



Product: [8102](#)

RS232/422 Low Cap, #24-2pr, FPO, O/A Foil+Braid, PVC Jkt, CM, 100Ω

Product Description

Computer EIA RS-232/422 Cable, 24 AWG stranded (7x32) tinned copper conductors, Datalene® insulation, twisted pairs, overall Beldfoil® (100% coverage) + tinned copper braid shield (65% coverage), 24 AWG stranded 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
------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Construction Details

Conductor

Element	No. of Elements	Size	Stranding	Material
Pair(s)	2	24 AWG	7x32	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Pair(s)	PE - Polyethylene (Foam)	0.013 in (0.33 mm)	0.049 in (1.2 mm)	Western Electric Standard

Outer Shield

Shield Type	Material	Coverage	Drainwire Type
Tape	Bi-Laminate (Alum+Poly)	100%	24 AWG (7x32) TC
Braid	Tinned Copper (TC)	65%	

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.035 in (0.89 mm)	0.270 in (6.86 mm)

Overall Cable Diameter (Nominal): 0.270 in (6.86 mm)

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Capacitance Cond-to-Other (Conds + Shield)	Nom. Characteristic Impedance	Nom. Inductance	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	0.201 µH/ft (0.659 µH/m)	78%	1.8 Amps per Conductor at 25°C

Nom Outer Shield DCR@Cond DCR1-cnv: 4.6 Ohm/1000ft (15 Ohm/km)

Voltage

UL Voltage Rating
300 V (CM), 30 V (UL AWM 2919)

Mechanical Characteristics

Temperature

UL Temperature	Operating
80°C	-30°C to +80°C

Bend Radius

Stationary Min.	Installation Min.
2.7 in (69 mm)	2.7 in (69 mm)

Max. Pull Tension:	36 lbs (16 kg)
Bulk Cable Weight:	34 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; CPR UKCA Class: Eca
NEC / UL Compliance:	Article 800, CM
AWM Compliance:	AWM 2919
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)
Plenum Number:	88102

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: 0.503 Revision Date: 09-07-2025
----------------------	--------------------------------------------------

Part Numbers

Variants

Item #	Color	Putup Type	Length	UPC/EAN	Footnote
8102.0030	Chrome	Reel	30 m	8719605017680	
8102 060100	Chrome	Reel	100 ft	612825194743	
8102.01152	Chrome	Reel	152 m	8719605017703	
8102.00305	Chrome	Reel	305 m	8719605017697	
8102 060500	Chrome	Reel	500 ft	612825194774	C
8102 0601000	Chrome	Reel	1,000 ft	612825194750	C
8102.001000	Chrome	Reel	1,000 m	8719605017673	
8102 0605000	Chrome	Reel	5,000 ft	612825194781	C
8102 06010000	Chrome	Reel	10,000 ft	612825194767	C Y

Footnote:	C - CRATE REEL PUT-UP., Y - FINAL PUT-UP LENGTH MAY VAR -10% TO +20% FROM LENGTH SHOWN. MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.
-----------	---------------------------------------------------------------------------------------------------------------------------------------------------------

© 2025 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 "AS IS" 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.