

SOLAR CABLE

'Empowering Your Life'

APPLICATIONS OF ELECTRON-BEAM CROSS LINKED CABLES



Requirements of
the railway industry



Requirements of
the Solar industry



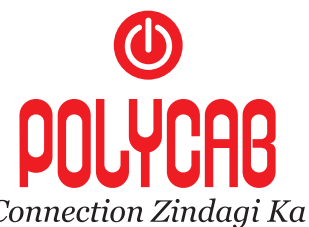
Requirements of
the wind energy



Requirements of
the automotive industry



Requirements for
coil winding



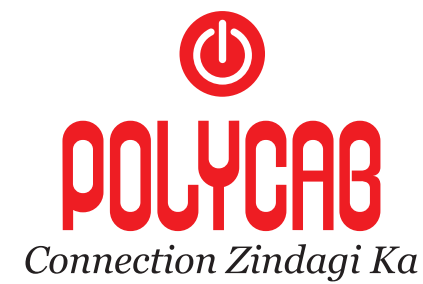
Corporate Office:
POLYCAP INDIA LIMITED (formerly known as 'Polycab Wires Limited')
Polycab house, 771 Mogul lane, Mahim (W), Mumbai 400 016.
Email: solar@polycab.com | Web: www.polycab.com

For Consumer Complaint Contact : Officer, Consumer Care Cell
Polycab House, 771, Mogul Lane, Mahim (W), Mumbai 400 016, Maharashtra, India.
Tel: 91-22-2432 7070 - 4,6735 1400
Email: customercare@polycab.com
Website: www.polycab.com | Toll Free No.: 1800 267 0008

Solar Division Marketing Office:
POLYCAP WIRES PVT. LTD.
Off. No. 34, Sangam Project Phase-2, Near RTD Pune,
Near Sangam Bridge, Opp. Air India Office, Pune- 411001.

Authorised Distributor / Dealer

Solar Cable /Jan/ 2020



SOLAR CABLE

'Empowering Your Life'



Features

- Electron beam cross linked compound
- UV, ozone, temperature & hydrolysis resistant
- Flame retardant, low smoke
- Excellent encapsulation
- Very long /service life >25 years.

Brochure 2020

Technical Specification

Construction:

- Conductor: tinned copper conductor IEC 60228, Class 5
- Insulation/sheath: electron beam cross linked halogen free & flame retardant compound (XLPO)

Electrical:

- Voltage test: 6500V as per EN 50395.
- Max permissible operating voltage: DC 1.5Kv (conductor-conductor, non earthed system).
- Nominal voltage: AC - 0.6/1 Kv, DC - 900/1.5 Kv.

Temperature:

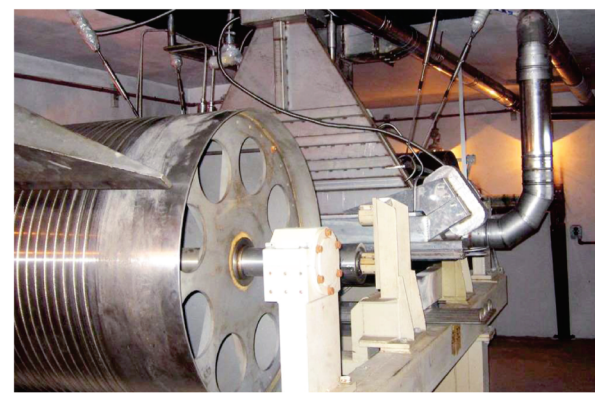
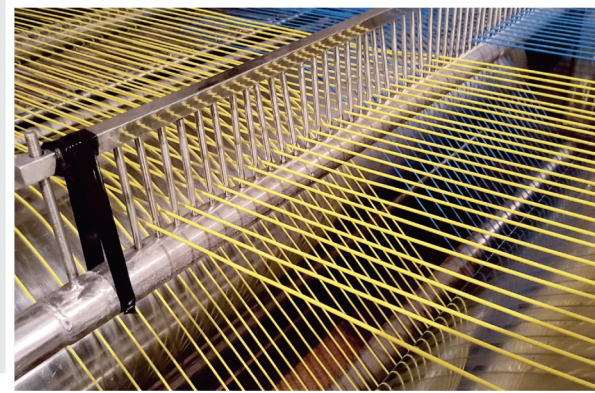
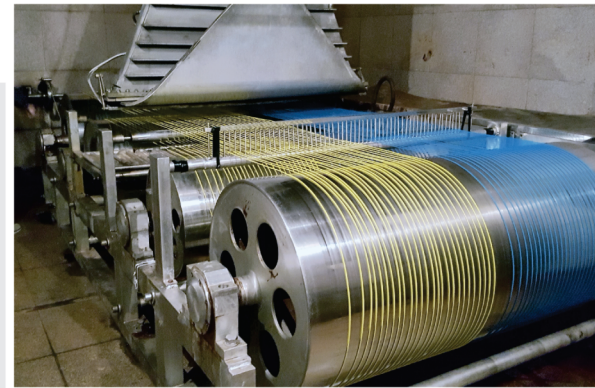
- Ambient Temperature: -40°C to + 90°C.
- Max conductor temperature: 40°C to 120°C.

Max bending radius:

- 5 *OD (fixed installation)
- 15 *OD (occasional moved)

Standards / Material Properties:

- Fire performance: IEC 60332-1-2
- Smoke emission: IEC 61034/ EN 50268-2
- Halogen free: EN 50267-2-1/-2, IEC 60754-2
- Toxicity: EN 50305, ITC - index <3
- Ozone Resistant: EN50396
- Weathering UV: HD 605/A1 or DIN 53367
- Approvals: EN 50618; H1Z2Z2-K



Solar DC Cables from PV Module to Array Junction Box
(as per TUV Specification- EN 50618 : 2014)

Single Core In Sq. mm.	E-BEAM XLPO Insulation thickness- Nominal in mm.	E-BEAM XLPO Sheath thickness- Nominal in mm.	Overall Diameter in mm.	Tolerance on diameter	Tinned Copper Maximum Resistance @ 20°C (ohms-Ω/Km)	Current Carrying Capacity (Single Cable in Air) (in Amps - A)
1.5	0.7	0.8	4.8	+/- 0.4	13.70	30
2.5	0.7	0.8	5.2	+/- 0.4	8.210	41
4	0.7	0.8	5.8	+/- 0.4	5.090	55
6	0.7	0.8	6.4	+/- 0.4	3.390	70

Solar DC Cables from Array Junction Box to Main Junction Box & MJB to Inverter
(as per TUV Specification- EN 50618 : 2014)

Single Core In Sq. mm.	E-BEAM XLPO Insulation thickness- Nominal in mm.	E-BEAM XLPO Sheath thickness- Nominal in mm.	Overall Diameter in mm.	Tolerance on diameter	Tinned Copper Maximum Resistance @ 20°C (ohms-Ω/Km)	Current Carrying Capacity (Single Cable in Air) (in Amps - A)
10	0.7	0.8	7.3	+/- 0.4	1.950	98
16	0.7	0.9	8.6	+/- 0.4	1.240	132
25	0.9	1.0	10.4	+/- 0.4	0.795	176
35	0.9	1.1	11.8	+/- 0.4	0.565	218
50	1.0	1.2	13.8	+/- 0.4	0.393	276
70	1.1	1.2	15.6	+/- 0.4	0.277	347
95	1.1	1.3	17.7	+/- 0.4	0.210	416
120	1.2	1.3	19.5	+/- 0.5	0.164	488
150	1.4	1.4	21.6	+/- 0.5	0.132	566
185	1.6	1.6	24.2	+/- 0.5	0.108	644
240	1.7	1.7	27.1	+/- 0.5	0.0817	775