# **Detailed Specifications & Technical Data**

## METRIC MEASUREMENT VERSION





# 8167 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.

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# **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

# Pairs	AWG	Stranding	<b>Conductor Material</b>
7	24	7x32	TC - Tinned Copper

Total Number of Conductors:

#### 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:



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 (%)
ľ	1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
ľ	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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7 Black & Orange

Mechanical Characteristics (Overall)			
Operating Temperature Range:	-40°C To +60°C		
Non-UL Temperature Rating:	60°C (UL AWM Style 2493)		
Bulk Cable Weight:	141.379 Kg/Km		
Max. Recommended Pulling Tension:	747.298 N		
Min. Bend Radius/Minor Axis:	114.300 mm		
Applicable Specifications and Agency (	compliance (Overall)		
Applicable Standards & Environmental Programs			
NEC/(UL) Specification:	CM		

NEC/(UL) Specification:	Civi
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

## Plenum/Non-Plenum

Plenum (Y/N): No

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Capacitance Conductor to Conductor:



Nom. Capacitance Cond. to Other Conductor & Shield:



**Nominal Velocity of Propagation:** 



Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 78.744

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 9.1868

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Ind. Pair Nominal Shield DC Resistance @ 20 59.058 Ohm/km

Deg. C:

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended 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
8167 0601000	1,000 FT	103.000 LB	CHROME	С	7 FS PR #24 FHDPE SH PVC
8167 060500	500 FT	52.500 LB	CHROME	С	7 FS PR #24 FHDPE SH PVC

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 09-21-2012

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