



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, CCTV, CATV, MATV, Broadband, or Broadcast use in Marine Shipboard and Offshore use

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	18	Solid	BCCS - Bare Copper Covered Steel	.040

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FPE - Foam Polyethylene	.180

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	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 Cabling

Overall Nominal Diameter: 0.274 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +75°C

Bulk Cable Weight: 28.400 lbs/1000 ft.

Max. Recommended Pulling Tension: 126 lbs.

Min. Bend Radius (Install)/Minor Axis: 3 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMG-LS

CEC/C(UL) Specification: CMG-LS

IEEE Specification: Std. 45 clause 23

Other Standards: 60092-376 clause 17, 60092-351, 60754-1, 60754-2, 61034

EU CE Mark: Yes

9116SB Coax - Shipboard CATV Cable

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-HS50072C/1-PDA
Series Type:	Series 6

Flame Test

UL Flame Test:	UL1685 FT4 Loading, Limited Smoke
C(UL) Flame Test:	FT4, Limited Smoke
IEC Flame Test:	60332-1, 60332-3-22 (Category A)
IEEE Flame Test:	1202

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Sunlight Resistance:	Yes

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)	Tolerance (Ohms)
75	± 3

Nom. Inductance:

Inductance (µH/ft)
.097

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.2

Nominal Velocity of Propagation:

VP (%)
83

Nominal Delay:

Delay (ns/ft)
1.2

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
28.0

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
9

Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
5	0.67
55	1.60
211	2.87
270	3.24
300	3.43
350	3.72
400	4.00

450	4.26
550	4.71
750	5.59
870	6.00
1000	6.54
1450	8.30
1800	9.30
2250	10.60
3000	11.90

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
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	31.000 LB	BLACK	C	#18 GIFHDLDP SH FRNHPO

Notes:

C = CRATE REEL PUT-UP.

Broadband Coax

CATV Cables


Series 6

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m

Series 6 • 18 AWG Solid .040" Bare Copper-covered Steel Conductor • Duobond® II + Aluminum Braid Shield (60% Coverage)

Gas-injected Foam Polyethylene Insulation • Polyethylene Jacket (Black or Orange)

80°C	9066	—	1000	304.8	26.0	11.8	18 AWG (solid) .040" 28.0Ω/M' 91.9Ω/km	.180	4.57	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	See Chart on page 6.92		
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CoreGuard®


Gas-injected Foam Polyethylene Insulation • Black PVC Jacket

80°C	9116	NEC: CATV CM CEC: CM	U-500 ▲ 500 ▲ S-700 U-1000 ♦ 1000 ▼	U-152.4 U-152.4 U-213.4 U-304.8 U-304.8	15.0 16.0 18.2 30.0 31.0	6.8 7.3 8.3 13.6 14.1	18 AWG (solid) .040" 28.0Ω/M' 91.9Ω/km	.180	4.57	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	See Chart on page 6.92		
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*500 ft. and U-500 ft. put-ups also available in White.
 *U-1000 ft. put-up also available in White, Neutral or Beige.
 *1000 ft. put-up also available in White or Neutral.


80°C	9116R	NEC: CATVR CMG CEC: CMG FT4	U-1000 1000	U-304.8 304.8	33.0 34.0	15.0 15.4	18 AWG (solid) .040" 28.0Ω/M' 91.9Ω/km	.180	4.57	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	See Chart on page 6.92		
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80°C	1545A	NEC: CATV CM CEC: CM	1000	304.8	31.0	14.1	18 AWG (solid) .040" 28.0Ω/M' 91.9Ω/km	.180	4.57	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.270	6.86	75	83%	16.2	53.1	See Chart on page 6.92 Sweep tested 5 MHz to 1 GHz.		
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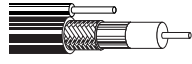
CoreGuard®

80°C	9077	NEC: CATV CM CEC: CM	1000	304.8	64.0	29.1	18 AWG (solid) .040" 28.0Ω/M' 91.9Ω/km	.180	4.57	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.270 x .590	6.86 x 14.99	75	83%	16.2	53.1	See Chart on page 6.92 Sweep tested 5 MHz to 1 GHz.		
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80°C	9117M	—	1000	304.8	44.0	20.0	18 AWG (solid) .040" 28.0Ω/M' 91.9Ω/km	.180	4.57	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.270 x .410	6.86 x 10.41	75	83%	16.2	53.1	See Chart on page 6.92		
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.051" (1.3mm) galvanized steel messenger.



80°C	1258AM	—	1000	304.8	42.0	19.1	18 AWG (solid) .040" 28.0Ω/M' 91.9Ω/km	.180	4.57	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.270 x .410	6.86 x 10.41	75	83%	16.2	53.1	See Chart on page 6.92 Sweep tested 5 MHz to 1 GHz.		
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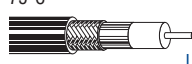
CoreGuard®

.051" (1.3mm) galvanized steel messenger.




Gas-injected Foam Polyethylene Insulation • Black Low-Smoke, Zero-Halogen Jacket

75°C	9116SB LSZH and ABS Type Approved new	NEC: CMG-LS CEC: CMG-LS FT4 Limited Smoke	1000	304.8	31.0	14.1	18 AWG (solid) .040" 28.0Ω/M' 91.9Ω/km	.180	4.57	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.274	6.96	75	83%	16.2	53.1	See Chart on page 6.92 Sweep tested 5 MHz to 3 GHz.		
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Plenum • Foam FEP Insulation • Natural Flamarrest® Jacket

75°C	9116P	NEC: CATVP CMP CEC: CMP FT6	U-1000 1000	U-304.8 304.8	27.0 27.0	12.3 12.3	18 AWG (solid) .040" 28.0Ω/M' 91.9Ω/km	.170	4.32	Duobond II* + 60% Aluminum Braid 9.0Ω/M' 29.5Ω/km	.235	5.97	75	83%	16.3	53.5	1 10 50 100 200 400 700 900 1000	.3 .7 1.6 2.2 3.0 4.6 6.6 7.7 8.2	1.0 2.2 5.3 7.2 9.8 15.1 21.7 25.3 26.9
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BCCS = Bare Copper-covered Steel • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene

*Duobond II = Bonded Duofoil® (100% coverage) + aluminum braid (67% coverage).

