Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



8164 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 & Digital



For more Information please call

1-800-Belden1



General Description:

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

Physical Characteristics (Overall) Conductor AWG: # Pairs AWG Stranding Conductor Material TC - Tinned Copper 24 7x32 **Total Number of Conductors:** 8 Insulation Insulation Material: Insulation Trade Name Insulation Material Wall Thickness (mm) Datalene® FPE - Foam Polyethylene | 0.483 **Inner Shield** Inner Shield Material: Inner Shield Trade Name Type Inner Shield Material Coverage (%) Beldfoil® (Z-Fold®) Tape | Aluminum Foil-Polyester Tape | 100 Inner Shield Drain Wire AWG: AWG 24 7x32 Inner Shield Drain Wire Stranding: Inner Shield Drain Wire Conductor Material: TC - Tinned Copper **Outer Shield** Outer Shield Material: Layer # Outer Shield Trade Name Type Outer Shield Material Coverage (%) Beldfoil® Tape | Aluminum Foil-Polyester Tape | 100 Braid TC - Tinned Copper 65 Outer Jacket **Outer Jacket Material:** Outer Jacket Material Nom. Wall Thickness (mm) PVC - Polyvinyl Chloride | 1.219 **Overall Cable Overall Nominal Diameter:** 9.855 mm Pair Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue

Med	Mechanical Characteristics (Overall)						
	Operating Temperature Range:	-40°C To +60°C					
	UL Temperature Rating:	60°C					
	Bulk Cable Weight:	107.150 Kg/Km					
	Max. Recommended Pulling Tension:	493.750 N					
	Min. Bend Radius/Minor Axis:	101.600 mm					

Page 1 of 3 09-11-2017

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



8164 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 & Digital

Applicable Specifications and Agency Compliance (Overall)							
Applicable Standards & Environmental Programs							
NEC/(UL) Specification:	CM						
CEC/C(UL) Specification:	CM						
AWM Specification:	UL Style 2493 (300 V 60°C)						
EU Directive 2011/65/EU (ROHS II):	Yes						
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						
Plenum/Non-Plenum							
Plenum (Y/N):	No						

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:



Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 41.0125

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 72.182

Nominal Velocity of Propagation:

VP (%) 78

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 78.744

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 10.4992

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current
2.5 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.

59.058 Ohm/km

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8164 060100	100 FT	8.200 LB	CHROME		4 FS PR #24 FHDPE SH PVC
8164 0601000	1,000 FT	77.000 LB	CHROME	С	4 FS PR #24 FHDPE SH PVC
8164 060500	500 FT	39.500 LB	CHROME	С	4 FS PR #24 FHDPE SH PVC

Notes:

C = CRATE REEL PUT-UP.

Page 2 of 3 09-11-2017

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



8164 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 & Digital

Revision Number: 2 Revision Date: 08-16-2012

© 2017 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, 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 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

product. ´ Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).

Page 3 of 3