



Product: [9842LS](#) 

RS-485, 2 Pr #24 Str TC, PO ins, F/B, LSNH Jkt, 300V, SWA, Eca

Product Description

RS-485, 2 Pair 24AWG Tinned Copper - Stranded, Polyolefin (PO, PE, PP) insulation, Foil + Braid(s) shielding, LSZH / FRNC jacket , 300V, SWA, CPR Eca

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)	2	24 AWG	7x32	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	PE - Polyethylene	0.56 mm (0.022 in)	1.73 mm (0.0681 in)	White/Blue & Blue/White, White/Orange & Orange/White

Outer Shield

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

Inner Jacket

Material	Nom. Thickness	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	1.1 mm (0.043 in)	8.65 mm (0.341 in)

Armor

Armor Type & Material	Armor Thickness	Coverage
SWA - Steel Wire Armor	0.9 mm	Min. 95%

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	1.35 mm (0.0531 in)	13.1 mm (0.516 in)

Overall Cable Diameter (Nominal):	13.1 mm (0.516 in)
-----------------------------------	--------------------

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedance	Nom. Delay	Nom. Velocity of Prop.	Max. Current
Pair(s)	78.7 Ohm/km (24.0 Ohm/1000ft)	42 pF/m (13 pF/ft)	75.5 pF/m (23.0 pF/ft)	120 Ohm	5.2 ns/m	66%	2.1 Amps per Conductor

Nom Outer Shield DCR@Cond DCR1-cnvc:	7.2 Ohm/km (2.2 Ohm/1000ft)
--------------------------------------	-----------------------------

High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss (Attenuation)
Pair(s)	1	1.97 dB/100m

Voltage

Voltage Rating
300 V

Mechanical Characteristics

Temperature

Operating	Installation	Storage
-45°C To +80°C	-15°C To +80°C	-45°C To +80°C

Bend Radius

Stationary Min.	Installation Min.
130 mm (5.1 in)	196 mm (7.72 in)

Max. Pull Tension: 500 N (110 lbf)

Bulk Cable Weight: 322 kg/km (216 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Indoor/Indoor/OutdoorOutdoor/Indoor/Outdoor - Euroclass Eca, Indoor, Outdoor, Non-Halogenated, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	IEC 60332-1-2, IEC 60332-3-24
CPR Compliance:	CPR Euroclass: Eca
ISO/IEC Compliance:	IEC 61034-2 - Smoke Density Min Transmittance = 60%
CENELEC Compliance:	EN 50290-2-20
European Halogen Free Standards:	IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 2.5 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3
European Directive Compliance:	EU CE Mark
UK Regulation Compliance:	UKCA Mark
Other Standard Compliance(s):	DMX-512

History

Update and Revision: Revision Number: 0.257 Revision Date: 09-07-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
9842LS.00152	Black	Reel	152 m	8719605023094
9842LS.00500	Black	Reel	500 m	8719605023124
9842LS.01500	Black	Reel	500 m	8719605023162
9842LS.001000	Black	Reel	1,000 m	8719605023056
9842LS.011000	Black	Reel	1,000 m	8719605023131
9842LS.001200	Black	Reel	1,200 m	8719605023063
9842LS.001280	Black	Reel	1,280 m	8719605023070
9842LS.001500	Black	Reel	1,500 m	8719605023087
9842LS.011500	Black	Reel	1,500 m	8719605023148
9842LS.002000	Black	Reel	2,000 m	8719605023100
9842LS.012000	Black	Reel	2,000 m	8719605023155
9842LS.002600	Black	Reel	2,600 m	8719605023117
9842LS.02500	Green	Reel	500 m	8719605023186
9842LS.03500	Green	Reel	500 m	8719605023193
9842LS.021000	Green	Reel	1,000 m	8719605023179

© 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.