# **Detailed Specifications & Technical Data**



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

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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

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Physical Characteristics (Over Conductor	raii)					
AWG:						
# PairsAWGStrandingConduct2247x32TC - Tinn	aned Copper					
Total Number of Conductors:	4					
Insulation						
Insulation Material: Insulation Trade Name Insulation	n Matavial					
	n Material Wall Thickness (in.) am Polyethylene 0.013					
Outer Shield Outer Shield Material:						
Layer # Outer Shield Trade Name	e 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 Cond       24     7x32     TC - Tinned Copp						
Outer Jacket Outer Jacket Material:						
	all 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/V						
Mechanical Characteristics (O	)verall)					
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 Tensi	ion: 27.500 lbs.					
Min. Bend Radius/Minor Axis: 2.750 in.						
	Agency Compliance (Overall)					
Applicable Standards & Environm	-					
NEC/(UL) Specification:	СМ					
CEC/C(UL) Specification:	СМ					
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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### ENGLISH MEASUREMENT VERSION

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

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:	
Inductance (μH/ft) .201	
Nom. Capacitance Conductor to Conductor: Capacitance (pF/ft) 12.5	
Nom. Capacitance Cond. to Other Conductor & Shield: Capacitance (pF/ft) 22	
Nominal Velocity of Propagation:	
Nom. Conductor DC Resistance: DCR @ 20°C (Ohm/1000 ft) 24	
Nominal Outer Shield DC Resistance: DCR @ 20°C (Ohm/1000 ft) 4.6	
Voltage Description   30 V RMS UL AWM Style 2919   300 V RMS CM	
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.

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

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