Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

8164 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
4	24	7x32	TC - Tinned Copper

Total Number of Conductors: 8

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (mm)
Datalene®	FPE - Foam Polyethylene	0.483

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	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	1.219

Overall Cable

Overall Nominal Diameter: 9.855 mm

Pair

Pair Color Code Chart:

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

Mechanical Characteristics (Overall)

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Operating Temperature Range:	-40°C To +60°C
UL Temperature Rating:	60°C
Bulk Cable Weight:	107.150 Kg/Km
Max. Recommended Pulling Tension:	493.750 N
Min. Bend Radius/Minor Axis:	101.600 mm

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 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

Plenum/Non-Plenum

Plenum (Y/N):	No

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)
10.4992

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

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2.5 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
8164 060100	100 FT	8.200 LB	CHROME		4 FS PR #24 FHDPE SH PVC
8164 0601000	1,000 FT	77.000 LB	CHROME	C	4 FS PR #24 FHDPE SH PVC
8164 060500	500 FT	39.500 LB	CHROME	C	4 FS PR #24 FHDPE SH PVC

Notes:
C = CRATE REEL PUT-UP.

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