# **Detailed Specifications & Technical Data**

### METRIC MEASUREMENT VERSION



### 9116SB Coax - Shipboard CATV Cable





For more Information please call

1-800-Belden1



### **General Description:**

18 AWG solid .040" bare copper-covered steel conductor, gas-injected foam polyethylene insulation, Duobond® II plus an aluminum braid shield (60% coverage), LSZH jacket.

### Usage (Overall)

Suitable Applications:

Coaxial Cable for Communication, Audio, Video, CATV, MATV, Broadband, or Broadcast use in Marine Shipboard and Offshore use

### **Physical Characteristics (Overall)**

### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	18	Solid	BCCS - Bare Copper Covered Steel	1.016

**Total Number of Conductors:** 

#### Insulation

### Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FPE - Foam Polyethylene	4.572

#### **Outer Shield**

### **Outer Shield Material:**

Layer # Outer Shield Trade Name Type		Type	Outer Shield Material	Coverage (%)	
1		Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2			Braid	AL - Aluminum	60

### **Outer Jacket**

#### Outer Jacket Material:

### **Outer Jacket Material** LSZH - Low Smoke Zero Halogen

### **Overall Cable**

**Overall Nominal Diameter:** 

6.960 mm

### **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-30°C To +75°C		
Bulk Cable Weight:	41.670 Kg/Km		
Max. Recommended Pulling Tension:	560.473 N		
Min. Bend Radius/Minor Axis:	69.850 mm		

### **Applicable Specifications and Agency Compliance (Overall)**

### **Applicable Standards & Environmental Programs**

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

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	MII Order #39 (China RoHS):	Yes			
Other Specification:		UL444, ABS Type Approval Certificate 05-HS500072C			
	Series Type:	Series 6			
Fla	me 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			
Sui	tability				
	Suitability - Indoor:	Yes			
	Suitability - Outdoor:	Yes			
	Sunlight Resistance:	Yes			

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

Nom. Characteristic Impedance:

Impedance (Ohm) 75.000

Nom. Inductance:

Inductance (µH/m) 0.318257

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m) 53.1522

Nominal Velocity of Propagation:

**VP (%)** 83

Nominal Delay:

**Delay (ns/m)** 3.9372

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 91.868

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 29.529

Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
5	2.19827
55	5.2496
211	9.41647
270	10.6304
300	11.2538
350	12.2053
400	13.124
450	13.9771
550	15.4535
750	18.3408
870	19.686
1000	21.4577
1450	27.2323
1800	30.5133
2250	34.7786
3000	39.0439

Max. Operating Voltage - UL:

Voltage 300 V RMS

Minimum Structural Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
5	1000	20
1000	2250	15

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2250 3000 10

Sweep Test

Sweep Testing: 5 MHz - 3 GHz

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

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9116SB 0101000	1,000 FT	30.000 LB	BLACK	С	#18 GIFHDLDPE SH FRNHPO

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 4 Revision Date: 10-17-2012

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