Product: 3076F

Fieldbus, 1 Pr #18 Str TC, PO Ins, OS, PVC Jkt, Flexible SUN RES OIL RES

Request Sample

Product Description

Fieldbus, 1 Pair 18AWG (7x26) Tinned Copper, PO Insulation, Overall Beldfoil® Shield, Orange PVC Outer Jacket, Flexible SUN RES OIL RES

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 enviornments, exposure to humidity/moisture, dust, and oil, remote locations long distance applications, etc.

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Pairs
18	7x26	TC - Tinned Copper	0.045 in	1

Conductor Count:	2

Insulation

Material
PP - Polypropylene

Outer Shield Material

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Alum / Poly	Beldfoil®	100%	TC - Tinned Copper	20	7x28

Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.28 in

Construction and Dimensions

Cabling

Twists	Filler
5.3 twist/ft	Polypropylene

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
5.86 Ohm/1000ft	7.5 Ohm/1000ft

Capacitance

Max. Capacitance Unbalance	Nom. Capacitance Conductor to Shield	Nom.Mutual Capacitance
1.2 pF/ft	45 pF/ft	24 pF/ft

Inductance

Nominal Inductance
0.19 µH/ft

Impedance

Nominal Characteristic Impedance
100 Ohm

High Frequency (Nominal/Typical)

Nom. Insertion Loss
0.08 dB/100ft

Delay

Nominal Velocity of Propagation (VP) [%]
66%

High Freq

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

Current

Element	Max. Recommended Current [A]
Per Conductor	5.2 Amps per Conductor

Voltage

UL Voltage Rating
300 V RMS

Electrical Characteristics Notes:	Max Propagation Delay Change From 7.812 kHz to 39.06 kHz: 518 pS/ft
Other Electrical Characteristic 2:	31.25 KBits/sec

Temperature Range

UL Temp Rating:	105°C
Operating Temp Range:	-40°C To +105°C

Mechanical Characteristics

Oil Resistance:	Yes
UV Resistance:	Yes
Bulk Cable Weight:	38 lbs/1000ft
Max. Pull Tension:	60 lbs
Min Bend Radius/Minor Axis:	2.5 in

Standards

NEC Articles:	Article 725, Article 727, Article 800
NEC/(UL) Compliance:	CMR, ITC-ER, PLTC-ER
CEC/C(UL) Compliance:	CMG
IEC Compliance:	IEC 61158-2
CPR Euroclass:	Eca
IEEE Compliance:	1202, IEEE 383 Vertical Tray Flame Test (70,000 BTU)
Other Compliance:	ISA/SP-50 Type A

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01

MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Burial:	Yes - UL
Suitability - Indoor:	Yes
Suitability - Oil Resistance:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

C(UL) Flammability:	FT4
UL Flammability:	UL1666 Riser
IEC Flammability:	IEC 60332-1-2
IEEE Flammability:	1202
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No

Part Number

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

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	N - FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

Product Notes

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

History

Update and Revision:	Revision Number: 0.338 Revision Date: 06-08-2020