

## 8175 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
15	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®	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
PVC - Polyvinyl Chloride

#### Overall Cable

Overall Nominal Diameter: 0.665 in.

#### 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
8	Red & White

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9	Red & Green
10	Red & Blue
11	Red & Yellow
12	Red & Brown
13	Red & Orange
14	Green & White
15	Green & Blue

**Pair Lay Length & Direction:**

Lay Length (in.)	Twists/ft. (twist/ft)
1.500	8.000

### 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>	234 lbs/1000 ft.
<b>Max. Recommended Pulling Tension:</b>	315 lbs.
<b>Min. Bend Radius (Install)/Minor Axis:</b>	6.750 in.

### 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 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

**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/ft)</b>
12.5

**Nom. Capacitance Cond. to Other Conductor & Shield:**

<b>Capacitance (pF/ft)</b>
22

**Nominal Velocity of Propagation:**

<b>VP (%)</b>
78

**Nom. Conductor DC Resistance:**

<b>DCR @ 20°C (Ohm/1000 ft)</b>
24

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**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/1000 ft)
2.5

**Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C:** 18 Ohm/1000 ft

**Max. Operating Voltage - UL:**

Voltage
300 V RMS (UL AWM Style 2493)

**Max. Recommended Current:**

Current
1.1 Amps per conductor @ 25°C

### Related Documents:

No related documents are available for this product

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8175 060100	100 FT	22.600 LB	CHROME	C	15 PR #24 FRFPE SHLD PVC
8175 0601000	1,000 FT	210.000 LB	CHROME	C	15 PR #24 FRFPE SHLD PVC
8175 060500	500 FT	104.500 LB	CHROME	C	15 PR #24 FRFPE SHLD PVC

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

Revision Number: 1    Revision Date: 04-16-2008

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