

MIL-W-22759/18, /19 wire—extruded thin-wall ETFE insulation

MIL-W-22759/18 and /19 wires have thin-wall extruded ETFE insulation for aerospace and other applications requiring light weight, tight diameter tolerances, and enhanced mechanical toughness.

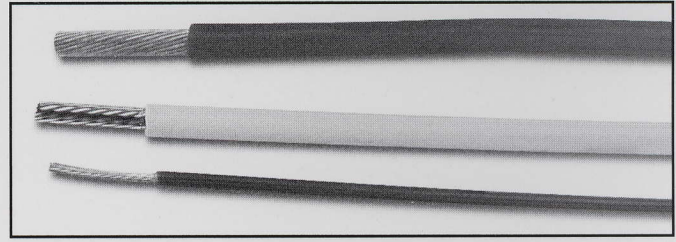
ETFE insulation also provides exceptional resistance to radiation and chemicals.

See page 71 for a selection of M27500 shielded and jacketed cables incorporating these wires.

Performance:

Voltage rating: 600V.

Temperature rating: /18, /19: -55 to 150° C



Construction Details

Insulation: thin-wall extruded ETFE.

Conductor: /18: Tin-plated copper;
/19: Silver-plated, high strength copper alloy.

Colors: Color coded to MIL-STD-104.

Identification: to M22759.

Dimensions, Resistance, and Weights—M22759/18 (tin-plated copper conductor)

M22759 P/N	AWG Size	Stranding	Conductor Diameter	Insulation Diameter		Weight	Maximum Resistance	Thermax P/N
				Minimum	Maximum			
M22759/18-10-*	10	37/26	.110 (2.79)	.131 (3.33)	.137 (3.48)	33.1 (49.3)	1.26 (4.13)	10-AMCFZ-3726
M22759/18-12-*	12	37/28	.086 (2.18)	.104 (2.64)	.110 (2.80)	21.0 (31.3)	2.02 (6.63)	12-AMCFZ-3728
M22759/18-14-*	14	19/27	.067 (1.70)	.083 (2.11)	.087 (2.21)	13.7 (20.4)	3.06 (10.0)	14-AMCFZ-1927
M22759/18-16-*	16	19/29	.053 (1.35)	.068 (1.73)	.072 (1.83)	8.93 (13.3)	4.81 (15.8)	16-AMCFZ-1929
M22759/18-18-*	18	19/30	.047 (1.19)	.059 (1.50)	.063 (1.60)	6.89 (10.3)	6.23 (20.4)	18-AMCFZ-1930
M22759/18-20-*	20	19/32	.038 (.97)	.049 (1.24)	.053 (1.35)	4.60 (6.85)	9.88 (32.4)	20-AMCFZ-1932
M22759/18-22-*	22	19/34	.030 (.76)	.041 (1.04)	.045 (1.14)	3.04 (4.52)	16.2 (53.1)	22-AMCFZ-1934
M22759/18-24-*	24	19/36	.024 (.61)	.034 (.86)	.038 (.97)	2.02 (3.01)	26.2 (85.9)	24-AMCFZ-1936
M22759/18-26-*	26	19/38	.019 (.48)	.030 (.76)	.034 (.86)	1.45 (2.26)	41.3 (135)	26-AMCFZ-1938

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—M22759/19 (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				
M22759/19-20-*	20	19/32	.038 (.97)	.049 (1.24)	.053 (1.35)	4.45 (6.62)	10.7 (35.1)	58.1 (26.4)	20-AMCFTF-1932
M22759/19-22-*	22	19/34	.030 (.76)	.041 (1.04)	.045 (1.14)	2.87 (4.27)	17.5 (57.4)	35.8 (16.2)	22-AMCFTF-1934
M22759/19-24-*	24	19/36	.024 (.61)	.034 (.86)	.038 (.97)	1.92 (2.86)	28.4 (93.2)	22.4 (10.2)	24-AMCFTF-1936
M22759/19-26-*	26	19/38	.019 (.48)	.030 (.76)	.034 (.86)	1.36 (2.02)	44.8 (147)	14.2 (6.44)	26-AMCFTF-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).