# **Detailed Specifications & Technical Data**



## 8422 Multi-Conductor - Two-Conductor, Low-Impedance Cable



For more Information please call

1-800-Belden1



### **General Description:**

22 AWG stranded (16x34) high-conductivity tinned copper conductors, polyethylene insulation, cotton braid, double tinned copper braid shield (85% coverage), PVC jacket.

| Physical Characteristics (Overall)   |   |
|--|---|
| Physical Characteristics (Overall)<br>Conductor  |   |
| AWG:   |   |
| # Conductors         AWG         Stranding         Conductor Material           2         22         16x34         High Conductivity TC - Tinned 0   | Dia. (mm)   |
|  |   |
| Total Number of Conductors:  | 2   |
| Insulation<br>Insulation Material:   |   |
| Insulation Material Wall Thickness (mm) Dia. (mm)  |   |
| PE - Polyethylene 0.5334 1.8288  |   |
| Outer Shield<br>Outer Shield Material:   |   |
| Type Outer Shield Material Coverage (%)  |   |
| Braid TC - Tinned Copper 85  |   |
| Outer Jacket   |   |
| Outer Jacket Material:   |   |
| Outer Jacket Material Nom. Wall Thickness (mm) PVC - Polyvinyl Chloride 0.5588   |   |
|  |   |
| Overall Cable<br>Overall Cabling Color Code Chart:   |   |
| Number Color   |   |
| 1 Clear  |   |
| 2 Black  |   |
| Overall Cabling Separator Material:  | Cotton Braid  |
| overall cability Separator Material.   | ookon biak  |
| Overall Nominal Diameter:  | 5.867 mm  |
| Overall Nominal Diameter:  |   |
|  |   |
| Overall Nominal Diameter:<br>Mechanical Characteristics (Overall)  | 5.867 mm  |
| Overall Nominal Diameter:<br>Mechanical Characteristics (Overall)<br>Operating Temperature Range:  | 5.867 mm<br>-40°C To +80°C  |
| Overall Nominal Diameter:<br>Mechanical Characteristics (Overall)<br>Operating Temperature Range:<br>Non-UL Temperature Rating:  | 5.867 mm<br>-40°C To +80°C<br>80°C  |
| Overall Nominal Diameter:<br>Mechanical Characteristics (Overall)<br>Operating Temperature Range:<br>Non-UL Temperature Rating:<br>Bulk Cable Weight:  | 5.867 mm<br>-40°C To +80°C<br>80°C<br>44.646 Kg/Km  |
| Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Operating Temperature Range:         Non-UL Temperature Rating:         Bulk Cable Weight:         Max. Recommended Pulling Tension:  | 5.867 mm<br>-40°C To +80°C<br>80°C<br>44.646 Kg/Km<br>413.683 N<br>58.420 mm  |
| Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Operating Temperature Range:         Non-UL Temperature Rating:         Bulk Cable Weight:         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:   | 5.867 mm<br>-40°C To +80°C<br>80°C<br>44.646 Kg/Km<br>413.683 N<br>58.420 mm  |
| Overall Nominal Diameter:<br>Mechanical Characteristics (Overall)<br>Operating Temperature Range:<br>Non-UL Temperature Rating:<br>Bulk Cable Weight:<br>Max. Recommended Pulling Tension:<br>Min. Bend Radius/Minor Axis:<br>Applicable Specifications and Agency Compliance  | 5.867 mm<br>-40°C To +80°C<br>80°C<br>44.646 Kg/Km<br>413.683 N<br>58.420 mm  |
| Overall Nominal Diameter:<br>Mechanical Characteristics (Overall)<br>Operating Temperature Range:<br>Non-UL Temperature Rating:<br>Bulk Cable Weight:<br>Max. Recommended Pulling Tension:<br>Min. Bend Radius/Minor Axis:<br>Applicable Specifications and Agency Compliance<br>Applicable Standards & Environmental Programs   | 5.867 mm<br>-40°C To +80°C<br>80°C<br>44.646 Kg/Km<br>413.683 N<br>58.420 mm<br>(Overall)   |
| Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Operating Temperature Range:         Non-UL Temperature Rating:         Bulk Cable Weight:         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency Compliance         Applicable Standards & Environmental Programs         EU Directive 2011/65/EU (ROHS II):  | 5.867 mm<br>-40°C To +80°C<br>80°C<br>44.646 Kg/Km<br>413.683 N<br>58.420 mm<br>(Overall)<br>Yes                                    |
| Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Operating Temperature Range:         Non-UL Temperature Rating:         Bulk Cable Weight:         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency Compliance         Applicable Standards & Environmental Programs         EU Directive 2011/65/EU (ROHS II):         EU CE Mark:  | 5.867 mm<br>-40°C To +80°C<br>80°C<br>44.646 Kg/Km<br>413.683 N<br>58.420 mm<br>(Overall)<br>Yes<br>Yes                             |
| Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Operating Temperature Range:         Non-UL Temperature Rating:         Bulk Cable Weight:         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency Compliance         Applicable Standards & Environmental Programs         EU Directive 2011/65/EU (ROHS II):         EU Directive 2000/53/EC (ELV):   | 5.867 mm<br>-40°C To +80°C<br>80°C<br>44.646 Kg/Km<br>413.683 N<br>58.420 mm<br>(Overall)<br>Yes<br>Yes<br>Yes                      |
| Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Operating Temperature Range:         Non-UL Temperature Rating:         Bulk Cable Weight:         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency Compliance         Applicable Standards & Environmental Programs         EU Directive 2011/65/EU (ROHS II):         EU Directive 2000/53/EC (ELV):         EU Directive 2002/95/EC (RoHS):   | 5.867 mm<br>-40°C To +80°C<br>80°C<br>44.646 Kg/Km<br>413.683 N<br>58.420 mm<br>(Overall)<br>Yes<br>Yes<br>Yes                      |
| Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Operating Temperature Range:         Non-UL Temperature Rating:         Bulk Cable Weight:         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency Compliance         Applicable Standards & Environmental Programs         EU Directive 2011/65/EU (ROHS II):         EU Directive 2000/53/EC (ELV):         EU Directive 2002/95/EC (RoHS):         EU RoHS Compliance Date (mm/dd/yyyy):   | 5.867 mm<br>-40°C To +80°C<br>80°C<br>44.646 Kg/Km<br>413.683 N<br>58.420 mm<br>(Overall)<br>Yes<br>Yes<br>Yes<br>Yes<br>01/01/2004 |
| Overall Nominal Diameter:         Mechanical Characteristics (Overall)         Operating Temperature Range:         Non-UL Temperature Rating:         Bulk Cable Weight:         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency Compliance         Applicable Standards & Environmental Programs         EU Directive 2011/65/EU (ROHS II):         EU Directive 2000/53/EC (ELV):         EU Directive 2000/53/EC (RoHS):         EU RoHS Compliance Date (mm/dd/yyyy):         EU Directive 2002/96/EC (WEEE): | 5.867 mm<br>-40°C To +80°C<br>80°C<br>44.646 Kg/Km<br>413.683 N<br>58.420 mm<br>(Overall)<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes |

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#### METRIC MEASUREMENT VERSION

## 8422 Multi-Conductor - Two-Conductor, Low-Impedance Cable

| Plenum/Non-Plenum                         |           |  |
|---|-----------|--|
| Plenum (Y/N):                             | No        |  |
| Electrical Characteristics (Overall)      |           |  |
| Nom. Characteristic Impedance:            |           |  |
| Impedance (Ohm)<br>90                     |           |  |
| Nom. Inductance:                          |           |  |
| Inductance (µH/m)<br>0.72182              |           |  |
| Nom. Capacitance Conductor to Conductor:  |           |  |
| Capacitance (pF/m)<br>59.058              |           |  |
| Nom. Capacitance Cond. to Other Conductor | & Shield: |  |
| Capacitance (pF/m)<br>104.992             |           |  |
| Nom. Conductor DC Resistance:             |           |  |
| DCR @ 20°C (Ohm/km)<br>52.1679            |           |  |
| Nominal Outer Shield DC Resistance:       |           |  |
| DCR @ 20°C (Ohm/km)<br>11.4835            |           |  |
| Max. Operating Voltage - Non-UL:          |           |  |
| Voltage<br>1000 V RMS                     |           |  |
| Max. Recommended Current:                 |           |  |
| Current<br>2.9 Amps per conductor @ 25°C  |           |  |
| Put Ups and Colors:                       |           |  |

#### Ship Weight Item # Color Notes Item Desc Putup 8422 060U1000 1,000 FT 31.000 LB CHROME 2 #22 PE CBRD BRD PVC 8422 0601000 1,000 FT 33.000 LB CHROME 2 #22 PE CBRD BRD PVC 8422 060500 CHROME 2 #22 PE CBRD BRD PVC 500 FT 16.500 LB С

Notes: C = CRATE REEL PUT-UP.

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