



SOLAR CABLES



E-BEAM IRRADIATED

improves thermal, mechanical and chemical properties of the polymer



TÜV CERTIFIED

Designed to meet international safety requirements and quality standards



LONG LIFE EXPECTANCY

Lasts up to 30 years even under tough external conditions.



MECHANICAL RESISTANCE

Resistant to Impact, tear & abrasion



PURE ANNEALED COPPER

99.97 % pure bright electrolyte grade copper





Due to rapid depletion of conventional fossil fuels, global focus today has shifted on the development and harnessing of renewable sources of energy. India has more than 300 sunny days in a year, which makes harnessing solar energy through photovoltaic (PV) system the most preferred green energy option here. In a PV system, the choice of solar cables is critical as a substandard cables can result in low efficiency and overheating that can in turn lead to cause of fire in extreme cases.

Paramount now offers TÜV certified electron-beam cross-linked solar cables. E-Beam irradiation is a process in which the polymer is exposed to an highly charged stream of electrons that creates cross-linking between the molecules. This cross-linking significantly improves thermal, mechanical and chemical properties of the polymer (i.e. insulation and sheathing materials.)

CONSTRUCTION



SHEATH

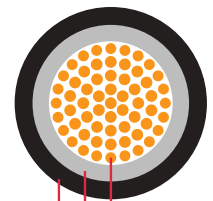
Extruded cross linked Halogen free Polyolefin thermosetting sheath

INSULATION

Extruded cross linked Halogen free Polyolefin thermosetting insulation

CONDUCTOR

Flexible Annealed Tinned Copper Stranded Class 5 conductor as per IEC – 60228



CONDUCTOR
INSULATION
SHEATH

TECHNICAL SPECIFICATIONS

Voltage Rating	U/U = 600/1000 V AC, 1000/1800 V DC
Test Voltage	6.5 KV 50 Hz or 15 KV DC for 5 min
Temperature Rating	40°C up to +120°C
Ambient Temperature	-40°C up to +90°C
Bending Radius	>4×Ø (Cable OD)
Oil & Chemical resistance	IEC 60811-1
Max. Short circuit Temp	250°C(for 5 sec)



FEATURES

E beam irradiated XLPO has following enhanced features over high temperature cross-linking:

1

UV and ozone resistant, improved weather resistance to work in difficult weather conditions.

2

Enhanced oil and chemical resistance, crack resistance.

3

Long-lasting cables Last 30 years, even under tough external conditions.

4

Conductor works in temperature minimum -40°C to max 120°C.

5

Halogen Free, improved flammability properties.

SIZE	CONDUCTOR	INSULATION THICKNESS	SHEATH THICKNESS	CABLE OD	WEIGHT OF CABLE	CURRENT RATING (A)			MAX. DC RESISTANCE OF CONDUCTOR AT 20°C (OHM/ KM)
sq.mm	No./ Dia of strand(mm) (nom.)	mm (minimum)	mm (minimum)	mm (Nominal)	Kg/ Km (Approx)	At 60°C in Air	Single Cables on Surface	2 Cables Adjacent on Surfaces	
2.5	50/0.25	0.5	0.5	4.2	35	41	39	33	8.21
4	56/0.3	0.5	0.5	4.7	50	55	52	44	5.09
6	84/0.3	0.5	0.5	5.5	70	70	67	57	3.39
10	80/0.4	0.5	0.5	6.5	110	98	93	79	1.95
16	126/0.4	0.5	0.5	8.3	170	132	125	107	1.24
25	196/0.4	0.5	0.5	11	285	176	167	142	0.795
35	276/0.4	0.5	0.5	12	385	218	207	176	0.565
50	396/0.4	0.8	1.0	14	535	276	262	221	0.393
70	360/0.5	0.9	1.0	16	735	347	330	278	0.277
95	475/0.5	0.9	1.1	18	945	416	395	333	0.21



TEST & RATING

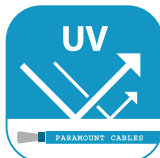
SEVERE WEATHER RESISTANCE



Max. Conductor
Temperature 120°C
IEC 60216



Resistance To
Extreme Temperatures
-40°C IEC 60811-1-4



Resistance
To UV Rays
(UV) UL 1581



Resistance
To Ozone
IEC 60811-2-1



Resistance
To Water Absorption
IEC 60811-1-3

LIFE EXPECTANCY



Design Life
Time 30 Years
IEC 60216

MECHANICAL RESISTANCE



Impact Resistance
IEC 60811-1-4



Abrasion Resistance
EN 50305



Tear Resistance
IEC 61034-2

SAFE FOR ENVIRONMENT



Environment
Friendly



Halogen Free
IEC 60754 - 1



Low Corrosive
Gas Emission
IEC 60754 - 2

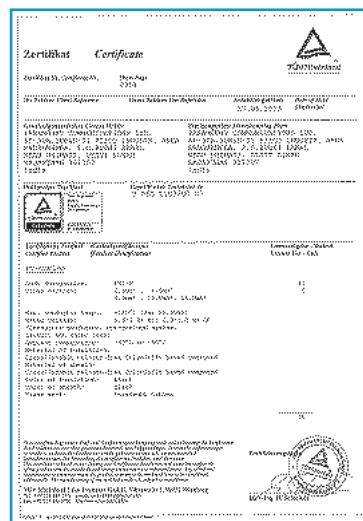


Low Smoke
Opacity
IEC EN 61034-2



Non Fire
Propagation
IEC 60332 - 3

TUV CERTIFIED



PARAMOUNT COMMUNICATIONS LIMITED

CORPORATE OFFICE

Paramount
C-125 Naraina Industrial Area Phase I ,
New Delhi 110028
T: +91-11-45618800/900
F: +91-11-25893719 / 20
E: pcl@paramountcables.com

PLANTS:

DHARUHERA PLANT
37 Industrial Estate , Dharuhera
District Rewari, Haryana 242692

T: +91-1274 2422351
F: +91-1274 242552
E: pcldw@paramountcables.com

KHUSKHERA PLANT
SP - 30 A, RIICO Industrial Area,
Khushkhera, Karoli,
District Alwar, Rajasthan 301707

T: +91-1493 513601/027
F: +91-1493 250222
E: pcck@paramountcables.com