

# SOLAR CABLE

'Empowering Your Life'

## APPLICATIONS OF ELECTRON-BEAM CROSSLINKED CABLES



Requirements of  
the railway industry



Requirements of  
the solar industry



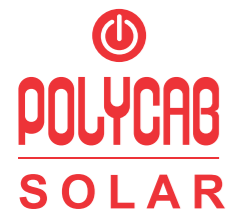
Requirements of  
the wind energy



Requirements of  
the automotive industry



Requirements for  
coil winding



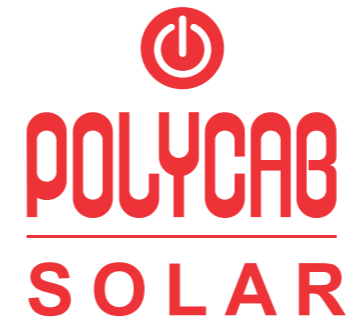
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**POLYCAP WIRES PVT. LTD.**  
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Email: solar@polycab.com | Web: www.polycab.com

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Tel: 91-22-2432 7070 - 4,6735 1400 | Fax: 91-22-24327075  
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Authorised Distributor / Dealer



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## Features

- Electron beam cross linked compound
- UV, ozone, temperature & hydrolysis resistant
- Flame retardant, low smoke
- Excellent encapsulation

Brochure 2016



**Technical Specification**

**Construction:**

- Conductor: tinned copper conductor IEC 60228, Class 5
- Insulation/sheath: electron beam crosslinked halogen free & flame retardant compound

**Electrical:**

- Voltage test: 6500V as per EN 50395.
- Max permissible operating voltage: DC 1.8Kv (conductor-conductor, non earthed system).
- Nominal voltage: AC - 0.6/1 Kv, DC - 900/1.5 Kv.

**Temperature:**

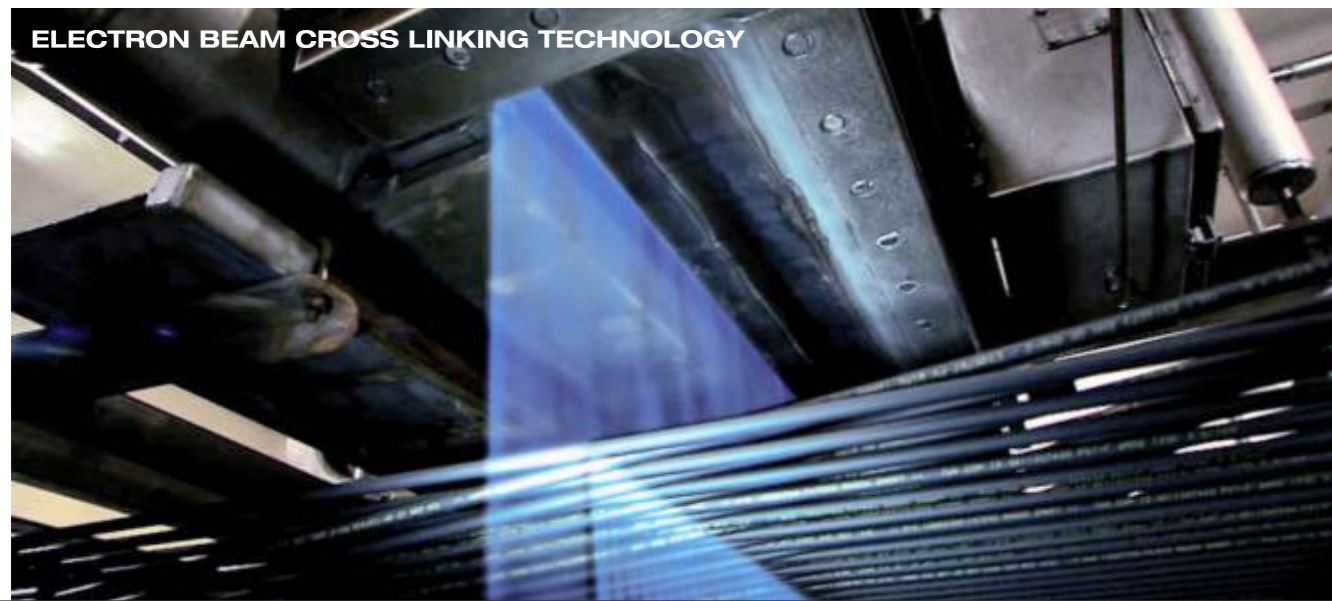
- Ambient Temperature: -40°C to +90°C.
- Max conductor temperature: -40°C to 120°C.

**Max bending radius:**

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

**Standards / Material Properties :**

- Fire performance: IEC 60332-1-2
- Smoke emission: ASTM D-2483
- 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: TUV 2Pfg 1169/08.2007



**Solar DC Cables from PV Module to Array Junction Box**  
(as per TUV Specifications- 2 Pfg 1169/08.2007)

Single Core in sq.mm	XL- LSOH Insulation Thickness - Nominal in mm	XL- LSOH Sheathing Thickness - Nominal in mm	Overall Dia. Nominal in mm	Tinned Copper Maximum Resistance @ 20°C (ohms- Ω/Km)	Current Carrying Capacity (Single Cable in Air) (in Amps- A)
1.5	0.5	0.5	4.10 +/-0.5	13.700	30
2.5	0.5	0.5	4.10 +/-0.5	8.210	41
4	0.5	0.5	5.1 +/-0.5	5.090	55
6	0.5	0.5	6.1 +/-0.5	3.390	70

**Solar DC Cables from Array Junction Box to Main Junction Box & MJB to Inverter**  
(as per TUV Specifications- 2 Pfg 1169/08.2007)

Single Core in sq.mm	XL- LSOH Insulation Thickness - Nominal in mm	XL- LSOH Sheathing Thickness - Nominal in mm	Overall Dia. Nominal in mm	Tinned Copper Maximum Resistance @ 20°C (ohms- Ω/Km)	Current Carrying Capacity (Single Cable in Air) (in Amps- A)
10	0.5	0.5	6.6 +/-0.5	1.950	98
16	0.5	0.5	7.7 +/-0.5	1.240	132
25	0.9	1.0	10.5 +/-0.7	0.795	176
35	0.9	1.1	12.0 +/-0.7	0.565	218
50	1.0	1.2	14.0 +/-0.7	0.393	274
70	1.1	1.3	16.0 +/-1.0	0.277	406
95	1.1	1.5	18.5 +/-1.0	0.210	491
120	1.2	1.6	20.0 +/-1.0	0.164	576
150	1.4	1.7	22.5 +/-1.0	0.132	670
185	1.6	1.9	25.0 +/-1.0	0.108	784
240	1.7	2.1	28.0 +/-1.0	0.0817	944