



## Description:

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

## 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
3	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100

### Outer Jacket

#### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

### Overall Cabling

Overall Nominal Diameter: 0.275 in.

## Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +80°C

UL Temperature Rating: 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

NEC/(UL) Specification: CATV, CM

CEC/C(UL) Specification: CM

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): 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

### Flame Test

UL Flame Test: UL1685 UL Loading

### 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)
6.5

### 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 - 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
9118 Q5HU1000	1,000 FT	30.000 LB	WHITE, NEUTRAL	Z	#18GIFHDLDP SH FS FRPVC
9118 009U1000	1,000 FT	30.000 LB	WHITE		#18 GIFHDLDP SH FS FRPVC
9118 010U1000	1,000 FT	30.000 LB	BLACK	Z	#18GIFHDLDP SH FS FRPVC
9118 0101000	1,000 FT	29.000 LB	BLACK	C Z	#18GIFHDLDP SH FS FRPVC

**Notes:**

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

# 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® III + Aluminum Braid Shield (60% Coverage)**

**Gas-injected Foam Polyethylene Insulation • Black PVC Jacket**

80°C	<b>9118</b>	NEC: CATV CM CEC: CM	U-1000 <sup>▲</sup> 1000	U-304.8 304.8	30.0 30.0	13.6 13.6	18 AWG (solid) .040" BCCS 28.0Ω/M' 91.9Ω/km	.180	4.57	Duobond III* + 60% Aluminum Braid 6.5Ω/M' 21.3Ω/km	.278 x	7.06 x	75	83%	16.2	53.1	See Chart on page 6.92		
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▲U-1000 ft. put-up also available in Beige, White and White Neutral.

80°C	<b>9119M</b>	—	1000	304.8	43.0	19.5	18 AWG (solid) .040" BCCS 28.0Ω/M' 91.9Ω/km	.180	4.57	Duobond III* + 60% Aluminum Braid 6.5Ω/M' 21.3Ω/km	.275 x	6.99 x	75	83%	16.2	53.1	See Chart on page 6.92		
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.051" (1.3mm) galvanized steel messenger.

80°C	<b>1546A</b>	NEC: CATV CM CEC: CM	U-1000	U-304.8	31.0	14.1	18 AWG (solid) .040" BCCS 28.0Ω/M' 91.9Ω/km	.180	4.57	Duobond III* + 60% Aluminum Braid 6.5Ω/M' 21.3Ω/km	.278	7.06	75	83%	16.2	53.1	See Chart on page 6.92		
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CoreGuard®

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

Burial 80°C	<b>1837A</b>	—	1000	304.8	26.0	11.8	18 AWG (solid) .040" BCCS 28.0Ω/M' 91.9Ω/km	.180	4.57	Duobond III* + 60% Aluminum Braid 6.5Ω/M' 21.3Ω/km	.275	6.99	75	83%	16.2	53.1	See Chart on page 6.92		
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CoreGuard®

**Series 6 • 18 AWG Solid .040" Bare Copper-covered Steel Conductor • Bonded Beldfoil® + Aluminum Braid Shield (50% Coverage)**

**Gas-injected Foam Polyethylene Insulation • Black PVC Jacket**

80°C	<b>5339G5</b> <small>new</small>	NEC: CATV, CMG CEC: CMG FT4	U-1000 1000	U-304.8 304.8	24.0 24.0	10.9 10.9	18 AWG (solid) .040" BCCS 28.0Ω/M' 91.9Ω/km	.180	4.57	Bonded Beldfoil + 50% AL Braid 15.0Ω/M' 49.2Ω/km	.253	6.43	75	83%	16.2	53.1	See Chart on page 6.92		
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AL = Aluminum • BCCS = Bare Copper-covered Steel • DCR = DC Resistance

\*Duobond III = Bonded Duofoil® (100% coverage) + aluminum braid (67% coverage) + Duofoil (100% 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