

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



For more Information
please call

1-800-Belden1



General 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

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. (mm)
7.112

Overall Cable

Overall Cabling Fillers: Polypropylene

Overall Cabling Lay Length & Direction:

Length (mm)	Twists (twist/m)
57.150	17.3893

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/Minor Axis: 63.500 mm

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

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM, CMX-Outdoor, PLTC-ER
NEC Articles:	725, 727, 800
CEC/C(UL) Specification:	CMG
EU Directive 2011/65/EU (ROHS II):	Yes
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
Other Specification:	ITC-ER

Flame Test

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

Suitability

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

Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

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 (%)

METRIC MEASUREMENT VERSION

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

66

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
19.2267

Nominal Outer Shield DC Resistance:

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

Related Documents:

[FieldbusCertificate-3076F.pdf](#) - This is a Foundation H1 Cable Registration Certification for 3076F.

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.

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

© 2020 Belden, Inc
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not

METRIC MEASUREMENT VERSION

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

to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product. Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).