

# MIL-W-22759/11, /12 wire—extruded PTFE insulation

MIL-W-22759/11 and /12 wires have extruded PTFE insulation for high-temperature applications where the additional abrasion resistance of mineral-filled PTFE insulation is not required. These wires are especially well-suited in applications where smoke emission, overload stability, and flammability are major concerns.

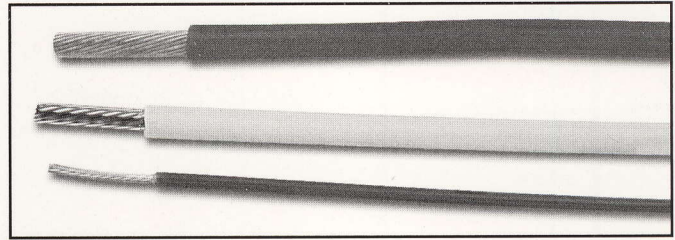
These wires are similar to MIL-W-22759/9 and /10 wires, but have a thinner-wall insulation and 600V voltage rating.

See page 69 for a selection of M27500 shielded and jacketed cables incorporating these wires.

## Performance:

**Voltage rating:** 600V.

**Temperature rating:** /11: -55 to 200° C  
/12: -55 to 260° C



## Construction Details

**Insulation:** Thin-wall extruded PTFE.

**Conductor:** /11: Silver-plated copper;  
/12: Nickel-plated copper.

**Colors:** Color coded to MIL-STD-104.

**Identification:** to M22759.

## Dimensions, Resistance, and Weights—M22759/11 (silver-plated conductor)

M22759 P/N	AWG Size	Stranding	Conductor Diameter	Insulation Diameter		Weight	Maximum Resistance	Thermax P/N
				Minimum	Maximum			
M22759/11-8-*	8	133/29	.162 (4.11)	.198 (5.03)	.206 (5.23)	57.8 (86.1)	.658 (2.16)	8-ATE-13329
M22759/11-10-*	10	37/26	.108 (2.74)	.135 (3.43)	.143 (3.63)	34.9 (52.0)	1.19 (3.90)	10-ATE-3726
M22759/11-12-*	12	19/25	.086 (2.18)	.108 (2.74)	.114 (2.90)	23.5 (35.0)	1.81 (5.94)	12-ATE-1925
M22759/11-14-*	14	19/27	.067 (1.70)	.088 (2.24)	.092 (2.34)	14.7 (21.9)	2.88 (9.45)	14-ATE-1927
M22759/11-16-*	16	19/29	.053 (1.35)	.073 (1.85)	.077 (1.96)	9.64 (14.3)	4.52 (14.8)	16-ATE-1929
M22759/11-18-*	18	19/30	.047 (1.19)	.066 (1.68)	.070 (1.78)	7.58 (11.3)	5.79 (19.0)	18-ATE-1930
M22759/11-20-*	20	19/32	.038 (.97)	.056 (1.42)	.060 (1.52)	5.15 (7.66)	9.19 (30.1)	20-ATE-1932
M22759/11-22-*	22	19/34	.030 (.76)	.047 (1.19)	.051 (1.30)	3.44 (5.12)	15.1 (49.5)	22-ATE-1934
M22759/11-24-*	24	19/36	.024 (.61)	.041 (1.04)	.045 (1.14)	2.44 (3.59)	24.3 (79.7)	24-ATE-1936
M22759/11-26-*	26	19/38	.019 (.48)	.036 (.91)	.040 (1.02)	1.74 (2.59)	38.4 (126)	26-ATE-1938
M22759/11-28-*	28	7/36	.015 (.38)	.031 (.79)	.035 (.89)	1.22 (1.82)	63.8 (209)	28-ATE-736

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

All values are nominal unless otherwise indicated. \* Add color coding per MIL-STD-104 (see page 36).

## Dimensions, Resistance, and Weights—M22759/12 (nickel-plated conductor)

M22759 P/N	AWG Size	Stranding	Conductor Diameter	Insulation Diameter		Weight	Maximum Resistance	Thermax P/N
				Minimum	Maximum			
M22759/12-8-*	8	133/29	.163 (4.14)	.200 (5.08)	.208 (5.28)	58.8 (87.5)	.694 (2.28)	8-ATEN-13329
M22759/12-10-*	10	37/26	.109 (2.77)	.135 (3.43)	.143 (3.63)	35.5 (52.8)	1.24 (4.07)	10-ATEN-3726
M22759/12-12-*	12	19/25	.086 (2.18)	.108 (2.74)	.114 (2.90)	24.0 (35.7)	1.89 (6.20)	12-ATEN-1925
M22759/12-14-*	14	19/27	.067 (1.70)	.088 (2.24)	.092 (2.34)	14.8 (22.0)	3.00 (9.84)	14-ATEN-1927
M22759/12-16-*	16	19/29	.053 (1.35)	.073 (1.85)	.077 (1.96)	9.74 (14.5)	4.76 (15.6)	16-ATEN-1929
M22759/12-18-*	18	19/30	.047 (1.19)	.066 (1.68)	.070 (1.78)	7.64 (11.4)	6.10 (20.0)	18-ATEN-1930
M22759/12-20-*	20	19/32	.038 (.97)	.056 (1.42)	.060 (1.52)	5.19 (7.72)	9.77 (32.0)	20-ATEN-1932
M22759/12-22-*	22	19/34	.030 (.76)	.047 (1.19)	.051 (1.30)	3.46 (5.15)	16.0 (52.5)	22-ATEN-1934
M22759/12-24-*	24	19/36	.024 (.61)	.041 (1.04)	.045 (1.14)	2.42 (3.60)	25.9 (85.0)	24-ATEN-1936
M22759/12-26-*	26	19/38	.019 (.48)	.036 (.914)	.040 (1.02)	1.75 (2.60)	42.2 (138)	26-ATEN-1938
M22759/12-28-*	28	7/36	.015 (.38)	.031 (.79)	.035 (.89)	1.23 (1.83)	67.9 (223)	28-ATEN-736

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

All values are nominal unless otherwise indicated. \* Add color coding per MIL-STD-104 (see page 36).