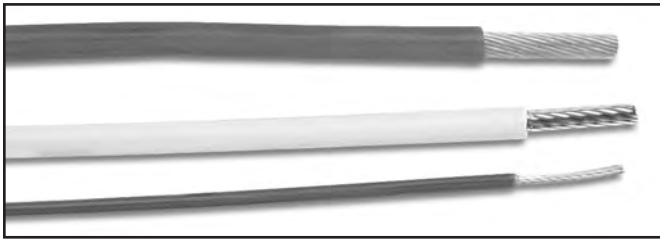


MIL-W-22759/16, /17 wire—extruded ETFE insulation



Construction Details

Insulation: Extruded ETFE.

Conductor: /16: Tin-plated copper;
/17: Silver-plated, high strength copper alloy.

Colors: Color coded to MIL-STD-104.

Identification: to M22759.

MIL-W-22759/16 and /17 wires have extruded ETFE insulation for aerospace and other applications requiring light weight, tight diameter tolerances, and enhanced mechanical toughness.

ETFE insulation also provides exceptional resistance to radiation and chemicals.

For versions of these wires with thinner-wall insulation for light weight, see M22759/18 and /19 (following page).

See page 70 for a selection of M27500 shielded and jacketed cables incorporating these wires.

Performance:

Voltage rating: 600V.

Temperature rating: /16, /17: -55 to 150° C

Dimensions, Resistance, and Weights—M22759/16 (tin-plated copper conductor)

M22759 P/N	AWG Size	Stranding	Conductor Diameter	Insulation Diameter		Weight	Maximum Resistance	Thermax P/N
				Minimum	Maximum			
M22759/16-02-*	2/0	1330/30	.460 (11.7)	.539 (13.7)	.553 (14.0)	485 (722)	.091 (.299)	2/0-ACFZ-1330/30
M22759/16-01-*	1/0	1045/30	.412 (10.5)	.473 (12.0)	.485 (12.3)	380 (566)	.126 (.380)	1/0-ACFZ-1045/30
M22759/16-1-*	1	817/30	.370 (9.40)	.426 (10.8)	.436 (11.1)	293 (437)	.149 (.489)	1-ACFZ-81730
M22759/16-2-*	2	665/30	.330 (8.38)	.384 (9.75)	.392 (9.96)	231 (344)	.183 (.600)	2-ACFZ-66530
M22759/16-4-*	4	133/25	.260 (6.60)	.308 (7.82)	.316 (8.03)	152 (227)	.280 (.916)	4-ACFZ-13325
M22759/16-6-*	6	133/27	.202 (5.13)	.247 (6.27)	.253 (6.43)	96.9 (144)	.445 (1.46)	6-ACFZ-13327
M22759/16-8-*	8	133/29	.162 (4.11)	.196 (4.98)	.202 (5.13)	61.5 (91.5)	.701 (2.30)	8-ACFZ-13329
M22759/16-10-*	10	37/26	.110 (2.79)	.136 (3.45)	.142 (3.61)	34.0 (50.6)	1.26 (4.13)	10-ACFZ-3726
M22759/16-12-*	12	37/28	.086 (2.18)	.111 (2.82)	.117 (2.97)	21.8 (32.4)	2.02 (6.63)	12-ACFZ-3728
M22759/16-14-*	14	19/27	.067 (1.70)	.091 (2.31)	.095 (2.41)	14.5 (21.6)	3.06 (10.0)	14-ACFZ-1927
M22759/16-16-*	16	19/29	.053 (1.35)	.077 (1.96)	.081 (2.06)	9.68 (14.4)	4.81 (15.8)	16-ACFZ-1929
M22759/16-18-*	18	19/30	.048 (1.22)	.069 (1.75)	.073 (1.85)	7.65 (11.4)	6.23 (20.4)	18-ACFZ-1930
M22759/16-20-*	20	19/32	.038 (.97)	.058 (1.47)	.062 (1.57)	5.18 (7.71)	9.88 (32.4)	20-ACFZ-1932
M22759/16-22-*	22	19/34	.030 (.76)	.050 (1.27)	.054 (1.37)	3.52 (5.24)	16.2 (53.1)	22-ACFZ-1934
M22759/16-24-*	24	19/36	.024 (.61)	.043 (1.09)	.047 (1.19)	2.45 (3.65)	26.2 (85.9)	24-ACFZ-1936

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M). Resistance in Ω /1,000 feet (Ω /Km), @20° C.

All values are nominal unless otherwise indicated.

* Add color coding per MIL-STD-104 (see page 36).

Dimensions, Resistance, and Weights—M22759/17 (silver-plated copper alloy conductor)

M22759 P/N	AWG Size	Stranding	Conductor Diameter	Insulation Diameter		Weight	Maximum Resistance	Break Strength	Thermax P/N
				Minimum	Maximum				
M22759/17-20-*	20	19/32	.038 (.97)	.058 (1.47)	.062 (1.57)	4.96 (7.38)	10.7 (35.1)	58.1 (26.4)	20-ACFTF-1932
M22759/17-22-*	22	19/34	.030 (.76)	.050 (1.27)	.054 (1.37)	3.40 (5.06)	17.5 (57.4)	35.8 (16.2)	22-ACFTF-1934
M22759/17-24-*	24	19/36	.024 (.61)	.043 (1.09)	.047 (1.19)	2.32 (3.45)	28.4 (93.2)	22.4 (10.2)	24-ACFTF-1936
M22759/17-26-*	26	19/38	.019 (.48)	.038 (.97)	.042 (1.07)	1.67 (2.49)	44.8 (147)	14.2 (6.44)	26-ACFTF-1938

Dimensions in inches (mm). Weights in pounds/1000 feet (Kg/1000 M). Resistance in Ω /1,000 feet (Ω /Km), @20° C.

Break strength in pounds (Kg) minimum.

All values are nominal unless otherwise indicated.

* Add color coding per MIL-STD-104 (see page 36).