

## 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:

| Insulation Material | Wall Thickness (in.) |
|---------------------|----------------------|
| PE - Polyethylene   | 0.016                |

**Outer Shield**

Outer Shield Material:

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

Outer Shield Drain Wire AWG:

| AWG | Stranding | 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 &amp; Cable): Yes

MIL Order #39 (China RoHS): Yes

## 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. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

15.5

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

Capacitance (pF/ft)

27.5

## Nominal Velocity of Propagation:

VP (%)

66

## Nominal Delay:

Delay (ns/ft)

1.6

## Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

24

## Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

3.9

## Max. Operating Voltage - UL:

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

## Max. Recommended Current:

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 | C     | 4 PR #24 PER SH PVC |
| 9831 060500  | 500 FT   | 30.000 LB   | CHROME |       | 4 PR #24 PER SH PVC |

## Notes:

C = CRATE REEL PUT-UP.

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