# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



## 9451D Multi-Conductor - Double-Pair Cable



For more Information please call

1-800-Belden1



## **General Description:**

EU Directive 2002/95/EC (RoHS):

EU RoHS Compliance Date (mm/dd/yyyy):

22 AWG stranded (7x30) TC conductors, polyolefin insulation, dual twisted pairs, overall Beldfoil® shield (100% coverage), 22 AWG stranded TC drain wire, PVC jacket in zip-cord construction.

Physical Characteristics (Overall)	
Conductor AWG:	
# Pairs AWG Stranding Conductor Material	
2 22 7x30 TC - Tinned Copper	
Total Number of Conductors:	4
Insulation	
Insulation Material: Insulation Material Wall Thickness (in.)	
PO - Polyolefin .008	
Outer Shield Outer Shield Material:	
Outer Shield Trade Name Type Outer Shield Material Co	verage (%)
Beldfoil® Tape Aluminum Foil-Polyester Tape 100	0
Outer Shield Drain Wire AWG:	
AWG Stranding Drain Wire Conductor Material 22   7x30   TC - Tinned Copper	
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 x 0.270 in.
Pair	
Pair Color Code Chart:  Number Color	
1 Black & Red	
2 Black & Red	
Machanical Characteristics (Overall)	
Mechanical Characteristics (Overall)	20°C To ±405°C
Operating Temperature Range:	-30°C To +105°C
Operating Temperature Range: UL Temperature Rating:	105°C
Operating Temperature Range:	
Operating Temperature Range: UL Temperature Rating:	105°C
Operating Temperature Range:  UL Temperature Rating:  Bulk Cable Weight:	105°C 27 lbs/1000 ft.
Operating Temperature Range:  UL Temperature Rating:  Bulk Cable Weight:  Max. Recommended Pulling Tension:	105°C 27 lbs/1000 ft. 54 lbs. 1.500 in.
Operating Temperature Range:  UL Temperature Rating:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:	105°C 27 lbs/1000 ft. 54 lbs. 1.500 in.
Operating Temperature Range:  UL Temperature Rating:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:  Applicable Specifications and Agency Compliance (O	105°C 27 lbs/1000 ft. 54 lbs. 1.500 in.
Operating Temperature Range:  UL Temperature Rating:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:  Applicable Specifications and Agency Compliance (O Applicable Standards & Environmental Programs	105°C 27 lbs/1000 ft. 54 lbs. 1.500 in.
Operating Temperature Range:  UL Temperature Rating:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:  Applicable Specifications and Agency Compliance (O Applicable Standards & Environmental Programs NEC/(UL) Specification:	105°C  27 lbs/1000 ft.  54 lbs.  1.500 in.  Verall)  CMR
Operating Temperature Range:  UL Temperature Rating:  Bulk Cable Weight:  Max. Recommended Pulling Tension:  Min. Bend Radius/Minor Axis:  Applicable Specifications and Agency Compliance (O Applicable Standards & Environmental Programs NEC/(UL) Specification:  CEC/C(UL) Specification:	105°C  27 lbs/1000 ft.  54 lbs.  1.500 in.  Verall)  CMR  CMR

Yes

01/01/2004

Page 1 of 3 01-09-2015

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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)

Nom. Inductance:

Inductance (µH/ft)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)

Nom. Capacitance Cond. to Other Conductor & Shield:

Nominal Velocity of Propagation:

66

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) 14.3

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
9451D A5QU1000	1,000 FT	29.000 LB	RED & GREEN		2 BONDED #22 FSPR PO FRPVC
9451D A5Q2000	2,000 FT	58.000 LB	RED & GREEN		2 BONDED #22 FSPR PO FRPVC
9451D G04U1000	1,000 FT	29.000 LB	RED & PURPLE		2 BONDED #22 FSPR PO FRPVC
9451D J77U1000	1,000 FT	29.000 LB	USE 061		2 BONDED #22 FSPR PO FRPVC
9451D 053U1000	1,000 FT	29.000 LB	RED & GRAY		2 BONDED #22 FSPR PO FRPVC

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Page 2 of 3

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Page 3 of 3