



Product: [9730](#)

RS232/422 Low Cap, #24-3pr, FPE, Indiv. Foil, PVC Jkt, CM, 100Ω

Product Description

Computer EIA RS-232/422, Digital Audio Cable, 3-Pair, 24 AWG stranded (7x32) tinned copper conductors, Datalene® insulation, individually shielded with Beldfoil® (100% coverage), 24 AWG stranded tinned copper drain wire, overall PVC jacket.

Technical Specifications

Product Overview

Suitable Applications:	RS-422 applications; computer communications; low voltage analog signals (4-20ma, 0-10v, ...); low voltage digital control (24v, ...); digital audio; panel wiring
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Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	Nominal Diameter	No. of Pairs
Pair(s)	24	7x32	TC - Tinned Copper	0.024 in	3

Conductor Count: 6

Insulation

Element	Material	Material Trade Name	Nominal Wall Thickness
Pair(s)	PE - Polyethylene (Foam)	Datalene®	0.0185 in

Color Chart

Number	Color
1	Black & Red
2	Black & White
3	Black & Green

Inner Shield Material

Element	Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Pair(s)	Tape	Alum / Poly	Beldfoil® (Z-Fold®)	100 %	TC - Tinned Copper	24	7x32

Outer Shield Material

Material
No Shield

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.334 in	0.048 in

Construction and Dimensions

Stranding

Lay Direction	Twists
Left Hand	6.9 twist/ft

Electrical Characteristics

Conductor DCR

Individual Pair Nominal Shield DCR	Nominal Conductor DCR
15 Ohm/1000ft	24 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield	Nom. Mutual Capacitance
12.5 pF/ft	23.2 pF/ft	39 pF/ft

Inductance

Nominal Inductance
0.23 μ H/ft

Impedance

Nominal Characteristic Impedance
100 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
0.384 MHz	0.74 dB/100m
0.7056 MHz	0.87 dB/100m
0.768 MHz	0.88 dB/100m
1.024 MHz	0.94 dB/100m
1.4112 MHz	1.01 dB/100m
1.536 MHz	1.03 dB/100m
2.048 MHz	1.13 dB/100m
2.8224 MHz	1.29 dB/100m
3.072 MHz	1.35 dB/100m
4.096 MHz	1.57 dB/100m
5.6448 MHz	1.78 dB/100m
6.144 MHz	1.84 dB/100m
8.192 MHz	2.13 dB/100m
11.2896 MHz	2.45 dB/100ft
12.288 MHz	2.57 dB/100ft
24.576 MHz	3.57 dB/100ft

Delay

Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
76 ns/100m	76 %

High Freq

Frequency [MHz]
0.384 MHz
0.7056 MHz
0.768 MHz
1.024 MHz
1.4112 MHz
1.536 MHz
2.048 MHz
2.8224 MHz
3.072 MHz
4.096 MHz
5.6448 MHz
6.144 MHz
8.192 MHz
11.2896 MHz
12.288 MHz
24.576 MHz

Current

Max. Recommended Current [A]
2.5 Amps per conductor @ 25°C ambient

Current Table Note: 35C Temperature Rise

Voltage

UL Description	UL Voltage Rating
CM	300 V
UL AWM 2919	30 V

Temperature Range

UL Temp Rating:	80°C (UL AWM Style 2919)
Operating Temp Range:	-20°C to +80°C

Mechanical Characteristics

Bulk Cable Weight:	42 lbs/1000ft
Max Recommended Pulling Tension:	51 lbs
Min Bend Radius/Minor Axis:	3.5 in

Standards

NEC Articles:	800
NEC/UL Specification:	CM
CEC/C(UL) Specification:	CM
UL AWM Style:	2919
CPR Euroclass:	Eca
PMSHA Specification:	P-MW-MS285

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
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Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT1
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V, 30 V

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	89730

Part Number

Variants

Item #	Color	Putup Type	Length	UPC/EAN
9730.0030	Chrome	Reel	30 m	8719605022592
9730 060100	Chrome	Reel	100 ft	612825257608
9730.00152	Chrome	Reel	152 m	8719605022585
9730.00305	Chrome	Reel	305 m	8719605022608
9730 060500	Chrome	Reel	500 ft	612825257639
9730 0601000	Chrome	Reel	1,000 ft	612825257615
9730.001000	Chrome	Reel	1,000 m	8719605022578
9730 0605000	Chrome	Reel	5,000 ft	612825257646
9730 06010000	Chrome	Reel	10,000 ft	612825257622

Footnote:	C - CRATE REEL PUT-UP.
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Product Notes

Notes:

Datalene® insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

History

Update and Revision:

Revision Number: 0.324 Revision Date: 05-27-2020

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