# **Detailed Specifications & Technical Data**



ENGLISH MEASUREMENT VERSION

## 8170 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
10247x32TC - 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® (Z-Fold®) 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: 0.584 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

### Pair Lay Length & 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:	178 lbs/1000 ft.	
Max. Recommended Pulling Tension:	225 lbs.	
Min. Bend Radius (Install)/Minor Axis:	6.300 in.	

## **Applicable Specifications and Agency Compliance (Overall)**

**Applicable Standards & Environmental Programs** 

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	СМ
AWM Specification:	UL Style 2493 (300 V 60°C)
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyy	<b>y):</b> 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

### **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 & Shield:

Capacitance (pF/ft)

22

Nominal Velocity of Propagation:

**VP (%)** 78

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 24

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

2.7



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

Max. Operating Voltage - UL: Voltage 300 V RMS (UL AWM Style 2493) Max. Recommended Current:

Current

1.1 Amps per conductor @ 25°C

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### **Related Documents:**

No related documents are available for this product

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8170 060100	100 FT	18.000 LB	CHROME	С	10 FS PR#24 FHDPE SH PVC
8170 0601000	1,000 FT	164.000 LB	CHROME	С	10 FS PR#24 FHDPE SH PVC
8170 060500	500 FT	83.000 LB	CHROME	С	10 FS PR#24 FHDPE SH PVC

Notes:

C = CRATE REEL PUT-UP.

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