



Product: [9842](#) 

RS485, 2 Pr #24 Str TC, PE Ins, OS+TC Brd, PVC Jkt, CM

Product Description

RS-485, 2 Pair 24AWG (7x32) Tinned Copper, PE Insulation, Overall Beldfoil®+Tinned Copper Braid(90%) Shield, PVC Outer Jacket, CM

Technical Specifications

Product Overview

Suitable Applications:	RS-485, POS; Computer communications; Low Voltage Analog Signals (4-20ma, 0-10v, ...); Low Voltage Digital Control (24v, ...); Line Level Audio; Panel Wiring; serial communication (RS-485 standard) comprising of PLCs, VFDs, HMI's, motors, RTU, SCADA, etc. within noisy environments over long distance, etc.
------------------------	--

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Pair(s)	2	24 AWG	7x32	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	PE - Polyethylene	0.022 in (0.56 mm)	0.068 in (1.7 mm)	White/Blue Stripe & Blue/White Stripe, White/Orange Stripe & Orange/White Stripe

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	24 AWG (7x32) TC
Braid	Tinned Copper (TC)	90%	

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.035 in (0.89 mm)	0.340 in (8.64 mm)

Outer Jacket1 Table Notes:	Jacket OD +/- 0.025
Overall Cable Diameter (Nominal):	0.340 in (8.64 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Delay	Nom. Velocity of Prop.	Max. Current
Pair(s)	24 Ohm/1000ft	12.8 pF/ft (42.0 pF/m)	23 pF/ft (75 pF/m)	120 Ohm	1.54 ns/ft	66%	2.1 Amps per Conductor at 25°C
Nom Outer Shield DCR@Cond DCR1-cnvt:		2.2 Ohm/1000ft (7.2 Ohm/km)					

High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss (Attenuation)
Pair(s)	1	0.6 dB/100ft

Voltage

UL Voltage Rating
300 V (CM), 30 V (UL AWM 2919)

Mechanical Characteristics

Temperature

UL Temperature	Operating
80°C	-30°C to +80°C

Bend Radius

Stationary Min.	Installation Min.
3.5 in (89 mm)	3.5 in (89 mm)

Max. Pull Tension:	87 lbs (39 kg)
Bulk Cable Weight:	49 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor
Flammability / Reaction to Fire:	UL 1685 UL Loading, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 800, CM
AWM Compliance:	AWM 2919
CEC / C(UL) Compliance:	CM
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Other Standard Compliance(s):	DMX-512
Plenum Number:	82842, 89842
Non-Plenum Number:	9841ZH

History

Update and Revision:	Revision Number: 0.703 Revision Date: 09-07-2025
----------------------	--

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC/EAN	Footnote
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.K0305	Chrome	Reel	305 m	8719605023049	
9842 060500	Chrome	Reel	500 ft	612825259541	C
9842.00500	Chrome	Reel	500 m	8719605023025	
9842 0601000	Chrome	Reel	1,000 ft	612825259527	C
9842.001000	Chrome	Reel	1,000 m	8719605022974	
9842.001525	Chrome	Reel	1,525 m	8719605022998	
9842.K01525	Chrome	Reel	1,525 m	8719605128652	
9842 0605000	Chrome	Reel	5,000 ft	612825259558	
9842 06010000	Chrome	Reel	10,000 ft	612825259534	

Footnote:	C - CRATE REEL PUT-UP.
-----------	------------------------

© 2025 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.