

## PHOTOVOLTAIC WIRE AL 2KV TYPE PV

### CONSTRUCTION PARAMETERS

**INSULATION:** Flame retardant Cross-Linked Polyethylene (XLPE)  
**INSULATION COLOR:** Black or Red<sup>x</sup>

### PRODUCT FEATURES

**TEMPERATURE RATINGS:** 90°C Dry, 90°C Wet  
Rated for direct burial, moisture resistant, meets cold bend & cold impact test at -40°C

**VOLTAGE RATING:** 2,000 V for interconnection wiring of grounded and ungrounded photovoltaic power systems as described in Section 690.31 (A) and other applicable parts of the National Electrical Code (NEC), NFPA 70

### STANDARDS & APPROVALS:



UL 44 Type RHH/RHW-2, 2000V, UV/Sunlight Resistant  
UL 854 Type USE-2  
UL 4703 Type PV  
ASTM B800 , B801, B836  
Flame Test: UL 1581 VW-1  
Sizes 1/0 AWG and larger rated for CT use  
ROHS, EPA 40 CFR, Part 26, Subpart C, heavy metals per Table 1,  
TLCF method

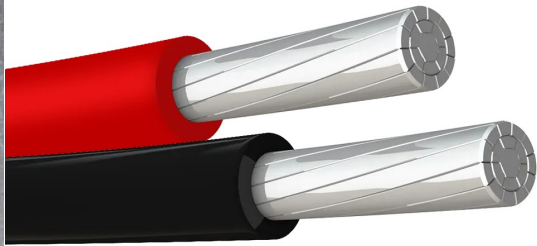
KINGWIRE TYPE PV - PHOTOVOLTAIC WIRE AL 2KV						Physical Characteristics		
Conductor Size	Stranding	Conductor Nominal Diameter	Insulation Thickness	Nominal Insulation Diameter	AL Weight	Nominal Net Weight	Maximum Pulling Tension	Minimum Bending Radius*
AWG/Kcmil	No.	inch	mils	inch	lb/1000ft	lb/1000ft	lb	inch
4/0 <sup>^</sup>	19/w	0.475	105	0.685	200	294	1270	2.7
250 <sup>^</sup>	36/w	0.520	120	0.760	236	363	1500	3.0
300 <sup>^</sup>	36/w	0.570	120	0.810	282	412	1800	3.2
350	36/w	0.614	120	0.854	329	479	2100	3.4
400	36/w	0.657	120	0.897	377	548	2400	3.6
500	36/w	0.736	120	0.976	471	685	3000	3.9
600	60/w	0.813	135	1.083	565	822	3600	5.4
750	60/w	0.908	135	1.178	706	1027	4500	5.9
1000 <sup>^</sup>	60/w	1.060	135	1.330	944	1170	6000	6.7

Data are approximate and subject to normal manufacturing tolerances.

<sup>^</sup>Non-stock item

\*Minimum bending radius shown applies to permanent training. Larger radius should be used during cable pulling.

x Other colors available as non-stock items



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KINGWIRE TYPE PV - PHOTOVOLTAIC WIRE AL 2KV			<i>Electrical Characteristics</i>		
Conductor Size	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance <sup>+</sup>	Ampacity* @ 75°C	Ampacity* @ 90°C
AWG/Kcmil	Ω/1000ft	Ω/1000ft	Ω/1000ft	amps	amps
4/0 <sup>^</sup>	0.084	0.100	0.041	180	205
250 <sup>^</sup>	0.071	0.086	0.041	205	230
300 <sup>^</sup>	0.059	0.071	0.041	230	260
350	0.051	0.062	0.040	250	280
400	0.044	0.054	0.040	270	305
500	0.035	0.044	0.039	310	350
600	0.029	0.036	0.039	340	385
750	0.024	0.031	0.038	385	435
1000 <sup>^</sup>	0.018	0.025	0.037	445	500

\*Ampacities are based on NEC 2023 Table 310.16, Ampacities of Insulated Conductors in Raceway, Cable, or Earth (Directly Buried). Not more than 3 current-carrying conductors. Ambient temperature of 30°C

+Inductive reactance based on NEC 2023, 3-Phase, 60 Hz, 75°C, 3-1/C in Conduit (PVC or Aluminum)

<sup>^</sup>Non-stock item

<sup>x</sup> Other colors available as non-stock items