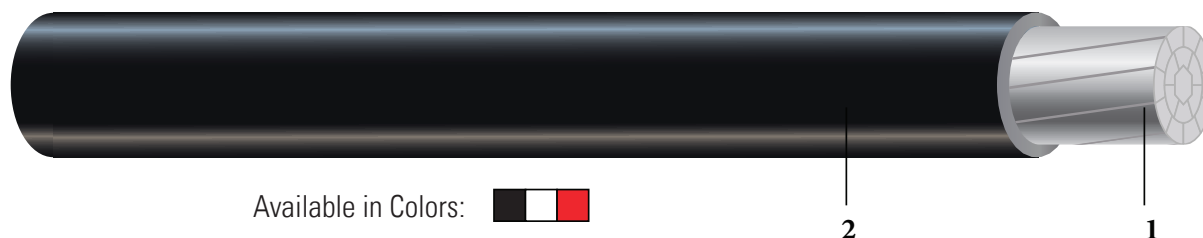


Super Sunlight Resistant (SSR™) 2000 Volt Aluminum Type PV

Single Conductor Photovoltaic (Type PV) Power Cable 2000 Volt Aluminum Conductor XLPE Insulation. Sizes 6AWG through 1000 kcmil. Heat, Moisture, and Sunlight Resistant RoHS. 90°C



Images not to scale.

CONSTRUCTION:

1. Conductors: AlumaFlex® Compact Stranded Aluminum Alloy (AA-8176)
2. Insulation: Southwire's Super Sunlight Resistant (SSR™) Cross-linked Polyethylene (XLPE)

APPLICATIONS AND FEATURES:

Southwire's new Super Sunlight Resistant – SSR Type PV cables are leading the industry with features such as enhanced UV stability, color permanence and aged physical properties, providing you with the most reliable solutions for your PV wiring systems. 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, RoHS compliant, passes -40°C cold bend, and is VW-1 rated.

SPECIFICATIONS:

- AA 8176 Stranded Aluminum Alloy Conductors
- ASTM 836 Compact Round Aluminum Conductors
- UL 854 for USE-2
- UL 44 for Type RHW-2
- UL 4703 for Type PV

SAMPLE PRINT LEGEND:

SOUTHWIRE SSR™ E316464 (UL) PV WIRE XX AWG (XX.X mm²) COMPACT AL.— ALUMAFLEX® AA8176 2000V 90°C WET OR DRY (-40°C) SUN RES DIRECT BURIAL OR RHH-RHW-2 2000V — RoHS



Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | www.southwire.com

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Southwire®

SPEC 54011_PSS DIVISION, DATE: 10/07/16 Rev:1.10

Super Sunlight Resistant 2000 Volt Aluminum Single Conductor Photovoltaic Wire (Type PV)

Stock Number (TBD)	Color	Conductor			Insulation Thickness	Average Overall Diameter	DC Resistance @ 20°C	Min. Bend Radius	Max Pulling Tension	Approx. Weight	Allowable Ampacities			
		Size	Strands	Diameter							In Air*		In Duct**	
											75°C	90°C	75°C	90°C
		AWG/kcmil		inches	mils	inches	Ω/1000 ft.	inches	lbs	lbs./kft	amps	amps	amps	amps
Black														
	black	6	7	0.169	85	0.339	0.6610	2.71	157	55	75	85	50	55
	black	4	7	0.213	85	0.383	0.4160	3.06	250	75	100	115	65	75
	black	1	8	0.299	105	0.509	0.2070	4.07	398	135	155	175	100	115
	black	1/0	10	0.336	105	0.546	0.1640	4.37	1,800	164	180	205	120	135
	black	2/0	12	0.376	105	0.586	0.1300	4.69	502	196	210	235	135	150
	black	3/0	16	0.423	105	0.633	0.1030	5.06	502	235	240	270	155	175
	black	4/0	19	0.475	105	0.685	0.0820	5.48	634	284	280	315	180	205
	black	250	22	0.520	120	0.760	0.0694	6.08	634	342	315	355	205	230
	black	300	35	0.570	120	0.810	0.0578	6.48	799	390	350	395	230	260
	black	350	35	0.616	120	0.856	0.0495	6.85	1,007	452	395	445	250	280
	black	400	35	0.659	120	0.899	0.0434	7.19	1,007	550	425	480	270	305
	black	500	35	0.736	120	0.976	0.0347	7.81	1,270	614	485	545	310	350
	black	600	58	0.813	120	1.053	0.0289	8.42	1,270	806	545	615	340	385
	black	750	58	0.908	135	1.178	0.0231	9.42	1,270	902	620	700	385	435
	black	1000	58	1.060	135	1.330	0.0173	10.64	1,500	1166	750	845	445	500
White														
	white	6	7	0.169	85	0.339	0.6610	2.71	157	55	75	85	50	55
	white	4	7	0.213	85	0.383	0.4160	3.06	250	75	100	115	65	75
	white	1	8	0.299	105	0.509	0.2070	4.07	398	135	155	175	100	115
	white	1/0	10	0.336	105	0.546	0.1640	4.37	3,000	164	180	205	120	135
	white	2/0	12	0.376	105	0.586	0.1300	4.69	502	196	210	235	135	150
	white	3/0	16	0.423	105	0.633	0.1030	5.06	3,000	235	240	270	155	175
	white	4/0	19	0.475	105	0.685	0.0820	5.48	3,000	284	280	315	180	205
	white	250	22	0.520	120	0.760	0.0694	6.08	3,600	342	315	355	205	230
	white	300	35	0.570	120	0.810	0.0578	6.48	3,600	390	350	395	230	260
	white	350	35	0.616	120	0.856	0.0495	6.85	3,600	452	395	445	250	280
	white	400	35	0.659	120	0.899	0.0434	7.19	4,500	550	425	480	270	305
	white	500	35	0.736	120	0.976	0.0347	7.81	4,500	614	485	545	310	350
	white	600	58	0.813	120	1.053	0.0289	8.42	4,500	806	545	615	340	385
	white	750	58	0.908	135	1.178	0.0231	9.42	6,000	902	620	700	385	435
	white	1000	58	1.060	135	1.330	0.0173	10.64	1,500	1166	750	845	445	500

NOTE: Ampacity values are taken directly from the NEC tables referenced below. Actual allowable ampacities may vary based on deratings for temperature, number of cables, duty cycles and other factors.

* Ampacities based on Table 310.15(B)(17) of the National Electrical Code® for single insulated conductors rated up to and including 2000 volts in free air. Based on Ambient Temperature of 30°C (86°F)

** Ampacities based on Table 310.15(B)(16) of the National Electrical Code® for insulated conductors rated up to and including 2000 volts for not more than three current carrying conductors in raceway, cable or earth (directly buried) Based on Ambient Temperature of 30°C (86°F)

All measurements are subject to nominal manufacturing tolerances.



Super Sunlight Resistant 2000 Volt Aluminum Single Conductor Photovoltaic Wire (Type PV)

Stock Number (TBD)	Color	Conductor			Insulation Thickness	Average Overall Diameter	DC Resistance @ 20°C	Min. Bend Radius	Max Pulling Tension	Approx. Weight	Allowable Ampacities			
		Size	Strands	Diameter							In Air*		In Duct**	
											75°C	90°C	75°C	90°C
		AWG/kcmil		inches	mils	inches	Ω/1000 ft.	inches	lbs	lbs./kft	amps	amps	amps	amps
Red														
	red	6	7	0.169	85	0.339	0.6610	2.71	157	55	75	85	50	55
	red	4	7	0.213	85	0.383	0.4160	3.06	250	75	100	115	65	75
	red	1	8	0.299	105	0.509	0.2070	4.07	398	135	155	175	100	115
	red	1/0	10	0.336	105	0.546	0.1640	4.37	1,800	164	180	205	120	135
	red	2/0	12	0.376	105	0.586	0.1300	4.69	502	196	210	235	135	150
	red	3/0	16	0.423	105	0.633	0.1030	5.06	502	235	240	270	155	175
	red	4/0	19	0.475	105	0.685	0.0820	5.48	2,100	284	280	315	180	205
	red	250	22	0.520	120	0.760	0.0694	6.08	634	342	315	355	205	230
	red	300	35	0.570	120	0.810	0.0578	6.48	799	390	350	395	230	260
	red	350	35	0.616	120	0.856	0.0495	6.85	2,100	452	395	445	250	280
	red	400	35	0.659	120	0.899	0.0434	7.19	1,007	550	425	480	270	305
	red	500	35	0.736	120	0.976	0.0347	7.81	2,100	614	485	545	310	350
	red	600	58	0.813	120	1.053	0.0289	8.42	2,400	806	545	615	340	385
	red	750	58	0.908	135	1.178	0.0231	9.42	2,400	902	620	700	385	435
	red	1000	58	1.060	135	1.330	0.0173	10.64	1,500	1166	750	845	445	500

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