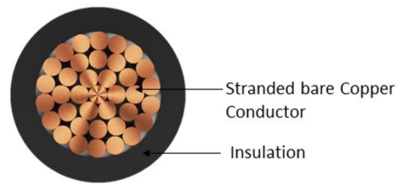


# POLYCAB COPPER SOLAR CABLE

## Photovoltaic Power Cable, UL 4703, 2000 V



Images not to scale. Follow table for dimensions

### APPLICATION

POLYCAB PV halogen free flame-retardant Copper 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: Stranded (Class B) Bare or Tinned Copper conductor as per ASTM B3, B33 & ASTM B8
- Insulation: Halogen free Flame retardant E-Beam crosslinked Polyolefins.

#### Core Identification

(-ve) Black, (+ve) Red

#### Bending Radius

Fixed installation: 8-10 D

#### Test Voltage

As per UL 44

### OUTSTANDING FEATURES

- Flame retardant
- UV, Ozone resistant
- High temperature resistant
- Oil and Gasoline resistant
- Moisture resistant
- Meets cold bend and cold impact at -40°C

### STANDARD FOLLOWS

UL 4703  
ASTM B8  
UL 44  
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
- OSHA acceptable
- Federal Spec A-A-59544

### OUR ACCREDITATIONS



### APPROVAL



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### Dimensional and electrical Characteristics:

No. of Cores	Conductor Size	No. of strands	Nominal Insulation thickness	Nominal Overall diameter	Nominal Overall diameter	Max. Conductor D.C. Resistance at 25°C	Ampacity in Air	Ampacity in Earth
No.	AWG/KCMIL	No.	mm	mm	mil	Ohms/Km	Amps	Amps
1	12	7	1.90	6.3	248.03	5.46	40	30
1	10	7	1.90	7.0	275.60	3.42	55	40
1	8	7	2.15	8.3	326.77	2.14	80	55
1	6	7	2.15	9.2	362.21	1.35	105	75
1	4	7	2.15	10.5	413.39	0.847	140	95
1	2	7	2.15	12.1	476.38	0.532	190	130
1	1	19	2.66	14.2	559.06	0.421	220	145
1	1/0	19	2.66	15.2	598.43	0.335	260	170
1	2/0	19	2.66	16.4	645.67	0.266	300	195
1	3/0	19	2.66	17.8	700.79	0.211	350	225
1	4/0	19	2.66	19.3	759.84	0.167	405	260
1	250	37	3.04	21.3	838.58	0.142	455	290
1	300	37	3.04	22.7	893.7	0.118	500	320
1	350	37	3.04	24.1	948.82	0.101	570	350
1	400	37	3.04	25.3	996.06	0.088	615	380
1	500	37	3.04	27.5	1082.68	0.071	700	430
1	600	61	3.43	28.93	1138.98	0.059	780	475
1	750	61	3.43	33.2	1307.09	0.047	885	535
1	1000	61	3.43	37.2	1464.57	0.035	1055	615

\*Above values are approximate and subject to standard manufacturing tolerance

\*The above Current Rating 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