



Product: [2135A](#)

Fieldbus, 36 Pr #16 Str TC, XLPE Ins, IS/OS, TPE Jkt, 600V TC-ER

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Product Description

Fieldbus, 36 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	Number of Element	Size	Stranding	Material
Pair(s)	36	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	0.12 in (3.0 mm)	1.952 in (49.58 mm)	Yes

Overall Cable Diameter (Nominal):	1.952 in (49.58 mm)
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Electrical Characteristics

Electricals

Nom. Conductor DCR	Max. Capacitance Unbalance	Nom. Capacitance Cond-to-Cond	Nom. Characteristic Impedance	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%	7.2 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:	3412 lbs (1548 kg)
Bulk Cable Weight:	1875 lbs/1000ft (2790 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Burial
Flammability / Reaction to Fire:	UL 1581 Vertical Tray, FT4, 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: 0.264 Revision Date: 11-09-2022
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Part Numbers**Variants**

Item #	Color	Putup Type	Length	UPC
2135A 0061000	Blue, Light	Reel	1,000 ft	612825130420
2135A 0031000	Orange	Reel	1,000 ft	612825130413

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