# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



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

For more Information please call

1-800-Belden1



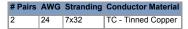
#### **General Description:**

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:



Total Number of Conductors:

#### Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (in.)
Datalene®	FPE - Foam Polyethylene	0.013

#### **Outer Shield**

Outer Shield Material:

ı	Layer#	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
ı	1	Beldfoil®	Таре	Aluminum Foil-Polyester Tape w/Shorting Fold	100
ı	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 (in.)
PVC - Polyvinyl Chloride	0.035

### **Overall Cable**

**Overall Nominal Diameter:** 

0.270 in.

#### 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:	34 lbs/1000 ft.
Max. Recommended Pulling Tension:	27.500 lbs.
Min. Bend Radius/Minor Axis:	2.750 in.

## **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

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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:	88102

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm)
100

Nom. Inductance:



Nom. Capacitance Conductor to Conductor:



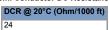
Nom. Capacitance Cond. to Other Conductor & Shield:



Nominal Velocity of Propagation:



Nom. Conductor DC Resistance:



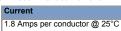
Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.6

Max. Operating Voltage - UL:

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

Max. Recommended Current:



## 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

## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8102 060100	100 FT	4.100 LB	CHROME		2 PR #24 FHDPE SH PVC
8102 0601000	1,000 FT	38.000 LB	CHROME	С	2 PR #24 FHDPE SH PVC
8102 06010000	10,000 FT	380.000 LB	CHROME	CY	2 PR #24 FHDPE SH PVC
8102 060500	500 FT	18.500 LB	CHROME	С	2 PR #24 FHDPE SH PVC
8102 0605000	5,000 FT	185.000 LB	CHROME	С	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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Revision Number: 2 Revision Date: 08-31-2012

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