Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION





8165 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.

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Physical Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material		
5	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 Trad	e Name Type	Inner Shield Material	Coverage (%)
Beldfoil® (Z-Fold®) Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:



Inner Shield Drain Wire Stranding: 7x32

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

Outer Shield

Outer Shield Material:

L	ayer#	yer # 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	1.219

Overall Cable

Overall Nominal Diameter: 10.490 mm

Pair

Pair Color Code Chart:

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

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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:	120.544 Kg/Km			
	Max. Recommended Pulling Tension:	564.921 N			
	Min. Bend Radius/Minor Axis:	107.950 mm			
App	olicable Specifications and Agency Com	oliance (Overall)			
App	olicable Standards & Environmental Program	ns			
	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			
Fla	Flame Test				

Flame Test

UL1581 Vertical Tray **UL Flame Test:**

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)

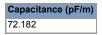
Nom. Characteristic Impedance:



Nom. Capacitance Conductor to Conductor:



Nom. Capacitance Cond. to Other Conductor & Shield:



Nominal Velocity of Propagation:



Nom. Conductor DC Resistance:



Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 11.1554

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

59.058 Ohm/km

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Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current

1.6 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:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8165 060100	100 FT	9.100 LB	CHROME		5 FS PR #24 FHDPE SH PVC
8165 0601000	1,000 FT	90.000 LB	CHROME	С	5 FS PR #24 FHDPE SH PVC
8165 060500	500 FT	45.500 LB	CHROME	С	5 FS PR #24 FHDPE SH PVC

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 09-21-2012

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