



**Product:** [1012A](#)

Type KX Thermocouple, 4 Pr #20+22 Sol, PVC Ins Yel, Red, IS/OS, Yellow PVC Jkt, 300V PLTC-ER ITC-ER CMG

[Request Sample](#)

**Product Description**

Type KX Thermocouple, 4 Pair 20+22AWG (Solid) Chromel+Alumel, PVC Insulation Yel, Red Color Code, Individual & Overall Beldfoil® Shield, Yellow PVC Outer Jacket, PLTC-ER ITC-ER CMG AWM 2464 SUN RES

**Technical Specifications**

**Physical Characteristics (Overall)**

**Conductor**

| Element | AWG | Stranding | Material         | Nominal Diameter | No. of Conductors | No. of Pairs |
|---------|-----|-----------|------------------|------------------|-------------------|--------------|
| Pair    | 20  | Solid     | Chromel & Alumel |                  |                   | 4            |
| Comm    |     | 7x30      | BC - Bare Copper | .066 in          | 1                 |              |

|                  |   |
|------------------|---|
| Conductor Count: | 9 |
|------------------|---|

**Insulation**

| Element | Material                 | Nominal Wall Thickness |
|---------|--------------------------|------------------------|
| Pair    | PVC - Polyvinyl Chloride | 0.016 in               |
| Comm    | PVC - Polyvinyl Chloride | 0.019 in               |

**Color Chart**

| Number | Color                       |
|--------|-----------------------------|
| 1      | Yellow & Red and Numbered 1 |
| 2      | Yellow & Red and Numbered 2 |
| 3      | Yellow & Red and Numbered 3 |
| 4      | Yellow & Red and Numbered 4 |
| 5      | Orange                      |

**Inner Shield Material**

| Type | Material    | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|------|-------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape | Alum / Poly | Beldfoil®           | 100 %        | TC - Tinned Copper | 22            | 7x30                         |

**Outer Shield Material**

| Type | Material    | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|------|-------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape | Alum / Poly | Beldfoil®           | 100 %        | TC - Tinned Copper | 20            | 7x28                         |

**Outer Jacket Material**

| Material                 | Nominal Diameter | Nominal Wall Thickness | Ripcord |
|--------------------------|------------------|------------------------|---------|
| PVC - Polyvinyl Chloride | 0.447 in         | 0.053 in               | Yes     |

**Electrical Characteristics**

**Conductor DCR**

| Individual Pair Nominal Shield DCR | Nominal Conductor DCR |
|------------------------------------|-----------------------|
| 10.6 Ohm/1000ft                    | 6.8 Ohm/1000ft        |

**Voltage**

| UL Voltage Rating |
|-------------------|
|-------------------|

|                       |
|-----------------------|
| 300 V                 |
| 150 V RMS (Type NPLF) |

Temperature Range

|                       |                 |
|-----------------------|-----------------|
| UL Temp Rating:       | 105°C           |
| Operating Temp Range: | -30°C To +105°C |

Mechanical Characteristics

|                                  |                |
|----------------------------------|----------------|
| Bulk Cable Weight:               | 102 lbs/1000ft |
| Max Recommended Pulling Tension: | 159 lbs        |
| Min Bend Radius/Minor Axis:      | 3.9 in         |

Standards

|                          |                      |
|--------------------------|----------------------|
| NEC Articles:            | 800                  |
| NEC/(UL) Specification:  | CMG, ITC-ER, PLTC-ER |
| CEC/C(UL) Specification: | CMG                  |
| UL AWM Style:            | 2464                 |
| ANSI Compliance:         | MC 96.1-1982 Type KX |

Applicable Environmental and Other Programs

|                                       |                               |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV):        | Yes                           |
| EU Directive 2011/65/EU (ROHS II):    | Yes                           |
| EU Directive 2012/19/EU (WEEE):       | Yes                           |
| EU Directive 2015/863/EU:             | Yes                           |
| EU Directive Compliance:              | EU Directive 2003/11/EC (BFR) |
| EU CE Mark:                           | Yes                           |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-04-01                    |
| MII Order #39 (China RoHS):           | Yes                           |

Suitability

|                                    |     |
|------------------------------------|-----|
| Suitability - Burial:              | Yes |
| Suitability - Sunlight Resistance: | Yes |

Flammability, LS0H, Toxicity Testing

|                     |                   |
|---------------------|-------------------|
| C(UL) Flammability: | FT4               |
| UL Flammability:    | UL1685 UL Loading |
| IEEE Flammability:  | 1202              |
| UL voltage rating:  | 300 V RMS         |

Plenum/Non-Plenum

|               |    |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Part Number

Variants

| Item #        | Color  | Putup Type | Length   | UPC          |
|---------------|--------|------------|----------|--------------|
| 1012A 0045000 | Yellow | Reel       | 5,000 ft | 612825102687 |

|           |                                                                                                                  |
|-----------|------------------------------------------------------------------------------------------------------------------|
| Footnote: | C - CRATE REEL PUT-UP.                                                                                           |
| Footnote: | Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN. |

Product Notes

|        |                                                                                         |
|--------|-----------------------------------------------------------------------------------------|
| Notes: | Chromel & Alumel = ""Chromel and Alumel are Hoskins Manufacturing Company trademarks."" |
|--------|-----------------------------------------------------------------------------------------|

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.329 Revision Date: 04-28-2020 |
|----------------------|--------------------------------------------------|

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