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:	Conductor				
# 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® Tape Aluminum Foil-Polyester Tape 100	erage (%)				
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 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 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				

Page 1 of 3 08-12-2014

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9451 Multi-Conductor - Single-Pair Cables

	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		FT4				
Ple	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:

VP (%)

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)

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	0.14	2 #22 PP FS PVC FR
9451 0015000	5.000 FT	70.000 LB	BROWN	CN	2 #22 PP FS PVC FR
9451 0013000 9451 002U1000	1.000 FT	16.000 LB	RED	CN	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	CN	2 #22 PP FS PVC FR
9451 00351000	5.000 FT	75.000 LB	ORANGE	CN	2 #22 PP FS PVC FR
9451 0033000 9451 004U1000	1.000 FT	16.000 LB	YELLOW	CN	2 #22 PP FS PVC FR
9451 00451000	5.000 FT	75.000 LB	YELLOW	CN	2 #22 PP FS PVC FR
9451 0045000 9451 006U1000	1.000 FT	16.000 LB	BLUE, LIGHT	CIN	2 #22 PP FS PVC FR
9451 0065000	5.000 FT	75.000 LB	BLUE, LIGHT	CN	2 #22 PP FS PVC FR
9451 0005000 9451 007U1000	1.000 FT	16.000 LB	VIOLET	CN	2 #22 PP FS PVC FR
9451 00701000	5.000 FT	75.000 LB	VIOLET	CN	2 #22 PP FS PVC FR
9431 0073000	3,000 F1	73.000 LB	VIOLET	CN	2 #22 FF F3 FVO FR

Page 2 of 3 08-12-2014

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



9451 Multi-Conductor - Single-Pair Cables

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 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

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

© 2014 Belden, Inc All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product. product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.

Page 3 of 3 08-12-2014