

## 9451 Multi-Conductor - Single-Pair Cables

For more Information  
please call

1-800-Belden1

**Description:**

22 AWG stranded (7x30) TC conductors, polypropylene insulation, 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®	Tape	Aluminum Foil-Polyester Tape	100

**Outer Shield Drain Wire AWG:**

AWG	Stranding	Drain Wire	Conductor Material
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: 0.135 in.

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

Number	Color
1	Black & Red

**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
UL Temperature Rating:	60°C
Bulk Cable Weight:	14 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
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

### Flame Test

UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4

### Plenum/Non-Plenum

Plenum (Y/N):	No
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## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)  
45

### Nom. Inductance:

Inductance (μH/ft)  
.17

### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)  
35

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

Capacitance (pF/ft)  
67

### Nominal Velocity of Propagation:

VP (%)  
66

### Nominal Delay:

Delay (ns/ft)  
1.5

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)  
14.1

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)  
14.3

### Max. Operating Voltage - UL:

Voltage  
300 V RMS

### Max. Recommended Current:

Current

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2.9 Amps per conductor @ 25°C

## Notes (Overall)

**Notes:** The jacket and shield are bonded so both can be removed on automatic stripping equipment. Drain wire is inside foil shield.  
 For cross-connect use with 1814R (et. al.) Snake Cables.

## Related Documents:

No related documents are available for this product

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9451 N3UU1000	1,000 FT	16.000 LB	GREEN, MIL		2 #22 PP FS PVC FR
9451 N3U5000	5,000 FT	70.000 LB	GREEN, MIL	C N	2 #22 PP FS PVC FR
9451 001U1000	1,000 FT	16.000 LB	BROWN		2 #22 PP FS PVC FR
9451 0015000	5,000 FT	70.000 LB	BROWN	C N	2 #22 PP FS PVC FR
9451 002U1000	1,000 FT	16.000 LB	RED		2 #22 PP FS PVC FR
9451 0025000	5,000 FT	75.000 LB	RED	C N	2 #22 PP FS PVC FR
9451 003U1000	1,000 FT	16.000 LB	ORANGE		2 #22 PP FS PVC FR
9451 0035000	5,000 FT	75.000 LB	ORANGE	C N	2 #22 PP FS PVC FR
9451 004U1000	1,000 FT	16.000 LB	YELLOW		2 #22 PP FS PVC FR
9451 0045000	5,000 FT	75.000 LB	YELLOW	C N	2 #22 PP FS PVC FR
9451 006U1000	1,000 FT	16.000 LB	BLUE, LIGHT		2 #22 PP FS PVC FR
9451 0065000	5,000 FT	75.000 LB	BLUE, LIGHT	C N	2 #22 PP FS PVC FR
9451 007U1000	1,000 FT	16.000 LB	VIOLET		2 #22 PP FS PVC FR
9451 0075000	5,000 FT	75.000 LB	VIOLET	C N	2 #22 PP FS PVC FR
9451 008T1000	1,000 FT	16.000 LB	GRAY		2 #22 PP FS PVC FR
9451 008U1000	1,000 FT	16.000 LB	GRAY		2 #22 PP FS PVC FR
9451 008U500	500 FT	8.500 LB	GRAY		2 #22 PP FS PVC FR
9451 008500	500 FT	8.000 LB	GRAY		2 #22 PP FS PVC FR
9451 0085000	5,000 FT	75.000 LB	GRAY	C N	2 #22 PP FS PVC FR
9451 009U1000	1,000 FT	16.000 LB	WHITE		2 #22 PP FS PVC FR
9451 0095000	5,000 FT	75.000 LB	WHITE	C N	2 #22 PP FS PVC FR
9451 010U1000	1,000 FT	16.000 LB	BLACK		2 #22 PP FS PVC FR
9451 0105000	5,000 FT	75.000 LB	BLACK	C N	2 #22 PP FS PVC FR

**Notes:**

C = CRATE REEL PUT-UP.

N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

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