

## 8168 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 &amp; Digital



For more Information  
please call

1-800-Belden1

**Description:**

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

**Physical Characteristics (Overall)****Conductor**

AWG:

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

**Insulation**

Insulation Material:

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

**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: Stranded

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

**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 Jacket**

Outer Jacket Material:

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

**Overall Cabling**

Overall Nominal Diameter: 12.167 mm

**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  |
| 7      | Black & Orange |
| 8      | Red & White    |

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## Pair Lay Length &amp; Direction:

| Lay Length (mm) | Twists/ft. (twist/m) |
|-----------------|----------------------|
| 38.09985        | 26.248               |

## Mechanical Characteristics (Overall)

|  |                          |
|--|--------------------------|
| Operating Temperature Range:           | -40°C To +60°C           |
| UL Temperature Rating:                 | 60°C (UL AWM Style 2493) |
| Bulk Cable Weight:                     | 223.230 Kg/Km            |
| Max. Recommended Pulling Tension:      | 818.469 N                |
| Min. Bend Radius (Install)/Minor Axis: | 127 mm                   |

## Applicable Specifications and Agency Compliance (Overall)

## Applicable Standards &amp; Environmental Programs

|                                       |                            |
|---------------------------------------|----------------------------|
| NEC/(UL) Specification:               | CM                         |
| CEC/C(UL) Specification:              | CM                         |
| AWM Specification:                    | UL Style 2493 (300 V 60°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                        |

## Plenum/Non-Plenum

|               |    |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

## Electrical Characteristics (Overall)

## Nom. Characteristic Impedance:

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

## Nom. Capacitance Conductor to Conductor:

| Capacitance (pF/m) |
|--------------------|
| 41.0125            |

## Nom. Capacitance Cond. to Other Conductor &amp; 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) |
|---------------------|
| 9.843               |

|   |               |
|---|---------------|
| Ind. Pair Nominal Shield DC Resistance @ 20 Deg. C: | 59.058 Ohm/km |
|---|---------------|

## Max. Operating Voltage - UL:

## METRIC MEASUREMENT VERSION

**8168 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 & Digital****Voltage**

300 V RMS (UL AWM Style 2493)

**Max. Recommended Current:****Current**

1.1 Amps per conductor @ 25°C

**Related Documents:**

No related documents are available for this product

**Put Ups and Colors:**

| Item #       | Putup  | Ship Weight | Color  | Notes | Item Desc                |
|--------------|--------|-------------|--------|-------|--------------------------|
| 8168 060100  | 30 MT  | 4.899 KG    | CHROME | C     | 8 FS PR #24 FHDPE SH PVC |
| 8168 0601000 | 305 MT | 52.163 KG   | CHROME | C     | 8 FS PR #24 FHDPE SH PVC |
| 8168 060500  | 152 MT | 27.896 KG   | CHROME | C     | 8 FS PR #24 FHDPE SH PVC |

**Notes:**

C = CRATE REEL PUT-UP.

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