Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



8103 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422



For more Information please call

1-800-Belden1



Description:

24 AWG stranded (7x32) TC conductors, Datalene® insulation, twisted pairs, overall Beldfoil® (100% coverage) + TC braid shield (65% coverage), 24 AWG stranded TC drain wire, PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
3	24	7x32	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material
Datalene®	FPE - Foam Polyethylene

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape w/Shorting Fold	100
2		Braid	TC - Tinned Copper	65

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
24	7x32	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material PVC - Polyvinyl Chloride

Overall Cabling

Overall Nominal Diameter: 0.283 in.

Pair

Pair Color Code Chart:

Number	Color
1	White/Blue & Blue/White
2	White/Orange & Orange/White
3	White/Green & Green/White

Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +80°C		
UL Temperature Rating:	80°C (UL AWM Style 2919)		
Bulk Cable Weight:	41 lbs/1000 ft.		
Max. Recommended Pulling Tension:	38.500 lbs.		
Min. Bend Radius (Install)/Minor Axis:	3 in.		

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

Page 1 of 3 06-23-2009

Detailed Specifications & Technical Data





8103 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422

NEC/(UL) Specification:	CM		
CEC/C(UL) Specification:	CM		
AWM Specification:	UL Style 2919 (30 V 80°C)		
EU CE Mark:	Yes		
EU Directive 2000/53/EC (ELV):	Yes		
EU Directive 2002/95/EC (RoHS):	Yes		
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004		
EU Directive 2002/96/EC (WEEE):	Yes		
EU Directive 2003/11/EC (BFR):	Yes		
CA Prop 65 (CJ for Wire & Cable):	Yes		
MII Order #39 (China RoHS):	Yes		
Flame Test			
UL Flame Test:	UL1685 UL Loading		
Plenum/Non-Plenum			
Plenum (Y/N):	No		
Plenum Number:	88103		

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 100

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
12.5

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
22

Nominal Velocity of Propagation:

VP (%) 78

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 24

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 3.8

Max. Operating Voltage - UL:

Voltage 30 V RMS (UL AWM Style 2919) 300 V RMS

Max. Recommended Current:

Current
1.5 Amps per conductor @ 25°C

Notes (Overall)

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.

Put Ups and Colors:

Page 2 of 3 06-23-2009

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



8103 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8103 060100	100 FT	4.600 LB	CHROME		3 PR #24 FHDPE SH PVC
8103 0601000	1,000 FT	42.000 LB	CHROME	С	3 PR #24 FHDPE SH PVC
8103 06010000	10,000 FT	430.000 LB	CHROME	CY	3 PR #24 FHDPE SH PVC
8103 060500	500 FT	19.500 LB	CHROME	С	3 PR #24 FHDPE SH PVC

Notes:

C = CRATE REEL PUT-UP.

Y = FINAL PUT-UP LENGTH MAY VARY -10% TO +20% FROM LENGTH SHOWN, MAY CONTAIN 2 PIECES, MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.

Revision Number: 1 Revision Date: 05-14-2007

© 2008 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 herein 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 EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.