# **Detailed Specifications & Technical Data**

#### **ENGLISH 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 TC - Tinned Copper 24 7x32 **Total Number of Conductors:** 18 Insulation Insulation Material: Insulation Material Wall Thickness (in.) PE - Polyethylene 0.016 **Outer Shield** Outer Shield Material: Outer Shield Trade Name Type Outer Shield Material Coverage (%) 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 (in.) PVC - Polyvinyl Chloride 0.035 **Overall Cable Overall Nominal Diameter:** 0.397 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       |

## **Mechanical Characteristics (Overall)**

| Operating Temperature Range:      | -20°C To +80°C           |
|-----------------------------------|--------------------------|
| Non-UL Temperature Rating:        | 80°C (UL AWM Style 2919) |
| Bulk Cable Weight:                | 67 lbs/1000 ft.          |
| Max. Recommended Pulling Tension: | 99 lbs.                  |
| Min. Bend Radius/Minor Axis:      | 4 in.                    |

#### **Applicable Specifications and Agency Compliance (Overall)**

#### **Applicable Standards & Environmental Programs**

| NEC/(UL) Specification:  | СМ |
|--------------------------|----|
| CEC/C(UL) Specification: | СМ |

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| 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   |  |
| ne Test                               |   |  |
| UL Flame Test:                        | UL1685 UL Loading   |  |
| um/Non-Plenum                         |   |  |
| Plenum (Y/N):                         | No  |  |
|                                       | AWM Specification:  EU Directive 2011/65/EU (ROHS II):  EU CE Mark:  EU Directive 2000/53/EC (ELV):  EU Directive 2002/95/EC (RoHS):  EU RoHS Compliance Date (mm/dd/yyyy):  EU Directive 2002/96/EC (WEEE):  EU Directive 2003/11/EC (BFR):  CA Prop 65 (CJ for Wire & Cable):  MII Order #39 (China RoHS):  ne Test  UL Flame Test:  http://www.hon-Plenum  Plenum (Y/N): |  |

#### **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Capacitance Conductor to Conductor:



Nom. Capacitance Cond. to Other Conductor & Shield:



**Nominal Velocity of Propagation:** 

VP (%) 66

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

Max. Operating Voltage - UL:

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

Max. Recommended Current:

2.1 Amps per conductor @ 25°C

#### **Put Ups and Colors:**

| Item #       | Putup    | Ship Weight | Color  | Notes | Item Desc           |
|--------------|----------|-------------|--------|-------|---------------------|
| 9683 0601000 | 1,000 FT | 76.000 LB   | CHROME | С     | 9 PR #24 PER FS PVC |
| 9683 060500  | 500 FT   | 36.500 LB   | CHROME | С     | 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 2014/35/EU).

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