



Product: <u>3077F</u> ☑

Fieldbus, 1 Pr #22 Str TC, PP Ins, OS, PVC Jkt, Flexible, PLTC, ITC, CM

Request Sample

Product Description

Fieldbus, 1 Pair 22AWG (7x30) Tinned Copper, PP Insulation, Overall Beldfoil® Shield, PVC Outer Jacket, Flexible, PLTC, ITC, 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.

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
Pair(s)	PP - Polypropylene	0.015 in (0.38 mm)	Blue & Orange

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	22 AWG (7x30) TC

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.037 in (0.94 mm)	0.197 in (5.00 mm)
Overall Cable Diameter (Nominal):	0.197 in (5.00 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)	1.2 pF/ft (3.9 pF/m)	44 pF/ft	100 Ohm	66%	2.5 Amps per Conductor			
Nom. Outer Shield DCR: 11.4 Ohm/1000ft (37.4 Ohm/km)									

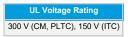
High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss (Attenuation)
Pair(s)	0.039	0.14 dB/100ft

High Frequency

Max. Insertion Loss (Attenuation)	Max./Min. Input Impedance (unFitted)
0.152 dB/100ft	100 Ohm

Voltage



Mechanical Characteristics

UL Temperature Operating

Temperature

105°C	-30°C to +	+105°C
Max. Pull Tension	n: 27	7 lbs (12
Bulk Cable Weigh	nt: 18	3 lbs/100

Standards and Compliance

Environmental Suitability: Sunlight Resistance				
Flammability / Reaction to Fire: UL1685 UL Loading, IEC 60332-1-2				
CPR Compliance:	CPR Euroclass: Eca			
NEC / UL Compliance:	IEC / UL Compliance: Article 725, Article 727, Article 800, CM, ITC, PLTC			
CEC / C(UL) Compliance:	СМ			
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 & Low Smoke Jacket optional.

History

Update and Revision:	Revision Number: 0.439 Revision Date: 05-05-2023

Part Numbers

Variants

Item	# C	olor Putu	p Type Leng	gth UPC
3077F 00	3500 Or	ange Reel	500	ft 612825140306
3077F 00	31000 Or	ange Reel	1,00	0 ft 612825140290

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