# **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



# 8450 Multi-Conductor - Single-Pair Cable

For more Information please call

1-800-Belden1



# **Description:**

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

#### Insulation

**Insulation Material:** 

Insulation Material	Wall Thickness (mm)
PP - Polypropylene	0.1778

#### **Outer Shield**

**Outer Shield Material:** 

Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
Beldfoil® (Z-Fold®)	Tape	Aluminum Foil-Polyester Tape	100

#### **Outer Shield Drain Wire AWG:**

AWG	Stranding	<b>Drain Wire Conductor Material</b>
22	Solid	TC - Tinned Copper

## **Outer Jacket**

**Outer Jacket Material:** 

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	0.4572

#### **Overall Cabling**

Overall Nominal Diameter: 2.997 mm

### **Pair**

**Pair Color Code Chart:** 



# **Mechanical Characteristics (Overall)**

Operating 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 (Install)/Minor Axis:	30.480 mm		

### **Applicable Specifications and Agency Compliance (Overall)**

### **Applicable Standards & Environmental Programs**

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NEC/(UL) Specification:	CM			
CEC/C(UL) Specification:	CM			

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## 8450 Multi-Conductor - Single-Pair Cable

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):	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
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)
40

Nom. Inductance:

Inductance (µH/m) 0.26248

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 131.24

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 249.356

Nominal Velocity of Propagation:

**VP (%)** 66

**Nominal Delay:** 

**Delay (ns/m)** 4.9215

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 52.8241

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 41.5047

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

**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.

# **Related Documents:**

No related documents are available for this product

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## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8450 0081000	305 MT	5.897 KG	GRAY		2 #22 PP SHLD PVC FR
8450 010U1000	305 MT	6.350 KG	BLACK		2 #22 PP SHLD PVC FR
8450 010U500	152 MT	3.402 KG	BLACK		2 #22 PP SHLD PVC FR
8450 0101000	305 MT	5.897 KG	BLACK		2 #22 PP SHLD PVC FR

Revision Number: 1 Revision Date: 05-14-2007

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