Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

8451 Multi-Conductor - Single-Pair Cable

For more Information please call

1-800-Belden1



General 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	
Total Number of Conductors:	2
	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® (Z-Fold®) Tape Aluminum Foil-Polyester	
Outer Shield Drain Wire AWG:	
AWG Stranding Drain Wire Conductor Material 22 7x30 TC - Tinned Copper	
Outer Jacket	
Outer Jacket Material:	
Outer Jacket Material	
PVC - Polyvinyl Chloride	
Overall Cable	
Overall Nominal Diameter:	3.505 mm
Pair Pair Color Code Chart:	
Number Color	
1 Black & Red	
Mechanical Characteristics (Overall)	
Operating Temperature Range:	-20°C To +75°C
Bulk Cable Weight:	22.323 Kg/Km
Max. Recommended Pulling Tension:	120.101 N
Min. Bend Radius/Minor Axis:	38.100 mm
Applicable Specifications and Agency Complian	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
EU Directive 2003/11/EC (BFR):	Yes

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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) 111.554					
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) 47.5745					
Nominal Outer Shield DC Resistance:					
DCR @ 20°C (Ohm/km) 46.2621					
Max. Operating Voltage - UL:					
Voltage 300 V RMS					
Max. Recommended Current:					
Current 2.9 Amps per conductor @ 25°C					
Notes (Overall)					

Notes: Unique paper separator facilitates jacket stripping.

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 01010000	10,000 FT	160.000 LB	BLACK		2 #22 PP SHLD PVC FR	
8451 01015000	15,000 FT	240.000 LB	BLACK		2 #22 PP SHLD PVC FR	
8451 010500	500 FT	8.000 LB	BLACK		2 #22 PP SHLD PVC FR	
8451 0105000	5,000 FT	80.000 LB	BLACK		2 #22 PP SHLD PVC FR	

Notes: C = CRATE REEL PUT-UP.

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