

# Solar Cable

## DC Single Core



Double insulation, electron-beam cross linked cables for photovoltaic power station

### Construction

Conductor: Tinned copper, according to the VDE 0295/IEC 60228, Class 5

Insulation: Polyolefin copolymer electron-beam cross-linked

Outer sheath: Polyolefin copolymer electron-beam cross-linked

Sheath color: Black/Red/Blue or as per customer's request



### Technical Specification

Nominal Voltage:  $U_0/U = 600/1000VAC, 1000/1800VDC$

Test Voltage: 6500V, 50Hz, 5Min.

Temperature Rating: 45°C upto +125°C; -40°F upto +257°F

Ambient temperature: 25 year (TUV); -40°C upto +90°C; -40°F upto +194°F

Max. Short circuit temperature: 28°C, +536°F

Bending Radius: Fixed installation > 4X; Occasionally moved > 5X

### Dimensions Parameter

Construction	Conductor Construction	Conductor $\Phi$	Outer $\Phi$	Resistance Max	Current Carrying Capacity
N $\times$ mm <sup>2</sup>	n/m	mm	mm	$\Omega$ /Km	A
1 $\times$ 1.5	30/0.25	1.58	4.90	13.30	30
1 $\times$ 2.5	50/0.25	2.02	5.45	7.98	41
1 $\times$ 4.0	56/0.30	2.30	6.10	4.75	55
1 $\times$ 6.0	84/0.30	3.42	7.20	3.39	70
1 $\times$ 10.0	142/0.30	4.56	9.00	1.95	98
1 $\times$ 16.0	228/0.30	5.60	10.20	1.24	132
1 $\times$ 25.0	361/0.30	6.95	12.00	0.795	176
1 $\times$ 35.0	525/0.30	8.74	13.80	0.565	218
1 $\times$ 50.0	720/0.30	9.20	14.80	0.393	280
1 $\times$ 70.0	988/0.30	11.00	16.90	0.277	350
1 $\times$ 95.0	1349/0.30	12.50	18.70	0.21	410
1 $\times$ 120.0	1691/0.30	14.20	20.70	0.164	480

The current-carrying capacity is under the situation of laying the single cable in air. e products' detailed description please refer to the specification for approval.

### Advantages

Electron-beam cross-linked compounds

- UV, ozone and hydrolysis resistant
- High temperature resistant, the materials do not melt or flow
- Good cold flexibility
- Very long service life > 25 years at 90°C
- Compatible to all popular connectors

### Material Properties/Standards

Fire-resistance performance: IEC 60332-1

Smoke emission: IEC 61034; EN 50268-2

Low fire load: DIN 51900

Approvals: TUV 2PFG 1169/08.2007 PV1-F

Application standards: UNE 211 23 / UNE 20.460-5-52 /

UTE C 32-502