



POWER KABEL INC.

Photovoltaic (PV) Wire ALUMINUM 2KV

APPLICATIONS & FEATURES

Aluminum 2KV Photovoltaic Cable is primarily used for interconnection wiring of grounded and ungrounded photovoltaic power systems. When installed in accordance with NEC article 690.31(C)(2), PV source and PV output circuits, single-conductor cable of all sizes can be installed in outdoor cable trays. The PV cable is for applications up to 2000 volts and temperatures from -40°C to +90°C wet or dry.

INDUSTRY COMPLIANCES

- ASTM B800, B801, B836, B901
- UL 44 RHH RHW, UL 854 USE-2, UL 4703 PV Wire, UL 2556
- CSA listed RPVU90 per CSA C22.2 No. 271
- ANSI/ICEA S-95-658/NEMA WC 70
- VW-1 flame test, Sunlight Resistant, Direct Burial

CONSTRUCTION

CONDUCTORS: Compact stranded 8000 Series Aluminum conductor per ASTM B800, B801, B836, B901
INSULATION: Cross-linked polyethylene (XLPE), gas/oil and sunlight resistant, direct burial rated

AWG	NUMBER OF STRANDS	INSULATION THICKNESS (INCHES)	APPROX. O.D. (INCHES)	APPROXIMATE WEIGHT/1000 FT	DC RESISTANCE @20°C (Ω/kft.)	AMPACITY* @90°C (AMPS)
6	7	0.085	0.34	56	0.661	55
4	7	0.085	0.38	76	0.416	75
2	7	0.085	0.44	107	0.262	100
1	18	0.105	0.51	143	0.206	115
1/0	18	0.105	0.55	171	0.165	135
2/0	18	0.105	0.59	203	0.131	150
3/0	18	0.105	0.63	245	0.103	175
4/0	18	0.105	0.69	295	0.0821	205
250	35	0.12	0.76	353	0.0695	230
300	35	0.12	0.81	411	0.0579	260
350	35	0.12	0.86	467	0.0496	280
400	35	0.12	0.9	525	0.0434	305
500	35	0.12	0.98	622	0.0348	350
600	58	0.135	1.08	756	0.029	385
700	58	0.135	1.15	836	0.248	425
750	58	0.135	1.18	913	0.0232	435
900	58	0.135	1.27	1062	0.0193	480
1000	58	0.135	1.33	1150	0.0174	500
1250	58	0.155	1.51	1458	0.0142	545

All values are nominal and subject to correction

*Ampacities shown are for general use as specified by the National Electric Code, 2017 Edition, Table 310.15(B)(16) based on ambient temperature of 30°C