




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®	0.013 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
-----------------------	-----

Flammability, LS0H, 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.
-----------	------------------------

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: 0.339 Revision Date: 05-11-2020
----------------------	--

© 2020 Belden, Inc
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.