



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.
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Conductors	No. of Pairs
24	7x32	TC - Tinned Copper	4	2

Total Number of Pairs: 2

Insulation

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

Color Chart

Number	Color
Pair 1	White/Blue & Blue/White
Pair 2	White/Orange & Orange/White

Inner Shield

Type	Material	Material Trade Name	Drainwire Material	Drainwire AWG
Tape	Bi-Laminate (Alum+Poly)	Beldfoil® (Z-Fold®)	TC - Tinned Copper	AWG24/7
Braid	Tinned Copper (TC)			

Inner Jacket

Material	Color	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	Chrome (RAL 7037)	8.65 mm	1.1 mm

Table Notes: UV Stabilised

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	13.1 mm	1.35 mm

Table Notes: UV Stabilised

Construction and Dimensions

Cabling

Description	Filler
2 pairs and 2 fillers twisted to cable core	Polypropylene (2x) (White, 2.87 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 Inner Shield DCR
78.7 Ohm/km	7.2 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

Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
5.2 ns/m	66%

Current

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

Voltage

Voltage Rating [V]
300 V

Temperature Range

Installation Temp Rating:	-15°C To +80°C
Installation Temp Range:	-15°C To +80°C
Storage Temp Range:	-45°C To +80°C
Operating Temp 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:	196 mm

Standards

CPR Euroclass:	Eca
GENELEC Compliance:	EN 50290-2-27

Applicable Environmental and Other Programs

Environmental Space:	Indoor/Outdoor - Euroclass Eca
EU CE Mark:	Yes

Suitability

Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	Yes
Suitability - Oil Resistance:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2 and 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
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

History

Update and Revision:	Revision Number: 0.227 Revision Date: 02-04-2022
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