# Detailed Specifications & Technical Data

**METRIC MEASUREMENT VERSION**

## 9683 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 shield (100% coverage), 24 AWG stranded TC drain wire, PVC jacket.

## Physical Characteristics (Overall)

### Conductor

**AWG:**

| # Pairs | AWG | Stranding | Conductor Material |
|---|---|---|---|
| 9 | 24 | 7x32 | TC - Tinned Copper |

**Total Number of Conductors:** 18

### Insulation

**Insulation Material:**

| Insulation Material | Wall Thickness (mm) |
|---|---|
| PE - Polyethylene | 0.406 |

### Outer Shield

**Outer Shield Material:**

| Outer Shield Trade Name | Type | Outer Shield Material | Coverage (%) |
|---|---|---|---|
| Beldfoil® | Tape | Aluminum Foil-Polyester Tape | 100 |

**Outer Shield Drain Wire AWG:**

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

### Outer Jacket

**Outer Jacket Material:**

| Outer Jacket Material | Nom. Wall Thickness (mm) |
|---|---|
| PVC - Polyvinyl Chloride | 0.889 |

### Overall Cable

**Overall Nominal Diameter:** 10.084 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 |
| 8 | Red/Green & Green/Red |
| 9 | Red/Brown & Brown/Red |

## Mechanical Characteristics (Overall)

| | |
|---|---|
| **Operating Temperature Range:** | -20°C To +80°C |
| **Non-UL Temperature Rating:** | 80°C (UL AWM Style 2919) |
| **Bulk Cable Weight:** | 99.709 Kg/Km |

| | |
|---|---|
| **Max. Recommended Pulling Tension:** | 440.372 N |
| **Min. Bend Radius/Minor Axis:** | 101.600 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. Characteristic Impedance:**

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

**Nom. Capacitance Conductor to Conductor:**

| Capacitance (pF/m) |
|---|
| 50.8555 |

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

| Capacitance (pF/m) |
|---|
| 90.2275 |

**Nominal Velocity of Propagation:**

| VP (%) |
|---|
| 66 |

**Nom. Conductor DC Resistance:**

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

**Nominal Outer Shield DC Resistance:**

| DCR @ 20°C (Ohm/km) |
|---|
| 39.372 |

**Max. Operating Voltage - UL:**

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

**Max. Recommended Current:**

| Current |
|---|
| 2.1 Amps per conductor @ 25°C |

## 9683 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422

## Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---|---|---|---|---|---|
| 9683 0601000 | 305 MT | 34.473 KG | CHROME | C | 9 PR #24 PER FS PVC |
| 9683 060500 | 152 MT | 16.556 KG | CHROME | C | 9 PR #24 PER FS PVC |

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

Revision Number: 2 Revision Date: 09-10-2012


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Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.