

# 3076F Paired - DataBus®/Profibus



#### **Description:**

Fieldbus/Profibus PA, 18 AWG stranded (7x26) tinned copper, polyolefin insulation, Beldfoil® (100% shield coverage), tinned copper drain wire, PVC jacket.

#### **PHYSICAL CHARACTERISTICS:**

## **CONDUCTOR:**

Number of Pairs	1		
Total Number of Conductors	2		
AWG	18		
Stranding	7x26		
Conductor Diameter	.048 in.		
Conductor Material	TC - Tinned Copper		
INSULATION:			
Insulation Material	PO - Polyolefin		
PAIR:			
Pair Lay Length	2.25 in.		
Pair Shield Material Trade Name	Beldfoil®		
Pair Shield Type	Tape		
Pair Shield Material	Aluminum Foil-Polyester Tape		
Pair Shield % Coverage	100 %		
PAIR SHIELD DRAIN WIRE :			
Pair Shield Drain Wire AWG	20		
Pair Shield Drain Wire Stranding	7x28		
Pair Shield Drain Wire Conductor Material	TC - Tinned Copper		
Pair Color Code Chart :			
Number	Color		

 Number
 Color

 1
 Blue&Orange

## **OUTER SHIELD:**

Outer Shield Material	Unshielded
OUTER JACKET:	
Outer Jacket Material	PVC - Polyvinyl Chloride
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#### **OVERALL NOMINAL DIAMETER:**

Overall Nominal Diameter	.253 in.
MECHANICAL CHARACTERISTICS:	
Operating Temperature Range	-40°C To +105°C
Temperature Rating	75°C
Bulk Cable Weight	35 lbs/1000 ft.
Max. Recommended Pulling Tension	59 lbs.
Min. Bend Radius (Install)	2.6 in.

## APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

## **APPLICABLE STANDARDS:**

NEC/(UL) Specification	PLTC CM ITC	
CEC/C(UL) Specification	СМ	
FLAME TEST:		

# UL Flame Test

1581 Vertical Tray

## **ELECTRICAL CHARACTERISTICS:**

#### Unaveraged Impedance :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Unaveraged Impedance (Ohms)		
	.03125			100		
Nom. Inductance		.19 μH/ft				
Nom. Capacitance Conductor to Shield @ 1 KHz		45.0 pF/ft				
Nom. Mutual Capacitance @ 1 KHz		24.0 pF/ft				
Maximum Capacitance Unbalance @ 1 KHz		3.6 pF/ft				
Nominal Velocity of Propagation		66 %				
Nom. Conductor DC Resistance @ 20 Deg. C		7.3 Ohms/1000 ft				
Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C		7.5 Ohms/1000 ft				
Nom. Attenuation (dB/100	) ft) :					
Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100 ft.)		
	.039			.08		
Max. Attenuation (dB/100 ft.) :						

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Max. Attenuation (dB/100 ft.)
	.039			.091
Max. Operating Voltage - Other		300 V RMS		
Max. Recommended Currer	nt :			

 Description
 Max. Recommended Current

 Per Conductor
 5.2 Amps

Other Electrical Characteristic 1

Max Propagation Delay Change From 7.812 kHz to 39.06 kHz: 518 pF/ft



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Other Electrical Characteristic 2	31.25 KBits/sec
NOTES:	
Notes	Profibus PA: Intrinsically Safe Blue jacket. Fieldbus: Orange jacket.
Notes (Cont'd.)	CPE Jacket is optional. Tape around pair has shorting fold.

#### **PUT-UPS AND COLORS:**

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
3076F 0031000	TWPR #18 PP FS PVC	1000	34	ORANGE	C N
3076F 003250	TWPR #18 PP FS PVC	250	10.5	ORANGE	С
3076F 0032500	TWPR #18 PP FS PVC	2500	85	ORANGE	C N
3076F 003500	TWPR #18 PP FS PVC	500	18.5	ORANGE	С
3076F 0035000	TWPR #18 PP FS PVC	5000	170	ORANGE	C N
3076F 0061000	TW PR #18 PP FS PVC	1000	37	BLUE, LIGHT	C N

C = CRATE REEL PUT-UP.

N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

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