

METRIC MEASUREMENT VERSION



## 8185 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
25	24	7x32	TC - Tinned Copper

Total Number of Conductors: 50

#### 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®	Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:

AWG
24

Inner Shield Drain Wire Stranding: Stranded

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	1.651

#### Overall Cable

Overall Nominal Diameter: 20.879 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
7	Black & Orange

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8	Red & White
9	Red & Green
10	Red & Blue
11	Red & Yellow
12	Red & Brown
13	Red & Orange
14	Green & White
15	Green & Blue
16	Green & Yellow
17	Green & Brown
18	Green & Orange
19	White & Blue
20	White & Yellow
21	White & Brown
22	White & Orange
23	Blue & Yellow
24	Blue & Brown
25	Blue & Orange

### Mechanical Characteristics (Overall)

<b>Operating Temperature Range:</b>	-40°C To +60°C
<b>Non-UL Temperature Rating:</b>	60°C (UL AWM Style 2493)
<b>Bulk Cable Weight:</b>	433.066 Kg/Km
<b>Max. Recommended Pulling Tension:</b>	2166.273 N
<b>Min. Bend Radius/Minor Axis:</b>	209.550 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

<b>NEC/(UL) Specification:</b>	CM
<b>CEC/C(UL) Specification:</b>	CM
<b>AWM Specification:</b>	UL Style 2493 (300 V 60°C)
<b>EU Directive 2011/65/EU (ROHS II):</b>	Yes
<b>EU CE Mark:</b>	Yes
<b>EU Directive 2000/53/EC (ELV):</b>	Yes
<b>EU Directive 2002/95/EC (RoHS):</b>	Yes
<b>EU RoHS Compliance Date (mm/dd/yyyy):</b>	01/01/2004
<b>EU Directive 2002/96/EC (WEEE):</b>	Yes
<b>EU Directive 2003/11/EC (BFR):</b>	Yes
<b>CA Prop 65 (CJ for Wire &amp; Cable):</b>	Yes
<b>MII Order #39 (China RoHS):</b>	Yes

#### Flame Test

<b>UL Flame Test:</b>	UL1581 Vertical Tray
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#### Plenum/Non-Plenum

<b>Plenum (Y/N):</b>	No
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### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

<b>Impedance (Ohm)</b>
100

#### Nom. Capacitance Conductor to Conductor:

<b>Capacitance (pF/m)</b>
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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)  
7.8744

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  
1 Amp per conductor @ 25°C

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8185 060100	100 FT	32.300 LB	CHROME	C	25 FS PR #24 FHDPE SH PVC
8185 0601000	1,000 FT	356.000 LB	CHROME	C	25 FS PR #24 FHDPE SH PVC
8185 060500	500 FT	160.500 LB	CHROME	C	25 FS PR #24 FHDPE SH PVC

**Notes:**  
C = CRATE REEL PUT-UP.

Revision Number: 2    Revision Date: 10-01-2012

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