



Part Number: 9731

RS232/422 Low Cap, #24-6pr, FPO, Indiv. Foil, PVC Jkt, CM, 100Ω

Product Description

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

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Pairs
24	7x32	TC - Tinned Copper	0.024 in	6

Conductor Count:	12
Conductor Size:	24 AWG

Insulation

Material	Material Trade Name	Nominal Wall Thickness
FPE - Foamed Polyethylene	Datalene®	0.019 in

Color Chart

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

Inner Shield Material

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Aluminum Foil-Polyester Tape	Beldfoil® (Z-Fold®)	100 %	TC - Tinned Copper	24	7x32

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.421 in	0.048 in

Construction and Dimensions

Stranding

Twists
6.85 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
12.5 pF/ft	23.2 pF/ft

Inductance

Nominal Inductance
0.12 μ H/ft

Impedance

Nominal Characteristic Impedance
100 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
0.384 MHz	0.74 dB/100ft
0.7056 MHz	0.87 dB/100ft
0.768 MHz	0.88 dB/100ft
1.024 MHz	0.94 dB/100ft
1.4112 MHz	1.01 dB/100ft
1.536 MHz	1.03 dB/100ft
2.048 MHz	1.13 dB/100ft
2.8224 MHz	1.29 dB/100ft
3.072 MHz	1.35 dB/100ft
4.096 MHz	1.57 dB/100ft
5.6448 MHz	1.78 dB/100ft
6.144 MHz	1.84 dB/100ft
8.192 MHz	2.13 dB/100ft
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 Delay	Nominal Velocity of Propagation (VP) [%]
76 ns/100m	1.39 ns/ft	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 A

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

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

Bulk Cable Weight:	74 lbs/1000ft
Max Recommended Pulling Tension:	103 lbs
Min Bend Radius/Minor Axis:	4.25 in

Standards

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
UL AWM Style:	2919 (30 V 80°C)
CPR Euroclass:	Eca

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 Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	89731

Part Number

Variants

Item #	Color	Footnote
9731.00152	Chrome	
9731.0030	Chrome	
9731.00305	Chrome	
9731 060100	Chrome	C
9731 0601000	Chrome	C
9731 060500	Chrome	C
9731 0605000	Chrome	

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.
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