



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

#### Conductor

AWG	Stranding	Material	No. of Pairs
24	7x32	TC - Tinned Copper	2

Conductor Count:	4
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#### Insulation

Material
PE - Polyethylene

#### 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
Tape	1	Alum / Poly	Beldfoil®	100 %	TC - Tinned Copper	24
Braid	2	TC - Tinned Copper		90 %		

#### Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.34 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
MII Order #39 (China RoHS):	Yes

#### Suitability

Suitability - Indoor:	Yes
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#### Flammability, LSOH, Toxicity Testing

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

#### Plenum/Non-Plenum

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

#### Part Number

#### Variants

Item #	Color	Putup Type	Length	UPC/EAN
9842.0030	Chrome	Reel	30 m	8719605023001
9842 060100	Chrome	Reel	100 ft	612825259510

9842.009999	Chrome	Reel	151 m	8719605023032
9842.00152	Chrome	Reel	152 m	8719605022981
9842.00305	Chrome	Reel	305 m	8719605023018
9842 060500	Chrome	Reel	500 ft	612825259541
9842.00500	Chrome	Reel	500 m	8719605023025
9842 0601000	Chrome	Reel	1,000 ft	612825259527
9842.001000	Chrome	Reel	1,000 m	8719605022974
9842.001525	Chrome	Reel	1,525 m	8719605022998
9842 0605000	Chrome	Reel	5,000 ft	612825259558
9842 06010000	Chrome	Reel	10,000 ft	612825259534

Footnote: C - CRATE REEL PUT-UP.

## History

Update and Revision:	Revision Number: 0.334 Revision Date: 04-28-2020
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