Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



9451 Multi-Conductor - Single-Pair Cables



For more Information please call

1-800-Belden1



General Description:

EU Directive 2002/96/EC (WEEE):

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:	
PP - Polypropylene 0.2032	
Outer Shield	
Outer Shield Material: Outer Shield Trade Name Type Outer Shield Material Cov.	erage (%)
Beldfoil® Tape Aluminum Foil-Polyester Tape 100	31496 (//)
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 (Ov	erall)
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

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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				
Fla	Flame Test					
	UL Flame Test:	UL1666 Vertical Shaft				
	CSA Flame Test:	FT4				
Ple	Plenum/Non-Plenum					
	Plenum (Y/N):	No				

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

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 (%)

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)

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 PO 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:

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

Revision Date: 08-08-2012 Revision Number: 1

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Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).

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