

Renewable Energy Cables

Solar Photovoltaic Cables

Solar photovoltaic cables are used for transmitting electrical power generated from the solar panel to the charging units, battery banks, change over systems, inverters etc. These cables have to function effectively while remaining exposed to a wide range of severe environmental conditions.

Construction:

Size (Sq mm)	Number of Strands/ Diameter	Nominal Outer Dia (mm)	Max Conductor Resistance Ohms/Km
2.5	50/0.25	5.50	8.21
4.0	56/0.30	6.00	5.09
6.0	85/0.30	6.80	3.39
10.0	140/0.30	7.70	1.95
16.0	128/0.40	8.80	1.24

Size (Sq mm)	Single Cable in Air (Amps)	Single Cable on Surface (Amps)	Multiple Cable on Surface (Amps)
2.5	41	39	33
4.0	55	52	44
6.0	70	67	57
10.0	98	93	79
16.0	132	125	107

- Voltage Grade** : 1000 V AC / 1500 V DC
- Temperature Range** : - 40° C to 120° C
- Conductor** : Tin Coated Copper Class 5 conductor
- Insulation and Sheath** : Electron Beam Irradiated Cross linked Polyolefin Compound
- Standards** : TUV-2PIG 1169 / 07 2008 (Standard for Photovoltaic cables) or BSEN 50618-2014 (Covers upto 240 Sq. mm)
- Features** : Resistant to ozone, water absorption & severe environmental conditions

Wind Power Cables

Torsion Cables

These cables are used for transmitting power from the generator mounted in the nacelle of the wind tower to base station. These are flexible cables made of special elastomeric compounds, so as to meet the torsional stresses exerted on the cable due to rotation of the nacelle towards wind direction.

- Voltage Grade** : 600 V / 1100 V
- Conductor** : Flexible Class-5 tinned or bare copper conductors, made to IEC-60228 / IS-8130
- Range (Single Core)** : 10 Sq. mm to 400 Sq. mm
- Insulation** : EPR - in conformance to IEC-60502 / IS-6380
- Sheath** : Special elastomer compound with Oil, Fire, Hydrolysis & Torsion resistant properties (Zero halogen free sheath available on request)
- Features**
 - Short circuit temperature (max) for up to 5 seconds** : + 250° C
 - Torsion angle** : ± 150° C per meter (Degrees)
 - Minimum bending radius** : 4D

Control & Instrumentation Cables

These cables are used in Wind Energy applications such as rotor blade pitch control, Yaw control, Top Box, Anemometer feedback, Remote data logging etc. Construction of Cables shall be as per Customers' requirement and conforming to various National/International Standards.

