



Product: [3107LWS](#)

RS-485, 2PR #22 Str TC, PO ins, F/B, LSNH Jkt, SWA, Cca

Product Description

RS-485, 2 Pair AWG 22 Tinned Copper - Stranded, Polyolefin (PO, PE, PP) insulation, Foil + Braid(s) shielding, LSZH / FRNC jacket ,SWA, CPR Cca

Technical Specifications

Product Overview

Suitable Applications:	Instrumentation and computer cable. For EIA RS-485 transmissions applications
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Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Pair(s)	2	22 AWG	7x30	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	PE - Polyethylene (Foam)	0.65 mm (0.026 in)	2.04 mm (0.0803 in)	White/Blue & Blue/White, White/Orange & Orange/White

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	22 AWG (7x30) TC
Braid	Tinned Copper (TC)	65%	

Inner Jacket

Material	Nom. Thickness	Nom. Diameter	Color
LSZH - Low Smoke Zero Halogen (Flame Retardant)	1.35 mm (0.0531 in)	8.9 mm (0.35 in)	Black

Armor

Armor Type & Material	Armor Thickness	Coverage
SWA - Steel Wire Armor	0.9 mm (0.035 in)	Min. 95%

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	1.35 mm (0.0531 in)	13.3 mm (0.524 in)

Overall Cable Diameter (Nominal):	13.3 mm (0.524 in)
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Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Pair(s)	48.2 Ohm/km (14.7 Ohm/1000ft)	36.1 pF/m (11.0 pF/ft)	68.6 pF/m	120 Ohm	78%	2.1 Amps per Conductor

Nom. Outer Shield DCR:	5.9 Ohm/km (1.8 Ohm/1000ft)
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High Frequency (Nominal/Typical)

Element	Frequency [MHz]	Nom. Insertion Loss (Attenuation)
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Pair(s)	1	1.64 dB/100m (0.500 dB/100ft)
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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.
200 mm (7.9 in)	260 mm (10 in)

Max. Pull Tension:	290 N (65 lbf)
Bulk Cable Weight:	322 kg/km (216 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Indoor/Indoor/OutdoorOutdoor/Indoor/Outdoor - Euroclass Cca, Indoor, Outdoor, Non-Halogenated, Sunlight Resistance, Oil Resistance
Flammability / Reaction to Fire:	IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Cca-s1a,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: 0.138 Revision Date: 04-08-2025
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Part Numbers

Variants

Item #	Color	Putup Type	Length	EAN
3107LWS.00500	Black	Reel	500 m	8719605190635
3107LWS.001000	Black	Reel	1,000 m	8719605186997

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