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.

Physical Characteristics (Overall) Conductor AWG: # Pairs AWG Stranding Conductor Material TC - Tinned Copper 24 7x32 **Total Number of Conductors:** 30 Insulation Insulation Material: Insulation Trade Name Insulation Material Wall Thickness (mm) FPE - Foam Polyethylene 0.483 Datalene® Inner Shield Inner Shield Material: Inner Shield Trade Name Type Inner Shield Material Coverage (%) Tape | Aluminum Foil-Polyester Tape | 100 Inner Shield Drain Wire AWG: AWG 24 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 (%) 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 | 1.651 **Overall Cable**

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

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Mechanical Characteristics (Overall)						
	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)						
Ap	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):

MII Order #39 (China RoHS):

Yes

Flame Test

UL Flame Test:
Plenum/Non-Plenum

Plenum (Y/N): No

UL1581 Vertical Tray

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:

DCR @ 20°C (Ohm/km) 78.744

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 8.2025

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 59.058 Ohm/km

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

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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

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

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