



### APPLICABLE STANDARDS AND TESTS

- ✓ ASTM B3, B33 and B8 for copper conductors
- ✓ CSA Standard C22.2 No. 271-11 Photovoltaic Cables
- ✓ ICEA S-95-658/NEMA WC70, ICEA S-66-524/NEMA WC7 Cross Linked
- ✓ Polyethylene Insulated Wire & Cable, UL44 / CSA C22.2 No. 38
- ✓ UL44 / CSA C22.2 No. 38, UL 1581 and UL 2556 for tests and procedures
- ✓ Spark tested at 7500 VAC

### VALUE ADD SERVICE

- ✓ Custom lengths and put-ups
- ✓ 12 available colors
- ✓ Wire paralleling and cabling
- ✓ One Pull bundled wire solution
- ✓ Wire stripping
- ✓ Custom print legends and labels

### SCOPE

This specification describes single conductor crosslinked polyethylene (XLP or XLPE) Photovoltaic Type RPVU90 wire rated for interconnection wiring of grounded and ungrounded photovoltaic power systems at 2000 volts or less. Suitable for AC and DC systems. This cable meets CSA type (RPVU90) as described in c(UL) CSA Standard C22.2 No. 271 and the Canadian Electrical Code Part I. It is approved for use as described in Section 690.31(A) and other applicable sections of the National Electrical Code (NEC), NFPA 70. This conductor is approved for -40°C Sunlight Resistant, FT1, Oil and Gasoline Resistant Cat II, Direct Burial, and rated for a continuous operating temperature of 90°C in wet and 105°C in dry locations.

### CONSTRUCTION

**Conductors:** The single copper conductor shall be stranded bare annealed or tin coated copper per ASTM and UL44 / CSA C22.2 No. 38, 66, 83, 854, and 1581 requirements.

**Insulation:** The conductor shall be insulated with XLP as specified and applied tightly to the conductor in a concentric manner. This construction is "Oil and Gasoline Resistant II" and rated and identified "Sunlight Resistant." The minimum at any point shall not be less than 90% of the specified average thickness in compliance with UL44 / CSA C22.2 No. 38.

### IDENTIFICATION AND PACKAGING

The wire shall be identified by surface marking indicating the manufacturer, conductor size, voltage rating, XLPE, c(UL) symbol, FT1, DIRECT BURIAL, "SUN RES", -40°C and RPVU90 designation. Standard length spools have 500 or 2500 feet. Custom lengths are available. Non-standard stranding, colors, and custom packing are available by request.

AWG	Standard Number of Strands	Extra Flexible Stranding	Insulation Thickness Mils 1 or 2 KV	Nominal Overall Diameter (Inches) Standard Strands 1 or 2 kv	Approx. Shipping Weight (Lbs/Mft) 1 or 2 KV
14	7	41	60	0.19	27
12	7	65	60	0.21	37
10	7	105	60	0.24	51
8	7	133	60	0.31	84
6	7	133	80	0.35	119
4	7	133	80	0.39	174
2	7	133	80	0.45	258
1	19	133	95	0.52	331
1/0	19	133	95	0.56	406