# Detailed Specifications & Technical Data

**METRIC MEASUREMENT VERSION**

## 8107 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 Applicatio

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 |
|---|---|---|---|
| 7 | 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 Cabling

| | |
|---|---|
| **Overall Nominal Diameter:** | 8.661 mm |

### 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 |

## Mechanical Characteristics (Overall)

| | |
|---|---|
| **Operating Temperature Range:** | -30°C To +80°C |
| **UL Temperature Rating:** | 80°C (UL AWM Style 2919) |
| **Bulk Cable Weight:** | 93.013 Kg/Km |
| **Max. Recommended Pulling Tension:** | 366.976 N |

| | |
|---|---|
| **Min. Bend Radius (Install)/Minor Axis:** | 88.900 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 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 |
| **Plenum Number:** | 88107 |

## 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 & 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) |
|---|
| 11.4835 |

**Max. Operating Voltage - UL:**

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

**Max. Recommended Current:**

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

## Notes (Overall)

# Detailed Specifications & Technical Data

**METRIC MEASUREMENT VERSION**

## 8107 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422 Applicatio

**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 |
|---|---|---|---|---|---|
| 8107 060100 | 30 MT | 3.084 KG | CHROME | | 7 PR #24 FHDPE SH PVC |
| 8107 0601000 | 305 MT | 28.576 KG | CHROME | C | 7 PR #24 FHDPE SH PVC |
| 8107 060500 | 152 MT | 14.969 KG | CHROME | C | 7 PR #24 FHDPE SH PVC |

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

Revision Number: 1 Revision Date: 05-14-2007


Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.
Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.