

# 9841 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-485 Applications

For more Information please call

1-800-Belden1



#### **General Description:**

24 AWG stranded (7x32) TC conductors, polyethylene insulation, twisted pairs, overall Beldfoil® (100% coverage) + TC braid shield (90% coverage), 24 AWG stranded TC drain wire, PVC jacket.

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Physical Characteristics (Overall)				
Conductor AWG:				
<b># Pairs AWG Stranding Conductor Material</b>				
1 24 7x32 TC - Tinned Copper				
Total Number of Conductors:	2			
Insulation				
Insulation Material: Insulation Material Wall Thickness (mm)				
PE - Polyethylene 0.584				
Outer Shield Outer Shield Material:				
Layer # Outer Shield Trade Name Type Outer Shield Material	Coverage (%)			
1 Beldfoil® (w/ shorting fold) Tape Aluminum Foil-Polyester	Tape 100.000			
2 Braid TC - Tinned Copper	90.000			
Outer Shield Drain Wire AWG:				
AWG Stranding Drain Wire Conductor Material   24 7x#32 TC - Tinned Copper				
Outer Jacket				
Outer Jacket Material:				
Outer Jacket Material Nom. Wall Thickness (mm)				
PVC - Polyvinyl Chloride 0.889				
Overall Cable				
Overall Cabling Fillers:	Fibrous Polypropylene			
Overall Cabling Lay Length & Direction: Length (mm) Direction Twists (twist/m)				
63.500 Left Hand 15.749				
	5 000 mm			
Overall Nominal Diameter:	5.893 mm			
Pair Pair Color Code Chart:				
Color				
White/Blue and Blue/White				
Mechanical Characteristics (Overall)				
Operating Temperature Range:	-30°C To +90°C			
UL Temperature Rating:	80°C (UL AWM Style 2919)			
Bulk Cable Weight:	53.575 Kg/Km			
Max. Recommended Pulling Tension:	321.605 N			
Min. Bend Radius/Minor Axis:	63.500 mm			
Applicable Specifications and Agency Compliance (C	Overall)			
Applicable Standards & Environmental Programs				
NEC/(UL) Specification:	СМ			
NEC Articles:	800			
CEC/C(UL) Specification:	СМ			
AWM Specification:	UL Style 2919 (30 V 80°C)			

# **Detailed Specifications & Technical Data**



#### METRIC MEASUREMENT VERSION

# 9841 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-485 Applications

EU Directive 2011/65/EU (ROHS II):	Yes		
EU CE Mark:	Yes		
EU Directive 2000/53/EC (ELV):	Yes		
EU Directive 2002/95/EC (RoHS):	Yes		
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004		
EU Directive 2002/96/EC (WEEE):	Yes		
EU Directive 2003/11/EC (BFR):	Yes		
CA Prop 65 (CJ for Wire & Cable):	Yes		
MII Order #39 (China RoHS):	Yes		
ame Test			
UL Flame Test:	UL1685 UL Loading		
CSA Flame Test:	FT1		
uitability			
Suitability - Indoor:	Yes		
enum/Non-Plenum			
Plenum (Y/N):	No		
Plenum Number:	82841, 89841		

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:					
Impedance (Ohm)					
120					
Nom. Capacitance Conductor to Conductor:					
Capacitance (pF/m)					
41.9968					
Nom. Capacitance Cond. to Other Conductor & Shield:					
Capacitance (pF/m)					
75.463					
Nominal Velocity of Propagation:					
VP (%)					
66					
Nominal Delay:					
Delay (ns/m)					
5.2496					
Nom. Conductor DC Resistance:					
DCR @ 20°C (Ohm/km)					
78.744					
Nominal Outer Shield DC Resistance:					
DCR @ 20°C (Ohm/km)					
11.1554					
Nom. Attenuation:					
Freq. (MHz) Attenuation (dB/100m)					
1.000 1.969					
Max. Operating Voltage - UL:					
Voltage Description					
300 V RMS Type CM					
30 V RMS AWM2919					
Max. Recommended Current:					
Description Current					
10C temperature rise 2.1 Amps per conductor @ 25°C ambient					

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9841 060100	100 FT	4.300 LB	CHROME		1 PR #24 PE SH PVC
9841 0601000	1,000 FT	40.000 LB	CHROME	С	1 PR #24 PE SH PVC
9841 06010000	10,000 FT	380.000 LB	CHROME	С	1 PR #24 PE SH PVC
9841 060500	500 FT	20.000 LB	CHROME	С	1 PR #24 PE SH PVC
9841 0605000	5,000 FT	200.000 LB	CHROME		1 PR #24 PE SH PVC

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Notes: C = CRATE REEL PUT-UP.

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