# **Detailed Specifications & Technical Data**



## ENGLISH MEASUREMENT VERSION

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## 8163 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 & Digital

For more Information please call

1-800-Belden1



## **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 Characterist	tics (Ov	erall	)			
Conductor	``					
AWG:						
<b># Pairs AWG Stranding</b> 3 24 7x32	<b>Conducto</b> TC - Tinne					
		eu Cop	per			
Insulation Insulation Material:						
Insulation Trade Name	Insulation	Matori	al			
	FPE - Foan					
		-				
Inner Shield Inner Shield Material:						
Inner Shield Trade Nam	e Type In	ner Sh	ield Materi	al	Coverag	je (%)
Beldfoil® (Z-Fold®)			n Foil-Polye			
Inner Shield Drain Wire	AWG:					
AWG						
24						
	re Strandi	ina:		7x3	30	
Inner Shield Drain Wi				/ X.		
Inner Shield Drain Wi		-	latorial:		-	Conner
Inner Shield Drain Wi		-	laterial:		: - Tinned	Copper
Inner Shield Drain Wi Outer Shield		-	laterial:		-	Copper
	re Condu	ctor N		TC	- Tinned	
Inner Shield Drain Wi Outer Shield Outer Shield Material: Layer # Outer Shield Tr 1 Beldfoil®	re Condu	ctor M		TC eld Mater	: - Tinned	Copper Covera 100
Inner Shield Drain Wi Outer Shield Outer Shield Material: Layer # Outer Shield Tr	re Condu	ctor N Type Tape	Outer Shie	TC eld Materi Foil-Polye	; - Tinned	Covera
Inner Shield Drain Wi Outer Shield Outer Shield Material: Layer # Outer Shield Tr 1 Beldfoil®	re Condu	ctor N Type Tape	Outer Shie Aluminum	TC eld Materi Foil-Polye	; - Tinned	<b>Covera</b>
Inner Shield Drain Wi Outer Shield Outer Shield Material: Layer # Outer Shield Tr 1 Beldfoil® 2	re Condu	ctor N Type Tape	Outer Shie Aluminum	TC eld Materi Foil-Polye	; - Tinned	<b>Covera</b>
Inner Shield Drain Wi Outer Shield Outer Shield Material: Layer # Outer Shield Tr 1 Beldfoil® 2 Outer Jacket Outer Jacket Material: Outer Jacket Material	re Condu	ctor N Type Tape	Outer Shie Aluminum	TC eld Materi Foil-Polye	; - Tinned	<b>Covera</b>
Inner Shield Drain Wi Outer Shield Outer Shield Material: Layer # Outer Shield Tr 1 Beldfoil® 2 Outer Jacket Outer Jacket Material:	re Condu	ctor N Type Tape	Outer Shie Aluminum	TC eld Materi Foil-Polye	; - Tinned	<b>Covera</b>
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Inner Shield Drain Wi Outer Shield Outer Shield Material: Layer # Outer Shield Tr 1 Beldfoil® 2 Outer Jacket Outer Jacket Material: Outer Jacket Material: PVC - Polyvinyl Chloride Overall Cable Overall Nominal Diam Pair Pair Color Code Chart: Number Color	re Condu	ctor N Type Tape	Outer Shie Aluminum	TC eld Mater Foil-Polye d Copper	ial	<b>Covera</b>
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Inner Shield Drain Wi Outer Shield Outer Shield Material: Layer # Outer Shield Tr 1 Beldfoil® 2 Outer Jacket Outer Jacket Material: Outer Jacket Material PVC - Polyvinyl Chloride Overall Cable Overall Nominal Diam Pair Pair Pair Color Code Chart: Number Color 1 Black & Red 2 Black & White 3 Black & Green	re Condu	ctor N Type Tape	Outer Shie Aluminum	TC eld Mater Foil-Polye d Copper	ial	<b>Covera</b>
Inner Shield Drain Wi Outer Shield Outer Shield Material: Layer # Outer Shield Tr 1 Beldfoil® 2 Outer Jacket Outer Jacket Material PVC - Polyvinyl Chloride Overall Cable Overall Nominal Diam Pair Pair Color Code Chart: Number Color 1 Black & Red 2 Black & White 3 Black & Green Pair Lay Length & Direct	re Condu	Type Tape Braid	Outer Shie Aluminum	TC eld Mater Foil-Polye d Copper	ial	<b>Covera</b>
Inner Shield Drain Wi Outer Shield Outer Shield Material: Layer # Outer Shield Tr 1 Beldfoil® 2 Outer Jacket Outer Jacket Material: Outer Jacket Material PVC - Polyvinyl Chloride Overall Cable Overall Nominal Diam Pair Pair Pair Color Code Chart: Number Color 1 Black & Red 2 Black & White 3 Black & Green	re Conduc rade Name neter:	Type Tape Braid	Outer Shie Aluminum	TC eld Mater Foil-Polye d Copper	ial	<b>Covera</b> 100

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## ENGLISH MEASUREMENT VERSION

# 8163 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 & Digital

chanical Characteristics (Overall) Operating Temperature Range:	-40°C To +60°C
Non-UL Temperature Rating:	60°C (UL AWM Style 2493)
Bulk Cable Weight:	76 lbs/1000 ft.
Max. Recommended Pulling Tension:	84 lbs.
	3.750 in.
Min. Bend Radius (Install)/Minor Axis:	5.750 m.
plicable Specifications and Agency Co	
pplicable Standards & Environmental Prog NEC/(UL) Specification:	rams CM
CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2493 (300 V 60°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
enum/Non-Plenum	
Plenum (Y/N):	No
ectrical Characteristics (Overall)	
om. Characteristic Impedance:	
Impedance (Ohm) 100	
om. Capacitance Conductor to Conductor:	
Capacitance (pF/ft)	
12.5	
om. Capacitance Cond. to Other Conductor & Sh	iield:
Capacitance (pF/ft) 22	
pminal Velocity of Propagation:	
VP (%)	
78	
om. Conductor DC Resistance:	
DCR @ 20°C (Ohm/1000 ft)	
DCR @ 20°C (Ohm/1000 ft) 24.0	
DCR @ 20°C (Ohm/1000 ft)	
DCR @ 20°C (Ohm/1000 ft) 24.0 pminal Outer Shield DC Resistance:	
DCR @ 20°C (Ohm/1000 ft) 24.0 ominal Outer Shield DC Resistance: DCR @ 20°C (Ohm/1000 ft) 4.4 Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:	18 Ohm/1000 ft
DCR @ 20°C (Ohm/1000 ft) 24.0 pminal Outer Shield DC Resistance: DCR @ 20°C (Ohm/1000 ft) 4.4 Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: ax. Operating Voltage - UL:	18 Ohm/1000 ft
DCR @ 20°C (Ohm/1000 ft) 24.0 ominal Outer Shield DC Resistance: DCR @ 20°C (Ohm/1000 ft) 4.4 Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:	18 Ohm/1000 ft

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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.

#### **Related Documents:**

No related documents are available for this product

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8163 060100	100 FT	7.000 LB	CHROME		3 FS PR #24 FHDPE SH PVC
8163 0601000	1,000 FT	66.000 LB	CHROME	С	3 FS PR #24 FHDPE SH PVC
8163 060500	500 FT	34.000 LB	CHROME	С	3 FS PR #24 FHDPE SH PVC

Notes:

C = CRATE REEL PUT-UP.

**Revision Number: 1** Revision Date: 04-16-2008

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