# **Detailed Specifications & Technical Data**



METRIC MEASUREMENT VERSION

## 9451SB Multi-Conductor - Audio, Control and Instrumentation Shipboard Cable





For more Information please call

1-800-Belden1



### **General Description:**

Min. Bend Radius/Minor Axis:

22 AWG stranded (7x30) tinned copper conductors, polypropylene insulation, twisted pair, overall Beldfoil shield (100% coverage), 22 AWG stranded TC drain wire, LSZH jacket.

Usage (Overall)	
Suitable Applications:	Audio, Control, or Instrumentation for Marine Shipboard and Offshore use
Physical Characteristics (Overall)	
Conductor AWG:	
# PairsAWGStrandingConductorMaterial1227x30TC - 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 Materia   Beldfoil® Tape Aluminum Foil-Polyes	
Outer Shield Drain Wire AWG:	
AWG StrandingDrain Wire Conductor Material227x30TC - Tinned Copper	
Outer Jacket Outer Jacket Material:	
Outer Jacket Material Nom. Wall Thicknes	ss (mm)
LSZH - Low Smoke Zero Halogen 0.8128	
Overall Cable	
Overall Nominal Diameter:	4.064 mm
Pair	
Pair Color Code Chart:	
Number Color   1 Black & Red	
Mechanical Characteristics (Overall)	
Operating Temperature Range:	-30°C To +105°C
Operating reinperature Kange.	
UL Temperature Rating:	105°C

44.450 mm



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pplicable Standards & Environmental Prog	jrams				
NEC/(UL) Specification:	CMG-LS				
CEC/C(UL) Specification:	CMG-LS				
EU Directive 2011/65/EU (ROHS II):	Yes				
IEEE Specification:	Std. 45 clause 23				
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):	08/01/2005				
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				
Other Specification:	UL444, ABS Type Approval Certificate 05-HS500072B				
lame Test					
UL Flame Test:	UL1685 FT4 Loading, Limited Smoke				
CSA Flame Test:	FT4				
IEC Flame Test:	60332-1, 60332-3-22 (Category A)				
IEEE Flame Test:	1202				
uitability					
Suitability - Indoor:	Yes				
Suitability - Outdoor:	Yes				
Sunlight Resistance:	Yes				
lenum/Non-Plenum					
Plenum (Y/N):	No				

Nom. Characteristic Impedance:

- Impedance (Ohm)
- 45

Nom. Inductance:

Inductance (µH/m)

0.55777

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 114.835

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

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#### Nom. Conductor DC Resistance:

DCR	@ 20°C	(Ohm/km)
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46.2621

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

46.9183

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
9451SB 0101000	1,000 FT	20.000 LB	BLACK	С	2 #22 PP FS FRNHPO

Notes:

C = CRATE REEL PUT-UP.

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