

## 88102 Multi-Conductor - Low Cap. Computer Cable for EIA RS-232/422/485 Applications



For more Information  
please call

1-800-Belden1



### General Description:

24 AWG stranded (7x32) tinned copper conductors, plenum, foam FEP insulation, twisted pairs, overall Beldfoil shield (100% coverage), 24 AWG stranded TC drain wire, fluorocopolymer jacket.

### Physical Characteristics (Overall)

#### Conductor

AWG:

| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|--------------------|
| 2       | 24  | 7x32      | TC - Tinned Copper |

Total Number of Conductors: 4

#### Insulation

Insulation Material:

| Insulation Material                        | Wall Thickness (mm) |
|--|---------------------|
| FFEP - Foam Fluorinated Ethylene Propylene | 0.381               |

#### 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) |
|------------------------|--------------------------|
| PVDF - Fluorocopolymer | 0.356                    |

#### Overall Cable

Overall Nominal Diameter: 5.156 mm

#### Pair

Pair Color Code Chart:

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

### Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +150°C

Bulk Cable Weight: 29.764 Kg/Km

Max. Recommended Pulling Tension: 124.550 N

Min. Bend Radius/Minor Axis: 57.150 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

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): 04/01/2005

EU Directive 2002/96/EC (WEEE): Yes

## METRIC MEASUREMENT VERSION

### 88102 Multi-Conductor - Low Cap. Computer Cable for EIA RS-232/422/485 Applications

|                                   |     |
|-----------------------------------|-----|
| 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:  | NFPA 262 |
| CSA Flame Test: | FT6      |

#### Plenum/Non-Plenum

|               |     |
|---------------|-----|
| Plenum (Y/N): | Yes |
|---------------|-----|

#### Electrical Characteristics (Overall)

##### Nom. Characteristic Impedance:

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

##### Nom. Inductance:

|                   |
|-------------------|
| Inductance (µH/m) |
| 0.68901           |

##### Nom. Capacitance Conductor to Conductor:

|                    |
|--------------------|
| Capacitance (pF/m) |
| 42.653             |

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

|                    |
|--------------------|
| Capacitance (pF/m) |
| 76.4473            |

##### Nominal Velocity of Propagation:

|        |
|--------|
| VP (%) |
| 78     |

##### Nominal Delay:

|              |
|--------------|
| Delay (ns/m) |
| 4.2653       |

##### Nom. Conductor DC Resistance:

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

##### Nominal Outer Shield DC Resistance:

|                     |
|---------------------|
| DCR @ 20°C (Ohm/km) |
| 50.8555             |

##### Max. Operating Voltage - UL:

|           |
|-----------|
| Voltage   |
| 300 V RMS |

##### Max. Recommended Current:

|                                |
|--------------------------------|
| Current                        |
| 1.76 Amps per conductor @ 25°C |

#### Put Ups and Colors:

| Item #        | Putup    | Ship Weight | Color | Notes | Item Desc        |
|---------------|----------|-------------|-------|-------|------------------|
| 88102 0081000 | 1,000 FT | 22.000 LB   | GRAY  | C     | 2#24 PR FS SOLEF |
| 88102 008500  | 500 FT   | 12.000 LB   | GRAY  | C     | 2#24 PR FS SOLEF |

##### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2    Revision Date: 08-16-2012

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