

## 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. (mm)
6	24	7x32	TC - Tinned Copper	0.6096

Total Number of Conductors: 12

#### Insulation

##### Insulation Material:

Insulation Trade Name	Insulation Material	Wall Thickness (mm)
Datalene®	FPE - Foam Polyethylene	0.483

#### 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 (mm)
PVC - Polyvinyl Chloride	1.219

#### Overall Cable

Overall Nominal Diameter: 10.693 mm

#### 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 (mm)	Twists (twist/m)
43.18	22.475

### Mechanical Characteristics (Overall)

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

Operating Temperature Range:	-20°C To +80°C
UL Temperature Rating:	60°C (UL AWM Style 2493)
Bulk Cable Weight:	110.127 Kg/Km
Max. Recommended Pulling Tension:	458.165 N
Min. Bend Radius/Minor Axis:	107.950 mm

### 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/m)

0.39372

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

41.0125

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

Capacitance (pF/m)

76.1192

#### Nominal Velocity of Propagation:

VP (%)

76

#### Nominal Delay:

Delay (ns/m)

4.56059

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

78.744

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

Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: 49.215 Ohm/km

**Nom. Attenuation:**

Freq. (MHz)	Attenuation (dB/100m)
.384	2.42794
.7056	2.85447
.768	2.88728
1.024	3.08414
1.4112	3.31381
1.536	3.37943
2.048	3.70753
2.8224	4.23249
3.072	4.42935
4.096	5.15117
5.6448	5.84018
6.144	6.03704
8.192	6.98853
11.2896	8.03845
12.288	8.43217
24.576	11.7132

**Max. Operating Voltage - UL:**

Voltage
300 V RMS

**Max. Recommended Current:**

Current
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	30 MT	4.128 KG	CHROME	C	6 FS PR #24 FHDPE PVC
9731 0601000	305 MT	37.648 KG	CHROME	C	6 FS PR #24 FHDPE PVC
9731 060500	152 MT	19.051 KG	CHROME	C	6 FS PR #24 FHDPE PVC
9731 0605000	1,524 MT	197.314 KG	CHROME		6 FS PR #24 FHDPE PVC

**Notes:**

C = CRATE REEL PUT-UP.

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