



# Cross-linked ETFE - 600V Military

Normal Weight Wall

MIL-W-22759/34 & /35

## Application

These normal weight, high temperature airframe and avionics wires utilize a dual layer insulation of cross-linked, modified ethylene tetrafluoroethylene copolymer (ETFE). The contrasting colors of the layers provide a visual indication of possible abrasion or other mechanical damage due to physical abuse during service or installation. The insulation resists high PH cleaning fluids, fuel, lubricating oils, and many other chemicals. These wires can withstand temperature test extremes ranging from cold bend at  $-65^{\circ}\text{C}$  through aging at  $300^{\circ}\text{C}$  for 7 hours. These wires are a mechanically tough, flame retardant, and weight saving solution to many electronic applications.

## Conductor

Soft annealed tinned copper for /34 and silver-plated high strength copper alloy for /35, stranded as listed below.

## Insulation

Dual layer of irradiation cross-linked extruded ETFE meeting the requirements of the above specification. The primary insulation shall be of a contrasting pigmentation to that of the outer insulation.

## Approvals & Ratings

150°C conductor temperature, 600 volt.  
MIL-W-22759/34.

200°C conductor temperature, 600 volt.  
MIL-W-22759/35.

## Cables

Cables may be assembled using the requirements of MIL-C-27500, using Type SD and SE components for /34 and /35 respectively.

Product Number	Conductor Size		Stranding	Max. Strand Diameter		Nominal Diameter		Max. Weight	
	(AWG)	(mm <sup>2</sup> )		(Inch)	(mm)	(Inch)	(mm)	(#/m <sup>2</sup> )	(kg/km)
M22759/34-24	24	.24	19/36	.026	.66	.045	1.14	2.3	3.42
M22759/34-22	22	.38	19/34	.033	.84	.050	1.27	3.2	4.76
M22759/34-20	20	.62	19/32	.041	1.04	.058	1.47	4.7	6.99
M22759/34-18	18	.96	19/30	.051	1.29	.070	1.78	7.2	10.7
M22759/34-16	16	1.23	19/29	.058	1.47	.077	1.95	9.0	13.4
M22759/34-14	14	1.94	19/27	.073	1.85	.094	2.39	13.8	20
M22759/34-12	12	3.08	37/28	.090	2.29	.111	2.82	20.5	30
M22759/34-10	10	4.74	37/26	.114	2.89	.134	3.40	32.4	48
M22759/35-26	26	.15	19/38	.020	.51	.040	1.02	1.7	2.53
M22759/35-24	24	.24	19/36	.025	.63	.045	1.14	2.3	3.42
M22759/35-22	22	.38	19/34	.032	.81	.050	1.27	3.3	4.91
M22759/35-20	20	.62	19/32	.040	1.02	.058	1.47	4.8	7.14