



**UL 4703 - TYPE PV 1000/2000V
PHOTOVOLTAIC WIRE – ALUMINUM**

File Number E544353



APPLICATION

Dynamic Cables' PV wire is Type RHW-2 designed for exposed outdoor use in PV source circuits and module interconnections, rated up to 1000V and 2000V. It is sunlight-resistant, direct burial approved, and operates reliably from -40°C to 90°C in both wet and dry conditions. Suitable for grounded and ungrounded systems, it meets NEC 690.31(C)(2) for rooftop, underground, and cable tray installations.

ASSEMBLY

Compact stranded Aluminum alloy conductor as per ASTM B800 & ASTM B801 insulated with cross linked PE (XLPE).

Conductor

Aluminum - Aluminum AA-8000 alloy compacted conductor, Class B stranding as per ASTM B800.

Insulation

Low Coefficient of friction, Abrasion, Moisture, & Heat Resistant Thermoset cross-linked polyethylene (XLPE).

Footage Marking & **Printing Legend

FEATURES

- Sunlight-resistant insulation
- VW-1 Rated
- Direct burial approved
- Cold tested at -40°C

STANDARD & REFERENCES

- UL 44, UL 4703, UL 2556
- ASTM B800, B801, B836
- National Electrical Code - NFPA 70 (NEC)
- ICEA S-95-658/NEMA WC70
- Article 6990; ARRA 2009

Conductor Size (AWG/kcmil)	No. of Strands	Conductor Diameter (Inches)	Insulation Thickness Min average (Mils)	Overall Diameter (Inches)	Conductor Weight (lbs./1000 ft.)	Cable Net Weight (lbs./1000 ft.)	Max DC Resistance @ 20°C (Ω/1000 ft.)	Ampacity *at 90°C
8	7	0.134	85	0.307	15	48	1.070	45
6	7	0.169	85	0.342	24	58	0.674	55
4	7	0.213	85	0.386	39	78	0.424	75
2	7	0.268	85	0.441	61	105	0.267	100
1	19	0.299	105	0.512	77	140	0.211	115
1/0	19	0.336	105	0.549	97	168	0.168	135
2/0	19	0.376	105	0.589	122	200	0.133	150
3/0	19	0.423	105	0.636	154	240	0.106	175
4/0	19	0.475	105	0.688	195	295	0.084	205
250	37	0.520	120	0.763	230	352	0.071	230
300	37	0.570	120	0.813	275	400	0.059	260
350	37	0.616	120	0.859	321	456	0.051	280
400	37	0.659	120	0.902	368	512	0.044	305
500	37	0.736	120	0.979	459	621	0.035	350
600	61	0.813	135	1.087	551	750	0.030	385
700	61	0.877	135	1.151	643	862	0.025	425
750	61	0.908	135	1.181	688	912	0.024	435
800	61	0.938	135	1.212	735	998	0.022	445
900	61	0.999	135	1.272	826	1070	0.020	480
1000	61	1.060	135	1.333	919	1182	0.018	500

Notes: All values are nominal and subject to correction based on actual design.

COLORS - Available upon request Black, White, Red, Blue, Green, Brown, Yellow, Orange, Gray.

REEL - Available in 500, 1000, 2500, 5000 ft. reels.

*Ampacity of Conductor are based on NEC (NFPA 70).

****Printing Legend** - DYNAMIC CABLES Type PV/RHW-2 90°C WET/DRY (-40°C) WIRE SIZE AWG/KCMIL COMPACT ALUMINUM AA-8000 2000 V SUN RES VW-1 CT FOR 1/0 & LARGER MONTH/YEAR.



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**UL 4703 - TYPE PV 1000/2000V
PHOTOVOLTAIC WIRE – COPPER**



File Number E544353



APPLICATION

Dynamic Cables' PV wire is Type RHW-2 designed for exposed outdoor use in PV source circuits and module interconnections, rated up to 1000V and 2000V. It is sunlight-resistant, direct burial approved, and operates reliably from -40°C to 90°C in both wet and dry conditions. Suitable for grounded and ungrounded systems, it meets NEC 690.31(C)(2) for rooftop, underground, and cable tray installations.

ASSEMBLY

Compact stranded Copper Conductor as per ASTM-B8, B787 insulated with cross inked PE(XLPE) rated for 90°C.

Conductor

Soft Annealed Stranded Tinned Copper Compacted Conductor, Class B Stranding as per ASTM –B8, B787

Insulation

Low Coefficient of friction, Abrasion, Moisture, & Heat Resistant Thermoset cross-linked polyethylene (XLPE).

Footage Marking & Printing Legend*

FEATURES

- Sunlight-resistant insulation
- VW-1 Rated
- Direct burial approved
- Cold tested at -40°C

STANDARD & REFERENCES

- UL 44, UL 4703, UL 2556
- ASTM B800, B801, B836
- National Electrical Code - NFPA 70 (NEC)
- ICEA S-95-658/NEMA WC70
- Article 690; ARRA 2009

Conductor Size (AWG/kcmil)	No. of Strands	Conductor Diameter (Inches)	Insulation Thickness Min average (Mils)	Overall Diameter (Inches)	Conductor Weight (lbs./1000ft)	Cable Net Weight (lbs./1000ft)	Max DC Resistance @ 20°C (Ω/1000 ft.)	Ampacity at 90°C
14	7	0.064	75	0.217	12	35	2.62	25
12	7	0.081	75	0.234	20	48	1.65	30
10	7	0.102	75	0.255	31	62	1.040	40
8	7	0.134	85	0.307	50	90	0.654	55
6	7	0.169	85	0.342	79	126	0.411	75
4	7	0.213	85	0.386	125	183	0.259	95
2	7	0.268	85	0.441	199	268	0.163	130
1	19	0.299	105	0.512	251	346	0.129	145
1/0	19	0.336	105	0.549	317	419	0.102	170
2/0	19	0.376	105	0.589	399	508	0.0811	195
3/0	19	0.423	105	0.636	503	626	0.0643	225
4/0	19	0.475	105	0.688	636	765	0.0510	260
250	37	0.520	120	0.763	748	890	0.0432	290
300	37	0.570	120	0.813	900	1045	0.0360	320
350	37	0.616	120	0.859	1051	1200	0.0308	350
400	37	0.659	120	0.902	1200	1360	0.0270	380
500	37	0.736	120	0.979	1498	1680	0.0216	430
600	61	0.813	135	1.087	1800	2025	0.0180	475
700	61	0.877	135	1.151	2099	2350	0.0154	520
750	61	0.908	135	1.181	2250	2502	0.0144	535

Note : All values are nominal and subject to correction based on actual design.

COLORS - Available upon request Black, White, Red, Blue, Green, Brown, Yellow, Orange, Gray, Purple.

REEL - Available in 500, 1000, 2500, 5000 ft. reels.

*Ampacity of Conductor are based on NEC (NFPA 70).

****Printing Legend** - DYNAMIC CABLES Type PV/RHW-2 90°C WET/DRY (-40°C) WIRE SIZE AWG/KCMIL COMPACT COPPER 2000 V SUN RES VW-1 CT FOR 1/0 & LARGER MONTH/YEAR.



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