## **Detailed Specifications & Technical Data**



ENGLISH MEASUREMENT VERSION

#### 9451 Multi-Conductor - Single-Pair Cables



For more Information 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	2
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	
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/Minor Axis:	1.500 in.
Applicable Specifications and Agency Complia	nce (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

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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:	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/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:	
<b>VP (%)</b> 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	
2.9 Amps per conductor @ 25°C	
Notes (Overall)	
Network The instant and shield are bounded as holds are here	

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 N3U5000	5,000 FT	70.000 LB	GREEN, MIL	CN	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	CN	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 0025000	5,000 FT	75.000 LB	RED	CN	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	CN	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 0045000	5,000 FT	75.000 LB	YELLOW	CN	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	CN	2 #22 PP FS PVC FR

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9451 007U1000	1,000 FT	16.000 LB	VIOLET		2 #22 PP FS PVC FR	
9451 0075000	5,000 FT	75.000 LB	VIOLET	CN	2 #22 PP FS PVC FR	
9451 008N1000	1,000 FT	18.000 LB	GRAY		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	CN	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	CN	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 0101000	1,000 FT	16.000 LB	BLACK		2 #22 PP FS PVC FR	
9451 0105000	5,000 FT	75.000 LB	BLACK	CN	2 #22 PP FS PVC FR	

Notes:

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

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