



Southwire®

**SUPER SUNLIGHT
RESISTANT - SSR™
PV CABLE**





SUPER SUNLIGHT RESISTANT - SSR™ PHOTOVOLTAIC WIRE

New SSR Type PV Product provides enhanced performance in applications with prolonged exposure to sunlight

With a strong commitment to innovation and sustainability, Southwire developed an answer to customer needs for enhanced UV protection on photovoltaic (PV) wire for solar installations above ground. Southwire's newly-introduced Super Sunlight Resistant – SSR™ photovoltaic (PV) cable provides a superior solution to the aging effects of extended exposure to UV light.

Extensive laboratory testing on the SSR product has proven longevity for color retention as well as superior aged tensile and elongation properties.

Why Southwire's Super Sunlight Resistant – SSR Photovoltaic Wire?

New Cable Jacket Formula:

Withstands harsh sunlight, colors don't fade easily over time.

Reduces Cost:

With no burial, labor costs are reduced.

Lab Tested:

Cabling's jacket passed extensive tests on color longevity, tensile strength and elongation.

Shipping:

Regional distribution centers deliver what you need, when and where you need it.

60+ Years of Expertise:

Southwire has a long, proven history of innovating to meet customer needs.



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

- AA8176 Stranded Aluminum Alloy Conductors
- ASTM B836 Compact Round Aluminum Conductors
- UL 44 for Type RHW-2
- UL 4703 for Type PV

SUPER SUNLIGHT RESISTANT – SSR 2000 VOLT ALUMINUM SINGLE CONDUCTOR PHOTOVOLTAIC WIRE (TYPE PV)

Stock Number	Color	Conductor		Insulation Thickness	Average Overall Diameter	DC Resistance @ 25°C	Min. Bend Radius	Max Pulling Tension	Approx. Weight	Allowable Ampacities+		
		Size	Diameter							60°C	75°C	90°C
		AWG/kcmil	inches							mils	inches	Ohm/1000 ft.
643576	Black	6	0.169	85	0.339	0.674	2.7	157	54	40	50	55
643580	Black	4	0.212	85	0.383	0.424	3.1	250	74	55	65	75
643583	Black	1	0.298	105	0.509	0.211	4.1	502	137	85	100	115
643587	Black	1/0	0.336	105	0.546	0.168	4.4	633	163	100	120	135
643590	Black	2/0	0.376	105	0.586	0.133	4.7	798	195	115	135	150
643594	Black	3/0	0.422	105	0.633	0.105	5.1	1006	235	130	155	175
643597	Black	4/0	0.474	105	0.685	0.084	5.5	1269	284	150	180	205
641821	Black	250	0.520	120	0.760	0.071	6.1	1500	342	170	205	230
641818	Black	300	0.569	120	0.810	0.059	6.5	1800	397	195	230	260
641815	Black	350	0.615	120	0.856	0.050	6.8	2100	452	210	250	280
641812	Black	400	0.659	120	0.899	0.044	7.2	2400	506	225	270	305
641492	Black	500	0.735	120	0.978	0.035	7.8	3000	614	260	310	350
641495	Black	600	0.812	135	1.083	0.029	8.7	3600	743	285	340	385
641499	Black	750	0.908	135	1.178	0.024	9.4	4500	902	320	385	435
641930	Black	1000	1.060	135	1.330	0.018	10.6	6000	1166	375	445	500



Stock Number	Color	Conductor		Insulation Thickness	Average Overall Diameter	DC Resistance @ 25°C	Min. Bend Radius	Max Pulling Tension	Approx. Weight	Allowable Ampacities†		
		Size	Diameter							60°C	75°C	90°C
		AWG/kcmil	inches							mils	inches	Ohm/1000 ft.
643579	White	6	0.169	85	0.339	0.674	2.7	157	54	40	50	55
643582	White	4	0.212	85	0.383	0.424	3.1	250	74	55	65	75
643586	White	1	0.298	105	0.509	0.211	4.1	502	137	85	100	115
643589	White	1/0	0.336	105	0.546	0.168	4.4	633	163	100	120	135
643592	White	2/0	0.376	105	0.586	0.133	4.7	798	195	115	135	150
643596	White	3/0	0.422	105	0.633	0.105	5.1	1006	235	130	155	175
643599	White	4/0	0.474	105	0.685	0.084	5.5	1269	284	150	180	205
641823	White	250	0.520	120	0.760	0.071	6.1	1500	342	170	205	230
641820	White	300	0.569	120	0.810	0.059	6.5	1800	397	195	230	260
641817	White	350	0.615	120	0.856	0.050	6.8	2100	452	210	250	280
641814	White	400	0.659	120	0.899	0.044	7.2	2400	506	225	270	305
641493	White	500	0.735	120	0.978	0.035	7.8	3000	614	260	310	350
641496	White	600	0.812	135	1.083	0.029	8.7	3600	743	285	340	385
641500	White	750	0.908	135	1.178	0.024	9.4	4500	902	320	385	435
641932	White	1000	1.060	135	1.330	0.018	10.6	6000	1166	375	445	500

Stock Number	Color	Conductor		Insulation Thickness	Average Overall Diameter	DC Resistance @ 25°C	Min. Bend Radius	Max Pulling Tension	Approx. Weight	Allowable Ampacities†		
		Size	Diameter							60°C	75°C	90°C
		AWG/kcmil	inches							mils	inches	Ohm/1000 ft.
643578	Red	6	0.169	85	0.339	0.674	2.7	157	54	40	50	55
643581	Red	4	0.212	85	0.383	0.424	3.1	250	74	55	65	75
643584	Red	1	0.298	105	0.509	0.211	4.1	502	137	85	100	115
643588	Red	1/0	0.336	105	0.546	0.168	4.4	633	163	100	120	135
643591	Red	2/0	0.376	105	0.586	0.133	4.7	798	195	115	135	150
643595	Red	3/0	0.422	105	0.633	0.105	5.1	1006	235	130	155	175
643598	Red	4/0	0.474	105	0.685	0.084	5.5	1269	284	150	180	205
641822	Red	250	0.520	120	0.760	0.071	6.1	1500	342	170	205	230
641819	Red	300	0.569	120	0.810	0.059	6.5	1800	397	195	230	260
641816	Red	350	0.615	120	0.856	0.050	6.8	2100	452	210	250	280
641813	Red	400	0.659	120	0.899	0.044	7.2	2400	506	225	270	305
641494	Red	500	0.735	120	0.978	0.035	7.8	3000	614	260	310	350
641497	Red	600	0.812	135	1.083	0.029	8.7	3600	743	285	340	385
641501	Red	750	0.908	135	1.178	0.024	9.4	4500	902	320	385	435
641931	Red	1000	1.060	135	1.330	0.018	10.6	6000	1166	375	445	500

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F).

Min. Bend Radius is based on an operating voltage of less than or equal to 1000 volts. Min. Bend Radius for operating voltages above 1000 Volt is 8 X OD per NEC 300.34.

All measurements are subject to nominal manufacturing tolerances.