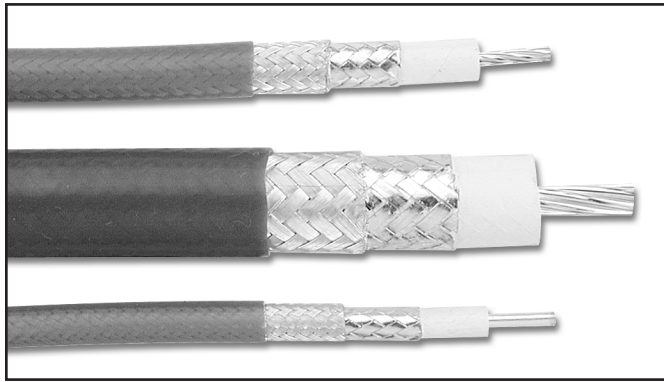


LTE high-performance coaxial cables (RG replacement)



Construction Details

Center Conductor: See table below.

Dielectric: LTE (extruded low-density PTFE) or low density / composite.

Inner Shield:

875-892: None.

900-142: Flat silver-plated copper braid, 95% coverage.

900-316: Flat silver-plated copper braid, 95% coverage.

900-393: Flat silver-plated copper braid, 92% coverage.

Outer Shield: Silver-plated copper braid, 95% nominal coverage. Can be provided with optional shield types such as flat braid, tape composites, or combinations.

Jacket: Extruded FEP.

LTE is a patented low-density, air-expanded PTFE dielectric which provides reduced weight and increased velocity of propagation (up to 85%).

LTE dielectric also exhibits low loss and stable performance throughout its temperature range.

These cables are ideal replacements for MIL-C-17 cables in demanding applications such as aerospace and high-reliability commercial systems.

875-892 is a replacement for RG-179 (M17/94).

900-142 is a replacement for RG-142 (M17/60, /158).

900-316 is a replacement for RG-316 (M17/113, /172).

900-393 is a replacement for RG-393 (M17/127, /174).

Performance:

Temperature rating: 200° C.

Impedance: 875-892: 75Ω nominal.

All others: 50Ω nominal.

See page 3 for more information on LTE dielectric.

Dimensions and Weights

Thermax P/N	Inner Conductor		Dielectric Diameter	Inner Shield Diameter	Outer Shield Diameter	Jacket Diameter	Weight	Min. Bend Radius
	Diameter	Stranding						
875-892	.015 (2.67)	7/36 SPCA	.063 (1.60)	—	.080 (2.03)	.100 (2.54)	8.5 (12.6)	.50 (12.7)
900-142	.051 (1.30)	Solid SPC	.145 (3.68)	.153 (3.85)	.171 (4.34)	.190 (4.83)	39.0 (57.8)	1.0 (25.4)
900-316	.020 (.51)	Solid SPCW	.060 (1.53)	.068 (1.73)	.085 (2.16)	.105 (2.68)	10.4 (15.5)	.50 (12.7)
900-393	.105 (2.67)	7/.038 SPC	.285 (7.24)	.291 (7.39)	.318 (8.08)	.390 (9.91)	133.0 (197.1)	2.0 (50.8)

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

SPC: Silver-plated copper. **SPCW:** Silver-plated copper-covered steel (copperweld). **SPCA:** Silver-plated high-strength copper (alloy 135).

Electrical Performance

Thermax P/N	Velocity of Propagation	Capacitance (pF/ft)	Attenuation (dB/100 ft.)					Time Delay ns / foot
			100 MHz	500 MHz	1 GHz	2 GHz	5 GHz	
875-892	81%	15.5	—	14.0	—	—	—	1.23
900-142	79%	26.0	2.8	6.5	9.4	14.0	23.0	1.28
900-316	75%	27.5	7.0	15.8	22.6	32.3	52.4	1.33
900-393	80%	26.0	1.5	3.5	5.2	7.8	13.5	1.28

All values are nominal unless otherwise indicated.

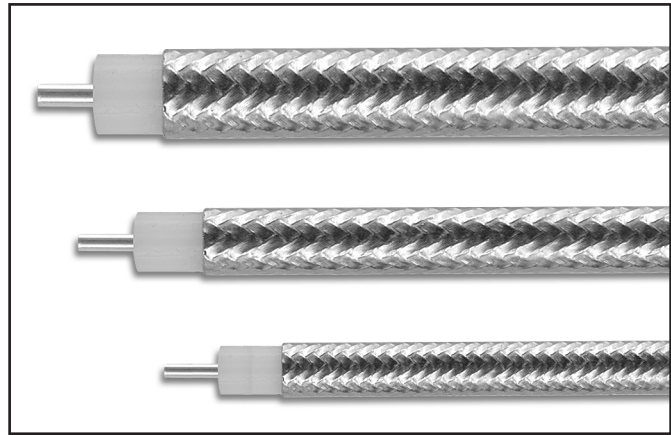
MaxForm hand-formable cable

MaxForm cable is a hand-formable alternative to semi-rigid cable. With its 100% shield coverage, it provides equivalent performance to MIL-C-17 semi-rigid, but can be formed by hand without the use of bending equipment. Cable assemblies can be made to approximate overall length and bent to fit when installing into equipment.

MaxForm cable can be used with connectors designed for MIL-C-17 semi-rigid cable, with no change in assembly procedures.

Performance:

Temperature rating: No jacket: 150° C;
FEP jacket: 150° C;
PVC jacket: 105° C.



Construction Details

Jacket: Where indicated, FEP or PVC.
Outer shield: Copper-tin composite, 100% coverage.
Dielectric: Solid PTFE.
Center Conductor: Solid SPC or SPCW (see table).

Dimensions and Weights

MIL-C-17 Equivalent	Inner Conductor Diameter / Type	Dielectric Diameter	Outer Conductor Diameter	Jacket Material / Diameter	Weight	Min. Bend Radius	Thermax P/N
M17/133	.020 (.51) SPCW	.065 (1.65)	.086 (2.18)	None	11.4 (17.0)	.43 (11)	670-086/50Y
	.020 (.51) SPCW	.065 (1.65)	.086 (2.18)	FEP .105 (2.67)	14.1 (21.0)	.43 (11)	670-086/50YXE
	.020 (.51) SPCW	.065 (1.65)	.086 (2.18)	PVC .115 (2.92)	14.1 (21.0)	.43 (11)	670-086/50YXV
None	.011 (.28) SPCW	.065 (1.65)	.086 (2.18)	None	11.4 (17.0)	.43 (11)	670-086/75Y
	.011 (.28) SPCW	.065 (1.65)	.086 (2.18)	FEP .105 (2.67)	14.1 (21.0)	.43 (11)	670-086/75YXE
	.011 (.28) SPCW	.065 (1.65)	.086 (2.18)	PVC .115 (2.92)	14.1 (21.0)	.43 (11)	670-086/75YXV
M17/130	.037 (.94) SPCW	.119 (3.02)	.141 (3.58)	None	25.5 (38.0)	.63 (16)	670-141Y
	.037 (.94) SPCW	.119 (3.02)	.141 (3.58)	FEP .168 (4.26)	31.7 (47.2)	.63 (16)	670-141YXE
	.037 (.94) SPCW	.119 (3.02)	.141 (3.58)	PVC .179 (4.55)	31.7 (47.2)	.63 (16)	670-141YXV
M17/129	.064 (1.63) SPC	.201 (5.31)	.240 (6.10)	None	70.3 (104.6)	2.0 (51)	670-250Y
	.064 (1.63) SPC	.201 (5.31)	.240 (6.10)	FEP .280 (7.11)	85.8 (127.7)	2.0 (51)	670-250YXE
	.064 (1.63) SPC	.201 (5.31)	.240 (6.10)	PVC .290 (7.37)	85.8 (127.7)	2.0 (51)	670-250YXV

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M).

SPCW: Silver-plated copperweld (copper-covered steel). **SPC:** Silver-plated copper.

All values are nominal unless otherwise indicated.

Electrical Performance

Thermax P/N	Nominal Impedance	Velocity of Propagation	Capacitance (pF/ft)	Attenuation (dB/100 ft.)					Resistance (Ω/1000 ft)	
				500 MHz	1 GHz	5 GHz	10 GHz	20 GHz	Conductor	Shield
670-086/50	50Ω	69.5%	29.0	15.0	22.0	50.0	80.0	130.0	65.7	10.2
670-086/75	75Ω	69.5%	19.5	16.8	24.5	56.0	82.0	130.0	205.0	10.2
670-141	50Ω	69.5%	29.0	8.0	12.0	29.0	45.0	70.0	20.5	5.5
670-250	50Ω	69.5%	29.6	5.1	7.5	19.0	33.0	—	2.52	1.8

All values are nominal unless otherwise indicated.

MaxFlex high-performance flexible cable



MaxFlex cable is a flexible alternative to semi-rigid cable. With its 100% shield coverage, it provides equivalent performance to MIL-C-17 semi-rigid, but is as flexible as many MIL-C-17 flexible coaxial cables.

Using MaxFlex cable, assemblies can be made to approximate overall length and installed into equipment without the tooling required for bending semi-rigid cable.

Performance:

Temperature rating: 200° C.

Impedance: 50 ±2Ω.

Shielding effect: >100 dB.

Construction Details

Center Conductor: Solid SPC or SPCW.

Dielectric: Solid PTFE.

Inner Shield: Spiral-wrapped silver-plated copper tape, 100% coverage.

Outer Shield: Silver-plated copper braid, 90% minimum coverage.

Jacket: Extruded FEP (blue).

Options: Stranded center conductor for enhanced flexibility; LTE (expanded extruded PTFE) dielectric for faster transmission speed; other jacket colors.

Dimensions and Weights

Thermax P/N	Inner Conductor Diameter	Dielectric Diameter	Inner Shield Diameter	Outer Shield Diameter	Jacket Diameter	Weight	Min. Bend Radius	MIL-C-17 Equivalent
710-0201	.0201 (.51) SPCW	.064 (1.63)	.070 (1.78)	.085 (2.16)	.103 (2.62)	13 (19.4)	.25 (6.4)	M17/133
710-037	.037 (.94) SPCW	.117 (2.97)	.125 (3.18)	.137 (3.48)	.158 (4.01)	32 (47.7)	.50 (12.7)	M17/130
710-0641	.064 (1.63) SPC	.210 (5.33)	.222 (5.64)	.240 (6.10)	.270 (6.86)	81 (120.7)	2.0 (50.8)	M17/129

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M).

SPC: Silver-plated copper. **SPCW:** Silver-plated copperweld (copper-covered steel).

All values are nominal unless otherwise indicated.

Electrical Performance

Thermax P/N	Velocity of Propagation	Capacitance (pF/ft)	Attenuation (dB/100 ft.)			
			500 MHz	1 GHz	5 GHz	10 GHz
710-0201	69.5%	29	22	32	39	75
710-037	69.5%	29	12	18	23	46
710-0641	69.5%	29	7.8	11	14	31

All values are nominal unless otherwise indicated.

Mobile Solutions low-loss coaxial cable

Mobile Solutions cable is low-loss, high-performance alternative to MIL-C-17 coaxial cables.

The extruded, expanded PTFE dielectric (solid PTFE for MS-100) gives Mobile Solutions cables enhanced power-handling capability, low loss, and consistent performance throughout its temperature range.

MS-195 cable can be used with connectors designed for RG-142 cable; MS-400 cable can be used with connectors designed for RG-213 cable.

Performance:

Temperature rating: 105° C.

Impedance: 50 ±2Ω.



Construction Details

Center Conductor: Solid silver-plated copper (SPC) or silver-plated copper-clad aluminum (SCCA)—see table.

Dielectric: All except MS-100: Extruded expanded PTFE; MS-100: Solid PTFE.

Inner Shield: Aluminum / Mylar / aluminum tape, 100% coverage.

Outer Shield: Tin-plated copper braid, 90% minimum coverage.

Jacket: Extruded PVC (black).

Dimensions and Weights

Thermax P/N	Inner Conductor Diameter	Dielectric Diameter	Inner Shield Diameter	Outer Shield Diameter	Jacket Diameter	Weight	Min. Bend Radius
MS-100	.0201 (.51) SPC	.063 (1.60)	.068 (1.73)	.085 (2.16)	.105 (2.67)	10.3 (15.3)	.5 (12.7)
MS-195	.037 (.94) SPC	.110 (2.79)	.115 (2.92)	.138 (3.50)	.195 (4.95)	26.7 (39.7)	1.0 (25.4)
MS-200	.044 (1.12) SPC	.116 (2.95)	.121 (3.07)	.144 (3.66)	.195 (4.95)	27.2 (40.5)	1.0 (25.4)
MS-240	.056 (1.42) SPC	.150 (3.81)	.155 (3.94)	.178 (4.52)	.240 (6.10)	40.7 (60.6)	1.25 (31.8)
MS-400	.109 (2.77) SCCA	.285 (7.24)	.291 (7.39)	.320 (8.13)	.405 (10.29)	90.6 (134.8)	2.0 (50.8)

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M).

SPC: Silver-plated copper. **SCCA:** Silver-plated copper-clad aluminum.

All values are nominal unless otherwise indicated.

Electrical Performance

Thermax P/N	Velocity of Propagation	Capacitance (pF/ft)	Attenuation (dB/100 ft.)				Average Power (W), 900 MHz	
			450 MHz	900 MHz	1.5 GHz	2 GHz	20° C	80° C
MS-100	69.5%	29	15.7	22.3	29.1	33.8	130	90
MS-195	80%	25	7.5	10.7	13.9	16.1	150	110
MS-200	83%	25	7.0	9.9	12.9	15.0	180	130
MS-240	84%	25	5.3	7.6	9.9	11.5	260	190
MS-400	85%	25	2.7	3.9	5.1	6.0	580	430

All values are nominal unless otherwise indicated.

Mobile Solutions² high-temperature, low-loss cable



MS² is low-loss, high-temperature cable with superior electrical and environmental performance for the most demanding aerospace, wireless, and microwave applications.

The air-spaced PTFE dielectric provides low loss and saves weight, and the sophisticated double shielding virtually eliminates crosstalk. This dielectric construction, and the extruded FEP jacket, ensure consistent performance throughout MS²'s extended temperature range.

Construction Details

Center Conductor: Stranded SPC.

Dielectric: Air-spaced PTFE tape.

Inner Shield: Flat silver-plated copper braid, 95% coverage.

Outer Shield: Silver-plated copper braid, 90% minimum coverage.

Jacket: Extruded FEP (yellow).

Options: Other jacket colors available.

Performance:

Temperature rating: 200° C.

Impedance: 50 ±2Ω.

Dimensions and Weights

Thermax P/N	Inner Conductor		Dielectric Diameter	Inner Shield Diameter	Outer Shield Diameter	Jacket Diameter	Weight	Min. Bend Radius
	Diameter	Stranding						
MS2-110	.024 (.61)	7/.008 SPC	.070 (1.78)	.076 (1.93)	.094 (2.39)	.111 (2.82)	14.4 (21.4)	.5 (12.7)
MS2-140	.034 (.86)	7/.0113 SPC	.098 (2.49)	.106 (2.69)	.124 (3.15)	.144 (3.66)	23.0 (34.2)	.75 (19.1)
MS2-190	.048 (1.22)	7/.0159 SPC	.136 (3.45)	.148 (3.76)	.166 (4.22)	.189 (4.80)	40.0 (59.5)	1.0 (25.4)
MS2-250	.066 (1.68)	7/.022 SPC	.186 (4.72)	.198 (5.03)	.218 (5.54)	.252 (6.40)	70.0 (104.1)	1.25 (31.8)
MS2-320	.089 (2.26)	7/.0296 SPC	.250 (6.35)	.262 (6.65)	.290 (7.37)	.322 (8.18)	109.0 (162.2)	1.5 (38.1)
MS2-480	.145 (3.68)	7/.0483 SPC	.408 (10.36)	.420 (10.67)	.448 (11.38)	.488 (12.40)	220.0 (327.4)	3.0 (76.2)

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M).

SPC: Silver-plated copper.

Electrical Performance

Thermax P/N	Velocity of Propagation	Capacitance (pF/ft)	Attenuation (dB/100 ft.)						Average Power (W), @ 1 GHz, 20° C
			500 MHz	1 GHz	3 GHz	5 GHz	10 GHz	18 GHz	
MS2-110	75%	26	14.3	20.7	36.4	47.0	69.0	96.5	299
MS2-140	75%	26	10.5	15.2	26.6	34.4	49.0	69.5	532
MS2-190	75%	26	7.0	10.1	17.6	23.8	34.4	49.0	1135
MS2-250	76%	26	5.5	7.6	13.5	17.7	26.0	38.5	2016
MS2-320	77%	26	3.7	5.3	9.5	12.5	18.4	—	3997
MS2-480	77%	26	2.4	3.3	6.1	8.0	12.3	—	8302

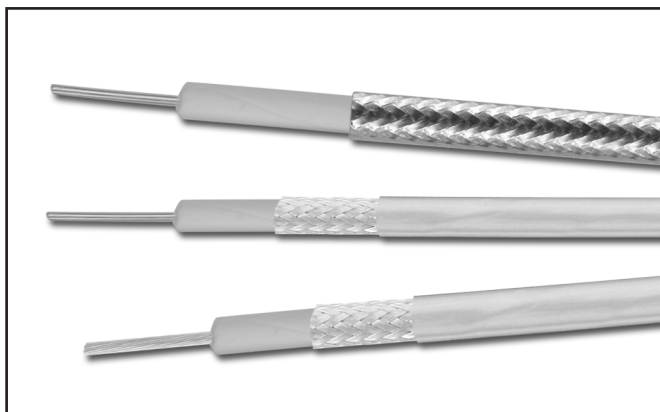
All values are nominal unless otherwise indicated.

CellTec high-velocity coaxial cable

CellTec™ low-density foam fluoropolymer dielectric gives these coaxial cables high velocity of propagation, small size, and stable performance.

They are ideal for use in computer interconnect, telecommunications, and automated test equipment.

These cables are just some examples of the performance levels provided by CellTec dielectric—many other configurations are also available, including composite shielded types.



Construction Details

Center Conductor: Stranded silver-plated copper alloy (SPCA).

Dielectric: CellTec.

Shield: Tin- or silver-plated copper braid, 95% minimum coverage.

Jacket: Extruded FEP. Other jacket materials available.

Physical Properties

AWG / Impedance	Conductor			Insulation Diameter	Shield Type	Jacket Diameter
	Material	Stranding	Diameter			
26 / 52Ω	SPCA	7 or 19	.019 (.48)	.050 (1.3)	SPC	.082 (2.1)
28 / 52Ω	SPCA	7 or 19	.015 (.38)	.040 (1.0)	SPC	.072 (1.8)
28 / 75Ω	SPCA	7 or 19	.015 (.38)	.064 (1.6)	SPC	.096 (2.4)
30 / 75Ω	SPCA	7 or 19	.012 (.30)	.050 (1.3)	SPC	.082 (2.1)

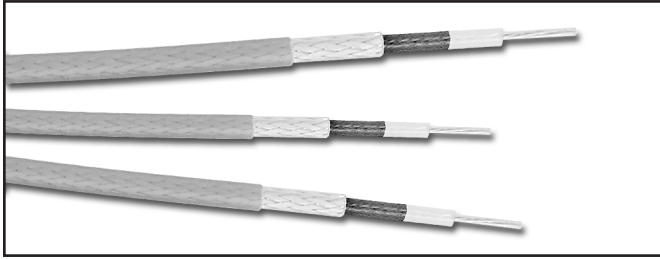
Dimensions in inches (mm). **SPC:** Silver-plated copper. **SPCA:** Silver-plated copper alloy.

Electrical Performance

AWG	Impedance	Capacitance (pF/ft)	Velocity of Propagation	Attenuation (dB / 100 feet @ 400 MHz)
26	52	24	82%	15.5
28	52	24	82%	20.3
28	75	16	84%	11.6
30	75	16	84%	14.6

All values are nominal unless otherwise indicated.

Low-Noise Coaxial Cables



Construction Options

Jacket: Tape wrapped PTFE; extruded jacket or our unique **Seamless Wrap** PTFE tape optional.

Shield: Nickel- or silver-plated copper.

Dielectric: Tape wrapped PTFE with semiconductive inner and outer PTFE tape.

Center Conductor: Nickel or silver-plated stranded copper.

Options: Wide variety of options for conductor and shield materials and plating and configurations of low-noise layering available.

Thermax Low-Noise cables minimize triboelectric noise generated by cable movement, as well as providing superior shielding to protect signals from external interference.

These cables are ideal for use with piezoelectric accelerometers or other sensitive transducers, or other applications with low-power signals and/or electrically noisy environments.

They are also used in airborne EVM (Engine Vibration Monitoring) systems, with approvals from many major aerospace manufacturers.

The cables shown below are just a few examples of our low-noise coaxial cable expertise. Many other combinations of materials and construction can be used to produce a low-noise cable that will fulfill your needs; please contact your Thermax representative with your requirements.

Low-Noise Coaxial Cable—Dimensions, Materials, and Weights

Thermax P/N	Conductor AWG / Diameter Stranding / Material	Dielectric Diameter Material	Shield Diameter AWG / Material	Jacket Diameter Material	Weight	Impedance
RGU-404	30 .012 (.30) 7/38 SPCW	.034 (.86) Extruded PTFE	.052 (1.32) 38 SPC	.075 (1.91) Extruded FEP	6.1 (9.1)	50Ω
50-742TFSXE	34 .0075 (.19) 7/42 SPCA	.022 (.56) Extruded PTFE	.034 (.86) 40 SPC	.048 (1.22) Extruded FEP	3.0 (4.5)	50Ω

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M). All values are nominal unless otherwise indicated. **NPC:** Nickel-plated copper. **SPC:** Silver-plated copper. **SPCA:** Silver-plated high-strength copper alloy. **SPCW:** Silver-plated copper-covered steel (copperweld).

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.

MIL-C-17 coaxial and twinaxial cables

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 Ω/100 feet (Ω/100 meters). Dielectric strength in KV RMS. Corona extinction in KV RMS. All values are nominal unless otherwise indicated.