



**Part Number: 9841**

RS-485, (1 pr) 24 AWG (7x32) TC, PE/PVC, Foil+TC Braid Shld, CM, 120Ω

## Product Description

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

## 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

#### 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 Foil-Polyester Tape	Beldfoil® (w/ 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 Length	Lay Direction	Twists	Filler
2.5 in	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	300V RMS (UL type CM)
AWM2919	30 V RMS (UL AWM 2919)

## 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 - Indoor:	Yes
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## Flammability, LS0H, Toxicity Testing

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

## Part Number

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

## Variants

Item #	Color
9841.0030	CHROME
9841.011000	CHROME
9841.01152	CHROME
9841.011525	CHROME
9841.012000	CHROME
9841.01305	CHROME
9841.019999	CHROME
9841 060100	CHROME
9841 0601000	CHROME
9841 06010000	CHROME
9841 060500	CHROME
9841 0605000	CHROME
9841.031000	VIOLET
9841.03305	VIOLET
9841.02305	YELLOW, RAL 1021

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