

X-Olene UV FMR® Type PV Photovoltaic Wire Rated 600V, 1000V or 2000V

Copper or Aluminum Conductor
Rated 90°C Conductor Temperature



A Copper or Aluminum
B X-Olene UV FMR Insulation

Insulation

X-Olene UV FMR is Okonite's trade name for its chemically cross-linked polyethylene insulating compound with outstanding electrical, mechanical and physical properties. Its excellent weather resistant properties make it the perfect insulation for use in photovoltaic applications.

Applications

X-Olene® UV FMR Type PV insulated wire delivers reliable performance in demanding solar installations. Designed for all NEC-permitted raceway and cable wiring methods, it is specifically listed for use in photovoltaic (PV) arrays and as part of listed PV systems. Engineered for durability, this UV - and weather-resistant PV wire is rated for continuous operation at 90°C in both wet and dry locations, ensuring long-lasting, safe, and efficient energy delivery.

Specifications

Conductor: The conductor shall be of soft annealed uncoated copper or aluminum Class B stranding.

Copper conductors sizes #14 - #10 AWG shall be compressed per ASTM B-8 and sizes #8 AWG-1000 kcmil shall be compact per ASTM B-496.

Aluminum conductors shall be compressed 8000 series alloy per ASTM B-800.

Insulation: Meets or exceeds electrical and physical requirements of UL 4703 and UL 44, as applicable.

Product Features

- Ideal for use in photovoltaic (PV) arrays.
- Suitable for all NEC-permitted raceway and cable wiring methods.
- Approved for use as part of listed PV systems.
- Designed for both residential and commercial solar installations.
- Suitable for outdoor and harsh-environment applications.
- Compatible with wet or dry locations up to 90°C.
- UL Listed Type PV, -40°C, Sun Res, and VW-1.
- Built for Performance. Designed for Solar.
- Default insulation color is black. Alternate colors available upon request.

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Product Data Section 3: Sheet 11

Catalog Number	Conductor Size	Number of Strands	Insulation Thickness - mils	Insulation Thickness - mm	Approx. O.D. - Inches	Approx. O.D. - mm	Approx. Net Weight lbs./kft	Approx. Shipping Weight lbs./kft	90°C (1) NEC Ampacity*	75°C (1) NEC Ampacity*
600V COPPER										
112-32-8002	14 7	60	0.15	0.20	0.50	29 34	15	15		
112-32-8003	12 7	60	0.15	0.22	0.55	39 44	20	20		
112-32-8004	10 7	60	0.15	0.24	0.61	54 59	30	30		
112-32-8006	8 7	75	0.19	0.29	0.74	82 93	55	50		
112-32-8008	6 7	75	0.19	0.33	0.84	117 128	75	65		
112-32-8010	4 7	75	0.19	0.37	0.95	171 182	95	85		
112-32-8012	2 7	75	0.19	0.43	1.09	254 277	130	115		
112-32-8013	1 19	95	0.24	0.50	1.28	330 353	145	130		
112-32-8015	1/0 19	95	0.24	0.54	1.37	405 444	170	150		
112-32-8018	2/0 19	95	0.24	0.58	1.47	494 533	195	175		
112-32-8020	3/0 19	95	0.24	0.63	1.59	609 648	225	200		
112-32-8022	4/0 19	95	0.24	0.68	1.73	752 791	260	230		
112-32-8024	250 37	110	0.28	0.76	1.92	897 936	290	255		
112-32-8026	300 37	110	0.28	0.81	2.05	1060 1115	320	285		
112-32-8030	350 37	110	0.28	0.85	2.15	1221 1276	350	310		
112-32-8034	500 37	110	0.28	0.97	2.45	1699 1763	430	380		
112-32-8038	750 61	125	0.32	1.16	2.95	2526 2626	535	475		
112-32-8045	1000 61	125	0.32	1.31	3.31	3318 3434	615	545		
1000/2000V COPPER										
113-32-8002	14 7	75	0.19	0.23	0.58	35 40	25*	20*		
113-32-8003	12 7	75	0.19	0.25	0.63	46 51	30*	25*		
113-32-8004	10 7	75	0.19	0.27	0.69	62 67	40*	35*		
113-32-8006	8 7	85	0.22	0.31	0.80	88 99	55	50		
113-32-8008	6 7	85	0.22	0.35	0.89	123 134	75	65		
113-32-8010	4 7	85	0.22	0.39	1.00	178 201	95	85		
113-32-8012	2 7	85	0.22	0.45	1.14	262 285	130	115		
113-32-8013	1 19	105	0.27	0.52	1.33	339 378	145	130		
113-32-8015	1/0 19	105	0.27	0.56	1.42	415 454	170	150		
113-32-8018	2/0 19	105	0.27	0.60	1.52	505 544	195	175		
113-32-8020	3/0 19	105	0.27	0.65	1.64	621 660	225	200		
113-32-8022	4/0 19	105	0.27	0.70	1.78	765 804	260	230		
113-32-8024	250 37	120	0.30	0.78	1.97	911 944	290	255		
113-32-8026	300 37	120	0.30	0.83	2.10	1075 1114	320	285		
113-32-8030	350 37	120	0.30	0.87	2.20	1237 1296	350	310		
113-32-8034	500 37	120	0.30	0.99	2.50	1718 1796	430	380		
113-32-8038	750 61	135	0.34	1.18	3.00	2547 2756	535	475		
113-32-8045	1000 61	135	0.34	1.33	3.37	3343 3580	615	545		



Okonite's web site, www.okonite.com contains the most up to date information.

*Current limited to 15, 20 and 30 amps per Section 240.4(D)(3) of the NEC for #14, #12 and #10 AWG, respectively.

Ampacities

(1) Ampacities are based on Table 310.16 of the National Electrical Code for these 90°C rated conductors at an ambient temperature of 30°C. The 75°C column is provided for additional information. Select size in accordance with Article 690.8(B).

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600V ALUMINUM										
132-32-8003	12 7	60	0.15	0.22	0.55	25 30	25*	20*		
132-32-8004	10 7	60	0.15	0.24	0.61	32 37	35*	30*		
132-32-8006	8 7	75	0.19	0.31	0.77	50 61	45*	40*		
132-32-8008	6 7	75	0.19	0.33	0.85	64 75	55	50*		
132-32-8010	4 7	75	0.19	0.38	0.97	86 97	75	65*		
132-32-8012	2 7	75	0.19	0.44	1.11	119 142	100	90		
132-32-8013	1 19	95	0.24	0.52	1.31	160 183	115	100		
132-32-8015	1/0 19	95	0.24	0.56	1.88	188 212	135	120		
132-32-8018	2/0 19	95	0.24	0.60	1.52	223 247	150	135		
132-32-8020	3/0 19	95	0.24	0.65	1.65	266 305	175	155		
132-32-8022	4/0 19	95	0.24	0.70	1.79	320 359	205	180		
132-32-8024	250 37	110	0.28	0.79	2.01	387 426	230	205		
132-32-8026	300 37	110	0.28	0.84	2.14	447 502	260	230		
132-32-8030	350 37	110	0.28	0.89	2.27	507 562	280	250		
132-32-8034	500 37	110	0.28	1.02	2.59	679 746	350	310		
132-32-8038	750 61	125	0.32	1.23	3.13	990 1080	435	385		
132-32-8045	1000 61	125	0.32	1.38	3.51	1267 1373	500	445		
1000/2000V ALUMINUM										
133-32-8003	12 7	75	0.19	0.25	0.63	32 37	25*	20*		
133-32-8004	10 7	75	0.19	0.27	0.69	39 44	35*	30*		
133-32-8006	8 7	85	0.22	0.33	0.83	56 67	45*	40*		
133-32-8008	6 7	85	0.22	0.35	0.90	70 81	55	50		
133-32-8010	4 7	85	0.22	0.40	1.02	93 116	75	65		
133-32-8012	2 7	85	0.22	0.46	1.16	127 150	100	90		
133-32-8013	1 19	105	0.27	0.54	1.36	169 193	115	100		
133-32-8015	1/0 19	105	0.27	0.58	1.47	199 223	135	120		
133-32-8018	2/0 19	105	0.27	0.62	1.57	235 259	150	135		
133-32-8020	3/0 19	105	0.27	0.67	1.70	278 317	175	155		
133-32-8022	4/0 19	105	0.27	0.72	1.84	333 372	205	180		
133-32-8024	250 37	120	0.30	0.81	2.06	402 432	230	205		
133-32-8026	300 37	120	0.30	0.86	2.19	463 498	260	230		
133-32-8030	350 37	120	0.30	0.91	2.32	524 572	280	250		
133-32-8034	500 37	120	0.30	1.04	2.65	698 746	350	310		
133-32-8038	750 61	135	0.34	1.25	3.18	1013 1098	435	385		
133-32-8045	1000 61	135	0.34	1.40	3.56	1293 1405	500	445		



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