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please call

1-800-Belden1



### General 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

Total Number of Conductors: 2

#### Insulation

##### Insulation Material:

Insulation Material	Wall Thickness (mm)
PP - Polypropylene	0.2032

#### 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 (mm)
PVC - Polyvinyl Chloride	0.508

#### Overall Cable

Overall Nominal Diameter: 3.429 mm

#### Pair

##### Pair Color Code Chart:

Number	Color
1	Black & Red

### Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +75°C

UL Temperature Rating: 60°C

Bulk Cable Weight: 20.835 Kg/Km

Max. Recommended Pulling Tension: 120.101 N

Min. Bend Radius/Minor Axis: 38.100 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/C(UL) Specification: CMG

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

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

## Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)

45

#### Nom. Inductance:

Inductance (µH/m)

0.55777

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

114.835

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

Capacitance (pF/m)

219.827

#### Nominal Velocity of Propagation:

VP (%)

66

#### Nominal Delay:

Delay (ns/m)

4.9215

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

46.2621

#### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

46.9183

#### Max. Operating Voltage - UL:

Voltage

300 V RMS

#### Max. Recommended Current:

Current

2.9 Amps per conductor @ 25°C

## Notes (Overall)

## 9451 Multi-Conductor - Single-Pair Cables

**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.

### 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 N3UZ1000	1,000 FT	17.000 LB	GREEN, MIL		2 #22 PO 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 001Z1000	1,000 FT	17.000 LB	BROWN		2 #22 PO FS PVC FR
9451 0015000	5,000 FT	70.000 LB	BROWN	C N	2 #22 PP FS PVC FR
9451 002N1000	1,000 FT	18.000 LB	RED		2 #22 PP FS PVC FR
9451 002U1000	1,000 FT	16.000 LB	RED		2 #22 PP FS PVC FR
9451 002Z1000	1,000 FT	17.000 LB	RED		2 #22 PO 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 003Z1000	1,000 FT	17.000 LB	ORANGE		2 #22 PO FS PVC FR
9451 0035000	5,000 FT	75.000 LB	ORANGE	C N	2 #22 PP FS PVC FR
9451 004N1000	1,000 FT	18.000 LB	YELLOW		2 #22 PP FS PVC FR
9451 004U1000	1,000 FT	16.000 LB	YELLOW		2 #22 PP FS PVC FR
9451 004Z1000	1,000 FT	17.000 LB	YELLOW		2 #22 PO FS PVC FR
9451 0045000	5,000 FT	75.000 LB	YELLOW	C N	2 #22 PO FS PVC FR
9451 006U1000	1,000 FT	16.000 LB	BLUE, LIGHT		2 #22 PP FS PVC FR
9451 006Z1000	1,000 FT	17.000 LB	BLUE, LIGHT		2 #22 PO 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 007Z1000	1,000 FT	17.000 LB	VIOLET		2 #22 PO FS PVC FR
9451 0075000	5,000 FT	75.000 LB	VIOLET	C N	2 #22 PP FS PVC FR
9451 008N1000	1,000 FT	18.000 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 008Z1000	1,000 FT	17.000 LB	GRAY		2 #22 PO FS PVC FR
9451 0081000	1,000 FT	16.000 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 009Z1000	1,000 FT	17.000 LB	WHITE		2 #22 PO FS PVC FR
9451 0095000	5,000 FT	75.000 LB	WHITE	C N	2 #22 PP FS PVC FR
9451 010N1000	1,000 FT	18.000 LB	BLACK		2 #22 PP FS PVC FR
9451 010U1000	1,000 FT	16.000 LB	BLACK		2 #22 PP FS PVC FR
9451 010Z1000	1,000 FT	17.000 LB	BLACK		2 #22 PO FS PVC FR
9451 0101000	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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## **9451 Multi-Conductor - Single-Pair Cables**

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