



REPRESENTATIVE IMAGE

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

RS485, 2 Pr #24 Str TC, PO Ins, OS+TC Brd, LSZH Jkt, B2ca

## Product Description

RS-485, 2 Pair 24AWG (7x32) Tinned Copper, PO Insulation, Overall Beldfoil®+Tinned Copper Braid(90%) Shield, LSZH Outer Jacket, CPR B2ca

## 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:	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
Pair 2	White/Orange & Orange/White

#### Outer Shield

Type	Layer	Material	Material Trade Name	Coverage [%]	Thickness of Foil	Drainwire AWG
Tape	1	Bi-Laminate (Alum+Poly)	Beldfoil® (Z-Fold®)	100%	9 / 23 µm	AWG24/7
Braid	2	Tinned Copper (TC)		90%		

#### Outer Jacket

Material	Color	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	Chrome (RAL 7037)	8.40 mm	1.0 mm

### Construction and Dimensions

#### Stranding

Lay Direction	Twists
Left Hand	12 twist/ft

#### Cabling

Description
2 pairs and 2 fillers twisted to cable core

### Electrical Characteristics

#### Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
78.7 Ohm/km	7.2 Ohm/1000ft

#### 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	120 Ohm

#### High Frequency (Nominal/Typical)

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

#### Delay

Max. Delay Skew	Nominal Delay	Nominal Velocity of Propagation (VP) [%]
66 ns/100m	5.2 ns/m	66%

#### Current

Max. Recommended Current [A]
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 Temperature Range:	-20°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
Max. Pull Tension:	395 N
Min. Bend Radius During Installation:	88 mm

### Standards

CPR Euroclass:	B2ca-s1a,d1,a1
CENELEC Compliance:	EN 50290-2-20

### Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass B2ca
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

### Suitability

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

### Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
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:	80%

## Plenum/Non-Plenum

Plenum (Y/N):	No
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## Related Part Numbers

### Variants

Item #	Color	Put-Up Type	Length	EAN
9842LV.00500	Chrome	Reel	500 m	8719605179982

## History

Update and Revision:	Revision Number: 0.74 Revision Date: 02-13-2024
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