

Product: 9841LW

RS485, 1 Pr #24 Str TC, PO Ins, OS+TC Brd, LSZH Jkt, Cca

Product Description

RS-485, 1 Pair 24AWG (7x32) Tinned Copper, PO Insulation, Overall Beldfoil®+Tinned Copper Braid(90%) Shield, LSZH Outer Jacket, CPR Cca

Technical Specifications

Product Overview

Suitable Applications:	Data link standard: RS-485, compatible with RS-422 and RS-232 Protocols: Modbus RTU, CANopen, BACNET MS/TP, DMX512 Signal types: Digital; Low Voltage Analog (4-20ma, 0-10v, ...); Low Voltage Digital Control (24v, …); Line Level Audio; Systems: serial communication (RS-485 standard) comprising of PLCs, VFDs, HMIs, motors, RTU, SCADA, etc.; Panel Wiring ; Audio & Lighting Environnent: Noisy, long distances

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Pair(s)	1	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

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
LSZH - Low Smoke Zero Halogen (Flame Retardant)	1.10 mm (0.0433 in)	6.50 mm (0.256 in)

Overall Cable Diameter (Nominal):	6.50 mm (0.256 in)

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)	78.7 Ohm/km (24.0 Ohm/1000ft)	42 pF/m (13 pF/ft)	75.5 pF/m	120 Ohm	66%	2.1 Amps per Conductor

Nom. Outer Shield DCR:	11.0 Ohm/km (3.35 Ohm/1000ft)

High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss (Attenuation)
Pair(s)	1	1.97 dB/100m (0.600 dB/100ft)

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.
32 mm (1.3 in)	65 mm (2.6 in)

Max. Pull Tension:	328 N (73.7 lbf)
Bulk Cable Weight:	61 kg/km (41 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Indoor - Euroclass Cca, Indoor, Non-Halogenated, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Cca-s1,d1,a1; CPR UKCA Class: Cca-s1,d1,a1
ISO/IEC Compliance:	IEC 61034-2 - Smoke Density Min Transmittance = 80%
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: 0.87 Revision Date: 04-07-2025

Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
9841LW.001000				
9841LW.00305				
9841LW.00500	Chrome	Reel	500 m	8719605187925

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