



Product: [1012A](#)

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

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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 ITC CMG AWM 2464 SUN RES

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)
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Pair(s)	4	20 AWG	Solid	Chromel & Alumel
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)	Yellow and Red Numbered 1, Yellow and Red Numbered 2, Yellow and Red Numbered 3, Yellow and Red Numbered 4
Comm	PVC - Polyvinyl Chloride	0.019 in (0.48 mm)	0.066 in (1.7 mm)	Orange

Inner Shield

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

Outer Shield

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

Outer Jacket

Separator	Material	Nom. Thickness	Nom. Diameter	Ripcord
Polyester Tape	PVC - Polyvinyl Chloride	0.053 in (1.3 mm)	0.447 in	Yes

Overall Cable Diameter (Nominal):	0.447 in
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Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Inner Shield DCR	Max. Current
Chromel	420 Ohm/1000ft	12.3 Ohm/1000ft (40.4 Ohm/km)	2.8 Amps per Conductor at 30°C
Alumel	161 Ohm/1000ft (528 Ohm/km)		2.8 Amps per Conductor at 30°C
Comm	18.5 Ohm/1000ft (60.7 Ohm/km)		4.8 Amps per Conductor at 30°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.
4.47 in (114 mm)	4.47 in

Max. Pull Tension:	635 lbs (288 kg)
Bulk Cable Weight:	83 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, UV Resistance, Burial
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 CE Mark, 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)

Product Notes

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

Update and Revision:	Revision Number: 0.435 Revision Date: 07-03-2024
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
1012A 0045000	Yellow	Reel	5,000 ft	612825102687	C Z

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