

Description:

Series 6, 18 AWG solid .040" bare copper-covered steel conductor, gas-injected foam polyethylene insulation, Duobond® II + aluminum braid shield (60% coverage), polyethylene jacket (black or orange).

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 Shield Flooding Grease: CoreGuard®

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PE - Polyethylene

Overall Cabling

Overall Nominal Diameter: 0.270 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -55°C To +80°C

Bulk Cable Weight: 26 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

EU CE Mark:	No
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
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

Series Type: Series 6

Suitability

Suitability - Burial: Yes

Plenum/Non-Plenum

Plenum (Y/N): No

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

Max. Operating Voltage - Non-UL:

Voltage
350 V RMS

Minimum Structural Return Loss:

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

Sweep Test

Sweep Testing: 5 MHz - 1 GHz

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9066 0031000	1,000 FT	27.000 LB	ORANGE		#18 GIFHDL DPE SH LDPE
9066 0101000	1,000 FT	27.000 LB	BLACK	C	#18 GIFHDL DPE SH LDPE

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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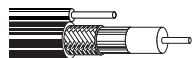
CoreGuard®

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 x 14.99	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 x 10.41	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 x 10.41	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).

Technical Information

Attenuation vs. Frequency for Belden® Broadband Coaxial Products

Frequency Point (MHz)	Series 59				Series 6				Series 11			
	Nominal dB/100 Ft.	Nominal dB/100m	Maximum dB/100 Ft.	Maximum dB/100m	Nominal dB/100 Ft.	Nominal dB/100m	Maximum dB/100 Ft.	Maximum dB/100m	Nominal dB/100 Ft.	Nominal dB/100m	Maximum dB/100 Ft.	Maximum dB/100m
5	.75	2.46	.89	2.92	.54	1.77	.67	2.20	.34	1.12	.38	1.25
55	1.84	6.04	1.95	6.40	1.45	4.76	1.60	5.25	.91	2.99	.97	3.18
211	3.36	11.02	3.59	11.78	2.64	8.66	2.87	9.42	1.68	5.51	1.81	5.94
216	3.41	11.19	3.69	12.11	2.67	8.76	2.95	9.68	1.70	5.58	1.84	6.04
240	3.57	11.71	3.87	12.70	2.80	9.19	3.09	10.14	1.78	5.84	1.94	6.36
270	3.79	12.43	4.05	13.29	2.97	9.74	3.24	10.63	1.89	6.20	2.05	6.73
300	3.99	13.09	4.27	14.01	3.13	10.27	3.43	11.25	1.99	6.53	2.15	7.05
325	4.16	13.65	4.50	14.76	3.26	10.70	3.59	11.78	2.07	6.79	2.24	7.35
350	4.33	14.21	4.64	15.22	3.39	11.12	3.72	12.20	2.15	7.05	2.32	7.61
375	4.49	14.73	4.84	15.88	3.52	11.55	3.87	12.70	2.22	7.28	2.40	7.87
400	4.66	15.29	4.88	16.01	3.65	11.97	4.00	13.12	2.30	7.55	2.47	8.10
450	4.96	16.27	5.30	17.39	3.88	12.73	4.26	13.98	2.45	8.04	2.65	8.69
500	5.22	17.13	5.50	18.04	4.09	13.42	4.48	14.70	2.59	8.50	2.85	9.35
550	5.48	17.98	5.90	19.36	4.30	14.11	4.71	15.45	2.73	8.96	2.94	9.65
600	5.75	18.86	6.18	20.28	4.51	14.80	4.94	16.21	2.85	9.35	3.08	10.10
650	6.03	19.78	6.52	21.39	4.72	15.49	5.18	16.99	2.98	9.78	3.22	10.56
700	6.28	20.60	6.83	22.41	4.92	16.14	5.45	17.88	3.10	10.17	3.37	11.06
750	6.51	21.36	6.96	22.83	5.11	16.76	5.59	18.34	3.21	10.53	3.50	11.48
800	6.71	22.01	7.30	23.95	5.27	17.29	5.75	18.86	3.32	10.89	3.65	11.97
862	6.97	22.87	7.50	24.61	5.47	17.95	5.98	19.62	3.46	11.35	3.82	12.53
870	7.00	22.97	7.54	24.74	5.49	18.01	6.00	19.68	3.48	11.42	3.84	12.60
900	7.14	23.42	7.79	25.56	5.60	18.37	6.11	20.05	3.55	11.65	3.96	12.99
950	7.39	24.25	7.90	25.92	5.79	19.00	6.35	20.83	3.66	12.01	4.10	13.45
1000	7.68	25.20	8.09	26.54	5.99	19.65	6.54	21.46	3.77	12.37	4.23	13.88
1450	—	—	—	—	7.80	25.60	8.00	26.20	5.00	16.41	5.50	18.10
1800	—	—	—	—	8.60	28.20	8.80	28.90	5.70	18.70	6.27	20.60
2250	—	—	—	—	9.80	32.20	10.00	32.80	6.50	21.33	7.15	23.50
3000	—	—	—	—	11.30	37.10	11.90	39.00	8.00	26.25	8.80	28.90