# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



## 9451P Multi-Conductor - Single-Pair Cable



For more Information please call

1-800-Belden1



#### **General Description:**

EU Directive 2002/96/EC (WEEE):

22 AWG stranded (7x30) TC conductors, twisted pair, FEP insulation, overall Beldfoil shield (100% coverage), 22 AWG stranded TC drain wire, Flamarrest® jacket.

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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.)	
FEP - Fluorinated Ethylene Propylene  .007	
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 Trade Name Outer Jacket Material  Flamarrest® LS PVC - Low Smoke Polyvinyl Chloride	
Overall Cable	
Overall Nominal Diameter:	0.127 in.
Pair	
Pair Color Code Chart:	
Number Color  1 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:	1.250 in.
Applicable Specifications and Agency Compliance (Ov	erall)
Applicable Standards & Environmental Programs	
NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
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):	04/01/2005

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	EU Directive 2003/11/EC (BFR):	Yes			
	CA Prop 65 (CJ for Wire & Cable):	Yes			
	MII Order #39 (China RoHS):	Yes			
Flai	Flame Test				
	UL Flame Test:	NFPA 262			
	CSA Flame Test:	FT6			
Plei	lenum/Non-Plenum				
	Plenum (Y/N):	Yes			
	Non-Plenum Number:	9451			

#### **Electrical Characteristics (Overall)**

Nom. Inductance:

Inductance (µH/ft)
.15

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) 1.47

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.

#### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9451P N3UU1000	1,000 FT	16.000 LB	GREEN, MIL		FSPR #22 FEP PLENUM PVC
9451P N3U5000	5,000 FT	75.000 LB	GREEN, MIL	С	FSPR #22 FEP PLENUM PVC
9451P 001U1000	1,000 FT	16.000 LB	BROWN		FSPR #22 FEP PLENUM PVC
9451P 0015000	5,000 FT	75.000 LB	BROWN	С	FSPR #22 FEP PLENUM PVC
9451P 002U1000	1,000 FT	16.000 LB	RED		FSPR #22 FEP PLENUM PVC
9451P 0025000	5,000 FT	75.000 LB	RED	С	FSPR #22 FEP PLENUM PVC
9451P 003U1000	1,000 FT	16.000 LB	ORANGE		FSPR #22 FEP PLENUM PVC
9451P 0035000	5,000 FT	75.000 LB	ORANGE	С	FSPR #22 FEP PLENUM PVC
9451P 004U1000	1,000 FT	16.000 LB	YELLOW		FSPR #22 FEP PLENUM PVC
9451P 0045000	5,000 FT	75.000 LB	YELLOW	С	FSPR #22 FEP PLENUM PVC
9451P 006U1000	1,000 FT	16.000 LB	BLUE, LIGHT		FSPR #22 FEP PLENUM PVC
9451P 0065000	5,000 FT	75.000 LB	YELLOW	С	FSPR #22 FEP PLENUM PVC
9451P 007U1000	1,000 FT	16.000 LB	VIOLET		FSPR #22 FEP PLENUM PVC
9451P 0075000	5,000 FT	75.000 LB	VIOLET	С	FSPR #22 FEP PLENUM PVC
9451P 008U1000	1,000 FT	16.000 LB	GRAY		FSPR #22 FEP PLENUM PVC
9451P 0085000	5,000 FT	75.000 LB	GRAY	С	FSPR #22 FEP PLENUM PVC
9451P 009U1000	1,000 FT	16.000 LB	WHITE		FSPR #22 FEP PLENUM PVC

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9451P 0095000	5,000 FT	75.000 LB	WHITE	С	FSPR #22 FEP PLENUM PVC
9451P 010U1000	1,000 FT	16.000 LB	BLACK		FSPR #22 FEP PLENUM PVC
9451P 0101000	1,000 FT	15.000 LB	BLACK		FSPR #22 FEP PLENUM PVC
9451P 010500	500 FT	8.500 LB	BLACK		FSPR #22 FEP PLENUM PVC
9451P 0105000	5,000 FT	75.000 LB	BLACK	С	FSPR #22 FEP PLENUM PVC

Notes: C = CRATE REEL PUT-UP.

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