammability / Reaction to Fire: | UL1685 (FT4 Loading), FT4, 1202 |
|----------------------------------|---------------------------------|

|                      |   |
|----------------------|---|
| NEC / UL Compliance: | Article 725, Article 727, Article 800, CMG, ITC, PLTC |
|----------------------|---|

|                 |          |
|-----------------|----------|
| 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: | Constantan is a Hoskins Manufacturing Company trademark. |
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## History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.372 Revision Date: 04-14-2023 |
|----------------------|--|

## Part Numbers

### Variants

| Item #        | Color | Putup Type | Length   | UPC          |
|---------------|-------|------------|----------|--------------|
| 3111A 0101000 | Black | Reel       | 1,000 ft | 612825141860 |
| 3111A 0105000 | Black | Reel       | 5,000 ft | 612825141877 |

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