



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
------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------

Physical Characteristics (Overall)

Conductor

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

Conductor Count:	4
------------------	---

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
-----------------------	-----

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
----------------------	--------------------------------------------------

© 2020 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.