

METRIC MEASUREMENT VERSION



## 9933 Multi-Conductor - Low-Capacitance Computer Cable for EIA RS-232/423

For more Information  
please call

1-800-Belden1



### General Description:

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

### Physical Characteristics (Overall)

#### Conductor

AWG:

| # Conductors | AWG | Stranding | Conductor Material |
|--------------|-----|-----------|--------------------|
| 8            | 24  | 7x32      | TC - Tinned Copper |

Total Number of Conductors: 8

#### Insulation

Insulation Material:

| Insulation Trade Name | Insulation Material     | Wall Thickness (mm) |
|-----------------------|-------------------------|---------------------|
| Datalene®             | FPE - Foam Polyethylene | 0.381               |

#### Outer Shield

Outer Shield Material:

| Outer Shield Trade Name | Type  | Outer Shield Material        | Coverage (%) |
|-------------------------|-------|------------------------------|--------------|
| Beldfoil®               | Tape  | Aluminum Foil-Polyester Tape | 100          |
|                         | 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 (mm) |
|--------------------------|--------------------------|
| PVC - Polyvinyl Chloride | 0.889                    |

#### Overall Cable

Overall Cabling Color Code Chart:

| Number | Color  |
|--------|--------|
| 1      | Black  |
| 2      | White  |
| 3      | Red    |
| 4      | Green  |
| 5      | Brown  |
| 6      | Blue   |
| 7      | Orange |
| 8      | Yellow |

Overall Nominal Diameter: 7.112 mm

### Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +80°C

UL Temperature Rating: 80°C (UL AWM Style 2919)

Bulk Cable Weight: 62.504 Kg/Km

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Min. Bend Radius/Minor Axis: 76.200 mm

### 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                       |
| 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

### Electrical Characteristics (Overall)

#### Nom. Capacitance Conductor to Conductor:

| Capacitance (pF/m) |
|--------------------|
| 39.372             |

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

| Capacitance (pF/m) |
|--------------------|
| 72.182             |

#### Nominal Velocity of Propagation:

| VP (%) |
|--------|
| 78     |

#### Nom. Conductor DC Resistance:

| DCR @ 20°C (Ohm/km) |
|---------------------|
| 78.744              |

#### Nominal Outer Shield DC Resistance:

| DCR @ 20°C (Ohm/km) |
|---------------------|
| 14.4364             |

#### Max. Operating Voltage - UL:

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

#### Max. Recommended Current:

| Current                       |
|-------------------------------|
| 1.5 Amps per conductor @ 25°C |

### Notes (Overall)

**Notes:** Datalene® insulation features include a low dielectric constant and a low dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight.

### Put Ups and Colors:

## 9933 Multi-Conductor - Low-Capacitance Computer Cable for EIA RS-232/423

| Item #       | Putup    | Ship Weight | Color  | Notes | Item Desc          |
|--------------|----------|-------------|--------|-------|--------------------|
| 9933 060Z500 | 500 FT   | 23.000 LB   | CHROME |       | 8 #24 FHDPE SH PVC |
| 9933 060100  | 100 FT   | 4.900 LB    | CHROME |       | 8 #24 FHDPE SH PVC |
| 9933 0601000 | 1,000 FT | 46.000 LB   | CHROME | C     | 8 #24 FHDPE SH PVC |
| 9933 060500  | 500 FT   | 22.500 LB   | CHROME | C     | 8 #24 FHDPE SH PVC |

**Notes:**  
C = CRATE REEL PUT-UP.

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