

LSRG Military Shipboard Coax

MIL-C-17 Qualified

- MIL-Spec Air Frame, Shipboard, Ground (Tactical) Interconnect (M17/180–/200)
- Fire Retardant / Low Smoke (non-halogen)
- Flexible For Easy Deployment / Routing



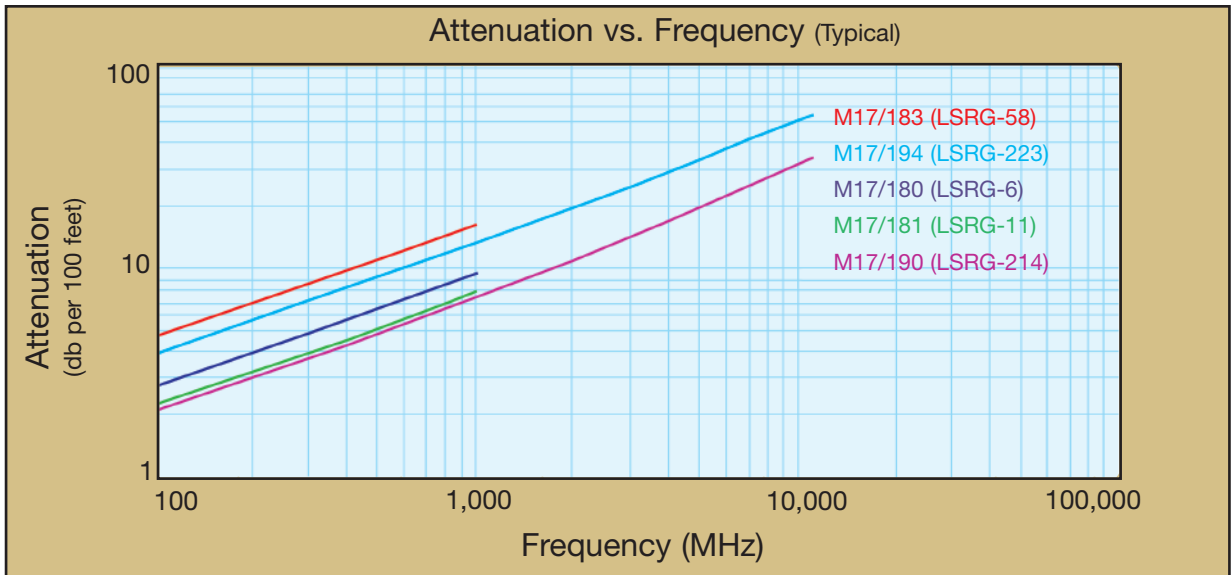
Features & Benefits

- Rugged Abrasion Resistant Jacket
- Excellent Shielding Effectiveness
- Fire Retardant (non-halogen)
- Light Weight
- Flexible for Ease of Deployment
- Excellent Connector Selection

- **Flexible:** With very tight minimum bend radius, LSRG cable can be easily routed into and through tight spaces. Ideal for tactical deployment and retrieval.
- **Excellent Loss:** LSRG has lower loss than other cables of the same size and is significantly less than the M17 spec requirement.
- **Fire Retardant:** A black UV resistant non-halogen, low smoke - fire retardant, cross-linked polyethylene jacket makes the cable rugged and resistant to the full range of military/defense environments. LSRG cables easily achieve FAR 25, NES-711 and NES-713 compliance.
- **RF Shielding:** High coverage (>95%) braids, result in >40-60 dB RF shielding (>80 dB - 120 dB crosstalk) and excellent interference immunity (ingress and egress).
- **Connectors and Assemblies:** A full range of connector interfaces is available in crimp or clamp styles. Custom pre-terminated and tested assemblies with phase matching, insertion loss matching, and other special electrical or marking requirements can also be provided.
- **Reference:** See page 8 for complete listing of qualified M17/180-/200 shipboard cable constructions.

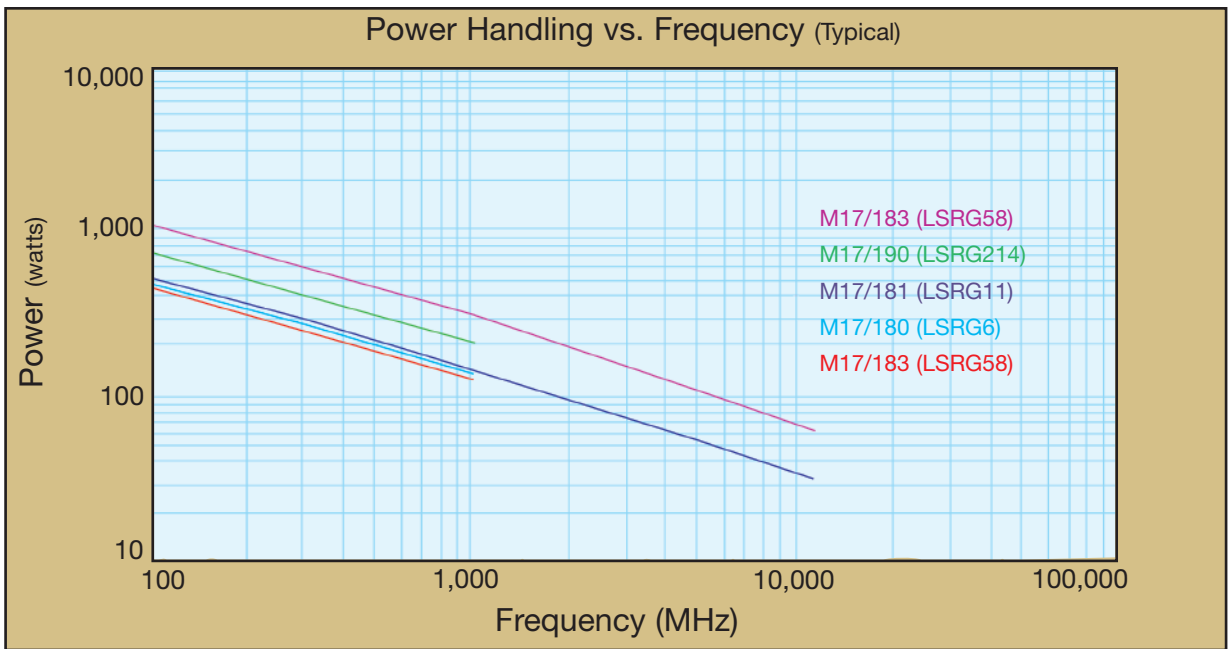
TMS M17 No.	M17 QPL No.	TMS Dwg No.	Conductor inches (mm)	Dielectric inches (mm)	Shields inches (mm)	Jacket inches (mm)	Weight lbs/ft (kg/m)	Impedance (ohms) Vp (%)	Capacitance pF/ft (pF/m)	Max. Op Voltage vms	Temp. Range F (C)	M17 Test Frequency (max)
LS-RG6 M17/180-00001	17-05-92	AA-7276	CCS 0.0285 (0.72)	PE 0.185 (4.70)	34 SC:34 BC 0.243 (6.17)	XLPE 0.332 (8.43)	0.092 (0.137)	75 +/- 3 65.9	20.6 (67.6)	2,700	-22 +185 (-30 +85)	3 GHz UnSwept
LS-RG11 M17/181-00001	17-05-92	AA-7277	TC 7/.0159 0.0477 (1.21)	PE 0.285 (7.24)	33 BC 0.318 (8.08)	XLPE 0.405 (10.29)	0.142 (0.212)	75 +/- 3 65.9	20.6 (67.6)	5,000	-22 +185 (-30 +85)	3 GHz UnSwept
LS-RG58 M17/183-00001	17-05-92	AA-7281	TC 19/.0072 0.108 (2.74)	PE 0.116 (2.95)	36 TC 0.139 (3.53)	XLPE 0.195 (4.95)	0.03 (0.045)	50 +/- 2 65.9	30.8 (101.1)	1,900	-22 +185 (-30 +85)	0.05- 1.0 GHz Swept
LS-RG214 M17/190-00001	17-05-92	AA-7289	SC 7/.0296 0.089 (2.26)	PE 0.285 (7.24)	34 SC:34SC 0.343 (8.71)	XLPE 0.425 (10.80)	0.154 (0.229)	50 +/- 2 65.9	30.8 (101.1)	5,000	-22 +185 (-30 +85)	0.05- 11 GHz Swept
LS-RG223 M17/194-00001	17-05-92	AA-7294	SC 0.035 (0.89)	PE 0.116 (2.95)	36 SC:36 SC 0.162 (4.11)	XLPE 0.212 (5.38)	0.044 (0.066)	50 +/- 2 65.9	30.8 (101.1)	1,900	-22 +185 (-30 +85)	0.05 2.5 GHz Swept

See page 9 for materials abbreviations.



Frequency (MHz)	10	30	50	100	400	1,000	1,500	2,000	2,500	3,000	11,000	k1	k2
M17/183 (LSRG-58)	1.4	2.5	3.2	4.6	9.4	15	-	-	-	-	-	0.44400	0.00126
M17/194 (LSRG-223)	1.2	2.1	2.8	4.0	8.2	13	17	20	22	25	54	0.38400	0.00126
M17/180 (LSRG-6)	0.8	1.4	1.9	2.7	5.6	9.4	-	-	-	-	-	0.25600	0.00126
M17/181 (LSRG-11)	0.7	1.1	1.5	2.2	4.6	7.7	-	-	-	-	-	0.20300	0.00126
M17/190 (LSRG-214)	0.6	1.1	1.4	2.0	4.3	7.3	9.2	11.0	12.7	14.2	33.8	0.19000	0.00126

Attenuation at Any Frequency = [k1 x \sqrt{Fmhz}] + [k2 x Fmhz]; dB per 100 feet



Power Handling vs. Frequency (Typical)

Frequency (MHz)	10	30	50	100	400	1,000	1,500	2,000	2,500	3,000	11,000
M17/190 (LSRG-214)	3611	2053	1573	1091	512	302	237	198	172	153	63
M17/181 (LSRG-11)	2477	1409	1081	751	353	209	-	-	-	-	-
M17/180 (LSRG-6)	1718	980	753	525	250	149	-	-	-	-	-
M17/194 (LSRG-223)	1568	898	691	483	233	141	113	95	84	75	33
M17/183 (LSRG-58)	1436	822	634	444	215	131	-	-	-	-	-

Watts; Sea Level; Ambient +40C; VSWR 1:1