# **Detailed Specifications & Technical Data**

METRIC MEASUREMENT VERSION



## 8104 Multi-Conductor - Low Capacitance Computer Cables 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		
4	24	7x32	TC - Tinned Copper		

Total Number of Conductors: 8

#### 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:**

Oı	uter Jacket Material	Nom. Wall Thickness (mm)
Р١	/C - Polyvinyl Chloride	0.889

#### **Overall Cable**

Overall Nominal Diameter: 7.087 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	

## **Mechanical Characteristics (Overall)**

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Operating Temperature Range:	-30°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2919)
Bulk Cable Weight:	62.504 Kg/Km
Max. Recommended Pulling Tension:	220.186 N
Min. Bend Radius/Minor Axis:	76.200 mm

Page 1 of 3 01-30-2019

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## 8104 Multi-Conductor - Low Capacitance Computer Cables for EIA RS-232/422

App	Applicable Specifications and Agency Compliance (Overall)				
Ap	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			
Fla	me Test				
	UL Flame Test:	UL1685 UL Loading			
Ple	num/Non-Plenum				
	Plenum (Y/N):	No			
	Plenum Number:	88104			

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



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/km) 13.4521

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

## **Notes (Overall)**

Page 2 of 3 01-30-2019

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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
8104 060100	100 FT	5.000 LB	CHROME		4 PR #24 FHDPE SH PVC
8104 0601000	1,000 FT	46.000 LB	CHROME	С	4 PR #24 FHDPE SH PVC
8104 06010000	10,000 FT	460.000 LB	CHROME	CY	4 PR #24 FHDPE SH PVC
8104 060500	500 FT	23.000 LB	CHROME	С	4 PR #24 FHDPE SH PVC

#### Notes:

C = CRATE REFL 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'.

Revision Number: 3 Revision Date: 08-15-2012

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