



Part Number: 3078F

Fieldbus, 1 Pr #22 Str TC, PO Ins, OS, PVC Jkt, Flexible High Speed CM

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Product Description

Fieldbus, 1 Pair 22AWG (7x30) Tinned Copper, PO Insulation, Overall Beldfoil® Shield, Orange PVC Outer Jacket, Flexible High Speed CM

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
22	7x30	TC - Tinned Copper	1

Conductor Count: 2

Insulation

Material	Nominal Wall Thickness
FHDPE - Foamed High Density Polyethylene	0.042 in

Color Chart

Number	Color
1	Blue & Orange

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	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.351 in	0.05 in

Electrical Characteristics

Conductor DCR

Individual Pair Nominal Shield DCR	Nominal Conductor DCR
3.3 Ohm/1000ft	17.1 Ohm/1000ft

Capacitance

Max. Capacitance Unbalance	Nom. Capacitance Conductor to Shield	Nom. Mutual Capacitance
0.46 pF/ft	16 pF/ft	8.5 pF/ft

Inductance

Nominal Inductance
0.3 µH/ft

Impedance

Nominal Characteristic Impedance
150 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
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0.25 MHz	0.18 dB/100ft
0.625 MHz	0.26 dB/100ft
1.25 MHz	0.34 dB/100ft
3.125 MHz	0.55 dB/100ft

Delay

Nominal Velocity of Propagation (VP) [%]
78 %

High Freq

Max./Min. Input Impedance (unFitted)
150 Ohm

Current

Element	Max. Recommended Current [A]
Per Conductor	2.5 Amps per Conductor

Voltage

UL Voltage Rating
300 V RMS

Electrical Characteristics Notes:	ISA/IEC SP50 Requirements: Impedance @ 250 kHz, 625 kHz, 1.25 MHz, and 3.125 MHz: 150 +/- 10% Ohms
Other Electrical Characteristic 2:	1.0 and 2.5 Mbits/sec

Temperature Range

UL Temp Rating:	75°C
Operating Temp Range:	-40°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	40 lbs/1000ft
Max Recommended Pulling Tension:	32 lbs
Min Bend Radius/Minor Axis:	3.5 in

Standards

NEC Articles:	800
NEC/(UL) Specification:	CM, PLTC
CEC/C(UL) Specification:	CM

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/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 - Sunlight Resistance:	Yes
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Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	UPC	Length	Footnote
3078F 0031000	Orange	612825140313	1,000 ft	C
3078F 0032500	Orange	612825140320	2,500 ft	C
3078F 003500	Orange	612825140337	500 ft	C

Footnote:	C - CRATE REEL PUT-UP.
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Product Notes

Notes:	Tape around pair has shorting fold. CPE & LSOH Jacket optional.
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History

Update and Revision:	Revision Number: 0.324 Revision Date: 08-22-2019
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