



REPRESENTATIVE IMAGE

**Product:** [2127A](#)

Fieldbus, 1 Pr #16 Str TC, XLPE Ins, OS, TPE Jkt, 600V TC

[Request Sample](#)

## Product Description

Fieldbus, 1 Pair 16AWG (7x24) Tinned Copper, XLPE Insulation, Overall Beldfoil® Shield, TPE Outer Jacket, 600V TC

## Technical Specifications

### Product Overview

**Suitable Applications:** harsh environment digital and serial two-way communication, oil and gas extraction and refining sites, petrochemical, Profibus process automation or Foundation FieldBus process automation, extreme temperature environments, exposure to humidity/moisture, dust, and oil, remote locations long distance applications, etc.

### Construction Details

#### Conductor

Element	Number of Element	Size	Stranding	Material
Pair(s)	1	16 AWG	7x24	TC - Tinned Copper

#### Insulation

Element	Material	Nom. Thickness	Color Code
Pair(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.038 in (0.97 mm)	Blue, Orange and Numbered

#### 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	Ripcord
TPE - Thermoplastic Elastomer	0.047 in (1.2 mm)	0.365 in (9.27 mm)	Yes

Cable Diameter (Nominal): 0.365 in

### Electrical Characteristics

#### Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Shield	Max. Capacitance Unbalance	Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Pair(s)	4.2 Ohm/1000ft	22 pF/ft	1.2 pF/ft	100 Ohm	64%	11.6 Amps per Conductor

Nom. Outer Shield DCR: 7.5 Ohm/1000ft

#### High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss
Pair(s)	0.039 MHz	0.065 dB/100ft

#### High Frequency

Max. Insertion Loss (Attenuation)	Max./Min. Input Impedance (unFitted)
0.091 dB/100ft	100 Ohm

#### Voltage

UL Voltage Rating
600 V (TC), 600 V (CSA CIC Type TC)

## Mechanical Characteristics

### Temperature

UL Temperature	Operating
90°C Wet/Dry	-25°C Cold Impact -40°C to +90°C -55°C Cold Bend

Table Notes: -40C

### Bend Radius

Stationary Min.	Installation Min.
3.75 in (95.3 mm)	3.75 in

Max. Pull Tension: 93 lbs

Bulk Cable Weight: 67 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Flammability / Fire Resistance:	UL1581 Vertical Tray, FT4, 1202, 60332-3-24 (Category C)
NEC / UL Compliance:	Article 336, TC
AWM Compliance:	I/II A/B
CEC / C(UL) Compliance:	CIC, TC
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)
Other Standard Compliance(s):	ISA/SP-50 Type A

## History

Update and Revision: Revision Number: 0.407 Revision Date: 10-13-2021

© 2021 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.