

## 8118 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422



For more Information  
please call

1-800-Belden1

**Description:**

24 AWG stranded (7x32) TC conductors, Datalene® 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 |
|---------|-----|-----------|--------------------|
| 18      | 24  | 7x32      | TC - Tinned Copper |

**Insulation****Insulation Material:**

| Insulation Trade Name | Insulation Material     |
|-----------------------|-------------------------|
| Datalene®             | FPE - Foam Polyethylene |

**Outer Shield****Outer Shield Material:**

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

**Outer Shield Drain Wire AWG:**

| AWG | Stranding | Drain Wire Conductor Material |
|-----|-----------|-------------------------------|
| 24  | 7x32      | TC - Tinned Copper            |

**Outer Jacket****Outer Jacket Material:**

| Outer Jacket Material    |
|--------------------------|
| PVC - Polyvinyl Chloride |

**Overall Cable**

**Overall Nominal Diameter:** 0.537 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   |
| 5      | White/Gray & Gray/White     |
| 6      | Red/Blue & Blue/Red         |
| 7      | Red/Orange & Orange/Red     |
| 8      | Red/Green & Green/Red       |
| 9      | Red/Brown & Brown/Red       |
| 10     | Red/Gray & Gray/Red         |
| 11     | Black/Blue & Blue/Black     |
| 12     | Black/Orange & Orange/Black |
| 13     | Black/Green & Green/Black   |
| 14     | Black/Brown & Brown/Black   |
| 15     | Black/Gray & Gray/Black     |
| 16     | Yellow/Blue & Blue/Yellow   |

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|    |                               |
|----|-------------------------------|
| 17 | Yellow/Orange & Orange/Yellow |
| 18 | Yellow/Green & Green/Yellow   |

**Mechanical Characteristics (Overall)**

|                                        |                          |
|----------------------------------------|--------------------------|
| Operating Temperature Range:           | -30°C To +80°C           |
| UL Temperature Rating:                 | 80°C (UL AWM Style 2919) |
| Bulk Cable Weight:                     | 141 lbs/1000 ft.         |
| Max. Recommended Pulling Tension:      | 203.500 lbs.             |
| Min. Bend Radius (Install)/Minor Axis: | 5.500 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 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. Characteristic Impedance:**

|                 |
|-----------------|
| Impedance (Ohm) |
| 100             |

**Nom. Capacitance Conductor to Conductor:**

|                     |
|---------------------|
| Capacitance (pF/ft) |
| 12.5                |

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

|                     |
|---------------------|
| Capacitance (pF/ft) |
| 22                  |

**Nominal Velocity of Propagation:**

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

**Nom. Conductor DC Resistance:**

|                          |
|--------------------------|
| DCR @ 20°C (Ohm/1000 ft) |
| 24                       |

**Nominal Outer Shield DC Resistance:**

|                          |
|--------------------------|
| DCR @ 20°C (Ohm/1000 ft) |
| 2.1                      |

**Max. Operating Voltage - UL:**

|         |
|---------|
| Voltage |
|---------|

## 8118 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422

|                              |
|------------------------------|
| 30 V RMS (UL AWM Style 2919) |
| 300 V RMS                    |

**Max. Recommended Current:**

|                               |
|-------------------------------|
| <b>Current</b>                |
| .88 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.

**Related Documents:**

No related documents are available for this product

**Put Ups and Colors:**

| Item #       | Putup    | Ship Weight | Color  | Notes | Item Desc              |
|--------------|----------|-------------|--------|-------|------------------------|
| 8118 060100  | 100 FT   | 13.300 LB   | CHROME | C     | 18 PR #24 FHDPE SH PVC |
| 8118 0601000 | 1,000 FT | 141.000 LB  | CHROME | C     | 18 PR #24 FHDPE SH PVC |
| 8118 060500  | 500 FT   | 70.500 LB   | CHROME | C     | 18 PR #24 FHDPE SH PVC |

**Notes:**

C = CRATE REEL PUT-UP.

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