

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 |
|----------------|-------------------|

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 |

9731 Multi-Conductor - Multi-Pair Snake Cable

| | |
|---------|------|
| 11.2896 | 2.45 |
| 12.288 | 2.57 |
| 24.576 | 3.57 |

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 | 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.

Revision Number: 2 Revision Date: 09-28-2012

© 2017 Belden, Inc.
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability. Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein. All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product. Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).