

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

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

Flammability, LS0H, Toxicity Testing

UL voltage rating:	300 V RMS

Plenum/Non-Plenum

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

Part Number

Variants

Item #	Color	Footnote

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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