



**Product:** [9728](#)

RS232/422 Low Cap, #24-4pr, 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) each with 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

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

Conductor Count:	8
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#### Insulation

Material	Material Trade Name	Nominal Wall Thickness
PE - Polyethylene (Foam)	Datalene®	0.019 in

#### Color Chart

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

#### Inner Shield Material

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

#### Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.363 in	0.048 in

### 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
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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/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 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: 2.5 A

#### Voltage

UL Description	UL Voltage Rating
UL AWM Style 2493	300 V RMS

#### Temperature Range

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

#### Mechanical Characteristics

Bulk Cable Weight:	51 lbs/1000ft
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Max Recommended Pulling Tension:	65 lbs
Min Bend Radius/Minor Axis:	3.75 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
MII Order #39 (China RoHS):	Yes

## Flammability, LS0H, Toxicity Testing

UL Flammability:	UL 1685 UL Loading
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

## Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	89728

## Part Number

### Variants

Item #	Color	Putup Type	Length	UPC/EAN
9728.0030	Chrome	Reel	30 m	8719605022400
9728.060100	Chrome	Reel	100 ft	612825257493
9728.01152	Chrome	Reel	152 m	8719605022424
9728.00305	Chrome	Reel	305 m	8719605022417
9728.060500	Chrome	Reel	500 ft	612825257516
9728.0601000	Chrome	Reel	1,000 ft	612825257509
9728.001524	Chrome	Reel	1,524 m	8719605022394
9728.0605000	Chrome	Reel	5,000 ft	612825257523

Footnote: C - CRATE REEL PUT-UP.

## 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: 0.328 Revision Date: 04-28-2020
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