Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION





8175 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.

30

Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material		
15	24	7x32	TC - Tinned Copper		

Total Number of Conductors:

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®	Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:



Inner Shield Drain Wire Stranding: Stranded

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

Outer Shield

Outer Shield Material:

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

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	1.651

Overall Cable

Overall Nominal Diameter: 16.891 mm

Pair

Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown
7	Black & Orange

Page 1 of 3 11-08-2019

Detailed Specifications & Technical Data





8175 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 & Digital

8	Red & White
9	Red & Green
10	Red & Blue
11	Red & Yellow
12	Red & Brown
13	Red & Orange
14	Green & White
15	Green & Blue

Mechanical	Charac	teristics ((Overal	I)
------------	--------	-------------	---------	----

Operating Temperature Range:	-40°C To +60°C		
Non-UL Temperature Rating:	60°C (UL AWM Style 2493)		
Bulk Cable Weight:	288.711 Kg/Km		
Max. Recommended Pulling Tension:	1401.183 N		
Min. Bend Radius/Minor Axis:	171.450 mm		

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
ame Test	

Flame Test

UL Flame Test: UL1581 Vertical Tray

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 100

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:

Page 2 of 3 11-08-2019

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



8175 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 & Digital

DCR @ 20°C (Ohm/km)

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 8.2025

Ind. Pair Nominal Shield DC Resistance @ 20

59.058 Ohm/km

Deg. C:

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current

1.1 Amps per conductor @ 25°C

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8175 060100	100 FT	22.600 LB	CHROME	С	15 PR #24 FRFPE SHLD PVC
8175 0601000	1,000 FT	210.000 LB	CHROME	С	15 PR #24 FRFPE SHLD PVC
8175 060500	500 FT	104.500 LB	CHROME	С	15 PR #24 FRFPE SHLD PVC

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 10-01-2012

© 2019 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 2014/35/EU).