

# MIL-C-17 coaxial and twinaxial cables

## Dimensions and Weights

M17 P/N	Thermax Type	Impedance / Type	Conductor Type / Diameter	Insulation Type / Diameter	Braid Type / Diameter	Jacket Type / Diameter	Weight
M17/060-RG142	RGS-142	50 Ω coaxial	Solid SPCW .037 (.694)	Extruded PTFE .116 (2.95)	Double 36 SPC .162 (4.11)	Extruded FEP .195 (4.95)	41.2 (61.3)
M17/093-RG178	RGS-178	50 Ω coaxial	7/38 SPCW .012 (.057)	Extruded PTFE .033 (.838)	Single 38 SPC .051 (1.30)	Extruded FEP .071 (1.80)	5.41 (8.05)
M17/093-00001	50-738CSPA	50 Ω coaxial	7/38 SPCW .012 (.057)	Extruded PTFE .033 (.838)	Single 38 SPC .051 (1.30)	Extruded PFA .071 (1.80)	5.41 (8.05)
M17/094-RG179	RGU-179	75 Ω coaxial	7/38 SPCW .012 (.057)	Extruded PTFE .063 (1.60)	Single 38 SPC .081 (2.06)	Extruded FEP .100 (2.54)	9.83 (14.6)
M17/095-RG180	RGU-180	95 Ω coaxial	7/38 SPCW .012 (.057)	Extruded PTFE .102 (2.59)	Single 38 SPC .120 (3.05)	Extruded FEP .141 (3.58)	18.3 (27.2)
M17/110-RG302	RGU-302	75 Ω coaxial	Solid SPCW 025 (.324)	Extruded PTFE .146 (3.71)	Single 36 SPC .168 (4.27)	Extruded FEP .202 (5.13)	37.7 (56.1)
M17/111-RG303	RGS-303	50 Ω coaxial	Solid SPCW .037 (.694)	Extruded PTFE .116 (2.95)	Single 36 SPC .138 (3.51)	Extruded FEP .170 (4.32)	30.0 (44.6)
M17/112-RG304	RGS-304	50 Ω coaxial	Solid SPCW .059 (1.76)	Extruded PTFE .185 (4.70)	Double 34 SPC .240 (6.10)	Extruded FEP .280 (7.11)	89.1 (133)
M17/113-RG316	RGS-316	50 Ω coaxial	7/0067 SPCW .020 (.159)	Extruded PTFE .060 (1.52)	Single 38 SPC .078 (1.98)	Extruded FEP .098 (2.49)	9.89 (14.7)
M17/127-RG393	RGS-393	50 Ω coaxial	7/.0312 SPC .094 (3.45)	Extruded PTFE .285 (7.24)	Double 34 SPC .340 (8.64)	Extruded FEP .390 (9.91)	160 (238)
M17/128-RG400	RGS-400	50 Ω coaxial	19/32 SPC .038 (.616)	Extruded PTFE .116 (2.95)	Double 36 SPC .162 (4.11)	Extruded FEP .195 (4.95)	41.9 (62.4)
M17/131-RG403	RGS-403	50 Ω triaxial	7/38 SPCW .012 (.057)	Extruded PTFE .033 (.838)	Double 38 SPC FEP Interlayer Inner .051 (1.30) Outer .090 (2.29)	Double Ext. FEP Braid Interlayer Inner .074 (1.88) Outer .118 (3.00)	14.3 (21.3)
M17/132-RG404	RGU-404	50 Ω coaxial (Low Noise)	7/38 SPCW .012 (.057)	Extruded PTFE .034 (.864)	Single 38 SPC .052 (1.32)	Extruded FEP .073 (1.85)	5.46 (8.13)
M17/136-00001	U75-738CSPA	75 Ω coaxial	7/38 SPCW .012 (.057)	Extruded PTFE .063 (1.60)	Single 38 SPC .081 (2.06)	Extruded PFA .100 (2.54)	9.83 (14.6)
M17/137-00001	U95-738CSPA	95 Ω coaxial	7/38 SPCW .012 (.057)	Extruded PTFE .102 (2.59)	Single 38 SPC .120 (3.05)	Extruded PFA .141 (3.58)	18.3 (27.2)
M17/138-00001	S50-7/0067CSPA	50 Ω coaxial	7/0067 SPCW .020 (.159)	Extruded PTFE .060 (1.52)	Single 38 SPC .078 (1.98)	Extruded PFA .098 (2.49)	9.89 (14.7)
M17/139-00001	U95-738BCCBPA	95 Ω coaxial	7/38 SPBC .012 (.057)	Extruded PTFE .102 (2.59)	Single 38 SP CAD BR .120 (3.05)	Extruded PFA .141 (3.58)	18.4 (27.4)
M17/152-00001	S50-7/0067CSSXE	50 Ω coaxial	7/0067 SPCW .020 (.159)	Extruded PTFE .060 (1.52)	Double 38 SPC .096 (2.44)	Extruded FEP .114 (2.90)	15.7 (23.4)
M17/158-00001	RGU-142	50 Ω coaxial	Solid SPCW .037 (.694)	Extruded PTFE .116 (2.95)	Double 36 SPC .162 (4.11)	Extruded FEP .195 (4.95)	41.2 (61.3)
M17/169-00001	RGU-178	50 Ω coaxial	7/38 SPCW .012 (.057)	Extruded PTFE .033 (.838)	Single 38 SPC .051 (1.30)	Extruded FEP .071 (1.80)	5.41 (8.05)
M17/170-00001	RGU-303	50 Ω coaxial	Solid SPCW .037 (.694)	Extruded PTFE .116 (2.95)	Single 36 SPC .138 (3.51)	Extruded FEP .170 (4.32)	30.0 (44.6)
M17/171-00001	RGU-304	50 Ω coaxial	Solid SPCW .059 (1.76)	Extruded PTFE .185 (4.70)	Double 34 SPC .240 (6.10)	Extruded FEP .280 (7.11)	89.1 (133)
M17/172-00001	RGU-316	50 Ω coaxial	7/0067 SPCW .020 (.159)	Extruded PTFE .060 (1.52)	Single 38 SPC .078 (1.98)	Extruded FEP .098 (2.49)	9.89 (14.7)
M17/174-00001	RGU-393	50 Ω coaxial	7/0312 SPC .094 (3.45)	Extruded PTFE .285 (7.24)	Double 34 SPC .340 (8.64)	Extruded FEP .390 (9.91)	160 (238)
M17/175-00001	RGU-400	50 Ω coaxial	19/32 SPC .038 (.616)	Extruded PTFE .116 (2.95)	Double 36 SPC .162 (4.11)	Extruded FEP .195 (4.95)	41.9 (62.4)
M17/176-00002	77-1936TF(2)TFPA	77 Ω twinax	19/36 SPTF .024 (.241)	Extruded PTFE .042 (1.07)	Single 38 SPTF .100 (2.54)	Extruded PFA .125 (3.18)	15.8 (23.5)

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M). All values are nominal unless otherwise indicated.

**FEP:** Fluorinated Ethylene Propylene. • **PFA:** Perfluoroalkoxy. • **PTFE:** Polytetrafluoroethylene. • **SPC:** Silver-plated copper.

**SP CAD BR:** Silver-plated cadmium bronze. • **SPCW:** Silver-plated copperweld (copper-covered steel).

**SPTF:** Silver-plated high-strength copper alloy.



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## Electrical Performance

M17 P/N	Max. Capacitance	Max. Working Voltage	Max. Conductor Resistance	Min. Dielectric Strength	Min. Corona Extinction	Max. Attenuation (dB / 100 ft.)			Max. Power (Watts)		
						100 MHz	400 MHz	1 GHz	100 MHz	400 MHz	1 GHz
M17/060-RG142	32.0 (105)	1,400	1.95 (6.40)	5.00	1.90	5.5	11.7	19.0	2,400	1,100	650
M17/093-RG178	32.0 (105)	750	24.5 (80.2)	2.00	1.00	16.0	33.0	52.0	255	113	66
M17/093-00001	32.0 (105)	750	24.5 (80.2)	2.00	1.00	16.0	33.0	52.0	255	113	66
M17/094-RG179	23.0 (75.4)	900	24.5 (80.2)	2.00	1.20	—	21.0	—	880	420	260
M17/095-RG180	17.4 (57.1)	1,000	24.5 (80.2)	2.00	1.50	—	17.0	—	740	370	230
M17/110-RG302	22.0 (72.2)	1,700	4.40 (14.4)	3.50	2.30	—	8.0	—	—	1,700	800
M17/111-RG303	32.0 (105)	1,400	1.90 (6.23)	5.00	1.90	3.9	8.6	15.0	2,400	1,100	630
M17/112-RG304	32.0 (105)	2,200	.800 (2.62)	5.00	3.00	2.7	6.4	11.1	3,200	1,450	870
M17/113-RG316	32.0 (105)	900	8.41 (27.6)	2.00	1.20	11.0	21.0	38.0	430	210	130
M17/127-RG393	32.0 (105)	1,875	.152 (.499)	7.50	2.50	2.4	5.0	8.8	4,100	1,200	290
M17/128-RG400	32.0 (105)	1,400	.910 (2.98)	3.00	1.90	4.5	10.5	17.0	2,400	1,050	620
M17/131-RG403	30.2 (99.1) Conductor-Shield 160 (525) Shield-Shield	750  300	24.5 (80.2)	2.00  1.00	1.00	—	—	—	200	95	60
M17/132-RG404	32.0 (105)	750	24.5 (80.2)	1.50	1.00	—	50.0	—	—	—	—
M17/136-00001	22.0 (72.2)	900	34.0 (112)	1.50	1.20	—	21.0	—	3,000	1,400	250
M17/137-00001	15.4 (50.5)	1,000	24.5 (80.2)	2.00	1.50	—	17.0	—	760	360	227
M17/138-00001	32.0 (105)	900	8.41 (27.6)	2.00	1.20	11.0	21.0	38.0	415	220	130
M17/139-00001	17.4 (57.1)	1,100	40.0 (131)	2.00	1.50	—	18.0	—	740	360	230
M17/152-00001	32.0 (105)	1,100	8.41 (27.6)	2.00	1.20	15.0	24.0	40.0	425	210	130
M17/158-00001	32.0 (105)	1,400	1.95 (6.40)	5.00	1.90	—	11.7	19.0	2,400	1,100	650
M17/169-00001	32.0 (105)	750	24.5 (80.2)	2.00	1.00	—	33.0	52.0	255	113	66
M17/170-00001	32.0 (105)	1,400	1.80 (5.90)	5.00	1.90	—	8.6	—	2,400	1,100	630
M17/171-00001	32.0 (105)	2,200	.800 (2.62)	5.00	3.00	—	6.4	—	3,200	1,450	870
M17/172-00001	32.0 (105)	900	8.41 (27.6)	2.00	1.20	—	21.0	—	430	210	130
M17/174-00001	32.0 (105)	1,875	.152 (.499)	7.50	2.50	—	5.0	—	4,100	1,200	290
M17/175-00001	32.0 (105)	1,400	.910 (2.98)	3.00	1.90	—	10.5	—	2,400	1,050	620
M17/176-00002	24.0 (78.7)	750	2.84 (9.32)	1.00	—	—	—	1.4	—	—	—

Capacitance in pF/foot (pF/meter). Resistance in  $\Omega$ /100 feet ( $\Omega$ /100 meters). Dielectric strength in KV RMS. Corona extinction in KV RMS. All values are nominal unless otherwise indicated.

