



**Product:** [2128A](#)

Fieldbus, 2 Pr #16 Str TC, XLPE Ins, IS/OS, TPE Jkt, 600V TC-ER

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### Product Description

Fieldbus, 2 Pair 16AWG (7x24) Tinned Copper, XLPE Insulation, Individual & Overall Beldfoil® Shield, TPE Outer Jacket, 600V TC-ER

### 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.
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#### Construction Details

##### Conductor

Element	No. of Elements	Size	Stranding	Material
Pair(s)	2	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

##### Inner Shield

Element	Shield Type	Material	Coverage	Drainwire Type	Notes
Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%	18 AWG (7x26) TC	Individually Shielded

##### Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	16 AWG (7x24) TC

##### Outer Jacket

Material	Nom. Thickness	Nom. Diameter	Ripcord
TPE - Thermoplastic Elastomer	0.063 in (1.6 mm)	0.629 in (16.0 mm)	Yes

Overall Cable Diameter (Nominal):	0.629 in (16.0 mm)
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#### Electrical Characteristics

##### Electricals

Nom. Conductor DCR	Max. Capacitance Unbalance	Nom. Capacitance Cond-to-Cond	Nom. Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
4.2 Ohm/1000ft (14 Ohm/km)	1.2 pF/ft (3.9 pF/m)	22 pF/ft (72 pF/m)	100 Ohm	64%	11.6 Amps per Conductor

##### High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss (Attenuation)
0.039	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-ER), 600 V (CSA CIC Type TC)

**Mechanical Characteristics****Temperature**

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

Table Notes:	-40C
Max. Pull Tension:	223 lbs (101 kg)
Bulk Cable Weight:	165 lbs/1000ft (246 kg/km)

**Standards and Compliance**

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Flammability / Reaction to Fire:	UL 1581 Vertical Tray, IEC 60332-3-24
NEC / UL Compliance:	Article 336, TC-ER
AWM Compliance:	AWM I A/B II A/B
CEC / C(UL) Compliance:	CIC, TC
ISO/IEC Compliance:	IEC 61158-2
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)
Other Standard Compliance(s):	ISA/SP-50 Type A

**History**

Update and Revision:	Revision Number: 0.458 Revision Date: 12-22-2023
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**Part Numbers****Variants**

Item #	Color	Putup Type	Length	UPC
2128A 0061000	Blue, Light	Reel	1,000 ft	612825130048
2128A 0065000	Blue, Light	Reel	5,000 ft	612825130055
2128A 0031000	Orange	Reel	1,000 ft	612825130024
2128A 0035000	Orange	Reel	5,000 ft	612825130031

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