Belden



Product: 83954

Type TX Thermocouple, 1 Pr #20 Str, FEP Ins Blu, Red, Blue FEP Jkt, 300V CL3P 200C PLTC SUN RES

Request Sample

Product Description

Type TX Thermocouple, 1 Pair 20AWG (7x28) OFHC+Constantan, FEP Insulation Blu, Red Color Code, Blue 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, …),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
Conductor(s)	2	20 AWG	7x28	Copper & Constantan

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Conductor(s)	FEP - Fluorinated Ethylene Propylene	0.01 in (0.25 mm)	0.058 in (1.5 mm)	Blue, Red

Inner Shield

Material
No Shield

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
FEP - Fluorinated Ethylene Propylene	0.012 in (0.30 mm)	0.145 in

Overall Cable Diameter (Nominal):	0.145 in

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR
Copper	10 Ohm/1000ft
Constantan	283 Ohm/1000ft (928 Ohm/km)

Nom Outer Shield DCR:	12 Ohm/1000ft (39 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.
1.45 in (36.8 mm)	1.45 in

Max. Pull Tension:	41 lbs (19 kg)
Bulk Cable Weight:	18 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance
Flammability / Reaction to Fire:	NFPA 262 (UL 910)
NEC / UL Compliance:	Article 725
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)

History

Update and Revision:	Revision Number: 0.408 Revision Date: 02-20-2026

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC	Footnote
83954 0061000	Blue, Light	Reel	1,000 ft	612825206057	C

Footnote:	C - CRATE REEL PUT-UP.

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