



**Product:** [1117A](#)

Type TX Thermocouple, 1 Pr #16 Sol, FEP Ins Blu, Red, OS, Blue FEP Jkt, 300V PLTC CL2P 200C SUN RES

[Request Sample](#)

## Product Description

Type TX Thermocouple, 1 Pair 16AWG (Solid) OFHC+Constantan, FEP Insulation Blu, Red Color Code, Overall Beldfoil® Shield, Blue FEP Outer Jacket, PLTC CL2P 200C 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)
------------------------	--

### Construction Details

#### Conductor

Element	No. of Elements	Size	Stranding	Material
Pair(s)	1	16 AWG	Solid	Copper & Constantan

#### Insulation

Element	Material	Nom. Thickness	Color Code
Pair(s)	FEP - Fluorinated Ethylene Propylene	0.010 in (0.25 mm)	Blue & Red

#### Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	18 AWG (7x26) TC

#### Outer Jacket

Material	Nom. Thickness	Nom. Diameter
FEP - Fluorinated Ethylene Propylene	0.012 in (0.30 mm)	0.170 in (4.32 mm)

Overall Cable Diameter (Nominal):	0.170 in (4.32 mm)
-----------------------------------	--------------------

### Electrical Characteristics

#### Electricals

Element
Pair(s)

Table Notes:	Conductor DCR (Nom): 10 Ohm/1000ft 9Copper, 121 Ohm/1000ft (Constantan)
--------------	---

#### Voltage

UL Voltage Rating
300 V (PLTC), 300 V (CL3P)

### Mechanical Characteristics

#### Temperature

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

#### Bend Radius

Stationary Min.	Installation Min.
1.7 in (43 mm)	1.7 in (43 mm)

Max. Pull Tension:	83 lbs (38 kg)
Bulk Cable Weight:	32 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Indoor/Outdoor, Indoor, Outdoor, Sunlight Resistance
Flammability / Reaction to Fire:	NFPA 262, UL 910 (Plenum)
NEC / UL Compliance:	Article 725, CL3P, PLTC
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, 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 TX

## Product Notes

Notes:	Constantan is a Hoskins Manufacturing Company trademark.
--------	--

## History

Update and Revision:	Revision Number: 0.535 Revision Date: 02-03-2025
----------------------	--

## Part Numbers

### Variants

Item #	Color	Putup Type	Length	UPC	Footnote
1117A 0065000	Blue, Light	Reel	5,000 ft	612825107071	C Z

© 2025 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.