



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

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

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### Product Description

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

### 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.

#### Construction Details

##### Conductor

Element	Number of Element	Size	Stranding	Material
Pair(s)	1	22 AWG	7x30	TC - Tinned Copper

##### Insulation

Element	Material	Nom. Thickness	Color Code	Notes
Pair(s)	PE - Polyethylene (Foam)	0.046 in (1.2 mm)	Blue & Orange	HDPE w/ Skin

##### Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	20 AWG (7x28) TC

##### Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.050 in (1.3 mm)	0.351 in (8.92 mm)

Overall Cable Diameter (Nominal): 0.351 in (8.92 mm)

#### Electrical Characteristics

##### Electricals

Element	Nom. Conductor DCR	Max. Capacitance Unbalance	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Pair(s)	17.1 Ohm/1000ft (56.1 Ohm/km)	0.46 pF/ft (1.5 pF/m)	16 pF/ft	150 Ohm	78%	2.5 Amps per Conductor

##### High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss (Attenuation)
Pair(s)	0.25	0.18 dB/100ft
	0.625	0.26 dB/100ft
	1.25	0.34 dB/100ft
	3.125	0.55 dB/100ft

##### High Frequency

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

##### Voltage

UL Voltage Rating

300 V (CM, PLTC)

## Mechanical Characteristics

### Temperature

UL Temperature	Operating
75°C	-40°C to +75°C

Max. Pull Tension:	32 lbs (15 kg)
Bulk Cable Weight:	40 lbs/1000ft (60 kg/km)

## Standards and Compliance

Environmental Suitability:	Sunlight Resistance
Flammability / Reaction to Fire:	UL1685 UL Loading
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 725, Article 800, CM, PLTC
CEC / C(UL) Compliance:	CM
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

## Product Notes

Notes:	CPE & LSzH Jacket optional
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## History

Update and Revision:	Revision Number: 0.436 Revision Date: 05-05-2023
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## Part Numbers

### 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

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