# **Detailed Specifications & Technical Data**

## **METRIC MEASUREMENT VERSION**



# 9735 Multi-Conductor - Multi-Pair Snake Cable

For more Information please call

1-800-Belden1



# BELDEN SENDING ALL THE DIGHT SIGNALS

# **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	<b>Conductor Material</b>	Dia. (mm)
15	24	7x32	TC - Tinned Copper	0.6096

Total Number of Conductors: 30

## 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:



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	1.651

# **Overall Cable**

Overall Nominal Diameter: 16.231 mm

### Pair

# Pair Color Code Chart:

Number	Color
Humber	00101
1	Black & Red
2	Black & White
3	Black & Green
4	Black & Blue
5	Black & Yellow
6	Black & Brown
7	Black & Orange
8	Red & White
9	Red & Green
10	Red & Blue
11	Red & Yellow
12	Red & Brown

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13	Red & Orange
14	Green & White
15	Green & Blue

chanical Characteristics (Overall)	
Operating Temperature Range:	-20°C To +80°C
UL Temperature Rating:	60°C (UL AWM Style 2493)
Bulk Cable Weight:	251.506 Kg/Km
Max. Recommended Pulling Tension:	1112.050 N
Min. Bend Radius/Minor Axis:	165.100 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
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## **Flame Test**

UL Flame Test: UL1685 UL Loading

# Plenum/Non-Plenum

Plenum (Y/N): No

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm) 100

Nom. Inductance:

Inductance (µH/m) 0.75463

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

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 78.744

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## 9735 Multi-Conductor - Multi-Pair Snake Cable

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

#### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
.384	2.42794
.705	2.85447
.768	2.88728
1.024	3.08414
1.411	3.31381
1.536	3.37943
2.048	3.70753
2.822	4.23249
3.072	4.42935
4.096	5.15117
5.644	5.84018
6.144	6.03704
8.192	6.98853
11.289	8.03845
12.288	8.43217
24.576	11.7132

## Max. Operating Voltage - UL:

Voltage 300 V RMS

#### Max. Recommended Current:

Current 1.9 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
9735 0601000	1,000 FT	185.000 LB	CHROME	С	15 FS PR #24 FHDPE PVC
9735 060500	500 FT	92.000 LB	CHROME	С	15 FS PR #24 FHDPE PVC

### Notes:

C = CRATE REEL PUT-UP.

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