

Product: 8163

RS-232/422 Low Cap, #24-3pr, FPO, Indiv.& O/A Foils+Braid, PVC Jkt, CM, 100Ω

Product Description

Computer EIA RS-232/422, Digital Audio Cable, 24 AWG stranded (7x32) tinned copper conductors, Datalene® insulation, 3 twisted pairs individually Beldfoil® shielded + overall 100% Beldfoil® + tinned copper braid shield (65% coverage), drain wire, PVC jacket.

Technical Specifications

Product Overview

Suitable Applications:	RS-232 Extended Distance & RS-422 Applications; Computer Communications; Low Voltage Analog signals (4-20ma, 0-10v, ...); Low Voltage Digital Control (24v, ...); Digital Audio; Panel Wiring

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Pair(s)	3	24 AWG	7x32	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	PE - Polyethylene (Foam)	0.019 in (0.48 mm)	0.061 in (1.5 mm)	Black & Red, Black & White, Black & Green

Inner Shield

Element	Shield Type	Material	Coverage	Drainwire Type	Notes
Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%	24 AWG (7x32) TC	each pair, Z-Fold® Foil-in

Outer Shield

Shield Type	Material	Coverage
Tape	Bi-Laminate (Alum+Poly)	100%
Braid	Tinned Copper (TC)	65%

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.048 in (1.2 mm)	0.359 in (9.12 mm)

Overall Cable Diameter (Nominal):	0.359 in (9.12 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Pair(s)	24 Ohm/1000ft	12.5 pF/ft (41.0 pF/m)	22 pF/ft (72 pF/m)	100 Ohm	78%	1.6 Amps per Conductor at 25ºC

Voltage

UL Voltage Rating
300 V (CM), 300 V (UL AWM 2493)

Mechanical Characteristics

Temperature

UL Temperature	Operating
60°C	-40°C to +60°C

Bend Radius

Stationary Min.	Installation Min.
3.6 in (91 mm)	3.6 in (91 mm)

Max. Pull Tension:	84 lbs (38 kg)
Bulk Cable Weight:	62 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor (Not Riser or Plenum), Indoor
Flammability / Reaction to Fire:	UL 1685 FT4 Loading, IEC 60332-1-2
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, CM
AWM Compliance:	AWM 2493
CEC / C(UL) Compliance:	CM
European Directive Compliance:	EU CE Mark, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

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: 0.560 Revision Date: 12-22-2023

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC/EAN	Footnote
8163.0030	Chrome	Reel	30 m	8719605017932	
8163 060100	Chrome	Reel	100 ft	612825195597	
8163.01152	Chrome	Reel	152 m	8719605017956	
8163.00305	Chrome	Reel	305 m	8719605017949	
8163 060500	Chrome	Reel	500 ft	612825195610	C
8163 0601000	Chrome	Reel	1,000 ft	612825195603	C
8163 0605000	Chrome	Reel	5,000 ft	612825195627	C

© 2024 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.