# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



#### 9831 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422



For more Information please call

1-800-Belden1



#### **General Description:**

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

### **Physical Characteristics (Overall)**

#### Conductor

AWG:

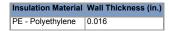
| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|--------------------|
| 4       | 24  | 7x32      | TC - Tinned Copper |

**Total Number of Conductors:** 

8

#### Insulation

Insulation Material:



#### **Outer Shield**

Outer Shield Material:

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

#### Outer Shield Drain Wire AWG:

| ı |    | •        | Drain Wire Conductor Material |
|---|----|----------|-------------------------------|
|   | 24 | Stranded | TC - Tinned Copper            |

#### **Outer Jacket**

Outer Jacket Material:

| Outer Jacket Material    | Nom. Wall Thickness (in.) |
|--------------------------|---------------------------|
| PVC - Polyvinyl Chloride | 0.035                     |

#### **Overall Cable**

**Overall Nominal Diameter:** 

0.330 in.

#### Pair

#### Pair Color Code Chart:

| Number | Color                       |
|--------|-----------------------------|
| 1      | White/Blue & Blue/White     |
| 2      | White/Orange & Orange/White |
| 3      | White/Green & Green/White   |
| 4      | White/Brown & Brown/White   |

#### **Mechanical Characteristics (Overall)**

| Operating Temperature Range: | -30°C To +80°C           |  |
|------------------------------|--------------------------|--|
| UL Temperature Rating:       | 80°C (UL AWM Style 2919) |  |
| Bulk Cable Weight:           | 53 lbs/1000 ft.          |  |
| Min. Bend Radius/Minor Axis: | 3.500 in.                |  |

#### **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                       |
| -                                  |                           |

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|     | 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               |  |  |
| Fla | me Test                               |                   |  |  |
|     | UL Flame Test:                        | UL1685 UL Loading |  |  |
| Ple | num/Non-Plenum                        |                   |  |  |
|     | Plenum (Y/N):                         | No                |  |  |

#### **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)

Nominal Velocity of Propagation:

**VP** (%) 66

Nominal Delay:

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 3.9

Max. Operating Voltage - UL:

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

Max. Recommended Current:

1.68 Amps per conductor @ 25°C

#### **Put Ups and Colors:**

| Item #       | Putup    | Ship Weight | Color  | Notes | Item Desc           |
|--------------|----------|-------------|--------|-------|---------------------|
| 9831 060100  | 100 FT   | 6.200 LB    | CHROME |       | 4 PR #24 PER SH PVC |
| 9831 0601000 | 1,000 FT | 58.000 LB   | CHROME | С     | 4 PR #24 PER SH PVC |
| 9831 060500  | 500 FT   | 30.000 LB   | CHROME |       | 4 PR #24 PER SH PVC |

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 09-17-2012

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Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.

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