



REPRESENTATIVE IMAGE

Product: [3076F](#)

Fieldbus, 1 Pr #18 Str TC, PP Ins, OS, PVC Jkt, Flexible SUN RES OIL RES, PLTC-ER, ITC-ER, CMX-Outdoor, CM

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Product Description

Fieldbus, 1 Pair 18AWG (7x26) Tinned Copper, PP Insulation, Overall Beldfoil® Shield, PVC Outer Jacket, Flexible SUN RES OIL RES, PLTC-ER, ITC-ER, CMX-Outdoor, CM

Technical Specifications

Product Overview

Suitable Applications: exposure to rodent, crush, or cut through force, 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	18 AWG	7x26	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Color Code
Pair(s)	PP - Polypropylene	0.022 in (0.56 mm)	Blue & Orange

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	20 AWG (7x28) TC

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.050 in (1.3 mm)	0.280 in (7.11 mm)

Overall Cable Diameter (Nominal): 0.280 in

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Shield	Max. Capacitance Unbalance	Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Pair(s)	5.86 Ohm/1000ft	45 pF/ft	1.2 pF/ft	100 Ohm	66%	5.2 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	0.08 dB/100ft

High Frequency

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

Voltage

UL Voltage Rating

300 V (CM, PLTC-ER), 150 V (ITC)

Mechanical Characteristics

Temperature

UL Temperature	Operating
105°C	-40°C to +105°C

Bend Radius

Stationary Min.	Installation Min.
6.5 in (170 mm)	6.5 in

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Oil Resistance, Burial
Flammability / Reaction to Fire:	UL1666 Riser, FT4, FT4, 1202, IEC 60332-1-2
NEC / UL Compliance:	Article 725, Article 727, Article 800, CM, CMX-Outdoor, ITC-ER, PLTC-ER
CEC / C(UL) Compliance:	CMG
IEEE Compliance:	1202, IEEE 383 Vertical Tray Flame Test (70,000 BTU)
ISO/IEC Compliance:	IEC 61158-2
CPR Euroclass:	Eca
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

Product Notes

Notes:	Fieldbus: Orange jacket. Profibus PA: Intrinsically Safe Blue jacket. Jacket diameter tolerance: +/- .010
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History

Update and Revision:	Revision Number: 0.437 Revision Date: 10-27-2021
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