

# **Product:** 8102 ⊠ RS232/422 Low Cap, #24-2pr, FPO, O/A Foil+Braid, PVC Jkt, CM, 100Ω

## **Product Description**

Computer EIA RS-232/422 Cable, 24 AWG stranded (7x32) tinned copper conductors, Datalene® insulation, twisted pairs, overall Beldfoil® (100% coverage) + tinned copper braid shield (65% coverage), 24 AWG stranded tinned copper drain wire, PVC jacket

## **Technical Specifications**

### **Physical Characteristics (Overall)**

Condu	Conductor		
AWG	Stranding	Material	No. of Pairs
24	7x32	TC - Tinned Copper	2
Condu	Conductor Count: 4		

### Insulation

Material	Material Trade Name	Nominal Wall Thickness
FPE - Foamed Polyethylene	Datalene®	0.013 in

#### Color Chart

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

#### **Outer Shield Material**

Туре	Layer	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Таре	1	Aluminum/Polyester	Beldfoil®	100 %	TC - Tinned Copper	24	7x32 mm
Braid	2	TC - Tinned Copper		65 %			

#### Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.27 in	0.035 in

## **Electrical Characteristics**

Conductor DCR			
Nominal Conductor DCR	Nominal Outer Sh	ield DCR	
24 Ohm/1000ft	4.6 Ohm/1000ft		
Capacitance			
Nom. Capacitance Condu	ctor to Conductor	Nom. Capacitance Conductor to Other Conductor	to Shield
12.5 pF/ft		22 pF/ft	
Inductance			
Nominal Inductance			
0.201 µH/ft			
Impedance			
Nominal Characteristic Im	npedance		
100 Ohm			

Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
78 ns/100m	78 %

## Current

Max. Recommended Current [A] 1.8 Amps per conductor @ 25°C A

### Voltage

UL Description	UL Voltage Rating
UL AWM Style 2919	30 V RMS (UL AWM Style 2919)
CM	300 V RMS (CM)

## **Temperature Range**

UL Temp Rating:	80°C (UL AWM Style 2919)
Operating Temp Range:	-30°C To +80°C

## **Mechanical Characteristics**

Bulk Cable Weight:	34 lbs/1000ft
Max Recommended Pulling Tension:	27.5 lbs
Min Bend Radius/Minor Axis:	2.75 in

## Standards

NEC/(UL) Specification:	СМ
CEC/C(UL) Specification:	CM
UL AWM Style:	2919 (30 V 80°C)
CPR Euroclass:	Eca

# Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

# Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	30 V RMS (UL AWM Style 2919)

## Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	88102

## Part Number

#### Variants

Item #	Color	UPC	Length	Footnote
8102.001000	Chrome		1,000 m	
8102.0030	Chrome		30 m	
8102.00305	Chrome		305 m	
8102.01152	Chrome		152 m	
8102 060100	Chrome	612825194743	100 ft	
8102 0601000	Chrome	612825194750	1,000 ft	С
8102 06010000	Chrome	612825194767	10,000 ft	CY

8102 060500	Chrome	61282519477	4 500 ft	С
8102 0605000	Chrome	61282519478	1 5,000 ft	С
Footnote:		(	C - CRATE F	REEL PUT-U
Footnote:		١	′ - FINAL PU	JT-UP LENG

## Product Notes

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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#### History

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Update and Revision: Revision Number: 0.251 Revision Date: 08-22-2019
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