Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

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 Characteristics (Overall)

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
3	24	7x32	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material
Datalene®	FPE - Foam Polyethylene

Inner Shield

Inner Shield Material:

Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
Beldfoil® (Z-Fold®)	Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:

AWG
24

Inner Shield Drain Wire Stranding: 7x32

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
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 0.359 in.

Pair

Pair Color Code Chart:

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

Pair Lay Length & Direction:

Lay Length (in.)	Twists/ft. (twist/ft)
1.000	12.000

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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:	76 lbs/1000 ft.
Max. Recommended Pulling Tension:	84 lbs.
Min. Bend Radius (Install)/Minor Axis:	3.750 in.

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 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

Plenum/Non-Plenum

Plenum (Y/N):	No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
100

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
12.5

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
22

Nominal Velocity of Propagation:

VP (%)
78

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
24.0

Nominal 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

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Recommended Current:

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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	C	3 FS PR #24 FHDPE SH PVC
8163 060500	500 FT	34.000 LB	CHROME	C	3 FS PR #24 FHDPE SH PVC

Notes:
C = CRATE REEL PUT-UP.

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