

## 9680 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 |
|---------|-----|-----------|--------------------|
| 3       | 24  | 7x32      | TC - Tinned Copper |

Total Number of Conductors: 6

#### 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: 7.163 mm

#### Pair

Pair Color Code Chart:

| Number | Color                       |
|--------|-----------------------------|
| 1      | White/Blue & Blue/White     |
| 2      | White/Orange & Orange/White |
| 3      | White/Green & Green/White   |

### Mechanical Characteristics (Overall)

|                                   |                          |
|-----------------------------------|--------------------------|
| Operating Temperature Range:      | -20°C To +80°C           |
| Non-UL Temperature Rating:        | 80°C (UL AWM Style 2919) |
| Bulk Cable Weight:                | 49.111 Kg/Km             |
| Max. Recommended Pulling Tension: | 146.791 N                |
| Min. Bend Radius/Minor Axis:      | 76.200 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                       |

## METRIC MEASUREMENT VERSION

### 9680 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422

|                                       |            |
|---------------------------------------|------------|
| 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        |
| MIL 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)

47.2464

#### 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 |

### Put Ups and Colors:

| Item #       | Putup    | Ship Weight | Color  | Notes | Item Desc           |
|--------------|----------|-------------|--------|-------|---------------------|
| 9680 0601000 | 1,000 FT | 37.000 LB   | CHROME | C     | 3 PR #24 PER FS PVC |
| 9680 060500  | 500 FT   | 18.000 LB   | CHROME | C     | 3 PR #24 PER FS PVC |
| 9680 0605000 | 5,000 FT | 325.000 LB  | CHROME | C     | 3 PR #24 PER FS PVC |

#### Notes:

C = CRATE REEL PUT-UP.

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

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