



**Product:** [9842LS](#)

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

**Product Description**

RS-485, 2 Pair AWG 24 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 Pairs
24	7x32	TC - Tinned Copper	2

Conductor Count:	4
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 Material**

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**

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
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**Outer Shield Material**

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material
Tape		Beldfoil® (Z-Fold®)	100%	TC - Tinned Copper
Braid	Tinned Copper (TC)		90%	

**Outer Jacket Material**

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

**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 Outer 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

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

### Current

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

### Voltage

Voltage Rating [V]
300 V

## Temperature Range

Installation Temp Range:	-15°C To +80°C
Storage 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:	196.5 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
EU RoHS Compliance Date (yyyy-mm-dd):	2005-01-01

## Suitability

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

Suitability - Sunlight Resistance:	Yes
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## Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2 and IEC 60332-3-24
IEC 60754-1 (EN50267-1)- Halogen Amount:	Zero
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Max. Conductivity:	2.5 µS/mm
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Min. pH:	4.3
IEC 61034-2 (EN 61034-2) (VDE 0482-1034) - Smoke Density Min. Transmittance:	60%

## Part Number

### 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

## History

Update and Revision:	Revision Number: 0.193 Revision Date: 12-18-2020
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