# **Detailed Specifications & Technical Data**

**ENGLISH MEASUREMENT VERSION** 



## 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.

## **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

	AWG	Stranding	<b>Conductor Material</b>
1	24	7x32	TC - Tinned Copper

Total Number of Conductors: 2

### Insulation

#### **Insulation Material:**

<b>Insulation Material</b>	Wall Thickness (in.)
PE - Polyethylene	0.023

#### **Outer Shield**

## **Outer Shield Material:**

1	Layer # Outer Shield Trade Name		Type	Outer Shield Material	Coverage (%)
ı	1	Beldfoil® (w/ shorting fold)	Tape	Aluminum Foil-Polyester Tape	100.000
ı	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 (in.)		
PVC - Polyvinyl Chloride	0.035		

#### **Overall Cable**

Overall Cabling Fillers: Fibrous Polypropylene

## **Overall Cabling Lay Length & Direction:**

Length (in.)	Direction	Twists (twist/ft)		
2.500	Left Hand	4.800		

Overall Nominal Diameter: 0.232 in.

## 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:	36 lbs/1000 ft.	
Max. Recommended Pulling Tension:	72.300 lbs.	

Page 1 of 3 10-30-2013

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Min. Bend Radius/Minor Axis:	2.500 in.				
Applicable Specifications and Agency Compliance (Overall)					
Applicable Standards & Environmental Programs					
NEC/(UL) Specification:	CM				
NEC Articles:	800				
CEC/C(UL) Specification:	CM				
AWM Specification:	UL Style 2919 (30 V 80°C)				
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				
Flame Test					
UL Flame Test:	UL1685 UL Loading				
CSA Flame Test:	FT1				
Suitability					
Suitability - Indoor:	Yes				
Plenum/Non-Plenum					
Plenum (Y/N):	No				
Plenum Number:	82841, 89841				
Electrical Characteristics (Overall)					
Nom Characteristic Impedance:					

Nom. Characteristic Impedance:

Impedance (Ohm)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

Nominal Velocity of Propagation:

VP (%) 66

**Nominal Delay:** 

Delay (ns/ft) 1.6

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

**Nominal Outer Shield DC Resistance:** 

DCR @ 20°C (Ohm/1000 ft) 3.4

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#### Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100 ft.) 0.600

#### 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

#### Notes:

C = CRATE REEL PUT-UP.

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