Coaxial Cables

TABLE 7 Flexible Coax Specifications

RG-()/U	Mil-C-17/()	Zo	Loss dB/100' @1 MHz	Loss dB/100' @10 MHz	Loss dB/100' @100 MHz	Loss dB/100' @1000 MHz	Center Conductor	Outer Conductor	Jacket	Outside Diameter [Inches]	Dielectric	Velocity Factor [%]	Capacitance pF/foot	Dielectric Core Diameter [inches]	Maximum Voltage [RMS]
8		52	0.16	0.56	1.9	7.4	#13 Stranded Bare Copper .058 Dia	Bare Copper Braid, 97%	Black PVC	0.405	Polyethylene	66	29.5	0.285	3700
8A	[3] 163	52	0.16	0.56	1.9	7.4	#13 Stranded Bare Copper .058 Dia	Bare Copper Braid, 97%	Black PVC, Noncontaminating	0.405	Polyethylene	66	29.5	0.285	3700
9		51	0.18	0.62	2.1	8.2	#13 Stranded Silver Coated Copper .086 Dia	Double Braid, Silver Coated Inner, Bare Copper Outer, 97%	Gray PVC, Noncontaminating	0.42	Polyethylene	66	30	0.28	3700
9B	[4] 164	50					#13 Stranded Silver Coated Copper .089 Dia	Double Braid, Silver Coated Inner, Bare Copper Outer, 97%	PVC	0.36	Polyethylene	66		0.285	3701
11	[6]	75	0.19	0.66	2	7.1	#18 Stranded Tinned Copper .048	Bare Copper Braid, 97%	Black PVC	0.405	Flame Retardant Semi-Foam Polyethylene	66	20.5	0.285	300
11A		75	0.19	0.66	2	8.5	#18 Stranded Tinned Copper .048	Bare Copper Braid, 97%	Black PVC, Noncontaminating	0.405	Polyethylene	66	20.5	0.285	3700
58	[28]	50	0.42	1.5	5.4	22.8	#20 Tinned Copper .035 Dia	Tinned Copper Braid, 95%	Black PVC, Noncontaminating	0.193	Polyethylene	66	30.8	0.116	1400
58A		50	0.42	1.5	5.4	22.8	#20 Solid Bare Copper .035 Dia	Tinned Copper Braid, 95%	Black PVC	0.193	Polyethylene	66	30.8	0.116	1400
58C	155	50	0.42	1.5	5.4	22.8	#20 Tinned Copper .035 Dia	Tinned Copper Braid, 95%	Black PVC, Noncontaminating	0.193	Polyethylene	66	30.8	0.116	1400
59	[29]	75	0.6	1.1	3.4	12	#23 Solid Bare Copper Covered Steel .023 Dia	Bare Copper Braid, 95%	Black PVC, Noncontaminating	0.241	Polyethylene	66	20.5	0.146	1700
59B		75	0.6	1.1	3.4	12	#23 Solid Bare Copper Covered Steel .023 Dia	Bare Copper Braid, 95%	Black PVC, Noncontaminating	0.241	Polyethylene	66	20.5	0.146	1700
62A	[30]	93	0.25	0.85	2.7	8.7	#22 Solid Bare Copper Covered Steel .023 Dia	Bare Copper Braid, 95%	Black PVC, Noncontaminating	0.242	Semi-solid Polyethylene	84	13.5	0.146	750

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TABLE 7 (continued) Flexible Coax Specifications

RG-()/U	Mil-C-17/()	Zo	Loss dB/100' @1 MHz	Loss dB/100' @10 MHz	Loss dB/100' @100 MHz	Loss dB/100' @1000 MHz	Center Conductor	Outer Conductor	Jacket	Outside Diameter [Inches]	Dielectric	Velocity Factor [%]	Capacitance pF/foot	Dielectric Core Diameter [inches]	Maximum Voltage [RMS]
62B	[91] 97	93	0.31	0.9	2.9	11	#24 Solid Bare Copper Covered Steel .025 Dia	Bare Copper Braid, 95%	Black PVC, Noncontaminating	0.242	Semi-solid Polyethylene	84	13.5	0.146	750
63	[31]	125	0.19	0.52	1.5	5.8	#22 Solid Bare Copper Covered Steel .025 Dia	Bare Copper Braid, 97%	Black PVC, Noncontaminating	0.405	Semi-solid Polyethylene	84	9.7	0.285	750
71	[90]	93	0.25	0.85	2.7	8.7	#22 Solid Bare Copper Covered Steel .025 Dia	Double Braid, Tinned Copper Outer, Bare Copper Inner, 98%	Black Polyethylene	0.245	Semi-solid Polyethylene	84	13.5	0.146	750
122	[54] 157	50	0.4	1.7	7	29	#22 Stranded Tinned Copper .030 Dia	Tinned Copper Braid, 95%	Black PVC, Noncontaminating	0.16	Polyethylene	66	30.8	0.096	1400
141	[59] 170	50					#18 Solid Silver Coated Copper Covered Steel .037 Dia	Silver Coated Copper Braid, 94%	Fluorinated Ethylene-Propylene	0.17	TFE Teflon	69.5		0.116	1400
141A		50	0.34	1.1	3.9	13.5	#18 Solid Silver Coated Copper Covered Steel .037 Dia	Silver Coated Copper Braid, 94%	Tinted Brown Fiberglass	0.187	TFE Teflon	69.5	29.2	0.116	1400
142	[60] 158	50	0.34	1.1	3.9	13.5	#18 Solid Silver Coated Copper Covered Steel .037 Dia	Double Silver Coated Copper Braid, 94%	Tinted Brown Fluorinated Ethylene-Propylene	0.187	TFE Teflon	69.5	29.2	0.116	1400
174	[119] 173	50	1.9	3.3	8.4	34	#26 Stranded Bare Copper Covered Steel .019 Dia	Tinned Copper Braid, 90%	Black PVC Jacket	0.11	Polyethylene	66	30.8	0.059	1100
178	[93] 169	50					#30 Stranded Silver Coated Copper Covered Steel .012 Dia	Silver Coated Copper Braid, 96%	Fluorinated Ethylene-Propylene	0.071	TFE Teflon	69.5		0.033	750
178B		50	2.6	5.6	14	46	#30 Solid Silver Coated Copper Covered Steel .012 Dia	Silver Coated Copper Braid, 96%	White Fluorinated Ethylene-Propylene	0.071	TFE Teflon	69.5	29.2	0.033	750

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179	[94]	75	3	5.3	10	24	#30 Solid Silver Coated Copper Covered Steel .012 Dia	Silver Coated Copper Braid, 95%	Tinted Brown Fluorinated Ethylene-Propylene	0.1	TFE Teflon	69.5	19.5	0.062	900
180	[95]	95	2.4	3.3	5.7	17	#30 Solid Silver Coated Copper Covered Steel .012 Dia	Silver Coated Copper Braid, 95%	Tinted Brown Fluorinated Ethylene-Propylene	0.141	TFE Teflon	69.5	15.4	0.102	1100
187	[68] 94	75					#30 Solid Silver Coated Copper Covered Steel .012 Dia	Silver Coated Copper Braid, 92.3%	Fluorinated Ethylene-Propylene	0.1	TFE Teflon	69.5		0.063	900
212	[73] 162	50	0.26	0.83	2.7	9.8	#15.5 Solid Silver Coated Copper .0556 Dia	Double Silver Coated Copper Braid, 95%	Black PVC Noncontaminating	0.332	Polyethylene	66	30.8	0.185	2200
213	[74] 163	50	0.18	0.62	2.1	8.2	#13 Stranded Bare Copper .089 Dia	Bare Copper Braid 97%	Black PVC Noncontaminating	0.405	Polyethylene	66	30.8	0.285	3700
214	[75] 164	50	0.17	0.55	1.9	8	#13 Stranded Silver Coated Copper .089 Dia	Double Silver Coated Copper Braid, 97%	Black PVC Noncontaminating	0.425	Polyethylene	66	30.8	0.285	3700
216	[77]	75	0.19	0.66	2	7.1	#18 Stranded Tinned Copper .048	Double Bare Copper Braid 95%	Black PVC Noncontaminating	0.425	Polyethylene	66	20.5	0.285	3700
223	[84]	50	0.35	1.2	4.1	14.5	#19 Solid Silver Coated Copper .034 Dia	Double Silver Coated Copper Braid, 95%	Black PVC Noncontaminating	0.212	Polyethylene	66	30.8	0.117	1700
303	[111] 170	50	0.34	1.1	3.9	13.5	#18 Solid Silver Coated Copper Covered Steel .037 Dia	Silver Coated Copper Braid, 95%	Tinted Brown Fluorinated Ethylene-Propylene	0.17	TFE Teflon	69.5	29.2	0.116	1400
316	[113] 172	50	1.2	2.7	8.3	29	#26 Stranded Silver Coated Copper Covered Steel .020 Dia	Silver Coated Copper Braid, 95%	White Fluorinated Ethylene-Propylene	0.098	TFE Teflon	69.5	29.2	0.06	900

Note: Mil-C-17/() part numbers were revised. Initial specification numbers are shown in brackets, current specification numbers are unbracketed.
Source:
Mil-C-17G
Mil-C-17G Supplement 1
Belden Master Catalog, Belden Wire & Cable Co, Richmond, IN.

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