

METRIC MEASUREMENT VERSION



## 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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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	100 FT	15.000 LB	CHROME	C	18 PR #24 FHDPE SH PVC
8118 0601000	1,000 FT	141.000 LB	CHROME	C	18 PR #24 FHDPE SH PVC
8118 060500	500 FT	70.500 LB	CHROME	C	18 PR #24 FHDPE SH PVC

#### Notes:

C = CRATE REEL PUT-UP.

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