

8166 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
6	24	7x32	TC - Tinned Copper

Total Number of Conductors: 12

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: 11.328 mm

Pair**Pair Color Code Chart:**

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

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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:	133.938 Kg/Km
Max. Recommended Pulling Tension:	671.678 N
Min. Bend Radius/Minor Axis:	114.300 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

Flame Test

UL Flame Test:	UL1581 Vertical Tray
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Plenum/Non-Plenum

Plenum (Y/N):	No
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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)

9.1868

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
8166 060100	30 MT	4.853 KG	CHROME	C	6 FS PR #24 FHDPE SH PVC
8166 0601000	305 MT	44.906 KG	CHROME	C	6 FS PR #24 FHDPE SH PVC
8166 060500	152 MT	22.680 KG	CHROME	C	6 FS PR #24 FHDPE SH PVC

Notes:

C = CRATE REEL PUT-UP.

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