

## 8106 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
6	24	7x32	TC - Tinned Copper

Total Number of Conductors: 12

#### Insulation

##### Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (mm)
Datalene®	FPE - Foam Polyethylene	0.330

#### 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	0.889

#### Overall Cable

Overall Nominal Diameter: 8.661 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

### Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +80°C

UL Temperature Rating: 80°C (UL AWM Style 2919)

Bulk Cable Weight: 80.363 Kg/Km

Max. Recommended Pulling Tension: 318.046 N

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Min. Bend Radius/Minor Axis: 88.900 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

#### Plenum/Non-Plenum

Plenum (Y/N): No

Plenum Number: 88106

### 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)

11.4835

#### Max. Operating Voltage - UL:

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

#### Max. Recommended Current:

Current

1.5 Amps per conductor @ 25°C

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## 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
8106 060100	30 MT	2.858 KG	CHROME		6 PR #24 FHDPE SH PVC
8106 0601000	305 MT	26.308 KG	CHROME	C	6 PR #24 FHDPE SH PVC
8106 060500	152 MT	13.835 KG	CHROME	C	6 PR #24 FHDPE SH PVC
8106 0605000	1,524 MT	142.882 KG	CHROME		6 PR #24 FHDPE SH PVC

**Notes:**

C = CRATE REEL PUT-UP.

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