



# Photovoltaic (PV) Cable

AL Conductor XLPE Insulated  
2kV UL Type PV/RHH or RHW-2  
or USE-2



PV wire, rated 90C (wet and dry) XLPE insulation "Direct Burial", "VW-1" and "-40C"

## 1.0 Scope

Single conductor, sunlight-resistant, photovoltaic wire rated 90°C wet and dry 2000V for interconnection wiring of grounded and ungrounded photovoltaic power systems as described in National Electrical Code (NEC), NFPA 70

## 2.0 Construction

### 2.1 Conductor

- 2.1.1 Size: 500 kcmil
- 2.1.2 Construction: Stranded Compacted
- 2.1.3 Number of strands: 36 Wires
- 2.1.4 Gauge Range: 8 AWG thru 1000 kcmil compact aluminum ACM (8000 series)

### 2.2 Insulation

- 2.2.1 Material: FR-XLPE
- 2.2.3 O.D.: 0.120" nom
- 2.2.4 Colors: Black

### 2.3 Print Legend:

- 2.3.1 2000V PV WIRE SIZE (AWG)/(KCMIL)  
A8000 AL ACM 90°C WET OR DRY SUN  
RES (UL) -40°C VW-1 DIR CUR [MONTH/  
YEAR OF MFG] [SEQUENTIAL FOOTAGE  
MARK]

## 2.4 Jacket

- 2.4.1 Material: XLPE
- 2.4.2 Diameter of Cable: 0.975" nom
- 2.4.3 Min. Thickness: 0.957"
- 2.4.4 Max Thickness: 1.007"
- 2.4.5 Colors (upon request)  
Black; White; Red

## 2.5 Weights

- 2.5.1 Cable: 674.1 lb/kft
- 2.5.2 Aluminum: 463.0 lb/kft

## 2.6 Electrical Properties

- 2.6.1 Conductor Resistance @ 20 degree  
0.0347  $\Omega$ /kft
- 2.6.2 Cable Resistance @ 20 degree  
0.0354  $\Omega$ /kft

## 2.7 Temperature Rating

- 2.7.1 -40°C to +90°C

## 2.8 Compliances

- 2.8.1 UL 4703 Type PV
- 2.8.2 UL 854 Type USE-2
- 2.8.3 UL 1581 VW-1
- 2.8.4 c(UL) RWU90 1kV
- 2.8.5 ICEA S-95-658/NEMA WC70 UL 44  
Type RHH or RHW-2
- 2.8.6 IEEE 383 for sizes 1/0 AWG and larger
- 2.8.7 ASTM B800 and B801

**We want to hear from you!**

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