



Product: [9841](#)

RS485, 1 Pr #24 Str TC, PE Ins, OS+TC Brd, PVC Jkt, CM

[Request Sample](#)

Product Description

RS-485, 1 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	Number of Element	Size	Stranding	Material
Pair(s)	1	24 AWG	7x32	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Color Code
Pair(s)	PE - Polyethylene	0.023 in (0.58 mm)	White/Blue Stripe & Blue/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)	0.232 in (5.89 mm)

Overall Cable Diameter (Nominal):	0.232 in (5.89 mm)
-----------------------------------	--------------------

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Pair(s)	24 Ohm/1000ft (79 Ohm/km)	12.8 pF/ft (42.0 pF/m)	23 pF/ft	120 Ohm	66%	2.1 Amps per Conductor at 25°C (10°C Temperature Rise)

Nom. Outer Shield DCR:	3.4 Ohm/1000ft (11 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 (UL AWM 2919)	-30°C to +80°C

Bend Radius

Stationary Min.	Installation Min.
2.5 in (64 mm)	2.5 in

Max. Pull Tension:	72.3 lbs (32.8 kg)
Bulk Cable Weight:	36 lbs/1000ft (54 kg/km)

Standards and Compliance

Environmental Suitability:	Indoor
Flammability / Reaction to Fire:	UL1685 (UL Loading), IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, CM
AWM Compliance:	AMW 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)
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Plenum Number:	82841, 89841
Non-Plenum Number:	9841ZH

History

Update and Revision:	Revision Number: 0.420 Revision Date: 12-15-2021
----------------------	--

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC/EAN
9841.0030	Chrome	Reel	30 m	8719605022745
9841.060100	Chrome	Reel	100 ft	612825259442
9841.019999	Chrome	Reel	151 m	8719605022806
9841.011152	Chrome	Reel	152 m	8719605022769
9841.01305	Chrome	Reel	305 m	8719605022790
9841.060500	Chrome	Reel	500 ft	612825259473
9841.0601000	Chrome	Reel	1,000 ft	612825259459
9841.011000	Chrome	Reel	1,000 m	8719605022752
9841.0111525	Chrome	Reel	1,525 m	8719605022776
9841.012000	Chrome	Reel	2,000 m	8719605022783
9841.0605000	Chrome	Reel	5,000 ft	612825259480
9841.06010000	Chrome	Reel	10,000 ft	612825259466
9841.03305	Violet	Reel	305 m	8719605022837
9841.031000	Violet	Reel	1,000 m	8719605022820
9841.02305	Yellow	Reel	305 m	8719605022813

© 2022 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.