



Product: [9506ELW](#)

Life Cycle Status: Capability

RS-232, 6PR #24 Str TC, LSZH ins, OS, LSZH Jkt, 300V, Cca

Product Description

6-Pair, 24 AWG stranded (7x32) TC conductors, LSZH insulation, twisted pairs, overall Beldfoil shield (100% coverage), 24 AWG stranded TC drain Wire, LSZH jacket, Flame resistance IEC 60332-3C

Technical Specifications

Product Overview

Suitable Applications:	Instrumentation and computer cable; For EIA RS-232 data transmission applications
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
24	7x32	TC - Tinned Copper	6

Conductor Count:	12
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Insulation

Material	Nominal Diameter	Diameter +/- Tolerance
LSZH - Low Smoke Zero Halogen (Flame Retardant)	1.25 mm	0.05 mm

Color Chart

Number	Color
Pair 1 (central)	Black & Red
Pair 2	Black & White
Pair 3	Black & Green
Pair 4	Black & Blue
Pair 5	Black & Yellow
Pair 6	Black & Brown

Outer Shield

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

Outer Jacket

Material	Nominal Diameter	Nominal Wall Thickness
LSZH - Low Smoke Zero Halogen (Flame Retardant)	8.3 mm	0.9 mm

Construction and Dimensions

Cabling

Description
6 pairs twisted to cable core

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR

78.7 Ohm/km	52.5 Ohm/km
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Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
98.4 pF/m	164 pF/m

Impedance

Frequency [MHz]	Nominal Characteristic Impedance
N/A	75 Ohm

Current

Element	Max. Recommended Current [A]
Conductor(s)	1.5 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 Temp Range (Flexible Install):	-30°C To +70°C
Operating Temp Range (Fixed Install):	-30°C To +70°C

Mechanical Characteristics

Oil Resistance:	IEC 60811-404
Max. Pull Tension:	300 N
Min. Bend Radius During Installation:	75 mm

Standards

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

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Euroclass Cca
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Suitability

Suitability - Sunlight Resistance:	Yes
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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 μ S/mm
IEC 60754-2 - Halogen Acid Gas Amount - Min. pH:	4.3
IEC 61034-2 - Smoke Density Min. Transmittance:	60%

Product Notes

Notes:	This is a preliminary Technical Design Specification (TDS) which is subject to modification throughout the prototyping phase. The minimum business quantity to offer is 5km for the first order. This product will have Chrome as standard color and 305mt or 500mt as standard put-ups. Additional options for colors and put-ups are available on special request. The estimated production lead time for the first order will be similar to the production lead time of 9506NH plus extra 6-7 weeks. Please liaise with your Belden representative for confirmation.
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History

Update and Revision:	Revision Number: 0.5 Revision Date: 11-13-2024
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