Detailed Specifications & Technical Data

ENGLISH 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
Insulation	
Insulation Material: Insulation Material Wall Thickness (in.)	
PP - Polypropylene .008	
Outer Shield Outer Shield Material:	
Outer Shield Trade Name Type Outer Shield Material Cov Beldfoil® (Z-Fold®) Tape Aluminum Foil-Polyester Tape 100	rerage (%)
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:	0.138 in.
Pair Pair Color Code Chart: Number Color Black & Red	
Mechanical Characteristics (Overall)	0000 T. (7500
Operating Temperature Range:	-20°C To +75°C
Bulk Cable Weight:	15 lbs/1000 ft.
Max. Recommended Pulling Tension:	27 lbs.
Min. Bend Radius/Minor Axis:	1.500 in.
Applicable Specifications and Agency Compliance (Ov	rerall)
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 Yes
EU Directive 2000/53/EC (ELV):	Yes
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Page 1 of 3 04-07-2016

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



8451 Multi-Conductor - Single-Pair Cable

CA Prop 65 (CJ for Wire & Cable):	Yes			
MII Order #39 (China RoHS):	Yes			
Flame Test				
UL Flame Test:	UL1666 Vertical Shaft	UL1666 Vertical Shaft		
CSA Flame Test:	FT4	FT4		
Plenum/Non-Plenum				
Plenum (Y/N):	No			
Floatrical Characteristics (Overall)				
Electrical Characteristics (Overall) Nom. Characteristic Impedance:				
Impedance (Ohm)				
45				
Nom. Inductance:				
Inductance (µH/ft)				
.17				

Nom. Capacitance Cond. to Other Conductor & Shield:

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

Nominal Velocity of Propagation:

VP (%)

Nominal Delay:

Delay (ns/ft)

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 14.1

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.

Page 2 of 3 04-07-2016

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



8451 Multi-Conductor - Single-Pair Cable

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