# **Detailed Specifications & Technical Data**

## **METRIC MEASUREMENT VERSION**



# 9938 Multi-Conductor - Low-Capacitance Computer Cable for EIA RS-232/423



For more Information please call

1-800-Belden1



# **General Description:**

24 AWG stranded (7x32) TC conductors, Datalene® insulation, overall Beldfoil® (100% coverage) + TC braid shield (65% coverage), drain wire, PVC jacket.

# **Physical Characteristics (Overall)**

## Conductor

#### AWG:

# Conducto	rs AWG	Stranding	Conductor Material
37	24	7x32	TC - Tinned Copper

**Total Number of Conductors:** 

37

### Insulation

### **Insulation Material:**

Insulation Trade Name	Insulation Material	Wall Thickness (mm)
Datalene®	FPE - Foam Polyethylene	0.381

### **Outer Shield**

### **Outer Shield Material:**

Layer # Outer Shield Trade Name T		Type	Outer Shield Material	Coverage (%)
1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
2		Braid	TC - Tinned Copper	65

## Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
24	Stranded	TC - Tinned Copper

# **Outer Jacket**

## **Outer Jacket Material:**

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	1.143

#### **Overall Cable**

## **Overall Cabling Color Code Chart:**

Number Color		
1	Black	
2	White	
3	Red	
4	Green	
5	Orange	
6	Blue	
7	White/Black	
8	Red/Black	
9	Green/Black	
10	Orange/Black	
11	Blue/Black	
12	Black/White	
13	Red/White	
14	Green/White	
15	Blue/White	
16	Black/Red	
17	White/Red	

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18	Orange/Red
19	Blue/Red
20	Red/Green
21	Orange/Green
22	Black/White/Red
23	White/Black/Red
24	Red/Black/White
25	Green/Black/White
26	Orange/Black/White
27	Blue/Black/White
28	Black/Red/Green
29	White/Red/Green
30	Red/Black/Green
31	Green/Black/Orange
32	Orange/Black/Green
33	Blue/White/Orange
34	Black/White/Orange
35	White/Red/Orange
36	Orange/White/Blue
37	White/Red/Blue

Overall Nominal Diameter: 12.090 mm

# **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-30°C To +80°C
UL Temperature Rating:	80°C (UL AWM Style 2919)
Bulk Cable Weight:	191.978 Kg/Km
Min. Bend Radius/Minor Axis:	127 mm

# **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
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

# **Electrical Characteristics (Overall)**

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 39.372

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)

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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) 7.77597

Max. Operating Voltage - UL:

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

Max. Recommended Current:

Current
1.5 Amps per conductor @ 25°C

## **Notes (Overall)**

**Notes:** Datalene® insulation features include a low dielectric constant and a low 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
9938 060100	100 FT	14.600 LB	CHROME	С	37 #24 FHDPE SH PVC
9938 0601000	1,000 FT	136.000 LB	CHROME	С	37 #24 FHDPE SH PVC
9938 060500	500 FT	71.500 LB	CHROME	С	37 #24 FHDPE SH PVC

### Notes:

C = CRATE REEL PUT-UP.

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