

**Part Number: 89729**

**RS-232/422 Low Cap, #24-2pr, FFEP, Indiv. Foil, PVDF Jkt, CMP, 100Ω**



## Product Description

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

## Technical Specifications

### Physical Characteristics (Overall)

#### Conductor

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

Conductor Count:	4
AWG Size:	24

#### Insulation

Material	Nominal Wall Thickness
FFEP - Foam Fluorinated Ethylene Propylene	0.019 in

#### Color Chart

Number	Color
1	White/Blue & Blue/White
2	White/Orange & Orange/White

#### Inner Shield Material

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

#### Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVDF - Polyvinylidene Fluoride	0.261 in	0.017 in

### Construction and Dimensions

#### Stranding

Lay Length	Lay Direction	Twists
1.75 in	Left Hand	6.9 twist/ft

### Electrical Characteristics

#### Conductor DCR

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

#### Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
13.5 pF/ft	22.5 pF/ft

#### Inductance

Nominal Inductance
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0.24 μH/ft
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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	0.89 dB/100ft
1.024 MHz	0.95 dB/100ft
1.4112 MHz	1.03 dB/100ft
1.536 MHz	1.06 dB/100ft
2.048 MHz	1.17 dB/100ft
2.8224 MHz	1.37 dB/100ft
3.072 MHz	1.44 dB/100ft
4.096 MHz	1.67 dB/100ft
5.6448 MHz	1.89 dB/100ft
6.144 MHz	1.96 dB/100ft
8.192 MHz	2.26 dB/100ft
11.2896 MHz	2.59 dB/100ft
12.288 MHz	2.71 dB/100ft
24.576 MHz	3.73 dB/100ft

Delay

Max. Delay Skew	Nominal Delay	Nominal Velocity of Propagation (VP) [%]
76 ns/100m	1.3 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 Amps per conductor @ 25°C A

Current Table Note:	10C Temperature Rise
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Voltage

UL Voltage Rating
300V RMS

Temperature Range

Operating Temp Range:	-20°C to +150°C
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Mechanical Characteristics

Bulk Cable Weight:	27 lbs/1000ft
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Max Recommended Pulling Tension:	33 lbs
Min Bend Radius/Minor Axis:	2.75 in

Standards

NEC Articles:	800
NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
CPR Euroclass:	Fca

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):	2005-04-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
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Flammability, LS0H, Toxicity Testing

UL Flammability:	NFPA 262 Plenum Flame Test (UL910)
CSA Flammability:	FT6

Part Number

Plenum (Y/N):	Yes
Non-Plenum Number:	9729

Variants

Item #	Color	Footnote
89729 0081000	GRAY	C
89729 008500	GRAY	C
89729 0085000	GRAY	

Footnote:	C - CRATE REEL PUT-UP.
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