



Product: [9843](#)

RS485, 3 Pr #24 Str TC, PE Ins, OS+TC Brd, PVC Jkt, CM

Request Sample

### Product Description

RS-485, 3 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, HMIs, motors, RTU, SCADA, etc. within noisy environments over long distance, etc.
------------------------	---

#### Construction Details

##### Conductor

Element	No. of Elements	Size	Stranding	Material
Pair(s)	3	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, White/Green Stripe & Green/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)	0.360 in (9.14 mm)

Overall Cable Diameter (Nominal):	0.360 in (9.14 mm)
-----------------------------------	--------------------

#### Electrical Characteristics

##### Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Pair(s)	24 Ohm/1000ft	12.8 pF/ft (42.0 pF/m)	23 pF/ft	120 Ohm	66%	1.54 Amps per Conductor at 25°C

Nom. Outer Shield DCR:	2.3 Ohm/1000ft (7.5 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.
3.75 in (95.3 mm)	3.75 in (95.3 mm)

Max. Pull Tension:	105.5 lbs (47.85 kg)
Bulk Cable Weight:	62 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)

## History

Update and Revision:	Revision Number: 0.573 Revision Date: 01-20-2023
----------------------	--

## Part Numbers

### Variants

Item #	Color	Putup Type	Length	UPC/EAN	Footnote
9843 0101000	Black	Reel	1,000 ft	612825495604	
9843 060100	Chrome	Reel	100 ft	612825259589	
9843.00305	Chrome	Reel	305 m	8719605023339	
9843 060500	Chrome	Reel	500 ft	612825259602	C
9843 0601000	Chrome	Reel	1,000 ft	612825259596	C
9843 0605000	Chrome	Reel	5,000 ft	612825259619	C

© 2023 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.