



**Part Number: 9729**

RS-232/422 Low Cap, #24-2pr, FPO, Individ. 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 Beldfoil® shielded (100% coverage), 24 AWG stranded tinned copper drain wire, PVC jacket.

**Technical Specifications**

**Physical Characteristics (Overall)**

**Conductor**

AWG	Stranding	Material	Nominal Diameter	No. of Conductors	No. of Pairs
24	7x32	TC - Tinned Copper	0.024 in	4	2

Conductor Count: 4

**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

**Color Chart 2**

Number
16

**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	0.266 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
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12.5 pF/ft	23.2 pF/ft
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#### Inductance

##### Nominal Inductance

0.23  $\mu$ 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]

Per conductor @ 25°C: 1 A

Current Table Note: 10C Temperature Rise

#### Voltage

##### UL Voltage Rating

300 V RMS

Electrical Characteristics Notes: Attenuation @ 1 MHz: 0.94 dB/100 ft nom

#### Temperature Range

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

## Mechanical Characteristics

Bulk Cable Weight:	35 lbs/1000ft
Max Recommended Pulling Tension:	22 lbs
Min Bend Radius/Minor Axis:	2.75 in

## Standards

NEC Articles:	800
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 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
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

## Suitability

Suitability - Hazardous Locations:	Yes
Suitability - Indoor:	Yes
Suitability - Outdoor:	No

## Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 (UL Loading)
CSA Flammability:	FT1
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

## Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	89729, 82729

## Part Number

### Variants

Item #	Color	UPC	Length	Footnote
9729.001100	Chrome		1,100 m	
9729.002000	Chrome		2,000 m	
9729.0030	Chrome		30 m	
9729.00305	Chrome		305 m	
9729.00500	Chrome		500 m	
9729.01152	Chrome		152 m	
9729 060100	Chrome	612825257530	100 ft	
9729 0601000	Chrome	612825257547	1,000 ft	C
9729 06010000	Chrome	612825257554	10,000 ft	C Y
9729 060500	Chrome	612825257561	500 ft	C
9729 0605000	Chrome	612825257578	5,000 ft	C
9729.K0305	Chrome		305 m	

Footnote: C - CRATE REEL PUT-UP.

Footnote:	Y - FINAL PUT-UP LENGTH MAY VAR -10% TO +20% FROM LENGTH SHOWN. MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.
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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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## History

Update and Revision:	Revision Number: 0.325 Revision Date: 08-22-2019
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