



KEI
Wires & Cables

CABLES FOR PHOTOVOLTAICS

(SOLAR CABLES)



SOLAR POWER

Rapid urbanisation and globalisation has given rise to an increased demand for energy. The fast pace of depletion of conventional sources of energy have influenced us to find newer and sustainable solutions to meet this increase in demand. In such a scenario, renewable energy sources like wind and solar energy are the need of the hour.

Solar power generation has emerged as one of the most rapidly growing renewable sources of electricity. Solar energy is set to address the ever-growing need for power across the world. It has a low impact on the environment, serving as an ideal alternative to produce electricity, while maintaining a lower carbon-footprint and thereby helping preserve the nature. This has opened new avenues of business for the cable and wire manufacturing companies.

In the recent years, there has been an increase in the number of solar power generation plants, in India and across the world, which has in-turn created a higher demand for wires and cables. In response to this increase in demand, KEI is helping the renewable energy industry harness the opportunity.

KEI is proud to contribute to the renewable energy industry by supplying electrical solar cables to solar power plants. With a sharp focus on technology and innovation, the Company aims at becoming one of the key environment friendly technology companies of the country. To keep pace with the changing needs of the industry, it is important to overcome challenges, identify opportunities for growth and provide future-proof solutions for the industry.



PROPERTIES

- A lifetime 'Component': lasts up to 30 years even under tough conditions
- Used in extreme weather conditions (UV Resistance)
- Halogen-free: low smoke emission and low toxicity during fire
- Flame & fire retardant
- Flexibility & stripability: for fast and easy installation
- Easy installation: with color identification
- Suitable to common connector types
- TÜV, VDE, UTE and IMQ certified
- One common factor for most of the photovoltaic power systems is outdoor use, characterised by high temperature / high UV radiation

SPECIFICATION

Type of appliance: Cable for Photovoltaic Systems

Standard: 2Pfg 1169/08.2007/BSEN 50618

Marking: KEI, PV1-F, 0.6/1.0 kV, Cable size, year of manufacturing, TUV 2 Pfg 1169/08.2007 or BSEN 50618

Cross Sectional area: 2.5 sqmm to 16 sqmm or as per customer requirement

Maximum permissible voltage 2000 Vdc

Conductor According to class 5 of IEC 60228/ DIN VDE 0295

Lower ambient temperature: -40°C

Upper ambient temperature: +90°C

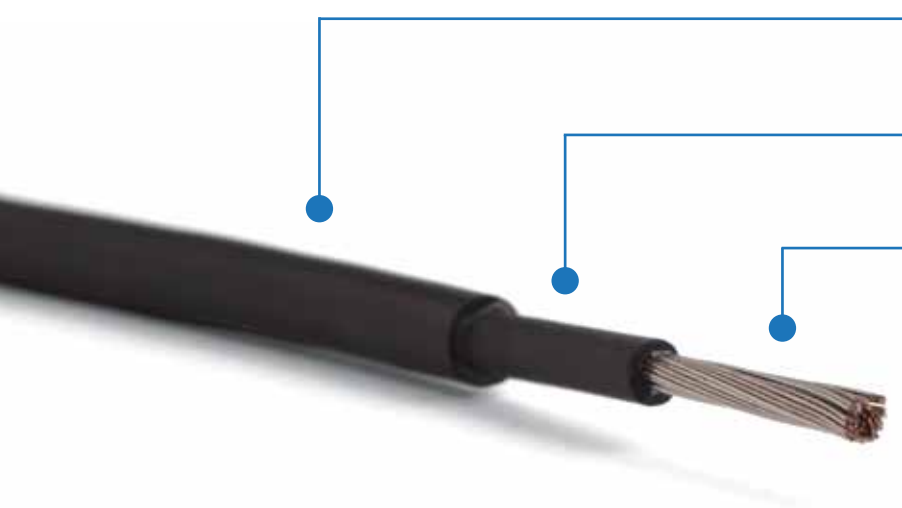
Max. temperature at conductor: 120°C for 20000h



CONSTRUCTION

KEI Solar Cables are manufactured with the following material:

- Annealed tinned copper conductor-Class 5
- Cross linked insulated halogen-free polyolefin compound
- Cross linked halogen free polyolefin sheath compound



Sheath - Extruded cross linked halogen-free polyolefin thermosetting sheath

Insulation-Extruded cross linked halogen-free polyolefin thermosetting insulation

Flexible stranded & circular (Class 5) tinned copper conductor

REQUIRED FEATURES OF SOLAR CABLE

Cable Size	Thickness of insulation	Thickness of sheath	Approx. overall diameter	Approx. weight of cable	Max. conductor D.C resistance at 20°C	Current rating under continuous operation 90°C & ambient temperature at 40°C
sqmm	mm	mm	mm	Kg/km	Ohm/km	Amp
1.5	0.60	0.80	4.60	35	13.70	22
2.5	0.60	0.80	4.90	45	8.21	30
4	0.60	0.80	5.40	60	5.09	42
6	0.60	0.80	5.90	80	3.39	52
10	0.70	0.80	7.10	120	1.95	76
16	0.70	0.80	8.60	180	1.24	95
25	0.80	0.90	10.30	275	0.80	125
35	0.80	0.90	11.70	370	0.57	159
50	0.90	1.00	13.70	515	0.39	185
70	1.00	1.10	16.00	710	0.28	239
95	1.00	1.10	17.70	930	0.21	290
120	1.20	1.30	20.20	1190	0.16	335
150	1.30	1.40	22.20	1470	0.13	385
185	1.40	1.50	24.60	1800	0.11	440
240	1.50	1.60	27.70	2310	0.08	520

* Spindle Hole size shall be minimum 80 mm and maximum 110 mm

* Eight wooden spools packed in one pallet shall be provided

* F - Flange diameter, T - Traverse internal length, B - Barrel diameter

Packing Conductor size upto 10 sqmm in wooden ply spool & above 10 sqmm in wooden drums

Mechanical Features:

- Resistant to impact, tear and abrasion
- Minimum bending radius is 4 times the diameter
- Safe pulling force - 50 N/sqmm
- Mineral oil resistance will be according to EN 60811-2-1
- Ozone resistance will be according to EN 50396 part 8.1.3
- Weathering-UV Resistance: according to HD 605/A1 or DIN 53367
- Ammonia resistance is done for 30 days in saturated ammonia atmosphere (internal testing)
- Very good resistance to oil and chemicals
- Acidic & alkaline resistance will be according to EN 60811-2-1 (Oxal acid and sodium hydroxide)

KEI Industries Limited

REGISTERED AND CORPORATE OFFICE:

D-90, OKHLA INDUSTRIAL AREA PHASE-I, NEW DELHI-110020, TEL: +91-11-26818840/8642/0242 FAX: 26817225, 26811959

E-MAIL: info@kei-ind.com WEBSITE: www.kei-ind.com CIN NO: L74899DL1992PLC051527

Manufacturing Units

Bhiwadi

KEI Industries Limited
SP-919/920/922, Ricco Industrial Area,
Phase-III, Bhiwadi, Distt. Alwar 301019 Rajasthan
Tel: +91-1493-220106/221731
Fax: 221731 E-Mail: bhiwadi@kei-ind.com

Pathredi

KEI Industries Limited
Plot No.SP2-874, Ind. Area Pathredi 301019
Bhiwadi (Alwar) Rajasthan (India) Tel: 9828588579

Silvassa

KEI Industries Limited
99/2/7, Madhuban Industrial Estate, Rakholi,
Silvassa 396230 Dadra & Nagar Haveli
Tel: +91-260-2644404/2630944
Fax: 2645896 E-Mail: silvassa@kei-ind.com

Chinchpada

KEI Industries Limited
Survey No. 1/1/2/5, Village Chinchpada,
Silvassa 396230, Dadra Nagar Haveli (UT)
Tel: 7574881215 E-Mail: silvassa@kei-ind.com

Chopanki

KEI Industries Limited
A-280/281/282/283/284, Ricco Industrial Area
(Chopanki) Distt. Alwar 301019 Rajasthan
Tel: +91-1493-260202/06 Fax: 260203
E-mail: chopanki@kei-ind.com

Marketing Offices (India)

WEST

Marketing Office-Mumbai

KEI Industries Limited
Nirvan Corporate, 7th Floor, Opposite Aghadi Nagar,
Pump House, Jijamata Road, Andheri East,
Mumbai 400093
Tel: +91-22-28239673, 28375642
Fax: +91-22-28258277 E-mail: mumbai@kei-ind.com

Ahmedabad

KEI Industries limited
301, Sarthik Complex, Opp. ISCKON BRTS,
Satellite Road, Ahmedabad 380015, Tel: 9825795673
E-Mail: dharmin.maniar@kei-ind.com, ahmedabad@kei-ind.com

Pune

KEI Industries Limited
Vasudha Equinox, Office No. 104, 1st Floor,
Mouje Bopodi, Near Khadki Railway Station, Pune 411003
Tel: 9922722378
E-Mail: srivastav.prashant@kei-ind.com

Nagpur

KEI Industries Limited
504, B – Wing, Lokmat Building, Lokmat Square,
Wardha Road, Nagpur 440012
E-Mail: nagpur@kei-ind.com
Mr. Saranjeet S. Kohli, Tel: 9822473774
E-Mail: saranjeet.kohli@kei-ind.com

Kolhapur

KEI Industries Limited,
Shekhar Babu Potdar RSN.No.1064, Plot no.1, Haripriya
nagar, Near Rajre Sambhaji Nagar, Kolhapur- MH-416012
Tel - 8591700942
E-Mail: vijay.patil@kei-ind.com

Vapi/Silvassa/Daman

KEI Industries Limited
A1/302, Karmabhumi Residency, Behind Golden
Bakery, Nanakwada, Halar,
Valsad 396001
Mr. Harsh Desai, Tel: 9723455316
E-Mail: harsh.desai@kei-ind.com

Raipur

KEI Industries Limited
206, 2nd Floor, Harshit Corporate, Amanaka,
G.E. Road, Raipur, Chhattisgarh 492001
Email: Chhattisgarh@kei-ind.com
Mr. Sumit Ganguly - 7581809898
E-Mail: sumit.ganguly@kei-ind.com

Goa

KEI Industries Limited
House no: 617, Housing Board Colony,
Camurlim Mapusa Goa 403507
E-Mail: goa@kei-ind.com
Mr. Nilesh Parab - 9890452484
E-Mail: nilesh.parab@kei-ind.com

Solapur

KEI Industries Limited
Gangadhar Hatte 20, New Siddheshwar Nagar, Near
Narendra Nagar, Vijapur Road, Saiful Solapur 413008
Tel: 9960224800
E-Mail: gangadhar@kei-ind.com

Rajkot

KEI Industries Limited
Mr. Nitin Tank Tel: +91-8155044144
E-Mail: nitin.tank@kei-ind.com

Nashik

KEI Industries Limited
Flat no.6. Om residency pagaremala Badade nager,
Near venkatesh residency, New Nashik cidco 422009.
Mr. Ghanshyam Ramesh Pardeshi
Tel: 8805369705 / 8291918949
E-Mail: ghanshyam.pardeshi@kei-ind.com

Baroda

KEI Industries Limited
803-804, Siddharth Complex, Near Hotel Express
R.C. Dutt Road, Baroda 390007
Tel: +91-265-6539719, 2341831, 9824676443, 9327476732
E-Mail: baroda@kei-ind.com, amit.gohil@kei-ind.com

Surat

KEI Industries Limited
703, Royal Trade Centre. Opposite Star Bazar,
Adajan - Hazira Road, Adajan, Surat 395009
Tell : +91-8980772277 / +91-261-2793279
E-Mail: deepak.zhamtani@kei-ind.com, surat@kei-ind.com

Aurangabad

KEI Industries Limited
House No. 15 Khivansara Nagar, Bidkin, Paithan Road,
Aurangabad 431105
Tel: 9822473774 / 9975708195
E-mail: aurangabad@kei-ind.com, suraj.thote@kei-ind.com

Noida

KEI Industries Limited A-43 Ground Floor, Sector-64,
Noida, UP 201301 Tel: 0120-4315467

Indore

KEI Industries Limited
Plot No 451 Sch No 78 Industrial Area New Loha Mandi
Dewas Naka Indore 452010 (M.P.) Tel: 9826588885

Gurgaon

KEI Industries Limited
Shop no-101 1st Floor, Radha Palace
Gurudwara Road, Gurgaon Haryana-122001
Tel: +919873561757 E-Mail: rk Singh@kei-ind.com

Dehradun

KEI Industries Limited
H.No. – 329, Lane No- 13, Mohit Nagar,
Dehradun 248001 (U.K.), Ph.: 0135-2762223
Tel: 9756621171 E-Mail: depotdehradun@kei-ind.com

Secunderabad

KEI Industries Limited
Flat No 613, D. No: 1-2-218,92,93 Swapnalok Complex,
SD Road, Secunderabad, Telangana – 500003
Tel : 8008000583 / 9963530111
E-Mail : kiran.kumar@kei-ind.com / vasudeva.rao@kei-ind.com

Coimbatore

KEI Industries Limited, SF.no. 581/A, K.N.G. Pudur Road,
Kanuvai Post S.M. Palayam Village, Coimbatore 641108
Tel: 9443324217, E-Mail: manohar.s@kei-ind.com

Vijayawada

KEI Industries Limited
Venkata Ramana Enclave, D.No. 48-18-2a/1,
2nd Floor -Nagarjuna Nagar Colony, 6th Lane, Behind
Sai Baba Temple, Besides Ayush Hospital Krishna
Dist., Andhra Pradesh 520008 Tel: 970558838 / 7799397779
E-Mail: annem.rambabu@kei-ind.com / giresh.kumar@kei-ind.com

Kolkata

KEI Industries Limited
Arihant Benchmark, 4th Floor 113-F Matheshwartola
Road Ps:Tiljala, Kolkata: 700046
Tel: 033-4062 0820 / 4062 0822, 9932449183
E-Mail: kolkata@kei-ind.com

Siliguri

KEI Industries Limited, 8, Balai Das Chatterjee Road,
Ground Floor, Hakimpara, (Opp. Relief Physiotherapy
Centre) Dist-Darjeeling, Siliguri 734001, West Bengal
Tel: 6292209825, E-Mail: dibyoyoti.karmakar@kei-ind.com

Korea (Local Representative)

Contact: Mr. CH Han
E-mail: ch.han@kei-ind.com
Tel: +82-10-4351-8585
Mr. TH Park
E-mail: th.park@kei-ind.com Contact : +82-10-9104-4519

NORTH

Jaipur

KEI Industries Limited
Shivam Business Center, 405, 4th Floor,
Calgary Hospital Road, Pradhan Marg,
Malviya Nagar, Jaipur 302017 (Rajasthan)
Phone No. + 91 141 5179279 Fax: +91 141 252 9404
Tel: 9929093711 E-Mail : jaipur@kei-ind.com

Chandigarh

KEI Industries Limited
SCO 17, 1st & 2nd Floor, Swastik Vihar, MDC, Sector-5,
Panchkula 134109
Tel: +91-172-4416301, 4416300, 9872974996, 9872581422
E-Mail: chandigarh@kei-ind.com

SOUTH

Chennai

KEI Industries Limited
No.4, (Old. No. 23) SIR C P Ramasamy Road,
2nd Floor, Near Apollo Spectra Hospital
Alwarpet, Chennai 600018
Tel: +91-44-42009120
Fax: +91-44-42009130; 8939768405
E-Mail: victor@kei-ind.com, chennai@kei-ind.com

Cochin

KEI Industries Limited
Ward No 18/555 And 18/556, Nad Thorappu,
Near Kuzhikkattukara Juma Masjid,
Edathala, Ernakulam, Kerala- 683563
Tel: 9645096420, E-Mail : cochin@kei-ind.com

EAST

Bhubaneswar

KEI Industries Limited
Plot No- 139, 3rd Floor, Rose Dale District Centre,
Chandrashekharpur, Bhubaneswar 751016, Odisha
Tel: 9937033537
E-Mail: odisha@kei-ind.com

Patna

KEI Industries Limited
HIG Plot No-4H/59, Bahadurpur Housing Colony,
Lohia Nagar, Agamkuan, Patna 800026, Bihar
Tel: + 91 95348 38038, 7360042598
E-Mail: bihar@kei-ind.com

Marketing Office (Overseas)

Dubai

KEI Industries Limited
Office -27, LOB 10, PO Box – 261739, JAFZA, Dubai UAE.
Tel : +971-564853435 Fax : +971-48812311
E-Mail: dubai@kei-ind.com
Contact : Mr. Devraj Tigaiya

South Africa

KEI Cables SA (Pty) Ltd.
Unit 27-4, Fish Eagle View, 1 Benacre Lane,
Modderfontein, 1609, South Africa
Ms. Thavashnee Pillay +27 83 235 2895

Guwahati

KEI Industries Limited, Mangalam Plaza
Compound, Near North East Weight Bridge, NH-37
Bye Pass, Beltola, Guwahati 781029 Assam
Rubul Gogoi – 8134846024, 9706050041
E-Mail: rubul@kei-ind.com

Ranchi

KEI Industries Limited
Golden Camp Warehouse, Old H B Road
Kokar, Ranchi, Jharkhand 834001
Tel: 9810492658, 8918904901
E-Mail : jharkhand@kei-ind.com

Australia

KEI Cables Australia Pty Ltd
Level 1, 7 Marie Street, Milton, Brisbane, 4064
Queensland, Australia Tel: 1300 780 831
Contact: Mr. Michael Wicks
E-mail: info@cablegrid.com.au

Nigeria

(Marketing Representative)
E-Mail: kunal.gupta@kei-ind.com
Tel: +234 809 9777786