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

Request Sample

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	No. of Elements	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 Impedence	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 25ºC

Nom. Outer Shield DCR:	8.5 Ohm/1000ft (28 Ohm/km)

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

History

Update and Revision:	Revision Number: 0.534 Revision Date: 02-03-2025

Part Numbers

Variants

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

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