



Product: [9842](#)

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

REPRESENTATIVE IMAGE

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, HMIs, motors, RTU, SCADA, etc. within noisy environments over long distance, etc.

Construction Details

Conductor

Element	Number of Element	AWG	Stranding	Material
Pair(s)	2	24	7x32	TC - Tinned Copper

Insulation

Element	Material	Thickness	Color Code
Pair(s)	PE - Polyethylene	0.022 in	White/Blue Stripe & Blue/White Stripe, White/Orange Stripe & Orange/White Stripe

Outer Shield Material

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

Outer Jacket Material

Material	Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.035 in	0.340 in

Cable Diameter (Nominal): 0.340 in

Electrical Characteristics

Electricals

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

Nom Outer Shield DCR: 2.2 Ohm/1000ft

High Frequency (Nominal/Typical)

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

Voltage

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

Mechanical Characteristics

Temperature

UL Rating	Operating
80°C (UL AWM 2919)	-30°C to +80°C

Bend Radius

Stationary Min.	Installation Min.
3.5 in	3.5 in

Max. Pull Tension:	87 lbs
Bulk Cable Weight:	49 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor
Flammability / Fire Resistance:	UL 1685 (UL Loading), IEC 60332-1-2
NEC / UL Compliance:	Article 800, CM
AWM Compliance:	2919
CEC / C(UL) Compliance:	CM
CPR Euroclass:	Eca
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)
Other Standard Compliance(s):	DMX-512
Plenum Number:	82842, 89842
Non-Plenum Number:	9841ZH

History

Update and Revision:	Revision Number: 0.423 Revision Date: 03-16-2021
----------------------	--

© 2021 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.