



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	Nom. Insulation Diameter	Color Code
Pair(s)	XLPE - Cross-Linked Polyethylene (Thermoset)	0.038 in (0.97 mm)	0.135 in (3.43 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

Separator	Material	Nom. Thickness	Nom. Diameter	Ripcord
Polyester Tape	TPE - Thermoplastic Elastomer	0.047 in (1.2 mm)	0.374 in (9.50 mm)	Yes

Overall Cable Diameter (Nominal): 0.374 in (9.50 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Max. Capacitance Unbalance	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Pair(s)	4.5 Ohm/1000ft	1.2 pF/ft (3.9 pF/m)	22 pF/ft	100 Ohm	64%	11.6 Amps per Conductor at 25°C

Nom. Outer Shield DCR: 5.1 Ohm/1000ft (17 Ohm/km)

High Frequency (Nominal/Typical)

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

High Frequency

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

Voltage

UL Voltage Rating
600 V

Mechanical Characteristics

Temperature

UL Temperature	Operating
90°C	-40°C to +90°C Wet/Dry

Table Notes: -40C

Bend Radius

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

Max. Pull Tension: 93 lbs (42 kg)

Bulk Cable Weight: 67 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Flammability / Reaction to Fire:	UL 1581 Vertical Tray, FT4, IEEE 1202, IEC 60332-3-24
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 336, ITC-ER, PLTC-ER
AWM Compliance:	AWM 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)
UK Regulation Compliance:	UKCA Mark
Other Standard Compliance(s):	ISA/SP-50 Type A

History

Update and Revision: Revision Number: 0.520 Revision Date: 04-14-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC
2127A 0061000	Blue, Light	Reel	1,000 ft	612825129943
2127A 0065000	Blue, Light	Reel	5,000 ft	612825129950
2127A 0035000	Orange	Reel	5,000 ft	612825129936

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