



**Part Number: 9842**

RS-485, (2 pr) 24 AWG (7x32) TC, PE/PVC, Foil+TC Braid Shld, CM, 120Ω

## Product Description

Two 24 AWG pairs 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 Conductors	No. of Pairs
24	7x32	TC - Tinned Copper	4	2

Conductor Count:	4
Total Number of Pairs:	2
Conductor Size:	24 AWG

#### Insulation

Material	Nominal Wall Thickness
PE - Polyethylene	0.022 in

#### Color Chart

Number	Color
1	White/Blue & Blue/White
2	White/Orange & Orange/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®	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	0.34 in	0.035 in

### Electrical Characteristics

#### Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
24 Ohm/1000ft	2.2 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)****Frequency [MHz] | Nom. Insertion Loss**

1 MHz | 0.6 dB/100m

**Delay****Max. Delay Skew | Nominal Delay | Nominal Velocity of Propagation (VP) [%]**

66 ns/100m | 1.54 ns/ft | 66 %

**Current****Max. Recommended Current [A]**

Per conductor @ 25°C: 2.1 A

**Voltage****UL Voltage Rating**

300 V RMS

**Temperature Range**

UL Temp Rating:	80°C
Operating Temp Range:	-30°C To +80°C

**Mechanical Characteristics**

Bulk Cable Weight:	49 lbs/1000ft
Max Recommended Pulling Tension:	87 lbs
Min Bend Radius/Minor Axis:	3.5 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 voltage rating:	300 V RMS
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**Plenum/Non-Plenum**

Plenum (Y/N):	N
Plenum Number:	82842

**Part Number****Variants**

Item #	Color	Footnote
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9842.001000	Chrome	
9842.00152	Chrome	
9842.0030	Chrome	
9842.00305	Chrome	
9842.00500	Chrome	
9842.009999	Chrome	
9842 060100	Chrome	
9842 0601000	Chrome	C
9842 06010000	Chrome	
9842 060500	Chrome	C
9842 0605000	Chrome	

Footnote:	C - CRATE REEL PUT-UP.
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