

Application:

Solar Cable 4mm or 6mm is applied to solar panels for power generation and related components of the wiring, and connection, particularly suitable for outdoor. Resistance to sunlight, anti-aging, using the low smoke halogen-free flame retardant materials, higher grade, more safety.

Solar Cable Advantage:

Solar Cable 4mm or 6mm modules operate at high temperatures and are exposed to a variety of environmental conditions. The NEC limits various PV array applications to USE-2 or PV wire. These cables need to meet the required sunlight resistance and temperature ratings for the environment.

Solar Cable 6mm is manufactured for use in photovoltaic applications, while USE-2 cable types are typically manufactured for underground service entrance applications.

Both cable types commonly contain XLPO insulation and can be sunlight-resistant and/or rated for direct burial.



Cable Specification

- Conductor
Plain Annealed Copper Class 5 to BS EN 60228
- Insulation
XLPO
- Sheath
XLPO
- Min Operating Temperature
-40°C
- Max Operating Temperature
90°C
- Core Colours
Red or Black
- Sheath Colours
Red or Black

Cable Construction:

- Conductor: Fine Wire Tinned Copper Conductor according to BS EN 60228:2005 cl. 5.
- Insulation: UV-resistant, cross-linkable, halogen-free, flame-retardant compound for core insulation.
- Core Identification: Red, black, or natural Sheath: UV resistant, cross-linkable, halogen-free, flame retardant compound for Sheath over insulation.
- Cable Colour: Black or Red

Standard:

- Adapted to PV systems, 2 Pfg 1169 / 08.2007 and EN 50618:2015.
- Electrical Parameters:
Voltage Rating: AC 0.6 / 1.0 kV Max. PV
System Voltage: DC up to 2.0 kV possible Max.
Permissible Operating Voltage in AC Systems: 0.7 / 1.2 kV Max.
Permissible Operating Voltage in DC Systems: 0.9 / 1.8 kV
Test Voltage: AC 6 kV / DC 10 kV (15 min.)

Solar Cable Parameter

Construction	Conductor Construction	Conductor	Outer	Resistance Max	Current Carrying Capacity
n×mm ²	n×mm	mm	mm	Ω/Km	A

Construction	Conductor Construction	Conductor	Outer	Resistance Max	Current Carring Capacity
1×1.5	30×0.25	1.58	4.90	13.3	30
1×2.5	50×0.256	2.06	5.45	7.98	41
1×4.0	56×0.3	2.58	6.15	4.75	55
1×6	84×0.3	3.15	7.15	3.39	70
1×10	142×0.3	4.0	9.05	1.95	98
1×16	228×0.3	5.7	10.2	1.24	132
1×25	361×0.3	6.8	12.0	0.795	176
1×35	494×0.3	8.8	13.8	0.565	218
1×50	418×0.39	10.0	16.0	0.393	280
1×70	589×0.39	11.8	18.4	0.277	350
1×95	798×0.39	13.8	21.3	0.210	410
1×120	1007×0.39	15.6	21.6	0.164	480