



**Part Number: 9729LS**

Paired Computer Cables Low-Capacitance 100 Ohm Computer Cables for RS-422 and Digital Audio Applications

**Product Description**

24 AWG, Stranded (7 x 32) TC Conductors, Datalene Insulation, Individually Beldfoil® Shielded Pairs, Chrome LSZH Jacket, 2 Pairs, Steel Wire Armor

**Technical Specifications**

**Product Overview**

Environmental Space:	Indoor
Suitable Applications:	Instrumentation and computer cable; For data transmission applications

**Physical Characteristics (Overall)**

**Conductor**

AWG	Stranding	Material	No. of Conductors	No. of Pairs
24	7x32	TC - Tinned Copper	4	2

Conductor Count:	4
Total Number of Pairs:	2
Conductor Size:	24 AWG

**Insulation**

Material	Material Trade Name	Nominal Diameter	Diameter +/- Tolerance
FPE - Foamed Polyethylene	Datalene®	1.55 mm	0.06 mm

**Color Chart**

Number	Color	Number	Color
Pair 1	Black & Red	Pair 2	Black & White

Color Chart1, Table Note:	Shielded pairs
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**Color Chart 2**

Number	Color
Pair 1	Red
Pair 2	Green

**Inner Shield Material**

Type	Material	Material Trade Name	Thickness of Foil	Drainwire Material	Drainwire AWG
Tape	Aluminum / Polyester	Z-fold®	9 / 12 µm	Tinned copper	AWG24/7

**Inner Jacket Material**

Material	Color	Nominal Diameter	Min. Wall Thickness	Min. Average Wall Thickness
FRNC / LSZH	Chrome (RAL 7037)	7.9 mm	0.91 mm	1.10 mm

**Outer Shield Material**

Material
Aluminum/Polyester

**Outer Jacket Material**

Material	Color	Nominal Diameter	Min. Wall Thickness	Nominal Wall Thickness
LSZH / FRNC (UV stabilised)	Black	12.5 mm	1.25 mm	1.35 mm

## Construction and Dimensions

### Cabling

Description	Filler
2 pairs and 2 fillers twisted to cable core	Polypropylene (Blue, 2.20 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 Inner Shield DCR
78.7 Ohm/km	59.1 Ohm/km

### Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
41 pF/m	76.1 pF/m

### Inductance

Nominal Pair Inductance
0.49 $\mu$ H/m

### Impedance

Nominal Characteristic Impedance
100 Ohm

### High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
2 MHz	4.63 dB/100m
3 MHz	5.35 dB/100m
4 MHz	5.91 dB/100m
5 MHz	6.5 dB/100m
6 MHz	6.89 dB/100m
11 MHz	9.15 dB/100m
12 MHz	9.51 dB/100m
24 MHz	13.16 dB/100m

### Current

Element	Max. Recommended Current [A]
Conductor	1 A

### 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:	187.5 mm

## Standards

CENELEC Compliance:	EN 50290-2-27
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## Applicable Environmental and Other Programs

EU RoHS Compliance Date (yyyy-mm-dd):	2005-01-01
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## Flammability, LSOH, Toxicity Testing

ISO/IEC Flammability:	IEC 60332-3-24
Amount of Halogen acc. to IEC 60754-1 & EN50267-1:	Zero

## Part Number

### Variants

Item #	Color	Length
9729LS.001000	Black	1,000 m
9729LS.00500	Black	500 m
9729LS.011000	Black	1,000 m

## History

Update and Revision:	Revision Number: 0.158 Revision Date: 12-12-2018
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