Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

8451 Multi-Conductor - Single-Pair Cable

For more Information please call

1-800-Belden1



General Description:

CEC/C(UL) Specification:

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)	- -
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 MaterialWall Thickness (mm)PP - Polypropylene0.2032	
Outer Shield Outer Shield Material:	
Outer Shield Trade Name Type Outer Shield Mat	terial Coverage (%)
Beldfoil® (Z-Fold®) Tape Aluminum Foil-Po	olyester Tape 100
Outer Shield Drain Wire AWG:	
AWGStrandingDrain Wire Conductor Material227x30TC - Tinned Copper	
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	Compliance (Overall)
Applicable Specifications and Agency of Applicable Standards & Environmental Pro	• • •
NEC/(UL) Specification:	CMR
	0140

CMG

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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) 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.

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8451 Multi-Conductor - Single-Pair Cable

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8451 008U1000	305 MT	7.258 KG	GRAY		2 #22 PP SHLD PVC FR
8451 008U500	152 MT	3.856 KG	GRAY		2 #22 PP SHLD PVC FR
8451 0081000	305 MT	7.258 KG	GRAY	С	2 #22 PP SHLD PVC FR
8451 008500	152 MT	3.629 KG	GRAY		2 #22 PP SHLD PVC FR
8451 010U1000	305 MT	7.258 KG	BLACK		2 #22 PP SHLD PVC FR
8451 010U500	152 MT	3.856 KG	BLACK		2 #22 PP SHLD PVC FR
8451 010100	30 MT	0.998 KG	BLACK		2 #22 PP SHLD PVC FR
8451 0101000	305 MT	7.258 KG	BLACK	С	2 #22 PP SHLD PVC FR
8451 01010000	3,048 MT	72.575 KG	BLACK		2 #22 PP SHLD PVC FR
8451 01015000	4,572 MT	108.863 KG	BLACK		2 #22 PP SHLD PVC FR
8451 010500	152 MT	3.629 KG	BLACK		2 #22 PP SHLD PVC FR
8451 0105000	1,524 MT	36.288 KG	BLACK		2 #22 PP SHLD PVC FR

Notes:

C = CRATE REEL PUT-UP.

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