

## 9731 Multi-Conductor - Multi-Pair Snake Cable

For more Information  
please call

1-800-Belden1



### General Description:

24 AWG stranded (7x32) TC conductors, Datalene® insulation, twisted pairs, individually shielded w/Beldfoil® (100% coverage), 24 AWG stranded TC drain wire, overall PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
6	24	7x32	TC - Tinned Copper	.024

Total Number of Conductors: 12

#### Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (in.)
Datalene®	FPE - Foam Polyethylene	0.019

#### Inner Shield

Inner Shield Material:

Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
Beldfoil® (Z-Fold®)	Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:

AWG
24

Inner Shield Drain Wire Stranding: 7x32

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

#### Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	0.048

#### Overall Cable

Overall Nominal Diameter: 0.421 in.

#### Pair

Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown

Pair Lay Length & Direction:

Lay Length (in.)	Twists (twist/ft)
1.700	6.850

### Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +80°C

UL Temperature Rating: 60°C (UL AWM Style 2493)

Bulk Cable Weight: 74 lbs/1000 ft.

Max. Recommended Pulling Tension: 103 lbs.

Min. Bend Radius/Minor Axis: 4.250 in.

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2493 (300 V 60°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
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### Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	89731

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)  
100

### Nom. Inductance:

Inductance (µH/ft)  
0.12

### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)  
12.5

### Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)  
23.2

### Nominal Velocity of Propagation:

VP (%)  
76

### Nominal Delay:

Delay (ns/ft)  
1.39

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)  
24

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 15 Ohm/1000 ft

### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
.384	0.74
.7056	0.87
.768	0.88
1.024	0.94
1.4112	1.01
1.536	1.03
2.048	1.13
2.8224	1.29
3.072	1.35
4.096	1.57
5.6448	1.78
6.144	1.84
8.192	2.13

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11.2896	2.45
12.288	2.57
24.576	3.57

**Max. Operating Voltage - UL:**

<b>Voltage</b>
300 V RMS

**Max. Recommended Current:**

<b>Current</b>
2.5 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
9731 060100	100 FT	9.100 LB	CHROME	C	6 FS PR #24 FHDPE PVC
9731 0601000	1,000 FT	83.000 LB	CHROME	C	6 FS PR #24 FHDPE PVC
9731 060500	500 FT	42.000 LB	CHROME	C	6 FS PR #24 FHDPE PVC
9731 0605000	5,000 FT	435.000 LB	CHROME		6 FS PR #24 FHDPE PVC

**Notes:**

C = CRATE REEL PUT-UP.

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