



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.
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Construction Details

Conductor

Element	Number of Element	Size	Stranding	Material
Pair(s)	1	18 AWG	7x26	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	PP - Polypropylene	0.022 in (0.56 mm)	0.088 in (2.2 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)

Table Notes:	Jacket OD +/- 0.010
Overall Cable Diameter (Nominal):	0.280 in (7.11 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)	7.2 Ohm/1000ft	1.2 pF/ft (3.9 pF/m)	45 pF/ft	100 Ohm	66%	5.2 Amps per Conductor at 25°C

Nom. Outer Shield DCR:	8.5 Ohm/1000ft (28 Ohm/km)
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High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss (Attenuation)
Pair(s)	0.039	0.08 dB/100ft

High Frequency

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

Voltage

UL Voltage Rating

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

Mechanical Characteristics**Temperature**

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

Bend Radius

Stationary Min.	Installation Min.
6.5 in (170 mm)	2.80 in (71.1 mm)

Max. Pull Tension:	60 lbs (27 kg)
Bulk Cable Weight:	44 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Outdoor, Sunlight Resistance, Oil Resistance, Oil Resistance, Burial
Flammability / Reaction to Fire:	UL 1685 UL Loading, FT4, IEEE 1202, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 725, Article 727, Article 800, CMG, ITC, PLTC, TC
CEC / C(UL) Compliance:	CMG
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)
UK Regulation Compliance:	UKCA Mark
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: 0.530 Revision Date: 04-14-2023
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Part Numbers**Variants**

Item #	Color	Putup Type	Length	UPC
3076F 0061000	Blue, Light	Reel	1,000 ft	612825140269
3076F 00310000	Orange			612825140214
3076F 003250	Orange	Reel	250 ft	612825140221
3076F 003500	Orange	Reel	500 ft	612825140245
3076F 0031000	Orange	Reel	1,000 ft	612825140207
3076F 0032500	Orange	Reel	2,500 ft	612825140238
3076F 0035000	Orange	Reel	5,000 ft	612825140252

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