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**3076F**



**Multi-Conductor - DataBus® ISA/SP-50 FOUNDATION Fieldbus or PROFIBUS Cable**

1 pair 18 AWG stranded (7x26) tinned copper conductors, polyolefin insulation, polyolefin filler, Beldfoil® shield (100% coverage), tinned copper drain wire, binder, PVC jacket. Fieldbus Foundation Registered Product.

**For more Information  
Please call**

**1-800-Belden1**



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## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3076F 0031000	1,000 FT	48.000 LB	ORANGE	C	TW PR #18 PP FS PVC
3076F 00310000	10,000 FT	510.000 LB	ORANGE	C N	TW PR #18 PP FS PVC
3076F 003250	250 FT	14.000 LB	ORANGE	C	TW PR #18 PP FS PVC
3076F 0032500	2,500 FT	120.000 LB	ORANGE	C	TW PR #18 PP FS PVC
3076F 003500	500 FT	25.500 LB	ORANGE	C	TW PR #18 PP FS PVC
3076F 0035000	5,000 FT	240.000 LB	ORANGE	C N	TW PR #18 PP FS PVC
3076F 0061000	1,000 FT	48.000 LB	BLUE, LIGHT	C	TW PR #18 PP FS PVC

**Notes:**

C = CRATE REEL PUT-UP.

N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

## Physical Characteristics (Overall)

### Conductor

**AWG:**

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
1	18	7x26	TC - Tinned Copper	0.046

**Total Number of Conductors:**

2

**Insulation****Insulation Material:**

Insulation Material
PO - Polyolefin

**Outer Shield****Outer Shield Material:**

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

**Outer Shield Drain Wire AWG:**

AWG	Stranding	Drain Wire Conductor Material
20	7x28	TC - Tinned Copper

**Outer Jacket****Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

**Outer Jacket Diameter:**

Nom. Dia. (in.)
0.280

**Overall Cable****Overall Cabling Fillers:**

Polypropylene

**Overall Cabling Lay Length & Direction:**

Length (in.)	Twists (twist/ft)
2.250	5.300

**Mechanical Characteristics (Overall)**

<b>Operating Temperature Range:</b>	-40°C To +105°C
<b>UL Temperature Rating:</b>	105°C
<b>Bulk Cable Weight:</b>	38 lbs/1000 ft.
<b>Max. Recommended Pulling Tension:</b>	60 lbs.
<b>Min. Bend Radius/Minor Axis:</b>	2.500 in.

**Applicable Specifications and Agency Compliance (Overall)****Applicable Standards & Environmental Programs****NEC/(UL) Specification:**

CM, CMX-Outdoor, PLTC-ER

<b>NEC Articles:</b>	725, 727, 800
<b>CEC/C(UL) Specification:</b>	CMG
<b>EU Directive 2011/65/EU (ROHS II):</b>	Yes
<b>EU CE Mark:</b>	Yes
<b>EU Directive 2000/53/EC (ELV):</b>	Yes
<b>EU Directive 2002/95/EC (RoHS):</b>	Yes
<b>EU RoHS Compliance Date (mm/dd/yyyy):</b>	01/01/2004
<b>EU Directive 2002/96/EC (WEEE):</b>	Yes
<b>EU Directive 2003/11/EC (BFR):</b>	Yes
<b>CA Prop 65 (CJ for Wire &amp; Cable):</b>	Yes
<b>MII Order #39 (China RoHS):</b>	Yes
<b>Other Specification:</b>	ITC-ER

### Flame Test

<b>UL Flame Test:</b>	UL1666 Riser
<b>C(UL) Flame Test:</b>	FT4
<b>IEEE Flame Test:</b>	1202, IEEE 383 Vertical Tray Flame Test (70,000 BTU)

### Suitability

<b>Suitability - Indoor:</b>	Yes
<b>Suitability - Outdoor:</b>	Yes
<b>Suitability - Burial:</b>	Yes - UL
<b>Sunlight Resistance:</b>	Yes
<b>Oil Resistance:</b>	Yes

### Plenum/Non-Plenum

<b>Plenum (Y/N):</b>	No
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## Electrical Characteristics (Overall)

### Unaveraged Impedance:

Freq. (MHz)	Impedance (Ohm)
0.031	100.000

### Nom. Inductance:

Inductance ( $\mu$ H/ft)
.19

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
45.0

### Nom. Mutual Capacitance:

Capacitance (pF/ft)
24.0

**Maximum Capacitance Unbalance:****Capacitance (pF/ft)**

1.200

**Nominal Velocity of Propagation:****VP (%)**

66

**Nom. Conductor DC Resistance:****DCR @ 20°C (Ohm/1000 ft)**

5.86

**Nominal Outer Shield DC Resistance:****DCR @ 20°C (Ohm/1000 ft)**

7.500

**Nom. Attenuation:****Freq. (MHz) Attenuation (dB/100 ft.)**

0.039 0.080

**Max. Attenuation:****() Freq. (MHz) Attenuation (dB/100 ft.)**

.091 0.039 0.091

**Max. Operating Voltage - UL:****Voltage**

300 V RMS

**Max. Recommended Current:****Description Current**

Per Conductor 5.2 Amps

**Other Electrical Characteristic 1:**

Max Propagation Delay Change From 7.812 kHz to 39.06 kHz: 518 pS/ft

**Other Electrical Characteristic 2:**

31.25 KBits/sec

**Notes (Overall)****Notes:** Fieldbus: Orange jacket. Profibus PA: Intrinsically Safe Blue jacket. Jacket diameter tolerance: +/- .010**Related Documents:**[FieldbusCertificate-3076F.pdf](#) - This is a Foundation H1 Cable Registration Certification for 3076F.

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Revision Number: 7 Revision Date: 06-18-2014

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