

# SUNGEN® E Photovoltaic Wire

RHH/RHW-2, VW-1, RPVU90, FT1

2000V, UL Type PV, Single Conductor, Copper



The world is increasingly turning to renewable and sustainably sourced energy to meet an ever-growing need for power. In response to this demand, Prysmian is helping businesses in the solar industry convert these new opportunities into reality through innovative products and solutions.

As the solar market matures, the industry has begun to learn more about the harsh environmental conditions the cables are subjected to once installed. In response, Prysmian has developed an innovative carbon black core for solar photovoltaic cables to better withstand harsh environments.

The first of its kind in the market, the cable features a carbon black core underneath a colorable outerlayer, proven to perform better against deformation, resulting from enhancing the product's physical characteristics. This makes a cable less susceptible to mishandling during installation while enhancing bonding compatibility in overmold processes to keep water out of connection points. These innovations enhance cable performance and sustainability by providing longer service life, lowering the overall cost of the system and emissions. Harness the power of the sun with our Carbon Black Core.



COND. SIZE	NO. OF WIRES	BULK PART NUMBERS (BLACK/RED)	NOMINAL O.D.		MIN. INSULATION THICKNESS		NOMINAL DIAMETER		COPPER WEIGHT		NET WEIGHT	
			IN	MM	IN	MM	IN	MM	Lbs /1000 Ft.	KGs/km	Lbs /1000 Ft.	KGs/km
<b>SUNGEN E - CARBON BLACK CORE WITH COLORABLE OUTER LAYER</b>												
<b>12AWG - 8 AWG BARE COPPER, 19 STRAND CONDUCTORS</b>												
#12	19	5851.711200BS / 5851.711202BS	0.088	2.24	0.075	1.91	0.248	6.30	20	30	41	61
#10	19	426400S / 439400S	0.110	2.78	0.075	1.91	0.274	6.96	31	47	54	80
#8	19	426300S / 439420S	0.143	3.63	0.085	2.16	0.325	8.26	51	76	81	120
#6	19	5851.710600BS / 5851.710602BS	0.179	4.55	0.085	2.16	0.361	9.17	79	118	114	170
<b>8AWG - 6 AWG BARE COPPER, 49 STRAND CONDUCTORS</b>												
#8	49	445430S/445430.02S	0.147	3.73	0.085	2.16	0.329	8.36	51	76	81	120
#6	49	445480S/445480.02S	0.186	4.72	0.085	2.16	0.368	9.35	79	118	114	170
<b>12AWG - 8 AWG BARE COPPER, 7 STRAND CONDUCTORS</b>												
#12	7	Available Upon Request	0.089	2.26	0.075	1.91	0.249	6.32	20	30	41	61
#10	7	406400S / 406400.02S	0.113	2.87	0.075	1.91	0.273	6.93	31	46	54	80
#8	7	426600S / 426600.02S	0.142	3.61	0.085	2.16	0.324	8.23	51	76	81	120

# SUNGEN® E Photovoltaic Wire

RHH/RHW-2, VW-1, RPVU90, FT1

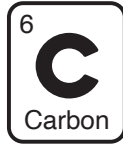
2000V, UL Type PV, Single Conductor, Copper

## Features & Benefits



### New Product Design

Enhanced deformation resistance at high temperatures for longer service life and lower overall cost of system needed for cable performance.



### Carbon Black Inner Layer

Enhanced and more stable electrical properties over a longer service life.



### Uniform & Smooth Jacket

Enhanced overmold capabilities providing better watertight seal during field application and improved water resistance exceeding UL 44.



### New Flame Retardant

Providing less environmental impact due to longer escape time, less heat release, less smoke and release of a lower concentration of toxic gases.

## Commitment to Sustainability

At the core of Prysmian Group's business model lies a commitment to sustainability. Prysmian seeks to achieve an efficient, effective and sustainable supply of energy and information while integrating sustainable practices throughout the value chain. The company leads global thought in the industry and action on critical climate issues by adopting a science-based approach and adhering to EPA standards to achieve net-zero emission targets for Scope 1 and 2 by 2035 and Scope 3 by 2050.

## Other Product Properties

### Applications

Single conductor, sunlight-resistant, direct burial photovoltaic wire rated 90°C wet or dry, 2000 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.

### Features

- Rated 90°C wet and dry
- Rated for direct burial
- Deformation-resistant at high temperatures
- Excellent moisture resistance, exceeds UL 44
- Stable electrical properties over a broad temperature range
- Increased flexibility
- Excellent resistance to crush and compression cuts
- UV/sunlight-resistant
- Meets cold bend and cold impact tests at -40°C

### Compliances

#### Industry Compliances:

- UL 4703 Type PV, UL File # E343277
- c(UL) CSA C22.2 No. 271 RPVU90 File # E343277
- National Electrical Code (NEC®)
- UL 44 Type RHW-2, UL File # E39406

#### Flame Test Compliances:

- UL 1581 VW-1

#### Other Compliances:

- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant Directive EU 2015 / 863

### Conductors

- 12 AWG thru 1000 kcmil bare compressed copper. Class B per ASTM B8
- 12 AWG thru 8 AWG bare copper, compressed, Class B stranding per ASTM B33 and B8
- 12 AWG thru 8 AWG tinned coated compressed copper. Class C stranding per ASTM B33 and B8

### Print

- PRYSMIAN GROUP (PLANT OF MFG) SUNGEN® 2000 V PV WIRE DIR BUR OR RHH OR RHW-2 (SIZE) XLPE 90°C WET OR DRY SUN RES (UL) -40°C VW-1 OR C(UL) 2000 V RPVU90 FT1 MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

### Options

- Available in 600V
- Bare or tinned copper conductors
- Other stranding options are available upon request
- Available in Black, Red, Green and White Jacket Colors
- Available in UL