SOUTH CABLE

AL 2000V XLPE Insulation RHH/RHW-2 PV



APPLICATION

The cable is available in sizes 6 AWG through 1000 kcmil. The product is approved for use in solar power applications per the NEC article 690 and is rated 90°C for exposed or concealed wiring in wet or dry locations. Individual conductors are stranded aluminum alloy covered with a cross-linked polyethylene (XLPE) insulation and is rated for direct burial. The cable is sunlight resistant, oil resistant PRI and PRII, RoHS compliant, passes -40°C cold bend. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions.

CHARACTERISTICS

Voltage Rating Uo/U (Um)
2000V

Temperature Rating
-40°C to 90°C

STANDARDS

ASTM B836 Compact Rounded Stranded Aluminum Conductors
UL 44 Thermoset-Insulated Wires and Cables
UL 854 Service Entrance Cable
UL 4703 Standard for Photovoltaic Wire
VW-1 Vertical-Wire Flame Test (Optional)
AA 8176 Stranded Aluminum Alloy Conductors

THE CABLE TEST

We have world-class testing facility, and made rigorous testing regime, every meter of cable before leaving the factory must go through strict testing, testing qualified products will be shipped to customers, effectively ensure product quality and meet customer requirements.

SUSTAINABILITY COMMITMENT

South Cable actively implements the ‘carbon reduction’ goal, strives to promote the green’s low-carbon transformation, strengthens energy-saving and emission reduction technology innovation, and promotes the company’s healthy and sustainable development.

CONSTRUCTION

Conductor
Compact Stranded Aluminum Alloy (AA-8176)

Insulation
Cross-linked Polyethylene (XLPE)

Sheath Colour
Black, Customized as needed

CONTACT INFO:
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SOUTH CABLE High-tech Zone, Zhengzhou City, Henan Province, China

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WEIGHTS AND MEASUREMENTS

Cond. Size	Conductor Number	Cond. Strands	Diameter Over Conductor	Insulation Thickness	Approx. OD	Aluminum Weight	Approx. Weight
AWG			inch	mil	inch	lb/1000ft	lb/1000ft
6 AWG	1	7	0.169	85	0.349	24	59
4 AWG	1	7	0.212	85	0.383	39	77
2 AWG	1	6	0.268	85	0.438	62	104
1 AWG	1	8	0.298	105	0.519	78	146
1/0 AWG	1	10	0.336	105	0.546	99	164
2/0 AWG	1	12	0.376	105	0.586	125	195
3/0 AWG	1	16	0.422	105	0.633	158	235
4/0 AWG	1	19	0.474	105	0.685	199	284
250 KCMIL	1	22	0.52	120	0.76	235	350
300 KCMIL	1	21	0.569	120	0.81	282	397
350 KCMIL	1	35	0.615	120	0.856	329	462
400 KCMIL	1	35	0.659	120	0.899	376	518
500 KCMIL	1	34	0.735	120	0.978	471	615
600 KCMIL	1	37	0.812	135	1.083	565	745
700 KCMIL	1	58	0.877	135	1.147	659	851
750 KCMIL	1	61	0.908	135	1.178	706	904
1000 KCMIL	1	58	1.06	135	1.33	942	1168

ELECTRICAL AND ENGINEERING DATA

Cond. Size	Conductor Number	Min. Bend Radius	Max Pull Tension	DC Resistance at 25°C	AC Resistance at 75°C	Inductive Reactance	Allowable Ampacity 75°C	Allowable Ampacity 90°C
AWG		inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
6 AWG	1	1.4	157	0.674	0.812	0.051	50	55
4 AWG	1	1.5	250	0.424	0.51	0.048	65	75
2 AWG	1	1.8	398	0.267	0.321	0.045	90	100
1 AWG	1	2.1	502	0.211	0.254	0.046	100	115
1/0 AWG	1	2.2	633	0.168	0.201	0.044	120	135
2/0 AWG	1	2.3	798	0.1	0.16	0.043	135	150
3/0 AWG	1	2.5	1006	0.105	0.126	0.042	155	175
4/0 AWG	1	2.7	1269	0.084	0.1	0.041	180	205
250 KCMIL	1	3	1500	0.071	0.086	0.041	205	230
300 KCMIL	1	3.2	1800	0.059	0.071	0.041	230	260
350 KCMIL	1	3.4	2100	0.05	0.062	0.04	250	280
400 KCMIL	1	3.6	2400	0.044	0.054	0.04	270	305
500 KCMIL	1	3.9	3000	0.035	0.044	0.039	310	350
600 KCMIL	1	5.4	3600	0.029	0.037	0.039	340	385
700 KCMIL	1	5.7	4200	0.025	0.033	0.038	375	425
750 KCMIL	1	5.9	4500	0.024	0.031	0.038	385	435
1000 KCMIL	1	6.7	6000	0.018	0.025	0.037	445	500

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.

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