



**Product:** [3078F](#)

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

[Request Sample](#)

## Product Description

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

## Technical Specifications

### Product Overview

Suitable Applications:	harsh environment digital and serial two-way communication, oil and gas extraction and refining sites, petrochemical, Profibus process automation or Foundation FieldBus process automation, extreme temperature environments, exposure to humidity/moisture, dust, and oil, remote locations long distance applications, etc.
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### Physical Characteristics (Overall)

#### Conductor

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

Conductor Count:	2
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#### Insulation

Material	Nominal Wall Thickness
PE - Polyethylene (Foam)	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	Alum / Poly	Beldfoil®	100%	TC - Tinned Copper	20	7x28

#### 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
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
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Other Electrical Characteristic 2:	1.0 and 2.5 Mbits/sec
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**Temperature Range**

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

Bulk Cable Weight:	40 lbs/1000ft
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Max. Pull Tension:	32 lbs
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Min Bend Radius/Minor Axis:	3.5 in
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**Standards**

NEC Articles:	Article 800
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NEC/(UL) Compliance:	CM, PLTC
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CEC/C(UL) Compliance:	CM
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**Applicable Environmental and Other Programs**

EU Directive 2000/53/EC (ELV):	Yes
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EU Directive 2003/11/EC (BFR):	Yes
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EU Directive 2011/65/EU (ROHS II):	Yes
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EU Directive 2012/19/EU (WEEE):	Yes
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EU Directive 2015/863/EU:	Yes
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EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
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EU CE Mark:	Yes
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EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
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MII Order #39 (China RoHS):	Yes
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**Suitability**

Suitability - Sunlight Resistance:	Yes
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## Flammability, LSOH, 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	Putup Type	Length	UPC
3078F 003500	Orange	Reel	500 ft	612825140337
3078F 0031000	Orange	Reel	1,000 ft	612825140313
3078F 0032500	Orange	Reel	2,500 ft	612825140320

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: 0.336 Revision Date: 04-28-2020
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#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.