



**Product:** [3106ELW](#)

RS-485, 1.5Pr #22 Str TC, PO ins, F/B, LSNH Jkt,Cca

## Product Description

RS-485, 1.5 Pair AWG 22 Tinned Copper - Stranded, Polyolefin (PO, PE, PP) and 1 FRNC insulation, Foil + Braid(s) shielding, LSZH / FRNC jacket ,Cca

## Technical Specifications

### Product Overview

Suitable Applications:	Instrumentation and computer cable. For EIA RS-485 transmissions applications
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### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	No. of Conductors	No. of Pairs
22	7x30	TC - Tinned Copper	3	1.5

Conductor Count:	3
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#### Insulation

Element	Material	Nominal Diameter	Diameter +/- Tolerance	Nominal Wall Thickness
Wire 1 & 3	PE - Polyethylene (Foam)	2.40 mm	0.05 mm	0.82
Additional Wire 2	PE - Polyethylene	1.57 mm		

#### Color Chart

Number	Color
wire 1	White & Orange
wire 2	Orange & White
wire 3	Blue & White

#### Outer Shield

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG
Tape	1	Bi-Laminate (Alum+Poly)	Beldfoil®	100%	TC - Tinned Copper	22
Braid	2	Tinned Copper (TC)		65%		

#### Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	8.3 mm	1 mm

Table Notes:	UV Stabilised
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### Construction and Dimensions

#### Cabling

Description
2 wires + 1 additional wire + tinned copper drainwire (AWG22)

### Electrical Characteristics

#### Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
48.2 Ohm/km	9.2 Ohm/km

## Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
36.1 pF/m	68.6 pF/m

## Impedance

Frequency [MHz]	Nominal Characteristic Impedance	Nominal Impedance
1 MHz	120 Ohm	120 Ohm

## High Frequency (Nominal/Typical)

Frequency [MHz]
1 MHz

## Delay

Nominal Velocity of Propagation (VP) [%]
78%

## Current

Max. Recommended Current [A]
2.7 Amps per Conductor

## Voltage

Voltage Rating [V]
300 V

## Temperature Range

Installation Temperature Range:	-15°C To +70°C
Storage Temperature Range:	-30°C To +70°C
Operating Temperature Range:	-15°C To +70°C
Operating Temp Range (Fixed Install):	-30°C To +70°C

## Mechanical Characteristics

Oil Resistance:	IEC 60811-404
Max. Pull Tension:	290 N
Min. Bend Radius During Installation:	83 mm

## Standards

CPR Euroclass:	Cca-s1,d1,a1
CENELEC Compliance:	EN 50290-2-20

## Applicable Environmental and Other Programs

Environmental Space:	Indoor
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## 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:	60%

## Related Part Numbers

### Variants

Item #
3106ELW.00500

## History

Update and Revision:	Revision Number: 0.14 Revision Date: 04-05-2024
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