



**Product:** <u>9841</u> ☑

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

# **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 applications; computer communications; low voltage analog signals (4-20ma, 0-10v, ...); low voltage digital control (24v, ...); line level audio; panel wiring

## **Physical Characteristics (Overall)**

#### Conductor

AWG	Stranding	Material	No. of Pairs
24	7x32	TC - Tinned Copper	1
Conductor Count:		2	

#### Insulation

Material	Nominal Wall Thickness
PE - Polyethylene	0.0225 in

#### **Color Chart**



### Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG
Tape	1	Alum / Poly	Beldfoil®	100 %	TC - Tinned Copper	24
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



### **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
Ī	Туре СМ	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

## **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			
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	Putup Type	Length	UPC/EAN
9841.0030	Chrome	Reel	30 m	8719605022745
9841 060100	Chrome	Reel	100 ft	612825259442
9841.019999	Chrome	Reel	151 m	8719605022806
9841.01152	Chrome	Reel	152 m	8719605022769
9841.01305	Chrome	Reel	305 m	8719605022790
9841 060500	Chrome	Reel	500 ft	612825259473
9841 0601000	Chrome	Reel	1,000 ft	612825259459
9841.011000	Chrome	Reel	1,000 m	8719605022752
9841.011525	Chrome	Reel	1,525 m	8719605022776
9841.012000	Chrome	Reel	2,000 m	8719605022783
9841 0605000	Chrome	Reel	5,000 ft	612825259480
9841 06010000	Chrome	Reel	10,000 ft	612825259466
9841.03305	Violet	Reel	305 m	8719605022837
9841.031000	Violet	Reel	1,000 m	8719605022820
9841.02305	Yellow	Reel	305 m	8719605022813

Footnote:

C - CRATE REEL PUT-UP

## History

Update and Revision: Revision Number: 0.324 Revision Date: 04-28-2020

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