# **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



### **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 TC - Tinned Copper 24 7x32 **Total Number of Conductors:** 20 Insulation Insulation Material: Insulation Trade Name Insulation Material Wall Thickness (in.) Datalene® FPE - Foam Polyethylene | 0.019 **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: 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 (%) Beldfoil® Tape | Aluminum Foil-Polyester Tape | 100 Braid TC - Tinned Copper 65 Outer Jacket Outer Jacket Material: Outer Jacket Material Nom. Wall Thickness (in.) PVC - Polyvinyl Chloride 0.063 **Overall Cable Overall Nominal Diameter:** 0.584 in. Pair Pair Color Code Chart: Number Color Black & Red Black & White Black & Green Black & Blue

Mechanical	Character	istics (	(Overal	I)
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Red & Blue

10

Black & Yellow Black & Brown Black & Orange Red & White Red & Green

Operating Temperature Range: -40°C To +60°C

UL Temperature Rating: 60°C (UL AWM Style 2493)

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Bulk Cable Weight:	148 lbs/1000 ft.		
Max. Recommended Pulling Tension:	225 lbs.		
Min. Bend Radius/Minor Axis:	6 in.		

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

#### **Applicable Standards & Environmental Programs**

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NEC/(UL) Specification:	CM		
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:

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)

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 2.7

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

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current
1.1 Amps per conductor @ 25°C

## **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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# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Belden Wire & Cable:

<u>8170 060100</u> <u>8170 060500</u> <u>8170 0601000</u>