# **Detailed Specifications & Technical Data**

#### **METRIC MEASUREMENT VERSION**



# 8450 Multi-Conductor - Single-Pair Cable



For more Information please call

1-800-Belden1



## **General Description:**

EU Directive 2002/96/EC (WEEE):

22 AWG solid tinned copper conductors, polypropylene insulation, twisted pair, overall Beldfoil shield (100% coverage), 22 AWG solid TC drain wire, PVC jacket.

| ` ' '  | •   |  |  |  |
|--|---|--|--|--|
| Physical Characteristics (Overall)   |   |  |  |  |
| Conductor AWG:   |   |  |  |  |
| # Pairs AWG Stranding Conductor Material  1   22   Solid   TC - Tinned Copper  |   |  |  |  |
| Total Number of Conductors:  | 2   |  |  |  |
| Insulation   |   |  |  |  |
| Insulation Material: Insulation Material Wall Thickness (mm)   |   |  |  |  |
| PP - Polypropylene   0.1778  |   |  |  |  |
| Outer Shield<br>Outer Shield Material:   |   |  |  |  |
| Outer Shield Trade Name         Type         Outer Shield Material         Cov           Beldfoil® (Z-Fold®)         Tape         Aluminum Foil-Polyester Tape         100 | erage (%)   |  |  |  |
| Outer Shield Drain Wire AWG:   |   |  |  |  |
| AWG Stranding Drain Wire Conductor Material  22   Solid   TC - Tinned Copper   |   |  |  |  |
| Outer Jacket   |   |  |  |  |
| Outer Jacket Material:   |   |  |  |  |
| Outer Jacket Material Nom. Wall Thickness (mm)  PVC - Polyvinyl Chloride 0.4572  |   |  |  |  |
| Overall Cable  |   |  |  |  |
| Overall Nominal Diameter:  | 2.997 mm  |  |  |  |
| Pair Pair Color Code Chart:  |   |  |  |  |
| Number Color   |   |  |  |  |
| 1 Black & Red  |   |  |  |  |
| Machanias Characteristics (Occupil)  |   |  |  |  |
| i i  | al Characteristics (Overall) ing Temperature Range: -20°C To +105°C |  |  |  |
| UL Temperature Rating:   | 75°C  |  |  |  |
|  |   |  |  |  |
| Bulk Cable Weight:   | 17.858 Kg/Km  |  |  |  |
| Max. Recommended Pulling Tension:  | 164.583 N   |  |  |  |
| Min. Bend Radius/Minor Axis:   | 31.750 mm   |  |  |  |
| Applicable Specifications and Agency Compliance (Ov  | erall)  |  |  |  |
| Applicable Standards & Environmental Programs  |   |  |  |  |
| NEC/(UL) Specification:  | CM  |  |  |  |
| CEC/C(UL) Specification:   | CM  |  |  |  |
| 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   |  |  |  |
| FU RoHS Compliance Date (mm/dd/yyyy):  | 01/01/2004  |  |  |  |

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|                   | EU Directive 2003/11/EC (BFR):    | Yes               |  |  |
|-------------------|-----------------------------------|-------------------|--|--|
|                   | CA Prop 65 (CJ for Wire & Cable): | Yes               |  |  |
|                   | MII 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)

Nom. Inductance:

Inductance (µH/m) 0.26248

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 131.24

Nom. Capacitance Cond. to Other Conductor & Shield:

249,356

Nominal Velocity of Propagation:

VP (%)

Nominal Delay:

Delay (ns/m) 4.9215

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 41 5047

Max. Operating Voltage - UL:

Voltage

Max. Recommended Current:

2.9 Amps per conductor @ 25°C

### Notes (Overall)

Notes: Belden's® Miniature Type Broadcast Audio and Instrumentation Cables occupy 1/2 to 2/3 less space than standard cables

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

| Item #        | Putup    | Ship Weight | Color | Notes | Item Desc            |
|---------------|----------|-------------|-------|-------|----------------------|
| 8450 0081000  | 1,000 FT | 13.000 LB   | GRAY  |       | 2 #22 PP SHLD PVC FR |
| 8450 010U1000 | 1,000 FT | 14.000 LB   | BLACK |       | 2 #22 PP SHLD PVC FR |
| 8450 010U500  | 500 FT   | 7.500 LB    | BLACK |       | 2 #22 PP SHLD PVC FR |
| 8450 0101000  | 1,000 FT | 13.000 LB   | BLACK |       | 2 #22 PP SHLD PVC FR |

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product. '
Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.

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