

# SunGen<sup>®</sup> XLPE, Photovoltaic Wire

## 2000 V, UL Type PV or RHW-2

### Single Conductor, Copper

**SPEC 5851**  
March, 2016



#### Product Construction:

##### Conductor:

- 12 AWG thru 2 AWG bare copper, compressed, Class B or Class C stranding per ASTM B33 and B8
- 1 AWG thru 1000 kcmil bare copper, compressed, Class B stranding per ASTM B33 and B8

##### Insulation:

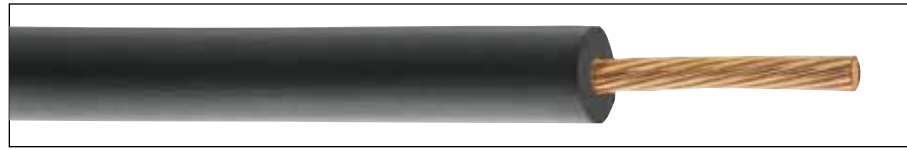
- Flame-retardant Cross-linked Polyethylene (XLPE), black

##### Print:

- GENERAL CABLE<sup>®</sup> (PLANT OF MFG) SUNGEN<sup>®</sup> 2000 V PV WIRE DIR BUR 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:

- Tinned coated copper
- Other sizes and stranding options available upon request
- Now available in colors
- Available in UL 1685 CT Flame rated  $\geq$  1 AWG RHW-2



#### 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

#### Packaging:

- Material cut to length and shipped on non-returnable wood reels

CATALOG NUMBER	COND. SIZE (AWG/kcmil)	NUMBER OF WIRES	NOMINAL COND. O.D.		MINIMUM AVG. INSULATION THICKNESS		NOMINAL CABLE DIAMETER		COPPER WEIGHT		NET WEIGHT	
			INCHES	mm	INCHES	mm	INCHES	mm	LBS/1000 FT	kg/km	LBS/1000 FT	kg/km
<b>12 AWG - 1000 kcmil CONDUCTORS</b>												
5851.711200B	12	19/.0185	0.089	2.25	0.075	1.91	0.239	6.06	20	29	38	55
426400	10	19/.0234	0.112	2.84	0.075	1.91	0.262	6.65	32	47	53	76
426300	8	19/.0295	0.141	3.58	0.085	2.16	0.311	7.90	51	74	79	115
5851.710600B*	6	19/.0372	0.180	4.57	0.085	2.16	0.353	8.95	81	118	115	168
5851.710400B*	4	19/.0469	0.235	5.96	0.085	2.16	0.405	10.27	129	188	169	246
5851.710200B*	2	19/.0591	0.296	7.52	0.085	2.16	0.466	11.84	205	298	253	369
5851.710100B*	1	19/.0664	0.322	8.18	0.105	2.67	0.532	13.51	258	375	323	469
5851.715100B*	1/0	19/.0745	0.362	9.19	0.105	2.67	0.572	14.53	326	474	397	577
5851.715200B*	2/0	19/.0837	0.405	10.29	0.105	2.67	0.615	15.62	411	598	489	712
5851.715300B*	3/0	19/.0940	0.456	11.58	0.105	2.67	0.666	16.92	518	754	605	880
5851.715400B*	4/0	19/.1055	0.512	13.00	0.105	2.67	0.722	18.34	653	950	750	1091
5851.716250B*	250	37/.0822	0.558	14.17	0.120	3.05	0.798	20.27	772	1123	892	1299
5851.716300B*	300	37/.0900	0.611	15.52	0.120	3.05	0.851	21.62	926	1347	1057	1539
5851.716350B*	350	37/.0972	0.661	16.79	0.120	3.05	0.901	22.89	1063	1547	1202	1749
5851.716400B*	400	37/.1040	0.706	17.93	0.120	3.05	0.946	24.03	1235	1797	1383	2012
5851.716500B*	500	37/.1159	0.789	20.04	0.120	3.05	1.029	26.14	1509	2196	1674	2435
5851.716600B*	600	61/.0992	0.866	22.00	0.135	3.43	1.136	28.85	1883	2740	2084	3032
5851.716750B*	750	61/.1109	0.968	24.59	0.135	3.43	1.238	31.45	2316	3370	2540	3696
5851.717000B*	1000	61/.1280	1.117	28.37	0.135	3.43	1.387	35.23	3088	4494	3346	4869
<b>12 AWG - 2 AWG CONDUCTORS</b>												
5851.711200B7	12	7/.0305	0.089	2.26	0.075	1.91	0.242	6.15	20	29	38	56
406400	10	7/.0385	0.113	2.87	0.075	1.91	0.266	6.76	32	47	53	77
426600	8	7/.0481	0.142	3.61	0.085	2.16	0.312	7.92	51	74	80	116
5851.710600B7*	6	7/.0612	0.178	4.52	0.085	2.16	0.348	8.84	81	118	115	167
5851.710400B7*	4	7/.0772	0.225	5.72	0.085	2.16	0.395	10.03	129	188	168	244
5851.710200B7*	2	7/.0974	0.283	7.19	0.085	2.16	0.462	11.73	205	298	252	366
<b>12 AWG - 2 AWG CONDUCTORS</b>												
5851.7112007	12	7/.0305	0.089	2.26	0.075	1.91	0.242	6.15	20	29	38	56
5851.7111007	10	7/.0385	0.113	2.87	0.075	1.91	0.266	6.76	32	47	53	77
5851.7108007	8	7/.0481	0.142	3.61	0.085	2.16	0.312	7.92	51	74	80	116
5851.7106007*	6	7/.0612	0.178	4.52	0.085	2.16	0.348	8.84	81	118	115	167
5851.7104007*	4	7/.0772	0.225	5.72	0.085	2.16	0.395	10.03	129	188	168	244
5851.7102007*	2	7/.0974	0.283	7.19	0.085	2.16	0.462	11.73	205	298	252	366

Dimensions and weights are nominal; subject to industry tolerances.

\* Non-stock item; minimum runs apply. Please contact Customer Service for price and delivery.



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