

Harbour Industries MIL-C-17 Coaxial Cables

Physical Characteristics

| M17 Number | Center Conductor | PTFE Dielectric Diameter | Shield | Jacket | Overall Diameter | Minimum Recommended Bend Radius | Operating Temp. (%C) | Weight (lbs./MFT) | Comments |
|-----------------------------------|------------------------|--------------------------|--------|--------|------------------|---------------------------------|----------------------|-------------------|-------------------------------------|
| M17/60-RG142 | .037" SCCS | .116" | SPC(2) | FEP | .195" | 1.0" | -55 +200 | 43.0 | |
| M17/93-RG178 | .0120"(7/.004")SCCS | .033" | SPC | FEP | .071" | 0.4" | -55 +200 | 6.3 | |
| M17/93-00001 | .0120"(7/.004")SCCS | .033" | SPC | PFA | .071" | 0.4" | -55 +200 | 6.3 | M17/93-RG178 w/extended temp. range |
| M17/94-RG179 | .0120"(7/.004")SCCS | .063" | SPC | FEP | .100" | 0.4" | -55 +200 | 10.8 | |
| M17/95-RG180 | .0120"(7/.004")SCCS | .102" | SPC | FEP | .141" | 0.7" | -55 +200 | 19.8 | |
| M17/110-RG302 | .0253"SCCS | .146" | SPC | FEP | .202" | 1.0" | -55 +200 | 40.0 | |
| M17/111-RG303 | .037"SCCS | .116" | SPC | FEP | .170" | 0.9" | -55 +200 | 31.0 | |
| M17/112-RG304 | .059" SCCS | .185" | SPC(2) | FEP | .280" | 1.4" | -55 +200 | 94.0 | |
| M17/113-RG316 | .0201"(7/.0067")SCCS | .060" | SPC | FEP | .098" | 0.5" | -55 +200 | 12.2 | |
| M17/127-RG393 | .094"(7/.0312")SC | .285" | SPC(2) | FEP | .390" | 2.0" | -55 +200 | 165.0 | |
| M17/128-RG400 | .0384"(19/.008")SC | .116" | SPC(2) | FEP | .195" | 1.0" | -55 +200 | 50.0 | |
| M17/131-RG403 | .0120"(7/.004")SCCS | .033" | SPC(2) | FEP(2) | .116" | 0.6" | -55 +200 | 15.0 | Triaxial M17/93-RG178 |
| M17/152-0001 | .0201"(7/.0067")SCCS | .060" | SPC(2) | FEP | .114" | 0.6" | -55 +200 | 18.5 | Double shielded M17/113-RG316 |
| M17/158-00001 | .037"SCCS | .116" | SPC(2) | FEP | .195" | 1.0" | -55 +200 | 56.0 | Unswpt M17/60-RG142 |
| M17/169-00001 | .0120"(7/.004")SCCS | .033" | SPC | FEP | .071" | 0.4" | -55 +200 | 6.3 | Unswpt M17/93-RG178 |
| M17/170-00001 | .037"(SCCS | .116" | SPC | FEP | .170" | 0.9" | -55 +200 | 39.0 | Unswpt M17/111-RG303 |
| M17/172-00001 | .0201"(7/.0067")SCCS | .060" | SPC | FEP | .098" | 0.5" | -55 +200 | 11.5 | Unswpt M17/113-RG316 |
| M17/174-00001 | .094"(7/.0312")SCCS | .285" | SPC(2) | FEP | .390" | 2.0" | -55 +200 | 175.0 | Unswpt M17/127-RG393 |
| M17/175-00001 | .0384"(19/.008")SC | .116" | SPC(2) | FEP | .390" | 1.0" | -55 +200 | 50.0 | Unswpt M17/128-RG400 |
| M17/176-00002 | .0235"(19/.005")SPA(2) | .042" | SPA | PFA | .129" | 0.6" | -55 +200 | 18.0 | Controlled impedance twinax |
| PTFE Tape Wrap Jacketed RG Cables | | | | | | | | | |
| RG 187 A/U | .0120"(7/.004)SCCS | .063 | SPC | PTFE | .100" | 0.5" | -55 +250 | 10.0 | Flexible, 250° C. rated |
| RG 188 A/U | .0201"(7/.0067)SCCS | .060 | SPC | PTFE | .100" | 0.5" | -55 +250 | 11.0 | Flexible, 250° C. rated |
| RG 195 A/U | .0120"(7/.004)SCCS | .102 | SPC | PTFE | .141" | 0.7" | -55 +250 | 18.0 | Flexible, 250° C. rated |
| RG 196 A/U | .0120"(7/.004)SCCS | .034 | SPC | PTFE | .080" | 0.4" | -55 +250 | 6.0 | Flexible, 250° C. rated |

Electrical Characteristics

| M17 Number | Impeence (ohms) | Capacitance (pF/ft) | Max. Operating Voltage (RMS) | Maximum attenuation (db/100ft) @ | | | | | | Max Frequency (GHz) |
|-----------------------------------|-----------------|---------------------|------------------------------|----------------------------------|---------|-------|-------|-------|--------|---------------------|
| | | | | 100 MHz | 400 MHz | 1 GHz | 3 GHz | 5 GHz | 10 GHz | |
| M17/60-RG142 | 50 +/- 2 | 29.4 | 1900 | 5.5 | 11.7 | 19.0 | 35.0 | 48.0 | - | 12.4 |
| M17/93-RG178 | 50 +/- 2 | 29.4 | 1000 | 16.0 | 33.0 | 52.0 | 94.0 | - | - | 3.0 |
| M17/93-00001 | 50 +/- 2 | 29.4 | 1000 | 16.0 | 33.0 | 52.0 | 94.0 | - | - | 3.0 |
| M17/94-RG179 | 50 +/- 3 | 19.4 | 1200 | - | 21.0 | - | -- | - | - | - |
| M17/95-RG180 | 95 +/- 5 | 16.4 | 1500 | - | 17.0 | - | -- | - | - | - |
| M17/110-RG302 | 50 +/- 3 | 19.4 | 2300 | - | 8.0 | - | 26.0 | - | - | - |
| M17/111-RG303 | 50 +/- 2 | 29.4 | 1900 | 3.9 | 8.0 | 15.0 | 28.0 | - | - | - |
| M17/112-RG304 | 50 +/- 2 | 29.4 | 3000 | 2.7 | 6.4 | 11.1 | 22.0 | 30.0 | - | 8.0 |
| M17/113-RG316 | 50 +/- 2 | 29.4 | 1200 | 11.0 | 21.0 | 38.0 | 58.0 | - | - | 3.0 |
| M17/127-RG393 | 50 +/- 2 | 29.4 | 2500 | 2.4 | 5.0 | 8.8 | 18.0 | 24.6 | 37.0 | 11.0 |
| M17/128-RG400 | 50 +/- 2 | 29.4 | 1900 | 4.5 | 10.5 | 17.0 | 38.0 | 50.0 | 78.0 | 12.0 |
| M17/131-RG403 | 50 +/- 2 | 29.4 | 1000 | - | 37.0 | - | -- | - | 10.0 | - |
| M17/152-00001 | 50 +/- 2 | 29.4 | 1200 | 11.5 | 24.0 | 40.0 | 75.0 | 110.0 | 170.0 | 12.0 |
| M17/158-00001 | 50 +/- 2 | 29.4 | 1900 | - | 9.5 | - | - | - | - | - |
| M17/169-00001 | 50 +/- 2 | 29.4 | 1000 | - | 29.0 | - | - | - | - | - |
| M17/170-00001 | 50 +/- 2 | 29.4 | 1900 | - | 8.6 | - | - | - | - | - |
| M17/172-00001 | 50 +/- 2 | 29.4 | 1200 | - | 21.0 | - | - | - | - | - |
| M17/174-00001 | 50 +/- 2 | 29.4 | 2500 | - | 5.0 | - | - | - | - | - |
| M17/175-00001 | 50 +/- 2 | 29.4 | 1900 | - | 10.5 | - | - | - | - | - |
| M17/176-00002 | 77 +/- 7 | 19.0 | 1000 | - | - | - | - | - | - | - |
| PTFE Tape Wrap Jacketed RG Cables | | | | | | | | | | |
| RG 187 A/U | 75 +/- 3 | 19.4 | 1200 | - | 21.0 | - | - | - | - | 3 |
| RG 188 A/U | 50 +/- 2 | 29.4 | 1200 | 11.0 | 21.0 | 38.0 | 58.0 | - | - | 3 |
| RG 195 A/U | 95 +/- 5 | 15.4 | 1500 | - | 17.0 | - | - | - | - | 3 |
| RG 196 A/U | 50 +/- 2 | 29.4 | 1000 | - | 29.0 | - | - | - | - | - |

"Maximum frequencies" are those as referenced on individual slant sheets of the MIL-C-17 specification. No values are given for unswpt constructions as the specification recommends these cables should not be used above 400 MHz. (All figures referenced above are nominal unless otherwise specified.)