

## 8102 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422

For more Information  
please call

1-800-Belden1



### 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
2	24	7x32	TC - Tinned Copper

#### Insulation

##### Insulation Material:

Insulation Trade Name	Insulation Material
Datalene®	FPE - Foam Polyethylene

#### 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
PVC - Polyvinyl Chloride

#### Overall Cabling

Overall Nominal Diameter: 6.858 mm

#### Pair

##### Pair Color Code Chart:

Number	Color
1	White/Blue & Blue/White
2	White/Orange & Orange/White

### Mechanical Characteristics (Overall)

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

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

Bulk Cable Weight: 55.063 Kg/Km

Max. Recommended Pulling Tension: 122.326 N

Min. Bend Radius (Install)/Minor Axis: 69.850 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CM

## 8102 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422

CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2919 (30 V 80°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/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
Plenum Number:	88102

**Electrical Characteristics (Overall)****Nom. Characteristic Impedance:**

Impedance (Ohm)

100

**Nom. Inductance:**Inductance ( $\mu\text{H}/\text{m}$ )

0.659481

**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)

15.0926

**Max. Operating Voltage - UL:**

Voltage

30 V RMS (UL AWM Style 2919)

300 V RMS

**Max. Recommended Current:**

Current

1.8 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.

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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
8102 060100	30 MT	1.860 KG	CHROME		2 PR #24 FHDPE SH PVC
8102 0601000	305 MT	17.237 KG	CHROME	C	2 PR #24 FHDPE SH PVC
8102 06010000	3,048 MT	172.366 KG	CHROME	C Y	2 PR #24 FHDPE SH PVC
8102 060500	152 MT	7.711 KG	CHROME	C	2 PR #24 FHDPE SH PVC

**Notes:**

C = CRATE REEL PUT-UP.

Y = FINAL PUT-UP LENGTH MAY VARY -10% TO +20% FROM LENGTH SHOWN.MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.

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