



Part Number: 3076F

ISA/SP-50 FOUNDATION Fieldbus or PROFIBUS PA, (1 pr) 18 AWG (7x26)
TC, PO/PVC, Foil Shld, CMG, CMX, PLTC-ER

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Product Description

One 18 AWG pair stranded (7x26) tinned copper conductors, polyolefin insulation, overall Beldfoil® shield (100% coverage), PVC jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

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

Conductor Count:	2
Conductor Size:	18 AWG

Insulation

Material
PO - Polyolefin

Outer Shield Material

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

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

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 Recommended Pulling Tension:	60 lbs
Min Bend Radius/Minor Axis:	2.5 in

Standards

NEC Articles:	725, 727, 800
NEC/(UL) Specification:	CMR, ITC-ER, PLTC-ER
CEC/C(UL) Specification:	CMG
CPR Euroclass:	Eca
IEEE Specification:	1202, IEEE 383 Vertical Tray Flame Test (70,000 BTU)

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
CA Prop 65 (CJ for Wire & Cable):	Yes
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, LSOH, Toxicity Testing

C(UL) Flammability:	FT4
UL Flammability:	UL1666 Riser
IEEE Flammability:	1202
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Footnote
3076F 0061000	Blue, Light	C
3076F 0031000	Orange	C
3076F 003250	Orange	C
3076F 0032500	Orange	C
3076F 003500	Orange	C
3076F 0035000	Orange	C N
3076F 00310000	Orange	C N

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

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