

## 8118 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422



For more Information  
please call

1-800-Belden1

**General Description:**

24 AWG stranded (7x32) TC conductors, Datalene® insulation, twisted pairs, overall Beldfoil® (100% coverage) + TC braid shield (65% coverage), 24 AWG stranded TC drain wire, PVC jacket.

**Physical Characteristics (Overall)****Conductor****AWG:**

# Pairs	AWG	Stranding	Conductor Material
18	24	7x32	TC - Tinned Copper

Total Number of Conductors: 36

**Insulation****Insulation Material:**

Insulation Trade Name	Insulation Material	Wall Thickness (mm)
Datalene®	FPE - Foam Polyethylene	0.381

**Outer Shield****Outer Shield Material:**

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape w/Shorting Fold	100
2		Braid	TC - Tinned Copper	65

**Outer Shield Drain Wire AWG:**

AWG	Stranding	Drain Wire Conductor Material
24	7x32	TC - Tinned Copper

**Outer Jacket****Outer Jacket Material:**

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	1.219

**Overall Cable**

Overall Nominal Diameter: 13.640 mm

**Pair****Pair Color Code Chart:**

Number	Color
1	White/Blue & Blue/White
2	White/Orange & Orange/White
3	White/Green & Green/White
4	White/Brown & Brown/White
5	White/Gray & Gray/White
6	Red/Blue & Blue/Red
7	Red/Orange & Orange/Red
8	Red/Green & Green/Red
9	Red/Brown & Brown/Red
10	Red/Gray & Gray/Red
11	Black/Blue & Blue/Black
12	Black/Orange & Orange/Black
13	Black/Green & Green/Black
14	Black/Brown & Brown/Black

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15	Black/Gray & Gray/Black
16	Yellow/Blue & Blue/Yellow
17	Yellow/Orange & Orange/Yellow
18	Yellow/Green & Green/Yellow

**Mechanical Characteristics (Overall)**

Operating Temperature Range:	-30°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2919)
Bulk Cable Weight:	197.931 Kg/Km
Max. Recommended Pulling Tension:	905.209 N
Min. Bend Radius/Minor Axis:	139.700 mm

**Applicable Specifications and Agency Compliance (Overall)****Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2919 (30 V 80°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:	UL1685 UL Loading
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**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/m)
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)
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## 8118 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422

6.8901

**Max. Operating Voltage - UL:**

Voltage	Description
30 V RMS	UL AWM Style 2919
300 V RMS	CM

**Max. Recommended Current:**

Current
.88 Amps per conductor @ 25°C

**Notes (Overall)**

**Notes:** Datalene® insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8118 060100	30 MT	6.804 KG	CHROME	C	18 PR #24 FHDPE SH PVC
8118 0601000	305 MT	63.957 KG	CHROME	C	18 PR #24 FHDPE SH PVC
8118 060500	152 MT	31.978 KG	CHROME	C	18 PR #24 FHDPE SH PVC

**Notes:**

C = CRATE REEL PUT-UP.

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