



# Cross-linked ETFE 600V, 200°C

**Military**

Normal Weight Wall

**MIL-W-22759/41 & /42**

## 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

Nickel-coated copper for /41 and nickel-coated high strength copper alloy for /42, 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

200°C conductor temperature, 600 volt.  
MIL-W-22759/41 and /42.

## Cables

Cables may be assembled using the requirements of MIL-C-27500, using Type SM and SN components of /41 and /42 respectively.

Product Number	Conductor Size		Stranding	Max. Strand Diameter		Nominal Diameter		Max. Weight	
	(AWG)	(mm <sup>2</sup> )		(Inch)	(mm)	(Inch)	(mm)	(#/m')	(kg/km)
M22759/41-26	26	.15	19/38	.021	.53	.040	1.02	1.7	2.53
M22759/41-24	24	.24	19/36	.026	.66	.045	1.14	2.3	3.42
M22759/41-22	22	.38	19/34	.033	.84	.050	1.27	3.2	4.76
M22759/41-20	20	.62	19/32	.041	1.04	.058	1.47	4.7	6.99
M22759/41-18	18	.96	19/30	.051	1.29	.070	1.78	7.2	10.7
M22759/41-16	16	1.23	19/29	.058	1.47	.077	1.95	9.0	13.4
M22759/41-14	14	1.94	19/27	.073	1.85	.094	2.39	13.8	20
M22759/41-12	12	3.08	37/28	.090	2.29	.111	2.82	20.5	30
M22759/41-10	10	4.74	37/26	.114	2.89	.134	3.40	32.4	48
M22759/41-8	8	8.61	133/29	.173	4.39	.195	4.95	64.2	95
M22759/41-6	6	13.6	133/27	.217	5.57	.241	6.12	96.8	144
M22759/41-4	4	22.0	133/25	.274	6.96	.310	7.87	163.0	242
M22759/42-26	26	.15	19/38	.021	.53	.040	1.02	1.7	2.53
M22759/42-24	24	.24	19/36	.026	.66	.045	1.14	2.3	3.42
M22759/42-22	22	.38	19/34	.033	.84	.050	1.27	3.3	4.91
M22759/42-20	20	.62	19/32	.041	1.04	.058	1.47	4.8	7.14