

METRIC MEASUREMENT VERSION



## 9814 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-232/422

For more Information  
please call

1-800-Belden1



### General Description:

28 AWG stranded (7x36) TC conductors, polypropylene insulation, overall Beldfoil® (100% coverage) + TC braid shield (90% coverage), 28 AWG stranded TC drain wire, PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|--------------------|
| 31      | 28  | 7x36      | TC - Tinned Copper |

Total Number of Conductors: 62

#### Insulation

##### Insulation Material:

| Insulation Material | Wall Thickness (mm) |
|---------------------|---------------------|
| PP - Polypropylene  | 0.229               |

#### 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           | 90           |

##### Outer Shield Drain Wire AWG:

| AWG | Stranding | Drain Wire Conductor Material |
|-----|-----------|-------------------------------|
| 28  | 7x36      | TC - Tinned Copper            |

#### Outer Jacket

##### Outer Jacket Material:

| Outer Jacket Material    | Nom. Wall Thickness (mm) |
|--------------------------|--------------------------|
| PVC - Polyvinyl Chloride | 1.016                    |

#### Overall Cable

Overall Nominal Diameter: 11.735 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    |
| 9      | Red & Green    |
| 10     | Red & Blue     |
| 11     | Red & Yellow   |
| 12     | Red & Brown    |
| 13     | Red & Orange   |
| 14     | Green & White  |

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|    |                 |
|----|-----------------|
| 15 | Green & Blue    |
| 16 | Green & Yellow  |
| 17 | Green & Brown   |
| 18 | Green & Orange  |
| 19 | White & Blue    |
| 20 | White & Yellow  |
| 21 | White & Brown   |
| 22 | White & Orange  |
| 23 | Blue & Yellow   |
| 24 | Blue & Brown    |
| 25 | Blue & Orange   |
| 26 | Brown & Yellow  |
| 27 | Brown & Orange  |
| 28 | Orange & Yellow |
| 29 | Purple & Orange |
| 30 | Purple & Red    |
| 31 | Purple & White  |

### Mechanical Characteristics (Overall)

|  |                          |
|--|--------------------------|
| <b>Operating Temperature Range:</b>      | -20°C To +60°C           |
| <b>UL Temperature Rating:</b>            | 60°C (UL AWM Style 2960) |
| <b>Bulk Cable Weight:</b>                | 175.608 Kg/Km            |
| <b>Max. Recommended Pulling Tension:</b> | 920.777 N                |
| <b>Min. Bend Radius/Minor Axis:</b>      | 120.650 mm               |

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

|  |                           |
|--|---------------------------|
| <b>NEC/(UL) Specification:</b>               | CL2                       |
| <b>AWM Specification:</b>                    | UL Style 2960 (30 V 60°C) |
| <b>EU Directive 2011/65/EU (ROHS II):</b>    | Yes                       |
| <b>EU CE Mark:</b>                           | Yes                       |
| <b>EU Directive 2000/53/EC (ELV):</b>        | Yes                       |
| <b>EU Directive 2002/95/EC (RoHS):</b>       | Yes                       |
| <b>EU RoHS Compliance Date (mm/dd/yyyy):</b> | 01/01/2004                |
| <b>EU Directive 2002/96/EC (WEEE):</b>       | Yes                       |
| <b>EU Directive 2003/11/EC (BFR):</b>        | Yes                       |
| <b>CA Prop 65 (CJ for Wire &amp; Cable):</b> | Yes                       |
| <b>MII Order #39 (China RoHS):</b>           | Yes                       |

#### Flame Test

|                       |                   |
|-----------------------|-------------------|
| <b>UL Flame Test:</b> | UL1685 UL Loading |
|-----------------------|-------------------|

#### Plenum/Non-Plenum

|                      |    |
|----------------------|----|
| <b>Plenum (Y/N):</b> | No |
|----------------------|----|

### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

|                        |
|------------------------|
| <b>Impedance (Ohm)</b> |
| 100                    |

#### Nom. Inductance:

|                          |
|--------------------------|
| <b>Inductance (µH/m)</b> |
| 0.62339                  |

#### Nom. Capacitance Conductor to Conductor:

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**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)**

212.937

**Nominal Outer Shield DC Resistance:**

**DCR @ 20°C (Ohm/km)**

6.8901

**Max. Operating Voltage - UL:**

| Voltage   | Description       |
|-----------|-------------------|
| 30 V RMS  | UL AWM Style 2960 |
| 150 V RMS | CL2               |

**Max. Recommended Current:**

| Current                      |
|------------------------------|
| .5 Amps per conductor @ 25°C |

### Put Ups and Colors:

| Item #       | Putup    | Ship Weight | Color  | Notes | Item Desc           |
|--------------|----------|-------------|--------|-------|---------------------|
| 9814 0601000 | 1,000 FT | 127.000 LB  | CHROME | C     | 31 PR #28 PP SH PVC |

**Notes:**

C = CRATE REEL PUT-UP.

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