

**8163 Paired - Low Capacitance Computer Cables for EIA RS-232/422**

	<p>For more information please call <b>1-800-Belden1</b></p> <p><u>See Put-ups and Colors</u></p> <p><b>Color Code Chart : No. 3 for Paired Cables (Belden Standard).pdf</b></p>
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**Description:**

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

**PHYSICAL CHARACTERISTICS:**

**CONDUCTOR:**

Number of Pairs	3
Total Number of Conductors	6
AWG	24
Stranding	7x32
Conductor Material	TC - Tinned Copper

**INSULATION:**

Insulation Material Trade Name	Datalene®
Insulation Material	FPE - Foam Polyethylene

**PAIR:**

Pair Lay Length	1 in.
Pair Twists/ft.	12
Pair Shield Material Trade Name	Beldfoil® (Z-Fold®)
Pair Shield Type	Tape
Pair Shield Material	Aluminum Foil-Polyester Tape
Pair Shield % Coverage	100 %

**PAIR SHIELD DRAIN WIRE :**

Pair Shield Drain Wire AWG	24
Pair Shield Drain Wire Stranding	Stranded
Pair Shield Drain Wire Conductor Material	TC - Tinned Copper

Pair Color Code Chart :

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

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**OUTER SHIELD:**

Outer Shield Trade Name	Beldfoil®
Outer Shield Type	Tape/Braid

Outer Shield Material :

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

Outer Shield % Coverage	100 %
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**OUTER JACKET:**

Outer Jacket Material	PVC - Polyvinyl Chloride
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**OVERALL NOMINAL DIAMETER:**

Overall Nominal Diameter	.359 in.
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**MECHANICAL CHARACTERISTICS:**

Operating Temperature Range	-40°C To +60°C
Temperature Rating	60°C (UL AWM Style 2493)
Bulk Cable Weight	76 lbs/1000 ft.
Max. Recommended Pulling Tension	84 lbs.
Min. Bend Radius (Install)	3.75 in.

**APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:**

**APPLICABLE STANDARDS:**

NEC/(UL) Specification	CM
CEC/C(UL) Specification	CM
AWM Specification	2493 (60°C)

**FLAME TEST:**

UL Flame Test	UL1581 Vertical Tray, VW-1
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**PLENUM/NON-PLENUM:**

Plenum (Y/N)	N
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**ELECTRICAL CHARACTERISTICS:**

Nom. Characteristic Impedance	100 Ohms
Nom. Capacitance Conductor to Conductor @ 1 KHz	12.5 pF/ft
Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz	22 pF/ft
Nominal Velocity of Propagation	78 %
Nom. Conductor DC Resistance @ 20 Deg. C	24.0 Ohms/1000 ft
Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C	18 Ohms/1000 ft
Nominal Outer Shield DC Resistance @ 20 Deg. C	4.4 Ohms/1000 ft
Max. Operating Voltage - UL	300 V RMS



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Other Maximum Continuous Currents 1.6 Amps per conductor @ 25°C

**NOTES:**

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	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
8163 060100	3 FS PR #24 FHDPE SH PVC	100	7	CHROME	
8163 0601000	3 FS PR #24 FHDPE SH PVC	1000	66	CHROME	C
8163 060500	3 FS PR #24 FHDPE SH PVC	500	34	CHROME	C

C = CRATE REEL PUT-UP.

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