



# Cross-Linked Polyalkene-PVF 600V, 150°C

Military

Light Weight Wall

MIL-W-81044/12 Wire

## Application

This dual layer, light weight, high temperature wire offers outstanding performance that makes it suitable for many applications where high density cabling and harnessing are required. Besides offering size and weight advantages, these wires have excellent resistance to cut-through, abrasion, cold flow, shrink back, notch propagation, and common chemicals. In addition, they strip and stripe easily, may be potted, and have low smoke characteristics. This wire should be considered for airframe, avionics, military vehicle, shipboard, missile, and other electronic applications.

## Conductor

Soft annealed tinned copper, stranded as listed below.

## Insulation

Irradiation cross-linked extruded Polyalkene meeting the requirements of the above specification.

## Jacket

Clear Irradiation cross-linked extruded Polyvinylidene Fluoride (PVF) with a wall thickness of  $0.003 \pm .001$  inches ( $.076 \pm .025$ mm). Finished wire diameter and weight as listed below.

## Approvals & Ratings

150°C conductor temperature, 600 volt.  
MIL-W-81044/12.

## Cables

Cables may be assembled using the requirements of MIL-C-27500, using Type ML components.

Product Number	Conductor Size		Stranding	Max. Strand Diameter		Nominal Diameter		Maximum Weight	
	(AWG)	(mm <sup>2</sup> )		(Inch)	(mm)	(Inch)	(mm)	(#/M <sup>2</sup> )	(kg/km)
M81044/12-30	30	.06	7/38	0.013	.33	0.029	.74	0.71	1.06
M81044/12-28	28	.09	7/36	0.016	.41	0.032	.81	0.96	1.43
M81044/12-26	26	.15	19/38	0.021	.53	0.036	.91	1.4	2.08
M81044/12-24	24	.24	19/36	0.026	.66	0.042	1.07	2.1	3.12
M81044/12-22	22	.38	19/34	0.033	.84	0.049	1.24	3.1	4.61
M81044/12-20	20	.62	19/32	0.041	1.04	0.057	1.45	4.6	6.84
M81044/12-18	18	.96	19/30	0.051	1.29	0.067	1.70	7.0	10.4
M81044/12-16	16	1.23	19/29	0.058	1.47	0.075	1.90	8.9	13.2
M81044/12-14	14	1.94	19/27	0.073	1.85	0.093	2.36	13.9	21
M81044/12-12	12	4.74	37/28	0.090	2.29	0.112	2.84	21.7	32