



Product: [9841LS](#)

RS 485, 1PR #24 Str TC, PO ins, F/B, LSNH Jkt, 300V SWA

Product Description

RS 485, 1 Pair AWG 24 Tinned Copper - Stranded, Polyolefin (PO, PE, PP) insulation, Foil + Braid(s) shielding, LSZH / FRNC jacket , 300V SWA

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, HMLs, motors, RTU, SCADA, etc. within noisy environments over long distance, outdoor etc
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Physical Characteristics (Overall)

Conductor			
AWG	Stranding	Material	No. of Pairs
24	7x32	TC - Tinned Copper	1
Conductor Count:			2
Total Number of Pairs:			1

Insulation		
Material	Nominal Diameter	Diameter +/- Tolerance
PE - Polyethylene	1.73 mm	0.05 mm

Color Chart	
Number	Color
Pair 1	White/Blue & Blue/White

Inner Shield				
Type	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG
Tape	Beldfoil®		TC - Tinned Copper	AWG24/7
Braid		95%		

Inner Jacket			
Material	Color	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	Chrome (RAL 7037)	6.1 mm	0.9 mm

Outer Jacket		
Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	10.3 mm	1.3 mm

Construction and Dimensions

Cabling	
Description	Filler
1 pair and 2 fillers twisted to cable core	Polypropylene (2x) (White, 1.90 mm)

Armor			
Type of Armor	Material	Thickness of Armoring Wires	Coverage Percentage
Steel Wire Armoring	Galvanized steel wire	0.9 mm	Min. 95%

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
78.7 Ohm/km	11 Ohm/km

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
42 pF/m	75.5 pF/m

Impedance

Frequency [MHz]	Nominal Characteristic Impedance
1 MHz	120 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	1.97 dB/100m

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
520 ns/ft	66%

Current

Element	Max. Recommended Current [A]
Conductor(s)	2.1 Amps per Conductor

Voltage

Voltage Rating [V]
300 V

Temperature Range

Installation Temperature Range:	-15°C To +80°C
Storage Temperature Range:	-45°C To +80°C
Operating Temp Range (Flexible Install):	-15°C To +80°C
Operating Temp Range (Fixed Install):	-45°C To +80°C

Mechanical Characteristics

Oil Resistance:	IEC 60811-404
Min. Bend Radius During Installation:	154.5 mm

Standards

CPR Euroclass:	Eca
CENELEC Compliance:	EN 50290-2-20
Other Specification:	DMX-512

Applicable Environmental and Other Programs

Environmental Space:	Indoor, Indoor/Outdoor, Outdoor, Indoor/Outdoor - Euroclass Eca
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Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-3-22, IEC 60332-3-24
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
IEC 61034-2 - Smoke Density Min. Transmittance:	60%

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	EAN
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9841LS.01305	Black	Reel	305 m	8719605022882
9841LS.01500	Black	Reel	500 m	8719605022899
9841LS.011000	Black	Reel	1,000 m	8719605022851
9841LS.011300	Black	Reel	1,300 m	8719605022868
9841LS.011500	Black	Reel	1,500 m	8719605022875
9841LS.021525	Gray	Reel	1,525 m	8719605022905

History

Update and Revision:	Revision Number: 0.237 Revision Date: 04-30-2024
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