



Product: [83900](#)

Type J Thermocouple, 1 Pr #20 Sol, FEP Ins Wht, Red, Brn FEP Jkt, 300V CL3P 200C PLTC SUN RES

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Product Description

Type J Thermocouple, 1 Pair 20AWG (Solid) Iron+Constantan, FEP Insulation Wht, Red Color Code, Brown FEP Outer Jacket, CL3P 200C PLTC 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, ...), encoders, control circuits, distributed control
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Construction Details

Conductor

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

Insulation

Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
FEP - Fluorinated Ethylene Propylene	0.01 in (0.25 mm)	0.052 in (1.3 mm)	White and Red

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
FEP - Fluorinated Ethylene Propylene	0.012 in (0.30 mm)	0.128 in (3.25 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR
Iron	69 Ohm/1000ft
Constantan	293 Ohm/1000ft (961 Ohm/km)

Voltage

UL Voltage Rating
300 V

Mechanical Characteristics

Temperature

UL Temperature	Operating
200°C	-70°C To +200°C

Bend Radius

Stationary Min.	Installation Min.
1.28 in (32.5 mm)	1.28 in (32.5 mm)

Max. Pull Tension:	40 lbs (18 kg)
Bulk Cable Weight:	13 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance
Flammability / Reaction to Fire:	NFPA 262, UL 910 (Plenum)
NEC / UL Compliance:	Article 725, CL3P, PLTC
European Directve 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)
Other Standard Compliance(s):	ISA MC 96.1-1982 Type J

History

Update and Revision:	Revision Number: 0.503 Revision Date: 04-14-2023
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Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
83900 001100	Brown	Reel	100 ft	612825205821
83900 001500	Brown	Reel	500 ft	612825205845
83900 0011000	Brown	Reel	1,000 ft	612825205838

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