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

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

Insulation

Element	Material	Material Trade Name	Nominal Wall Thickness
Pair(s)	PE - Polyethylene (Foam)	Datalene®	0.0125 in
Conductor(s)	PE - Polyethylene (Foam)		0.0125 in

Color Chart

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

Color Chart 2

Color
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	0.440 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
CM	300 V
UL AWM 2919	30 V

Temperature Range

UL Temp Rating:	80°C (UL AWM 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
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

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT1
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V (CM), 30 V (UL AWM 2919)

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.

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.

History

Update and Revision:	Revision Number: 0.341 Revision Date: 05-19-2020