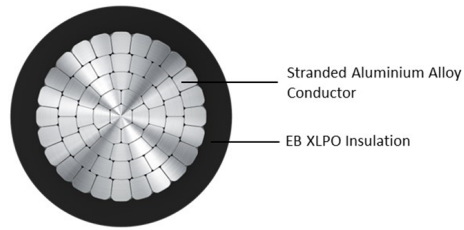


# POLYCAB ALUMINIUM ALLOY SOLAR CABLE

## Photovoltaic Power Cable, UL 4703, 2000 V



Images not to scale. Follow table for dimensions

### APPLICATION

POLYCAB PV halogen free flame-retardant Aluminium Alloy conductor E-Beam crosslinked Polyolefins insulated Wire is designed to use in Outdoor Solar application as per NEC 690 in wet & dry location. The cable is rated direct burial, Sunlight resistant and weatherproof.

### CHARACTERISTICS

#### Voltage Rating

Max. Rated Voltage: 2000 V  
Max. Short circuit temp: 250°C

#### Operation Temperature

Fixed: -40°C to +90° C

### CONSTRUCTION

- Conductor: AA8000 Series Stranded Aluminium Alloy conductor as per ASTM B-801.
- Insulation: Halogen free flame-retardant E-Beam crosslinked Polyolefins.

#### Core Identification

(-ve) Black, (+ve) Red

#### Bending Radius

Fixed installation: 8-10 X D

#### Test Voltage

As per UL 44

### OUTSTANDING FEATURES

- UV resistant
- Ozone resistant
- Flame retardant
- High temperature resistant
- Oil and gasoline resistant
- Moisture resistant

### STANDARD FOLLOWS

- ASTM B-801
- UL 44
- UL 4703
- UL 854
- UL 1685
- CSA C22.2 No. 271

### COMPLIANCE

- UL 854 for USE-2
- UL 44 for Type RHW-2
- UL 4703 for Type PV
- UL 1685 CT Flame rated (for 1/0 AWG and above)
- c(UL) CSA C22.2 No. 271 RPVU90
- ANSI ICEA S 95 658 NEMA WC70
- FT1, FT2, FT4, VW-1
- NEC NFPA 70, NEC 310, NEC Section 690.31
- EPA 40 CFR part 261 for leachable lead content per TCLP
- RoHS and REACH compliant

### OUR ACCREDITATIONS



### APPROVAL



# POLYCAB ALUMINIUM ALLOY SOLAR CABLE

## Photovoltaic Power Cable, UL 4703, 2000 V

### Dimensional and electrical Characteristics:

Conductor Size	No. of Strands	Conductor Dia.	Max. D.C. Resistance at 20° C.	Nominal Insulation Thickness	Approx Overall Dia.	Ampacity in Air	Ampacity in Earth (Directly buried)
AWG/MCM	Nos.	mm	Ohm/Km	mm	mm	Amps	Amps
8	7	3.4	3.52	2.15	8	60	45
6	7	4.29	2.21	2.15	8.9	85	55
4	7	5.41	1.39	2.15	10	115	75
2	7	6.81	0.875	2.15	11.4	150	100
1	19	7.59	0.693	2.66	13.2	175	115
1/0	19	8.53	0.55	2.66	14.2	205	135
2/0	19	9.55	0.436	2.66	15.2	235	150
3/0	19	10.7	0.346	2.66	16.3	270	175
4/0	19	12.1	0.274	2.66	17.7	315	205
250	37	13.2	0.232	3.04	19.6	355	230
300	37	14.5	0.194	3.04	20.9	395	260
350	37	15.6	0.166	3.04	22	445	280
400	37	16.7	0.145	3.04	23.1	480	305
500	37	18.7	0.116	3.04	26	545	350
600	61	20.7	0.0967	3.43	28.9	615	385
700	61	22.3	0.0829	3.43	30.5	670	425
750	61	23.1	0.0774	3.43	31.3	700	435
800	61	23.8	0.0725	3.43	32	725	445
900	61	25.4	0.0645	3.43	33.6	790	480
1000	61	26.9	0.058	3.43	35.1	845	500

\*Above data is approximate and subject to standard manufacturing tolerance.

\*The above Current Ratings is based on NEC Table No. 310.16 at ambient temperature of 30°C

### Current de-rating factors at various ambient temperature

Ambient temperature	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-70	71-80
Correction factor	1.04	1	0.96	0.91	0.87	0.82	0.76	0.71	0.58	0.41