



Product: [8112](#)

RS-232/422 Low Cap, #24-12.5pr, FPO, O/A Foil+Braid, PVC Jkt, CMG, 100Ω

Product Description

Computer EIA RS-232/422 Cable, 24 AWG stranded (7x32) tinned copper conductors, Datalene® insulation, twisted pairs, overall Beldfoil® + tinned copper braid shield (65% coverage), tinned copper drain wire, PVC jacket.

Technical Specifications

Product Overview

Suitable Applications:	rs-232 extended distance applications; rs-422 applications; computer communications; low voltage analog signals (4-20ma, 0-10v, ...); low voltage digital control (24v, ...); line level audio; panel wiring
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Physical Characteristics (Overall)

Conductor

Element	AWG	Stranding	Material	No. of Conductors	No. of Pairs
Pair(s)	24	7x32	TC - Tinned Copper		12
Conductor(s)	24	7x32	TC - Tinned Copper	1	

Conductor Count:	25
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Insulation

Element	Material	Material Trade Name	Nominal Wall Thickness
Pair(s)	PE - Polyethylene (Foam)	Datalene®	0.013 in
Conductor(s)			

Color Chart

Number	Color
1	White/Blue & Blue/White
2	White/Orange & Orange/White
3	White/Green & Green/White
4	White/Brown & Brown/White
5	White/Gray & Gray/White
6	Red/Blue & Blue/Red
7	Red/Orange & Orange/Red
8	Red/Green & Green/Red
9	Red/Brown & Brown/Red
10	Red/Gray & Gray/Red
11	Black/Blue & Blue/Black
12	Black/Orange & Orange/Black
Single Conductor	Gray

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	1	Alum / Poly	Beldfoil®	100 %	TC - Tinned Copper	24	7x32
Braid	2	TC - Tinned Copper		65 %			

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.44 in	0.035 in

Construction and Dimensions

Stranding

Lay Direction	Twists
Left Hand	9.6 twist/ft

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
24 Ohm/1000ft	2.4 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
12.5 pF/ft	22 pF/ft

Impedance

Nominal Characteristic Impedance
100 Ohm

High Frequency (Nominal/Typical)

Nom. Insertion Loss
7.1 dB/100m
7.1 dB/100m

Delay

Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
78 ns/100m	78 %

Unbalanced Crosstalk

Typical Unbalanced FEXT %
7.1 MHz

Current

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

Current Table Note: 10C Temperature Rise

Voltage

UL Description	UL Voltage Rating
UL type CM	300 V RMS (CM)
UL AWM 2919	30 V RMS (UL AWM 2919)

Temperature Range

UL Temp Rating:	80°C (UL AWM Style 2919)
Operating Temp Range:	-30°C To +80°C

Mechanical Characteristics

Bulk Cable Weight:	92 lbs/1000ft
Max Recommended Pulling Tension:	77 lbs
Min Bend Radius/Minor Axis:	4.5 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 Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No
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, LSOH, Toxicity Testing

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

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	88112

Part Number

Variants

Item #	Color	Putup Type	Length	UPC
8112 060100	Chrome	Reel	100 ft	612825195078
8112 060500	Chrome	Reel	500 ft	612825195092
8112 0601000	Chrome	Reel	1,000 ft	612825195085

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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History

Update and Revision:	Revision Number: 0.339 Revision Date: 05-11-2020
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