

## 8178 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 &amp; 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
18	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: 0.686 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
16	Green & Yellow
17	Green & Brown
18	Green & Orange

## Pair Lay Length &amp; Direction:

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

## Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +60°C
UL Temperature Rating:	60°C (UL AWM Style 2493)
Bulk Cable Weight:	263 lbs/1000 ft.
Max. Recommended Pulling Tension:	364 lbs.
Min. Bend Radius (Install)/Minor Axis:	7 in.

## Applicable Specifications and Agency Compliance (Overall)

## Applicable Standards &amp; Environmental Programs

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
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
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## Electrical Characteristics (Overall)

## Nom. Characteristic Impedance:

Impedance (Ohm)
100

## Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
12.5

## Nom. Capacitance Cond. to Other Conductor &amp; Shield:

Capacitance (pF/ft)
22

## Nominal Velocity of Propagation:

VP (%)
78

## Nom. Conductor DC Resistance:

**8178 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 & Digital****DCR @ 20°C (Ohm/1000 ft)**

24

**Nominal Outer Shield DC Resistance:****DCR @ 20°C (Ohm/1000 ft)**

2.6

**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 Amp 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
8178 060100	100 FT	24.600 LB	CHROME	C	18 FS PR#24 FHDPE SH PVC
8178 0601000	1,000 FT	238.000 LB	CHROME	C	18 FS PR#24 FHDPE SH PVC

**Notes:**

C = CRATE REEL PUT-UP.

Revision Number: 1    Revision Date: 04-17-2008

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