



Product: [2129A](#)

Fieldbus, 5 Pr #16 Str TC, XLPE Ins, IS/OS, TPE Jkt, 600V TC-ER

[Request Sample](#)

Product Description

Fieldbus, 5 Pair 16AWG (7x24) Tinned Copper, XLPE Insulation, Individual & Overall Beldfoil® Shield, TPE Outer Jacket, 600V TC-ER

Technical Specifications

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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Conductor

Element	Number of Element	AWG	Stranding	Material
Pair(s)	5	16	7x24	TC - Tinned Copper

Insulation

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

Inner Shield Material

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

Outer Shield Material

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

Outer Jacket Material

Material	Thickness	Nom. Diameter	Ripcord
TPE - Thermoplastic Elastomer	0.063 in	0.789 in	Yes

Cable Diameter (Nominal):	0.789 in
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Electricals

Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Max. Capacitance Unbalance	Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
4.2 Ohm/1000ft	22 pF/ft	1.2 pF/ft	100 Ohm	64%	10.1 Amps per Conductor

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
0.039 MHz	0.065 dB/100ft

High Freq

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)

Temperature

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

Table Notes:	-40C
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Bend Radius

Stationary Min.
8 in

Max. Pull Tension:	504 lbs
Bulk Cable Weight:	294 lbs/1000ft
Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Flammability / Fire Resistance:	UL1581 Vertical Tray, FT4, 60332-3-24 (Category C)
NEC / UL Compliance:	Article 336, TC-ER
AWM Compliance:	AWM I A/B II A/B
CEC / C(UL) Compliance:	CIC, TC
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Other Standard Compliance(s):	ISA/SP-50 Type A
Update and Revision:	Revision Number: 0.388 Revision Date: 09-30-2020

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