


# USA SOLAR CABLE- PHOTOVOLTAIC TYPE PV, RHW-2/RHH



EPR Insulation, CPE Jacket, Two Layer Construction  
UL PV Wire 2000V Direct Burial, c(UL) RW90 1000V

<p><b>APPLICATION:</b> For use on grounded and ungrounded systems as described in NEC Article 690 without the need for conduit when installed exposed. This wire maintains flexibility for ease of installation.</p> <p><b>CABLE MARKING:</b> USA SOLAR CABLE 800-880-9473 10AWG (UL) "E #" 2KV PV WIRE DIRECT BURIAL 90°C WET OR DRY RHH/RHW-2 -40°C VW-1 c(UL) RW90 1000V SUNLIGHT RESISTANT (production date)</p> <p><b>STANDARDS:</b></p> <ol style="list-style-type: none"> <li>UL Listed PV 2kV Direct Burial; c(UL) Listed RW90</li> <li>UL Standard 4703: Outline of Investigation for Photovoltaic Wire, PV Wire</li> <li>UL Standard 44: Continuous operating temperature of 90°C wet or dry; Meets cold bend test at -40°C; UL Sunlight Resistant; UL VW-1 Flame Resistant</li> <li>ASTM B3 - Standard Specification for soft or annealed copper wire; ASTM B8 - Standard specification for concentric lay stranded copper conductors; hard, medium and soft; Can be used in transformerless inverters.</li> <li>Available options: Tinned Copper per ASTM B33, Flex Strand per ASTM B172</li> </ol> <p><b>CONSTRUCTION:</b> Single bare copper conductor, stranded, insulated with a layer of Ethylene-Propylene Rubber (EPR) with an overall jacket of flame retardant, oil and sunlight resistant Chlorinated Polyethylene (CPE)</p> <p style="text-align: center;"><b>MADE IN THE USA</b></p>	<div style="text-align: center;">  </div> <ol style="list-style-type: none"> <li>EPR/CPE provides superior protection for solar.</li> <li>ONLY EPR/CPE w/ DIRECT BURIAL RATING</li> <li>Can be used with transformerless inverters.</li> </ol>
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USAWC Part #	Size		Strand (no.)	Nominal Inner Layer Thickness (Inches)	Nominal Outer Layer Thickness (Inches)	Nominal Outer Diameter (Inches)	Copper Wt. lbs/1000 ft	Weight lbs/1000 ft
	AWG	mm						
14-012KVPVECEPE	14	-	7	0.045	0.030	.243	13	37
12-012KVPVECEPE	12	-	7	0.045	0.030	.262	20	48
10-012KVPVECEPE	10	-	7	0.045	0.030	.282	32	64
8-012KVPVECEPE	8	-	7	0.055	0.030	.331	50	94

**Flexible Tinned Copper - AWG and Metric Sizes**

14-012KVPVFLEX	14	-	19	0.045	0.030	.240	13	37
2.5-012KVPVFLEX	-	2.5	45	1.14 (mm)	.760 (mm)	6.22 (mm)	15.23	58 (kg/km)
12-012KVPVFLEX	12	-	19	0.045	0.030	.258	20	48
4MM-012KVPVFLEX	-	4	52	1.14 (mm)	.760 (mm)	6.73 (mm)	24.37	75 (kg/km)
10-012KVPVFLEX	10	-	37	0.045	0.030	.282	32	63
6MM-012KVPVFLEX	-	6	78	1.14 (mm)	.760 (mm)	7.26 (mm)	36.56	97 (kg/km)
8-012KVPVFLEX	8	-	168	0.055	0.030	.351	50	1000

NOTE: Cable diameters and weights are subject to +/- 5% manufacturing tolerance

## JACKET AND INSULATION PROPERTIES

	EPR	CPE	XLP
Heat	E	E	G
Sun Resistance/ Weather	E	E	G
Ozone Resistance	E	G-E	E
Abrasion Resistance	G	E	F-G
Water Resistance	G-E	G-E	G-E
Oxidation	G	E	E

E - Excellent

G - Good

F - Fair