

Renewable Energy Cable

SunGen® Photovoltaic Wire
XLPE, RHH/RHW-2, VW-1
600 V, UL Type PV, Single Conductor, Copper



Product Construction:

Conductor:

- 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

Insulation:

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

Print:

- GENERAL CABLE® (PLANT OF MFG) SUNGEN® 600 V PV WIRE DIR BUR OR RHH OR RHW-2 (SIZE) XLPE 90°C WET OR DRY SUN RES (UL) -40°C VW-1 MONTH/YEAR OF MFG SEQUENTIAL FOOTAGE MARK

Options:

- Bare or tinned copper conductors
- Other stranding options are available upon request
- Now available in colors
- Available in UL 1685 CT Flame rated ≥ 1/0 AWG RHW-2

Applications:

- Single conductor, sunlight-resistant, direct burial photovoltaic wire rated 90°C wet or dry, 600 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
- Resistant 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
 - 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

Packaging:

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



CATALOG NUMBER	COND. SIZE (AWG/kcmil)	NUMBER OF WIRES	COLOR	NOMINAL CONDUCTOR O.D.		MIN. AVG. INSULATION THICKNESS		NOMINAL CABLE DIAMETER		COPPER WEIGHT		NET WEIGHT	
				IN	mm	IN	mm	IN	mm	LBS/1000 FT	kg/km	LBS/1000 FT	kg/km

12 AWG - 1000 kcmil BARE COPPER CONDUCTORS

5841.711200B*	12	19/.0185	Black	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
5841.711209B*	12	19/.0185	White	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
5841.711202B*	12	19/.0185	Red	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
425440	10	19/.0234	Black	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
439490	10	19/.0234	White	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
5841.711102B	10	19/.0234	Red	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
5841.710800B*	8	19/.0295	Black	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
5841.710809B*	8	19/.0295	White	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
5841.710802B*	8	19/.0295	Red	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
5841.710600B*	6	19/.0372	Black	0.180	4.57	0.075	1.91	0.330	8.38	81	121	110	164
5841.710400B*	4	19/.0469	Black	0.235	5.97	0.075	1.91	0.385	9.78	129	192	163	243
5841.710200B*	2	19/.0591	Black	0.296	7.52	0.075	1.91	0.446	11.33	205	305	247	368
5841.710100B*	1	19/.0664	Black	0.322	8.18	0.095	2.41	0.512	13.00	258	384	316	470
5841.715100B*	1/0	19/.0745	Black	0.362	9.19	0.095	2.41	0.552	14.02	326	485	389	579
5841.715200B*	2/0	19/.0837	Black	0.405	10.29	0.095	2.41	0.596	15.14	411	612	481	716
5841.715300B*	3/0	19/.0940	Black	0.456	11.58	0.095	2.41	0.646	16.41	518	771	596	887
5841.715400B*	4/0	19/.1055	Black	0.512	13.00	0.095	2.41	0.702	17.83	653	972	740	1101
5841.716250B*	250	37/.0822	Black	0.558	14.17	0.110	2.79	0.778	19.76	772	1149	880	1310
5841.716300B*	300	37/.0900	Black	0.611	15.52	0.110	2.79	0.831	21.11	926	1378	1044	1554
5841.716350B*	350	37/.0972	Black	0.661	16.79	0.110	2.79	0.881	22.38	1063	1582	1190	1771
5841.716400B*	400	37/.1040	Black	0.706	17.93	0.110	2.79	0.926	23.52	1235	1838	1370	2039
5841.716500B*	500	37/.1159	Black	0.789	20.04	0.110	2.79	1.009	25.63	1509	2246	1660	2470
5841.716600B*	600	61/.0992	Black	0.866	22.00	0.125	3.18	1.116	28.35	1883	2802	2069	3079
5841.716750B*	750	61/.1109	Black	0.968	24.59	0.125	3.18	1.218	30.94	2316	3447	2523	3755
5841.717000B*	1000	61/.1280	Black	1.117	28.37	0.125	3.18	1.367	34.72	3088	4595	3327	4951

12 AWG - 8 AWG BARE COPPER, 7 STRAND CONDUCTORS

5841.711200B7*	12	7/.0305	Black	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
5841.711209B7*	12	7/.0305	White	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
5841.711202B7*	12	7/.0305	Red	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
405400	10	7/.0385	Black	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
439390.06	10	7/.0385	White	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
439380.06	10	7/.0385	Red	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
405600*	8	7/.0481	Black	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
5841.710809B7*	8	7/.0481	White	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
5841.710802B7*	8	7/.0481	Red	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112

12 AWG - 8 AWG TINNED COPPER CONDUCTORS

5841.711200*	12	19/.0185	Black	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
5841.711209*	12	19/.0185	White	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
5841.711202*	12	19/.0185	Red	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
5841.711100*	10	19/.0234	Black	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
5841.711109*	10	19/.0234	White	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
5841.711102*	10	19/.0234	Red	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
5841.710800*	8	19/.0295	Black	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
5841.710809*	8	19/.0295	White	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
5841.710802*	8	19/.0295	Red	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112

Dimensions and weights are nominal, subject to industry tolerances.

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

Renewable Energy Cable

SunGen® Photovoltaic Wire

XLPE, RHH/RHW-2, VW-1, RPVU90, FT1
2000 V, UL Type PV, Single Conductor, Copper



CATALOG NUMBER	COND. SIZE (AWG/kcmil)	NUMBER OF WIRES	COLOR	NOMINAL CONDUCTOR O.D.		MIN. AVG. INSULATION THICKNESS		NOMINAL CABLE DIAMETER		COPPER WEIGHT		NET WEIGHT	
				IN	mm	IN	mm	IN	mm	LBS/1000 FT	kg/km	LBS/1000 FT	kg/km
12 AWG - 1000kcmil BARE COPPER CONDUCTORS													
5851.711200B	12	19/0185	Black	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
5851.711209B	12	19/0185	White	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
5851.711202B	12	19/0185	Red	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
426400	10	19/0234	Black	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
439410	10	19/0234	White	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
439400	10	19/0234	Red	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
426300	8	19/0295	Black	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
439430	8	19/0295	White	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
439420	8	19/0295	Red	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
5851.710600B*	6	19/0372	Black	0.180	4.57	0.075	1.91	0.330	8.38	81	121	110	164
5851.710400B*	4	19/0469	Black	0.235	5.97	0.075	1.91	0.385	9.78	129	192	163	243
5851.710200B*	2	19/0591	Black	0.296	7.52	0.075	1.91	0.446	11.33	205	305	247	368
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5851.716500B*	500	37/1159	Black	0.789	20.04	0.110	2.79	1.009	25.63	1509	2246	1660	2470
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5851.711202B7*	12	7/0305	Red	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
406400	10	7/0385	Black	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
406400.09	10	7/0385	White	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
406400.02	10	7/0385	Red	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
426600*	8	7/0481	Black	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
426600.09*	8	7/0481	White	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
426600.02*	8	7/0481	Red	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
12 AWG - 8 AWG TINNED COPPER CONDUCTORS													
439630*	12	19/0.185	Black	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
5851.711209*	12	19/0.185	White	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
5851.711202*	12	19/0.185	Red	0.088	2.24	0.060	1.52	0.212	5.38	20	30	36	54
426450*	10	19/0.234	Black	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
5851.711109*	10	19/0.234	White	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
5851.711102*	10	19/0.234	Red	0.112	2.84	0.060	1.52	0.238	6.05	32	48	48	71
426650*	8	19/0.295	Black	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
5851.710809*	8	19/0.295	White	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112
5851.710802*	8	19/0.295	Red	0.143	3.63	0.075	1.91	0.299	7.59	51	76	75	112

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- 12 AWG thru 8 AWG tinned coated compressed copper. Class C stranding per ASTM B33 and B8

Insulation:

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

Print:

- GENERAL CABLE * (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:

- Bare or tinned copper conductors
- Other stranding options are available upon request
- Now available in colors
- Available in UL 1685 CT Flame rated $\geq 1/0$ 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

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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
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