

3076F Multi-Conductor - DataBus® ISA/SP-50 FOUNDATION Fieldbus or PROFIBUS Cable


 For more Information
 please call

1-800-Belden1

**Description:**

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.

Physical Characteristics (Overall)**Conductor****AWG:**

# Pairs	AWG	Stranding	Conductor Material	Dia. (mm)
1	18	7x26	TC - Tinned Copper	1.168

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. (mm)
7.417

Overall Cabling
Overall Cabling Fillers: Polypropylene
Overall Cabling Lay Length & Direction:

Length (mm)	Twists (m.)
57.150	1.615

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +105°C
UL Temperature Rating:	105°C
Bulk Cable Weight:	56.552 Kg/Km
Max. Recommended Pulling Tension:	266.892 N
Min. Bend Radius (Install)/Minor Axis:	63.500 mm

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Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	ITC, PLTC-ER
CEC/C(UL) Specification:	CMG
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Flame Test

UL Flame Test:	UL1666 Riser
C(UL) Flame Test:	FT4

Suitability

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

Plenum/Non-Plenum

Plenum (Y/N):	No
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Electrical Characteristics (Overall)

Unaveraged Impedance:

Freq. (MHz)	Impedance (Ohm)
0.031	100.000

Nom. Inductance:

Inductance (µH/m)
0.62339

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
147.645

Nom. Mutual Capacitance:

Capacitance (pF/m)
78.744

Maximum Capacitance Unbalance:

Capacitance (pF/m)
3.937

Nominal Velocity of Propagation:

VP (%)
66

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
19.2267

Nominal Outer Shield DC Resistance:

METRIC MEASUREMENT VERSION

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DCR @ 20°C (Ohm/km)

24.608

Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100m)

0.039 0.262

Max. Attenuation:

() Freq. (MHz) Attenuation (dB/100m)

0.298571 0.039 0.300

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

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3076F 0031000	305 MT	21.773 KG	ORANGE	C	TW PR #18 PP FS PVC
3076F 003250	76 MT	6.350 KG	ORANGE	C	TW PR #18 PP FS PVC
3076F 0032500	762 MT	54.431 KG	ORANGE	C	TW PR #18 PP FS PVC
3076F 003500	152 MT	11.567 KG	ORANGE	C	TW PR #18 PP FS PVC
3076F 0035000	1,524 MT	108.863 KG	ORANGE	C N	TW PR #18 PP FS PVC
3076F 0061000	305 MT	21.773 KG	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.

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