



**Part Number: 9841**

RS485, 1 Pr #24 Str TC, PO Ins, OS+TC Brd, PVC Jkt, CM

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**Product Description**

RS-485, 1 Pair 24AWG (7x32) Tinned Copper, PO Insulation, Overall Beldfoil®+Tinned Copper Braid(90%) Shield, PVC Outer Jacket, CM

**Technical Specifications**

**Product Overview**

Suitable Applications:	RS-485, DMX-512
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**Physical Characteristics (Overall)**

**Conductor**

AWG	Stranding	Material	No. of Pairs
24	7x32	TC - Tinned Copper	1

Conductor Count:	2
Total Number of Pairs:	1
Conductor Size:	24 AWG

**Insulation**

Material	Nominal Wall Thickness
PE - Polyethylene	0.0225 in

**Color Chart**

Color
White/Blue & Blue/White

**Outer Shield Material**

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	1	Aluminum/Polyester	Beldfoil® with shorting fold	100 %	TC - Tinned Copper	24	7x32 mm
Braid	2	TC - Tinned Copper		90 %			

**Outer Jacket Material**

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.232 in	0.035 in

**Construction and Dimensions**

**Cabling**

Lay Direction	Twists	Filler
Left Hand	4.8 twist/ft	Fibrous Polypropylene

**Electrical Characteristics**

**Conductor DCR**

Nominal Conductor DCR	Nominal Outer Shield DCR
24 Ohm/1000ft	3.4 Ohm/1000ft

**Capacitance**

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
12.8 pF/ft	23 pF/ft

#### Impedance

Nominal Characteristic Impedance
120 Ohm

#### High Frequency (Nominal/Typical)

Nom. Insertion Loss
0.6 dB/100ft

#### Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.6 ns/ft	66 %

#### Current

Element	Max. Recommended Current [A]
10C Temperature Rise	Per conductor @ 25°C Ambient (10C temperature rise): 2.1 A

#### Voltage

UL Description	UL Voltage Rating
Type CM	300 V RMS (UL type CM)
AWM 2919	30 V RMS (UL AWM 2919)

Electrical Characteristics Notes:	Attenuation @ 1 MHz: .6 dB/100 ft nominal
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#### Temperature Range

UL Temp Rating:	80°C (UL AWM Style 2919)
Operating Temp Range:	-30°C To +80°C

#### Mechanical Characteristics

Bulk Cable Weight:	36 lbs/1000ft
Max Recommended Pulling Tension:	72.3 lbs
Min Bend Radius/Minor Axis:	2.5 in

#### Standards

NEC Articles:	800
NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
UL AWM Style:	2919 (30 V 80°C)
CPR Euroclass:	Eca

#### Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

#### Suitability

Suitability - Hazardous Locations:	Yes
Suitability - Indoor:	Yes

#### Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 (UL Loading)
CSA Flammability:	FT1

ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS (CM)

## Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	82841, 89841

## Part Number

### Variants

Item #	Color	UPC	Length	Footnote
9841.0030	Chrome		30 m	
9841.011000	Chrome		1,000 m	
9841.01152	Chrome		152 m	
9841.011525	Chrome		1,525 m	
9841.012000	Chrome		2,000 m	
9841.01305	Chrome		305 m	
9841.019999	Chrome		151 m	
9841 060100	Chrome	612825259442	100 ft	
9841 0601000	Chrome	612825259459	1,000 ft	C
9841 06010000	Chrome	612825259466	10,000 ft	C
9841 060500	Chrome	612825259473	500 ft	C
9841 0605000	Chrome	612825259480	5,000 ft	
9841.K1305	Chrome		305 m	
9841.031000	Violet		1,000 m	
9841.03305	Violet		305 m	
9841.02305	Yellow		305 m	

Footnote:	C - CRATE REEL PUT-UP.
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