# **Detailed Specifications & Technical Data**

**ENGLISH MEASUREMENT VERSION** 



# 8451 Multi-Conductor - Single-Pair Cable

For more Information please call

1-800-Belden1



# **Description:**

22 AWG stranded (7x30) TC conductors, polypropylene insulation, paper wrap, twisted pair, overall Beldfoil shield (100% coverage), 22 AWG stranded TC drain wire, PVC jacket.

# **Physical Characteristics (Overall)**

### Conductor

#### AWG:

# Pairs	AWG	Stranding	Conductor Material
1	22	7x30	TC - Tinned Copper

### Insulation

### **Insulation Material:**

Insulation Material	Wall Thickness (in.)
PP - Polypropylene	.008

### **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	7x30	TC - Tinned Copper

### **Outer Jacket**

### **Outer Jacket Material:**

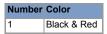
Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.020

### **Overall Cable**

Overall Nominal Diameter: 0.138 in.

### Pair

### **Pair Color Code Chart:**



# Pair Lay Length & Direction:

Lay Length (in.)	Twists/ft. (twist/ft)
1.750	6.860

### **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-20°C To +75°C		
Bulk Cable Weight:	15 lbs/1000 ft.		
Max. Recommended Pulling Tension:	27 lbs.		
Min. Bend Radius (Install)/Minor Axis:	1.400 in.		

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

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

NEC/(UL) Specification: CMR

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CEC/C(UL) Specification:	CMG
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
ame Test	
UL Flame Test:	UL1666 Riser
CSA Flame Test:	FT4
enum/Non-Plenum	
Plenum (Y/N):	No

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance	(Ohm)
45	

Nom. Inductance:



Nom. Capacitance Conductor to Conductor:



Nom. Capacitance Cond. to Other Conductor & Shield:



Nominal Velocity of Propagation:



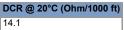
**Nominal Delay:** 



Nom. Conductor DC Resistance:

DCR @ 20°C	(Ohm/1000	ft)
14.5		

Nominal Outer Shield DC Resistance:



Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:



### **Notes (Overall)**

Notes: Unique paper separator facilitates jacket stripping.

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### **Related Documents:**

No related documents are available for this product

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

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8451 008U1000	1,000 FT	16.000 LB	GRAY		2 #22 PP SHLD PVC FR
8451 008U500	500 FT	8.500 LB	GRAY		2 #22 PP SHLD PVC FR
8451 0081000	1,000 FT	16.000 LB	GRAY	С	2 #22 PP SHLD PVC FR
8451 008500	500 FT	8.000 LB	GRAY		2 #22 PP SHLD PVC FR
8451 010U1000	1,000 FT	16.000 LB	BLACK		2 #22 PP SHLD PVC FR
8451 010U500	500 FT	8.500 LB	BLACK		2 #22 PP SHLD PVC FR
8451 010100	100 FT	2.200 LB	BLACK		2 #22 PP SHLD PVC FR
8451 0101000	1,000 FT	16.000 LB	BLACK	С	2 #22 PP SHLD PVC FR
8451 010500	500 FT	8.000 LB	BLACK		2 #22 PP SHLD PVC FR

#### Notes:

C = CRATE REEL PUT-UP.

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