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ONE STOP SHOP SOLAR WIRE & CABLES SOLUTION.



















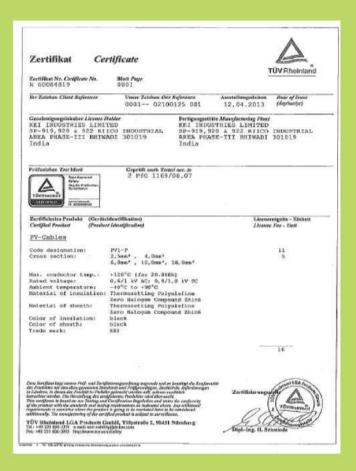








TUV Certificate





ISO Certificate







Introduction

Established in 1968, KEI Industries Ltd. is ranked amongst the top cable manufacturing companies of the world. Through its customer focus approach and continuous quest for world class quality, KEI has emerged as an industry leader over a period of five decades. KEI is acclaimed for its strong customer support and an efficient marketing and distribution network. It has an ever growing international footprint with clients spread across 45 countries to date.

Today, KEI enjoys a premium brand imagery serving large infrastructure projects in various fields like refinery, power, petrol chemical, cement, steel, fertilizers and renewable energy sectors. Along with this, utmost safety standards are practiced, confirming to occupational health and safety management system standards of OHSAS.

KEI has three manufacturing facilities in India to manufacture cables from 225V up to 420kV. KEI is proudly accredited by NABL, which forms a part of the NATA (Australia) Mutual Recognition Accreditation Agreement for testing cables. KEI first entered the Australian market in 2008 and is now an approved supplier to most large global mining Australian companies and Australia utilities. It has been part of countless successful projects ranging from 225V to 420kV. ISO 9001, 14001, 18001 certifications from DNV of the Netherlands are a testament to stringent quality control measures maintained by the Company. Surveillance by a competent team of technocrats and quality enablers, allows KEI to ensure compliance with globally accepted quality standards. Continuous product innovation and cutting-edge R&D at its in-house labs, contributes towards constant evolution in products and services.

KEI has the world-class quality, skilled manpower, and most importantly, the technology to ace any new challenge that can come during transmission, distribution, and supply of electrical power. The faith and support extended by its clients usher KEI to serve yet another important and critical application-Solar PV Plants.

Application

KEI Solar cables are designed for connecting photovoltaic power supply systems, dedicated to the photovoltaic system direct current (D.C.) side with a nominal D.C. voltage of a 1.5kV, can be used indoor & outdoor for flexible and fixed installations with high mechanical strength in extreme weather conditions designed to withstand the demanding environmental conditions that arise in any fixed, mobile, roof or architecturally integrated photovoltaic installation.

These cables are suitable for permanent outdoor long-term use, under variable and harsh climate extremely resistant to weathering, UV-radiation and abrasion conditions. Individual modules are connected using cables to form the PV generator. The module cables are connected into a string which leads into the generator junction box, and a main DC cable connects the generator junction box to the inverter.

Additionally, it is salt water resistant and resistant to acids and alkaline solutions. also suitable for fixed installation as well as for moving applications without tensile load. It is especially designed for outdoor use, which means direct sun radiation and air humidity, due to the halogen free & cross-linked jacket material the cable can also be installed in dry and humid conditions indoors.

They are designed and tested to operate at a normal maximum conductor temperature of 90°C and for 20,000 hours up to 120°C.





















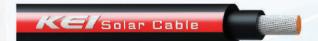








1C, Tinned Copper conductor, XLPO Insulated & Sheathed Cable 1500 V DC to EN: 50618





Cable Construction

 Conductor :Annealed Tinned Copper Class 5

Insulation :Cross linked Polyolefin (XLPO)

:Cross linked Polyolefin (XLPO) Outer Sheath

:(+ ve) Black with red stripe

(- ve) Black

Reference Standards :50618 & IEC : 62930

Characteristics

Temperature range

40 deg. C to +120 deg. C

"Normal max conductor temperature of 90 °C, but for a maximum of 20 000 hours a max. Conductor temperature of 120 °C at a max.

Ambient temperature of 90 °C is permitted."

Nominal DC Voltage

1.5/1.5 kV DC between conductors and between conductor and earth 1,0/1,0 kV when used in alternating current (a.c.) systems.

 Spark Test to EN 62230 Annex A • Flame retardant

● Test Voltage 6500 V AC or 15000 V DC to EN 60332-1-2

• Weathering/ UV Resistance to EN 50618 Annex E

• Ozone Resistance

to EN 50396 part 8.1.3 Method B

 Low smoke emission to EN 61034-2

• Halogen free to EN 50525-1, Annex B

 Resistant to Acid and Bases to EN 60811-404 & EN 50618

Annex B

 Expected Design life 30 years

TECHNICAL DETAILS

							i i				Current Rating	***
Pross Sectional Area	Conductor diameter	Insulation Radial Thickness	Outer Sheath Radial Thickness	Overall Diameter	Cable weight	Conductor DC deg.C	Conductor Short Circuit		g Radius mm	Single cable in air	Single cable on surface	Two loaded cables touchi in air
(Nominal)	(Approximate)	(Nominal)	(Nominal)	(Nominal)	(Approximate)	(Maximum)	(Maximum)	(Min	imum)	0	<u>o</u>	00
Sq. mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation	Installed	Amps	Amps	Amps
2.5	2.0	0.7	0.8	5.2	49	8.21	0.36	42	31	41	39	33
4	2.6	0.7	0.8	5,9	66	5.09	0.57	47	35	55	52	44
6	3.2	0.7	0.8	6.5	88	3.39	0.86	52	39	70	67	57
10	4.1	0.7	0.8	7.4	128	1.95	1.43	59	44	98	93	79
16	5.2	0.7	0.9	8.7	190	1.24	2.29	70	52	132	125	107
25	6.4	0.9	1.0	10.5	296	0.795	3.58	84	63	176	167	142
35	7.6	0.9	1.1	11.9	399	0.565	5.01	95	71	218	207	176
50	9.2	1.0	1,1	13.8	554	0.393	7.15	110	83	276	262	221
70	10.9	1.1	1.2	15.9	758	0.277	10.01	127	95	347	330	278
95	12.5	1.1	1.3	17.7	999	0.210	13.59	142	106	416	395	333
120	14.2	1.2	1.3	19.6	1243	0.164	17.16	157	118	488	464	390
150	15.8	1.4	1.4	21.8	1551	0.132	21.45	174	131	566	538	453
185	17.5	1.6	1.6	24.3	1919	0.108	26.46	194	146	644	612	515
240	20.1	1.7	1.7	27.3	2457	0.0817	34.32	218	164	775	736	620
300	22.5	1.8	1.8	30.1	3039	0.0654	42.90	241	181	913	866	693
400	26.0	2.0	2.0	34.4	4020	0.0495	57.20	275	206	1098	1041	825

The above dimension/parameter are indicative termed only for guidelines and are subjected to tolerance, due to regular development/improvisation subjected to change without prior information ***Current ratings are based on Max. conductor Temperature 120 deg. C, Ambient Air temperature 60 deg. C.

Current rating conversion factors for different ambient temperatures

	up to 60	70	80	90
Ì	1.00	0.92	0.84	0.75

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply





















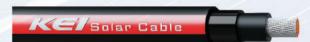








1C, Tinned Copper conductor, XLPO Insulated, Termite protected Polyamide jacket & XLPO Sheathed Cable 1500 V DC to EN: 50618





Cable Construction

Conductor :Annealed Tinned Copper Class 5

Insulation :Cross linked Polyolefin (XLPO)

• Anti Termite :Polyamide (Nylon-12)

(Black)

Outer Sheath :Cross linked Polyolefin (XLPO)

:(+ ve) Black with red stripe

(- ve) Black

• Reference Standards :50618 & IEC : 62930

Characteristics

Temperature range

40 deg. C to + 120 deg. C

"Normal max conductor temperature of 90 °C, but for a maximum of 20 000 hours a max. Conductor temperature of 120 °C at a

max.Ambient temperature of 90 °C is permitted."

Nominal DC Voltage

1.5/1.5 kV DC between conductors and between conductor and earth

1,0/1,0 kV when used in alternating current (a.c.) systems.

• Spark Test

6500 V AC or 15000 V DC

to EN 62230 Annex A

• Flame retardant

to FN 60332-1-2

Test Voltage

 Weathering/ UV Resistance to EN 50618 Annex E

• Ozone Resistance

to EN 50396 part 8.1.3 Method B

 Low smoke emission to EN 61034-2

• Halogen free

to EN 50525-1, Annex B

Resistant to acid and bases

to EN 60811-404 & EN 50618

Annex B

• Expected Design life

30 years

TECHNICAL DETAILS

												Current Rating 1	
Cross Sectional Area (Nominal)	Conductor diameter (Approximate)	Insulation Radial Thickness (Nominal)	Nylon Jacket Radial Thickness (Min.avg)	Outer Sheath Radial Thickness (Nominal)	Overall Diameter (Nominal)	Cable weight (Approximate)	Cond. DC Resistance at 20 deg.C (Maximum)	Conductor Short Circuit (Maximum)	ini	g Radius mm imum)	Single cable in air	Single cable on surface	Two loaded cables touchin in air
Sq. mm	mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation	Installed	Amps	Amps	Amps
2.5	2.0	0.7	0.2	0.8	6.2	66	8.21	0.36	155	93	41	39	33
4	2.6	0.7	0.2	0.8	6.9	79	5.09	0.57	173	104	55	52	44
6	3.2	0.7	0.2	0.8	7.5	102	3.39	0.86	188	113	70	67	57
10	4.1	0.7	0.2	0.8	8.4	144	1.95	1.43	210	126	98	93	79
16	5.2	0.7	0.2	0.9	9.7	209	1.24	2.29	243	146	132	125	107
25	6.4	0.9	0.2	1.0	11.5	328	0.795	3.58	288	173	176	167	142
35	7.6	0.9	0.2	1.1	12.9	434	0.565	5.01	323	194	218	207	176
50	9.2	1.0	0.2	1,1	14.8	593	0.393	7.15	370	222	276	262	221
70	10.9	1.1	0.2	1.2	16.9	803	0.277	10.01	423	254	347	330	278
95	12.5	1.1	0.2	1.3	18.7	1049	0.210	13.59	468	281	416	395	333
120	14.2	1.2	0.4	1.3	21.2	1298	0.164	17.16	530	318	488	464	390
150	15.8	1,4	0,4	1,4	23.4	1612	0.132	21.45	585	351	566	538	453
185	17.5	1.6	0.4	1.6	25.9	1988	0,108	26.46	648	389	644	612	515
240	20.1	1,7	0.4	1.7	28.9	2532	0.0817	34.32	723	434	775	736	620
300	22.5	1.8	0.4	1.8	31.7	3122	0.0654	42.90	793	475	913	866	693
400	26.0	2.0	0.4	2.0	36.0	4116	0.0495	57.20	900	540	1098	1041	825

The above dimension/parameter are indicative termed only for guidelines and are subjected to tolerance, due to regular development/improvisation subjected to change without prior information ***Current ratings are based on Max. conductor Temperature 120 deg. C, Ambient Air temperature 60 deg. C.

Current rating conversion factors for different ambient temperatures

up to 60	70	80	90
1.00	0.92	0.84	0.75

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply





























2 x 1C, Tinned Copper conductor, XLPO Insulated & Sheathed - Twin Parallel Cable 1500 V DC to EN: 50618



Cable Construction

• Conductor : Annealed Tinned Copper Class 5

• Insulation :Cross linked Polyolefin (XLPO)

:(+ve) Red (-ve) Black

:Cross linked Polyolefin (XLPO) (Black)

• Reference Standards :EN 50618 & IEC : 62930

Characteristics

• Temperature range -40 deg. C to + 120 deg. C

"Normal max conductor temperature of 90 °C, but for a maximum

of 20 000 hours a max. Conductor temperature of 120 °C at a max. Ambient temperature of 90 °C is permitted."

● Nominal DC Voltage

1.5/1.5~kV DC between conductors and between conductor and earth 1,0/1,0 kV when used in alternating current (a.c.) systems.

• Spark Test to EN 62230 Annex A • Flame retardant to EN 60332-1-2

• Ozone Resistance to EN 50396 part 8.1.3 Method B

•Low smoke emission to EN 61034-2

• Halogen free to EN 50525-1, Annex B

• Resistant to acid and bases to EN 60811-404 & EN 50618 Annex B

• Expected Design life 30 years

TECHNICAL DETAILS

Outer Sheath

		E CONTRACTO					Manager Services				Current Rating *	
Cross Sectional Area	Conductor diameter	Insulation Radial Thickness	Outer Sheath Radial Thickness	Overall Diameter	Cable weight	Cond. DC Resistance at 20 deg.C	Conductor Short Circuit		Bending Radius in mm		Single cable on surface	Two loaded cables touching in air
(Nominal)	(Approximate)	(Nominal)	(Nominal)	(Nominal)	(Approximate)	(Maximum)	(Maximum)	(Minir	num)	0	0	00
Sq. mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation	Installed	Amps	Amps	Amps
2.5	2.0	0.7	0.8	5.2 x 10.4	97	8.21	0.36	42	31	41	39	33
4	2.6	0.7	0.8	5.9 x 11.8	133	5.09	0.57	47	35	55	52	44
6	3.2	0.7	0.8	6.5 x 13.0	175	3.39	0.86	52	39	70	67	57
10	4.1	0.7	0.8	7.4 x 14.8	256	1.95	1.43	59	44	98	93	79
16	5.2	0.7	0.9	8.7 x 17.4	380	1.24	2.29	70	52	132	125	107

The above dimension/parameter are indicative termed only for guidelines and are subjected to tolerance, due to regular development/improvisation subjected to change without prior information
***Current ratings are based on Max. conductor Temperature 120 deg. C, Ambient Air temperature 60 deg. C.

Current rating conversion factors for different ambient temperatures

up to 60	70	80	90
1.00	0.92	0.84	0.75

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply





























2 x 1C, Tinned Copper conductor, XLPO Insulated, Termite protected Polyamide jacket & XLPO Sheathed-Twin Parallel Cable 1500 V DC to EN: 50618



Cable Construction

Conductor :Annealed Tinned Copper Class 5

• Insulation :Cross linked Polyolefin (XLPO)

:(+ ve) Red (- ve) Black

• Anti Termite :Polyamide (Nylon-12)

(Black)

Outer Sheath :Cross linked Polyolefin (XLPO)

(Black)

Reference Standards :EN 50618 & IEC : 62930

Characteristics

Temperature range

-40 deg. C to + 120 deg. C

"Normal max conductor temperature of 90 °C, but for a maximum of 20 000 hours a max. Conductor temperature of 120 °C at a max.

Ambient temperature of 90°C is permitted."

Nominal DC Voltage

1.5/1.5~kV DC between conductors and between conductor and earth 1,0/1,0 kV when used in alternating current (a.c.) systems.

Spark Test

to EN 62230 Annex A

• Flame retardant to EN 60332-1-2

●Test Voltage 6500 V AC or 15000 V DC Wealthering/UV Resistance
to FN 50618 Appex F

Ozone Resistance

to EN 50396 part 8.1.3 Method B

• Low smoke emission

to EN 61034-2

Halogen free

to EN 50525-1, Annex B

 Resistant to acid and bases to EN 60811-404 & EN 50618

Annex B

• Expected Design life

30 years

TECHNICAL DETAILS

				Radial Radial Diameter Resistance Short at 20 deg.C Circuit					Current Rating ***				
Cross Sectional Area	Conductor diameter	Insulation Radial Thickness	Nylon Jacket Radial Thickness	Radial		Cable weight	Resistance	777777	Bending in r	Radius nm	Single cable in air	Single cable on surface	Two loaded cables touching in air
(Nominal)	(Approximate)	(Nominal)	(min.avg)	(Nominal)	(Nominal)	(Approximate)	(Maximum)	(Maximum)	(Mini	mum)		<u>o</u>	<u>∞</u>
Sq. mm	mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation	Installed	Amps	Amps	Amps
2.5	2.0	0.7	0.2	0.8	6.2 x 12.4	132	8.21	0.36	155	93	41	39	33
4	2.6	0.7	0.2	0.8	6.9 x 13.8	158	5.09	0.57	173	104	55	52	44
6	3.2	0.7	0.2	0.8	7.5 x 15.0	204	3.39	0.86	188	113	70	67	57
10	4.1	0.7	0.2	0.8	8.4 x 16.8	288	1.95	1.43	210	126	98	93	79
16	5.2	0.7	0.2	0.9	9.7 x 19.4	418	1.24	2.29	243	146	132	125	107

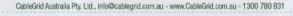
The above dimension/parameter are indicative termed only for guidelines and are subjected to tolerance, due to regular development/improvisation subjected to change without prior information
***Current ratings are based on Max. conductor Temperature 120 deg. C, Ambient Air temperature 60 deg. C.

Current rating conversion factors for different ambient temperatures

up to 60	70	80	90
1.00	0.92	0.84	0.75

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply

KEI





























1C, Aluminium Conductor XLPO Insulated & Sheathed Cable 1500 V DC to EN: 50618 & AS/NZS 5000.1





Cable Construction

• Conductor :Aluminium Class 2

• Insulation :Cross linked Polyolefin (XLPO)

(Black)

:Cross linked Polyolefin (XLPO) :(+ ve) Black with red stripe

(- ve) Black

• Reference Standards : EN 50618 & AS/NZS 5000.1

Characteristics

Temperature range

-40 deg. C to +120 deg. C

"Normal max conductor temperature of 90 °C, but for a maximum of 20 000 hours a max. Conductor temperature of 120 °C at a max. Ambient temperature of 90 °C is permitted."

Nominal DC Voltage

1.5/1.5 kV DC between conductors and between conductor and earth 1,0/1,0 kV when used in alternating current (a.c.) systems.

• Spark Test to EN 62230 Annex A • Flame retardant to EN 60332-1-2

6500 V AC or 15000 V DC to EN 50618 Annex E

• Ozone Resistance to EN 50396 part 8.1.3 Method B

• Low smoke emission to EN 61034-2

• Halogen free to EN 50525-1, Annex B

• Resistant to acid and bases to EN 60811-404 & EN 50618 Annex B

• Expected Design life

30 years

TECHNICAL DETAILS

Outer Sheath

			The second second							C	urrent Rating ***	
Cross Sectional Area	Conductor diameter	Insulation Radial Thickness	Outer Sheath Radial Thickness	Overall Diameter	Cable weight	Cond. DC Resistance at 20 deg.C	Conductor Short Circuit	2.00.1	mm	Two cable Touching in air Unenclosed Spaced from surface	Two cable Touching in air on surface	Two cable Touching in enclosure
(Nominal)	(Approximate)	(Nominal)	(Nominal)	(Nominal)	(Approximate)	(Maximum)	(Maximum)	(Mini	mum)	1	7	(80)
Sq. mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation	Installed	Amps	Amps	Amps
95	11.4	1.1	1.5	17.2	450	0.320	8.98	430	258	334	283	258
120	12.8	1.2	1.5	18.8	540	0.253	11.34	470	282	385	326	293
150	14.2	1.4	1.6	20.8	670	0.206	14.18	520	312	439	372	345
185	16.1	1.6	1.6	23.1	820	0.164	17.48	578	347	515	440	391
240	18.5	1.7	1.7	25.9	1030	0.125	22.68	648	389	609	522	457
300	20.6	1.8	1.8	28.4	1250	0.100	28.35	710	426	710	610	537
400	23.6	2.0	1.9	32.0	1610	0.0778	37.80	800	480	837	713	613
500	26.6	2.2	2.0	35.6	1990	0.0605	47.25	890	534	973	841	708

The above dimension and parameter are indicative termed only for guidelines, due to regular development/improvisation subjected to change without prior information
****Current ratings are based on Max. conductor Temperature 120 deg. C, Ambient Air temperature 40 deg. C.

Current rating conversion factors for other than 40 deg. C ambient temperature

15	20	25	30	35	45	50	55	60	65	70	75	80	85
1.26	1.20	1.15	1.10	1.05	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34	0.19

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply





















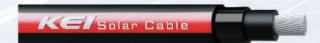








1C, Aluminium Conductor XLPO Insulated, Termite protected Polyamide jacket & XLPO Sheathed Cable 1500 V DC to EN: 50618 & AS/NZS 5000.1





Cable Construction

Conductor :Aluminium Class 2

Insulation :Cross linked Polyolefin (XLPO)

(Black)

:Polyamide Nylon-12 (Black) Anti Termite

Outer Sheath :Cross linked Polyolefin (XLPO)

:(+ ve) Black with red stripe

(- ve) Black

Characteristics

 Temperature range -40 deg. C to +120 deg. C

"Normal max conductor temperature of 90 °C, but for a maximum of 20 000 hours a max. Conductor temperature of 120 °C at a max.

Ambient temperature of 90°C is permitted."

Nominal DC Voltage

1.5/1.5 kV DC between conductors and between conductor and earth 1,0/1,0 kV when used in alternating current (a.c.) systems.

 Spark Test to EN 62230 Annex A to EN 60332-1-2

• Flame retardant

to EN 60811-404 & EN 50618 Annex B

Expected Design life

Resistant to acid and bases

 Ozone Resistance to EN 50396 part 8.1.3 Method B

Low smoke emission

to EN 61034-2

 Halogen free to EN 50525-1, Annex B

30 years

Reference Standards :EN 50618 & AS/NZS 5000.1

 Test Voltage 6500 V AC or 15000 V DC Weathering/UV Resistance to EN 50618 Annex E

TECHNICAL DETAILS

												Current F	Rating ***	
Cross Sectional Area (Nominal)	Conductor diameter (Approximate)	Insulation Radial Thickness (Nominal)	Radial S Thickness	Outer Sheath Radial Thickness (Nominal)	Overall Diameter (Nominal)	Diameter	Cond. DC Resistance at 20 deg.C	Conductor Short Circuit (Maximum)	Bending Radius in mm (Minimum)		Two cable Touching in air Unenclosed Spaced from surface	Two cable Touching in air on surface	Two cable Touching Direct Buried	Two cable Touching in enclosure Underground
Sq. mm	mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation	Installed	Amps	Amps	Amps	Amps
95	11.4	1.1	0.4	1.5	18.8	500	0.320	8.98	470	282	334	283	332	258
120	12.8	1.2	0.4	1.5	20.4	600	0.253	11.34	510	306	385	326	377	293
150	14.2	1.4	0.4	1.6	22.4	730	0.206	14.18	560	336	439	372	431	345
185	16.1	1.6	0.4	1.6	24.7	880	0.164	17.48	618	371	515	440	488	391
240	18.5	1.7	0.4	1.7	27.5	1100	0.125	22.68	688	413	609	522	565	457
300	20.6	1.8	0.4	1.8	30.0	1330	0.100	28.35	750	450	710	610	646	537
400	23.6	2.0	0.4	1.9	33.6	1700	0.0778	37.80	840	504	837	713	739	613
500	26.6	2.2	0.4	2.0	37.2	2080	0.0605	47.25	930	558	973	841	842	708

The above dimension and parameter are indicative termed only for guidelines, due to regular development/improvisation subjected to change without prior information

Current rating conversion factors for other than 40 deg. C ambient temperature

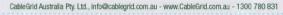
15	20	25	30	35	45	50	55	60	65	70	75	80	85
1.26	1.20	1.15	1.10	1.05	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34	0.19

Current rating conversion factors for other than 25 deg. C ground temperature

	10	15	20	30	35	40
Ī	1.11	1.07	1.03	0.97	0.93	0.89

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply































^{***}Current ratings are based on Max. conductor Temperature 120 deg. C, Ambient Air temperature 40 deg. C, Ambient soil Temperature 25deg. C, Soil thermal resistivity 1.2 k.m/W, Depth of Laying 0.5m

2 x 1C, Aluminium Conductor XLPO Insulated & Sheathed Feeder - Duplex Cable 1500 V DC to EN: 50618 & **AS/NZS 5000.1**



Cable Construction

Conductor

:Aluminium Class 2

Insulation

:Cross linked Polyolefin (XLPO)

Outer Sheath

:Cross linked Polyolefin (XLPO)

:(+ ve) Black with red stripe

(- ve) Black

• Reference Standards : EN 50618 & AS/NZS 5000.1

Characteristics

Temperature range

40 deg. C to +120 deg. C

"Normal max conductor temperature of 90 °C, but for a maximum of 20 000 hours a max. Conductor temperature of 120 °C at a max. Ambient temperature of 90°C is permitted."

● Nominal DC Voltage

1.5/1.5 kV DC between conductors and between conductor and earth 1,0/1,0 kV when used in alternating current (a.c.) systems.

Spark Test

• Flame retardant to EN 60332-1-2

to EN 62230 Annex A

 Test Voltage 6500 V AC or 15000 V DC

• Wealthering/ UV Resistance to EN 50618 Annex E

Ozone Resistance

to EN 50396 part 8.1.3 Method B

• Low smoke emission

to EN 61034-2

 Halogen free to EN 50525-1, Annex B

Resistant to acid and bases

to EN 60811-404 & EN 50618

Annex B

Expected Design life

30 years

TECHNICAL DETAILS

										C	urrent Rating *	**
Cross Sectional	vea diameter	Insulation Radial Thickness (Nominal)	Outer Sheath Radial Thickness (Nominal)	Overall Diameter (Nominal)	Cable weight (Approximate)	Cond. DC Resistance at 20 deg.C (Maximum)	Conductor Short Circuit (Maximum)) (Minimum) Installation Installed		Two cable Touching in air Unenclosed Spaced from surface	Two cable Touching in air on surface	Two cable Touching in enclosure Underground
Sq. mr	n mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation Phase/Bundled	Installed Phase/Bundled	Amps	Amps	Amps
95	11.4	1,1	1.5	17.2 / 34.4	900	0.320	8.98	310 / 413	206 / 275	334	283	258
120	12.8	1.2	1.5	18.8 / 37.6	1080	0.253	11.34	338 / 451	226 / 301	385	326	293
150	14.2	1,4	1.6	20.8 / 41.6	1340	0.206	14.18	374 / 499	250 / 333	439	372	345
185	16.1	1.6	1.6	23.1 / 46.2	1640	0.164	17,48	416 / 554	277 / 370	515	440	391
240	18.5	1.7	1.7	25.9 / 51.8	2060	0.125	22.68	466 / 622	311 / 414	609	522	457
300	20.6	1.8	1.8	28.4 / 56.8	2500	0.100	28.35	511 / 682	341 / 454	710	610	537
400	23.6	2.0	1.9	32.0 / 64.0	3220	0.0778	37.80	576 / 768	384 / 512	837	713	613
500	26.6	2.2	2.0	35.6 / 71.2	3980	0.0605	47.25	641 / 854	427 / 570	973	841	708

The above dimension and parameter are indicative termed only for guidelines, due to regular development/improvisation subjected to change without prior information

***Current ratings are based on Max. conductor Temperature 120 deg. C, Ambient Air temperature 40 deg. C.

Current rating conversion factors for other than 40 deg. C ambient temperature

15	20	25	30	35	45	50	55	60	65	70	75	80	85
1.26	1.20	1.15	1.10	1.05	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34	0.19

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply





























2 x 1C, Aluminium Conductor XLPO Insulated, Termite protected Polyamide jacket & XLPO Sheathed Feeder-Duplex Cable 1500V DC to EN: 50618 & AS/NZS 5000.1



Cable Construction

• Conductor :Aluminium Class 2

• Insulation :Cross linked Polyolefin (XLPO)

(Black)

Anti Termite :Polyamide Nylon-12 (Black)

Outer Sheath :Cross linked Polyolefin (XLPO)

:(+ ve) Black with red stripeto

(- ve) Black

• Reference Standards :EN 50618 & AS/NZS 5000.1

Characteristics

• Temperature range

-40 deg. C to +120 deg. C

Ambient temperature of 90°C is permitted."

"Normal max conductor temperature of 90 °C, but for a of 20 000 hours a max. Conductor temperature of 120 °C at a max.

Nominal DC Voltage

 $1.5/1.5\ kV$ DC between conductors and between conductor and earth1,0/1,0 kV when used in alternating current (a.c.) systems

● Spark Test FN 62230 Annex A • Flame retardant to EN 60332-1-2

• Test Voltage 6500 V AC or 15000 V DC • Wealthering/ UV Resistance to EN 50618 Annex E Ozone Resistance

to EN 50396 part 8.1.3 Method B

●Low smoke emission to FN 61034-2

• Halogen free to EN 50525-1, Annex B

 Resistant to acid and bases to EN 60811-404 & EN 50618

Annex B

●Expected Design life

30 years

TECHNICAL DETAILS

												Current	Rating ***	
Cross Sectional Area (Nominal)	Conductor diameter (Approximate)	Insulation Radial Thickness (Nominal)	Nylon Jacket Radial Thickness (min.avg)	Outer Sheath Radial Thickness (Nominal)	Overall Diameter (Nominal)	Cable weight (Approximate)	Cond. DC Resistance at 20 deg.C (Maximum)	Conductor Short Circuit (Maximum)	ini	g Radius mm mum)	Two cable Touching in air Unenclosed Spaced from surface	Two cable Touching in air on surface	Two cable Touching Direct Buried	Two cable Touching in enclosure Underground
Sq. mm	mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation Phase/Bundled	Installed Phase/Bundled	Amps	Amps	Amps	Amps
95	11.4	1.1	0.4	1.5	18.8 / 37.6	1000	0.320	8.98	564 / 752	376 / 564	334	283	332	258
120	12.8	1.2	0.4	1.5	20.4 / 40.8	1200	0,253	11.34	612 / 816	408 / 612	385	326	377	293
150	14.2	1.4	0.4	1.6	22.4 / 44.8	1460	0.206	14.18	672 / 896	448 / 672	439	372	431	345
185	16.1	1.6	0.4	1.6	24.7 / 49.4	1760	0.164	17.48	741 / 988	494 / 741	515	440	488	391
240	18.5	1.7	0.4	1.7	27.5 / 55.0	2200	0,125	22.68	825 / 1100	550 / 825	609	522	565	457
300	20.6	1.8	0.4	1.8	30.0 / 60.0	2660	0.100	28.35	900 / 1200	600 / 900	710	610	646	537
400	23.6	2.0	0.4	1.9	33.8 / 67.6	3400	0.0778	37.80	1008 / 1344	672 / 1008	837	713	739	613
500	26.6	2.2	0.4	2.0	37.4 / 74.8	4160	0.0605	47.25	1116 / 1488	744 / 1116	973	841	842	708

The above dimension and parameter are indicative termed only for guidelines, due to regular development/improvisation subjected to change without prior information

Current rating conversion factors for other than 40 deg. C ambient temperature

15	20	25	30	35	45	50	55	60	65	70	75	80	85
1.26	1.20	1.15	1.10	1.05	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34	0.19

Current rating conversion factors for other than 25 deg. C ground temperature

10	15	20	30	35	40
1.11	1.07	1.03	0.97	0.93	0.89

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply























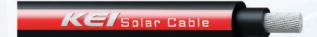






^{***}Current ratings are based on Max. conductor Temperature 120 deg. C, Ambient Air temperature 40 deg. C, Ambient soil Temperature 25deg. C, Soil thermal resistivity 1.2 k.m/W, Depth of Laying 0.5m.

1C, Aluminium Conductor XLPE Insulated & HDPE Sheathed Cable 1500 V DC to EN: 50618 & AS/NZS 5000.1





Cable Construction

Conductor :Aluminium Class 2

• Insulation :Cross linked Polyethylene (X-90)

(Black)

:High Density Polyethylene (HDPE) :(+ ve) Black with red stripe

(- ve) Black

• Reference Standards : EN 50618 & AS/NZS 5000.1

Characteristics

• Temperature range

-40 deg. C to +90 deg. C

Normal max conductor temperature of 90 °C.

Nominal DC Voltage

1.5/1.5 kV DC between conductors and between

conductor and earth.

Spark Text

to EN 62230 Annex A

Test Voltage

6500 V AC or 15000 V DC

• Surface Resistance of sheath to EN 50618 table 2, clause 1.6

•Long term resistance of insulation to DC

to EN 50618 table 2, Clause 1.5

• Environmental Stress Crack Resistance

to As/NZS 3808 table 10

• Carbon black content & dispersion

to As/NZS 3808 table 10

Expected Design life

30 years

TECHNICAL DETAILS

Outer Sheath

											Current R	ating ***	
Cross Sectional Area (Nominal)	Conductor diameter (Approximate)	Insulation Radial Thickness (Nominal)	Outer Sheath Radial Thickness (Nominal)	Overall Diameter (Nominal)	Cable weight (Approximate)	Cond. DC Resistance at 20 deg. C	Conductor Short Circuit (Maximum)	Bending Radius in mm (Minimum) Installation Installed		Two cable Touching in air Unenclosed Spaced from surface	Two cable Touching in air on surface	Two cable Touching Direct Buried	Two cable Touching in enclosure Underground
Sq. mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation	Installed	Amps	Amps	Amps	Amps
95	11.4	1.1	1.5	17.2	380	0.320	8.98	430	258	262	216	291	221
120	12.8	1.2	1.5	18.8	460	0.253	11.34	470	282	306	253	332	252
150	14.2	1.4	1.6	20.8	580	0.206	14.18	520	312	350	291	372	283
185	16.1	1.6	1.6	23.1	700	0.164	17.48	578	347	406	340	423	329
240	18.5	1.7	1.7	25.9	890	0.125	22.68	648	389	485	408	492	388
300	20.6	1.8	1.8	28.4	1090	0.100	28.35	710	426	562	473	556	440
400	23.6	2.0	1.9	32.1	1420	0.0778	37.80	803	482	660	559	638	516
500	26.6	2.2	2.0	35.7	1760	0.0605	47.25	893	536	772	656	729	590

The above dimension and parameter are indicative termed only for guidelines, due to regular development/improvisation subjected to change without prior information
****Current ratings are based on Max. conductor Temperature 90 deg. C, Ambient Air temperature 40 deg. C.

Current rating conversion factors for other than 40 deg. C ambient temperature

15	20	25	30	35	45	50	55	60	65	70	75	80	85
1.26	1.20	1.15	1.10	1.05	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34	0.19

Current rating conversion factors for other than 25 deg. C ground temperature

10	15	20	30	35	40
1.11	1.07	1.03	0.97	0.93	0.89

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply





















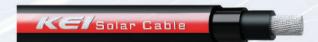








1C, Aluminium Conductor XLPE Insulated, Termite protected Polyamide jacket & HDPE Sheathed Cable 1500 V DC to EN: 50618 & AS/NZS 5000.1





Cable Construction

Conductor :Aluminium Class 2

Insulation :Cross linked Polyethylene (X-90)

(Black)

• Anti Termite :Polyamide (Nylon-12) (Black)

:High Density Polyethylene (HDPE) Outer Sheath

:(+ ve) Black with red stripe

(- ve) Black

• Reference Standards :EN 50618 & AS/NZS 5000.1

Characteristics

 Temperature range 40 deg. C to +90 deg. C

Normal max conductor temperature of 90 °C.

Nominal DC Voltage

1.5/1.5 kV DC between conductors and between

conductor and earth.

Snark Test

to EN 62230 Annex A

 Test Voltage 6500 V AC or 15000 V DC Surface Resistance of sheath to EN 50618 table 2, clause 1.6

•Long term resistance of insulation to DC to FN 50618 table 2. Clause 1.5

• Environmental Stress Crack Resistance

to As/NZS 3808 table 10

• Carbon black content & dispersion

to As/NZS 3808 table 10

Expected Design life

30 years

TECHNICAL DETAILS

0												Current R	ating ***	
Cross Sectional Area	Conductor diameter	Insulation Radial Thickness	Nylon Jacket Radial Thickness	Outer Sheath Radial Thickness	Overall Diameter	Cable weight	Cond. DC Resistance at 20 deg.C	Conductor Short Circuit	Bending in n		Two cable Touching in air Unenclosed Spaced from surface	Two cable Touching in air on surface	Two cable Touching Direct Buried	Two cable Touching in enclosure Underground
(Nominal)	(Approximate)	(Nominal)	(Min.avg)	(Nominal)	(Nominal)	(Approximate)	(Maximum)	(Maximum)	(Minir	num)	100	1	00	\$0000000 \$0000000000000000000000000000
Sq. mm	mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation	Installed	Amps	Amps	Amps	Amps
95	11.4	1.1	0.4	1.5	18.8	430	0.320	8.98	470	282	262	216	291	221
120	12.8	1.2	0.4	1.5	20.4	510	0.253	11,34	510	306	305	253	332	252
150	14.2	1.4	0.4	1.6	22.4	630	0.206	14.18	560	336	350	291	372	283
185	16.1	1.6	0.4	1.6	24.7	760	0.164	17.48	618	371	406	340	423	329
240	18.5	1.7	0.4	1.7	27.5	960	0.125	22.68	688	413	485	408	492	388
300	20.6	1.8	0.4	1.8	30.0	1160	0.100	28.35	750	450	562	473	556	440
400	23.6	2.0	0.4	1.9	33.7	1510	0.0778	37,80	843	506	660	559	638	516
500	26.6	2.2	0.4	2.0	37.3	1850	0.0605	47.25	933	560	772	656	729	590

The above dimension and parameter are indicative termed only for guidelines, due to regular development/improvisation subjected to change without prior information

Current rating conversion factors for other than 40 deg. C ambient temperature

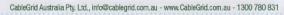
15	20	25	30	35	45	50	55	60	65	70	75	80	85
1.26	1.20	1.15	1.10	1.05	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34	0.19

Current rating conversion factors for other than 25 deg. C ground temperature

10	15	20	30	35	40
1.11	1.07	1.03	0.97	0.93	0.89

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply































^{***}Current ratings are based on Max. conductor Temperature 90 deg. C, Ambient Air temperature 40 deg. C, Ambient soil Temperature 25deg. C, Soil thermal resistivity 1.2 k.m/W, Depth of Laying 0.5m.

2 x 1C, Aluminium Conductor XLPE Insulated & HDPE Sheathed Feeder - Duplex Cable 1500 V DC to EN: 50618 & AS/NZS 5000.1



Cable Construction

• Conductor

:Aluminium Class 2

Insulation

:Cross linked Polyethylene (X-90)

Black)

Outer Sheath

:High Density Polyethylene (HDPE)

:(+ ve) Black with red stripe

(- ve) Black

• Reference Standards :EN 50618 & AS/NZS 5000.1

Characteristics

•Temperature Range -40 deg. C to +90 deg. C

Normal max conductor temperature of 90 °C.

Nominal DC Voltage

1.5/1.5 kV DC between conductors and between

conductor and earth.

Spark Test

to EN 62230 Annex A

Test Voltage

6500 V AC or 15000 V DC

•Surface resistande of sheath to EN 50618 table 2, clause 1.6

•Long term resistance of insulation to DC

Environmental Stress Crack resistance

to As/NZS 3808 table 10

to EN 50618 table 2, Clause 1.5

• Carbon black content & dispersion

to As/NZS 3808 table 10

Expected Design life

30 years

TECHNICAL DETAILS

											Current F	Rating ***	
Cross Sectional Area (Nominal)	Conductor diameter (Approximate)	Insulation Radial Thickness (Nominal)	Outer Sheath Radial Thickness (Nominal)	Overall Diameter (Nominal)	Cable weight	Cond. DC Resistance at 20 deg.C (Maximum)	Conductor Short Circuit (Maximum)	in	g Radius mm imum)	Two cable Touching in air Unenclosed Spaced from surface	Two cable Touching in air on surface	Two cable Touching Direct Buried	Two cable Touching in enclosure Underground
Sq. mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation Phase/Bundled	Installed Phase/Bundled	Amps	Amps	Amps	Amps
95	11.4	1.1	1.5	17.2 / 34.4	760	0.320	8.98	430 / 516	258 / 344	262	216	291	221
120	12.8	1.2	1.5	18.8 / 37.6	920	0.253	11,34	470 / 564	282 / 376	305	253	332	252
150	14.2	1.4	1.6	20.8 / 41.6	1160	0.206	14.18	520 / 624	312 / 416	350	291	372	283
185	16.1	1.6	1.6	23.1 / 46.2	1400	0.164	17.48	578 / 693	347 / 462	406	340	423	329
240	18.5	1.7	1.7	25.9 / 51.8	1780	0.125	22.68	648 / 777	389 / 518	485	408	492	388
300	20.6	1.8	1.8	28.4 / 56.8	2180	0.100	28.35	710 / 852	426 / 568	562	473	556	440
400	23.6	2.0	1.9	32.1 / 64.2	2840	0.0778	37.80	.803 / 963	482 / 642	660	559	638	516
500	26.6	2.2	2.0	35.7 / 71.4	3520	0.0605	47.25	893 / 1071	536 / 714	772	656	729	590

The above dimension and parameter are indicative termed only for guidelines, due to regular development/improvisation subjected to change without prior information

Current rating conversion factors for other than 40 deg. C ambient temperature

15	20	25	30	35	45	50	55	60	65	70	75	80	85
1.26	1.20	1.15	1.10	1.05	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34	0.19

Current rating conversion factors for other than 25 deg. C ground temperature

	10	15	20	30	35	40
İ	1.11	1.07	1.03	0.97	0.93	0.89

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply





























^{***}Current ratings are based on Max. conductor Temperature 90 deg. C, Ambient Air temperature 40 deg. C.

2 x 1C, Aluminium Conductor XLPE Insulated, Termite protected Polyamide jacket & HDPE Sheathed Feeder-Duplex Cable 1500 V DC to EN: 50618 & AS/NZS 5000.1



Cable Construction

Conductor :Aluminium Class 2

• Insulation :Cross linked Polyethylene (X-90)

(Black)

Anti Termite :Polyamide (Nylon-12) (Black)

Outer Sheath :High Density Polyethylene (HDPE)

:(+ ve) Black with red stripe

(- ve) Black

Reference Standards : EN 50618 & AS/NZS 5000.1

Characteristics

Temperature Range

-40 deg. C to +90 deg. C

Normal max conductor temperature of 90 °C.

●Nominal DC Voltage

1.5/1.5 kV DC between conductors and between

conductor and earth.

Spark Test to EN 62230 Annex A

●Test Voltage 6500 V AC or 15000 V DC Surface resistande of sheath to EN 50618 table 2, clause 1.6

• Long term resistance of insulation to DC to EN 50618 table 2, Clause 1.5

• Environmental Stress Crack resistance to As/NZS 3808 table 10

Carbon black content & dispersion

• Expected Design life

to As/NZS 3808 table 10

30 years

TECHNICAL DETAILS

												Current	Rating ***	
Cross Sectional Area (Nominal)	Conductor diameter (Approximate)	Insulation Radial Thickness (Nominal)	Nylon Jacket Radial Thickness (min.avg)	Outer Sheath Radial Thickness (Nominal)	Overall Diameter (Nominal)	Cable weight (Approximate)	Cond. DC Resistance at 20 deg.C	Conductor Short Circuit (Maximum)	in	g Radius mm mum)	Two cable Touching in air Unenclosed Spaced from surface	Two cable Touching in air on surface	Two cable Touching Direct Buried	Two cable Touching in enclosure Underground
Sq. mm	mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation Phase/Bundled	Installed Phase/Bundled	Amps	Amps	Amps	Amps
95	11.4	1.1	0.4	1.5	18.8 / 37.6	860	0.320	8.98	564 / 752	376 / 564	262	216	291	221
120	12.8	1.2	0.4	1.5	20.4 / 40.8	1020	0.253	11.34	612 / 816	408 / 612	305	253	332	252
150	14.2	1.4	0.4	1.6	22.4 / 44.8	1260	0.206	14.18	672 / 896	448 / 672	350	291	372	283
185	16.1	1.6	0.4	1.6	24.7 / 49.4	1520	0.164	17.48	741 / 988	494 / 741	406	340	423	329
240	18.5	1.7	0.4	1.7	27.5 / 55.0	1920	0.125	22.68	825 / 1100	550 / 825	485	408	492	388
300	20.6	1.8	0.4	1.8	30.0 / 60.0	2320	0.100	28.35	900 / 1200	600 / 900	562	473	556	440
400	23.6	2.0	0.4	1.9	33.7 / 67.4	3020	0.0778	37.80	1011 / 1348	674 / 1011	660	559	638	516
500	26.6	2.2	0.4	2.0	37.3 / 74.6	3700	0.0605	47.25	1119 / 1492	746 / 1119	772	656	729	590

The above dimension and parameter are indicative termed only for guidelines, due to regular development/improvisation subjected to change without prior information

Current rating conversion factors for other than 40 deg. C ambient temperature

15	20	25	30	35	45	50	55	60	65	70	75	80	85
1.26	1.20	1.15	1.10	1.05	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34	0.19

Current rating conversion factors for other than 25 deg. C ground temperature

1	10	15	20	30	35	40
1	1.11	1.07	1.03	0.97	0.93	0.89

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply























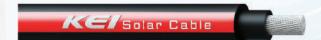






^{***}Current ratings are based on Max. conductor Temperature 90 deg. C, Ambient Air temperature 40 deg. C, Ambient soil Temperature 25deg. C, Soil thermal resistivity 1.2 k.m.W, Depth of Laying 0.5m.

1C, Aluminium Conductor XLPE Insulated & PVC Sheathed Cable 1500 V DC to EN: 50618 & AS/NZS 5000.1





Cable Construction:

Conductor

:Aluminium Class 2

Insulation

Outer Sheath

:Cross linked Polyethylene (X-90)

Characteristics

 Temperature Range -20 deg. C to +90 deg. C

Normal max conductor temperature of 90 °C.

• Flame Retardant to EN 60332-1

 UV Resistance to ASTM G-154

Nominal DC Voltage

1.5/1.5 kV DC between conductors and between conductor

and earth.

Snark Test

to EN 62230 Annex A

:(+ ve) Black with red stripe (- ve) Black

:Polyvinyl Chloride (5V-90)

Reference Standards : EN 50618 & AS/NZS 5000.1

Test Voltage

6500 V AC or 15000 V DC

Expected Design life 30 years

TECHNICAL DETAILS

					f a						Current F	Rating ***	
Cross Sectional Area	Conductor diameter	Insulation Radial Thickness	Outer Sheath Radial Thickness	Overall Diameter	Cable weight	Cond. DC Resistance at 20 deg.C	Conductor Short Circuit	Bending in I	Radius mm	Two cable Touching in air Unenclosed Spaced from surface	Two cable Touching in air on surface	Two cable Touching Direct Buried	Two cable Touching in enclosure Underground
(Nominal)	(Approximate)	(Nominal)	(Nominal)	(Nominal)	(Approximate)	(Maximum)	(Maximum)	(Mini	mum)	100	18	00 00	<i>\$12,12,12,12</i>
Sq. mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation	Installed	Amps	Amps	Amps	Amps
95	11.4	1.1	1.5	17.2	420	0.320	8.98	310	258	262	216	291	221
120	12.8	1.2	1.5	18.8	510	0.253	11.34	338	282	305	253	332	252
150	14.2	1.4	1.6	20.8	630	0.206	14.18	374	312	350	291	372	283
185	16.1	1.6	1.6	23.1	770	0.164	17.48	416	347	406	340	423	329
240	18.5	1.7	1.7	25.9	970	0.125	22.68	466	389	485	408	492	388
300	20.6	1.8	1.8	28.4	1180	0.100	28.35	511	426	562	473	556	440
400	23.6	2.0	1.9	32.0	1530	0.0778	37.80	576	480	660	559	638	516
500	26.6	2.2	2.0	35.6	1880	0.0605	47.25	641	534	772	656	729	590

The above dimension and parameter are indicative termed only for guidelines, due to regular development/improvisation subjected to change without prior information ***Current ratings are based on Max. conductor Temperature 90 deg. C, Ambient Air temperature 40 deg. C.

Current rating conversion factors for other than 40 deg. C ambient temperature

15	20	25	30	35	45	50	55	60	65	70	75	80	85
1.26	1.20	1.15	1.10	1.05	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34	0.19

Current rating conversion factors for other than 25 deg. C ground temperature

10	15	20	30	35	40
1.11	1.07	1.03	0.97	0.93	0.89

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply





























1C, Aluminium Conductor XLPE Insulated, Termite protected Polyamide jacket & PVC Sheathed Cable 1500 V DC to EN: 50618 & AS/NZS 5000.1





Cable Construction:

Conductor :Aluminium Class 2

•Insulation :Cross linked Polyethylene (X-90)

(Black)

Anti Termite :Polyamide Nylon-12 (Black)

Outer Sheath :Polyvinyl Chloride (5V-90)

:(+ ve) Black with red stripe

(- ve) Black

Reference Standards :EN 50618 & AS/NZS 5000.1

Characteristics

•Temperature Range

-20 deg. C to +90 deg. C

Normal max conductor temperature of 90 °C.

• Flame Retardant to EN 60332-1

• UV Resistance to ASTM G-154

Nominal DC Voltage

1.5/1.5 kV DC between conductors and between conductor

and earth.

Spark Test

to EN 62230 Annex A

Test Voltage

6500 V AC or 15000 V DC

• Expected Design life

30 years

TECHNICAL DETAILS

												Current F	Rating ***	
Cross Sectional Area (Nominal)	Conductor diameter	Insulation Radial Thickness (Nominal)	Nylon Jacket Radial Thickness (Min.avg)	Outer Sheath Radial Thickness (Nominal)	Overall Diameter (Nominal)	Cable weight (Approximate)	Cond. DC Resistance at 20 deg.C	Conductor Short Circuit (Maximum)	Bending in r		Two cable Touching in air Unenclosed Spaced from surface	Two cable Touching in air on surface	Two cable Touching Direct Buried	Two cable Touching in enclosure Underground
Sq. mm	mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation	Installed	Amps	Amps	Amps	Amps
95	11.4	1.1	0.4	1.5	18.8	480	0.320	8.98	470	282	262	216	291	221
120	12.8	1.2	0.4	1.5	20.4	570	0.253	11.34	510	306	305	253	332	252
150	14.2	1.4	0.4	1.6	22.4	700	0.206	14.18	560	336	350	291	372	283
185	16.1	1.6	0.4	1.6	24.7	830	0.164	17.48	618	371	406	340	423	329
240	18.5	1.7	0.4	1.7	27.5	1040	0.125	22.68	688	413	485	408	492	388
300	20.6	1.8	0.4	1.8	30,0	1260	0.100	28.35	750	450	562	473	556	440
400	23.6	2.0	0.4	1.9	33.7	1620	0.0778	37.80	843	506	660	559	638	516
500	26.6	2.2	0.4	2.0	37.3	1990	0.0605	47.25	933	560	772	656	729	590

The above dimension and parameter are indicative termed only for guidelines, due to regular development/improvisation subjected to change without prior information

Current rating conversion factors for other than 40 deg. C ambient temperature

15	20	25	30	35	45	50	55	60	65	70	75	80	85
1.26	1.20	1.15	1.10	1.05	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34	0.19

Current rating conversion factors for other than 25 deg. C ground temperature

10	15	20	30	35	40
1.11	1.07	1.03	0.97	0.93	0.89

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply





























^{***}Current ratings are based on Max. conductor Temperature 90 deg. C, Ambient Air temperature 40 deg. C, Ambient soil Temperature 25deg. C, Soil thermal resistivity 1.2 k.m/W, Depth of Laying 0.5m.

2 x 1C, Aluminium Conductor XLPE Insulated & PVC Sheathed Feeder - Duplex Cable 1500 V DC to EN: 50618 & AS/NZS 5000.1



Cable Construction

Conductor

:Aluminium Class 2

Insulation

Outer Sheath

:Cross linked Polyethylene (X-90)

:Polyvinyl Chloride (5V-90)

:(+ ve) Black with red stripe

(- ve) Black Reference Standards :EN 50618 & AS/NZS 5000.1

Characteristics

• Temperature Range

-20 deg. C to +90 deg. C

Normal max conductor temperature of 90 °C.

Nominal DC Voltage

1.5/1.5 kV DC between conductors and between conductor

and earth.

Spark Test

to EN 62230 Annex A

Test Voltage

6500 V AC or 15000 V DC

• Flame Retardant

to EN 60332-1

•UV Resistance to ASTM G-154

 Expected Design life 30 years

TECHNICAL DETAILS

										Current Rating ***				
Cross Sectional Area (Nominal)	Conductor diameter	Insulation Radial Thickness (Nominal)	Outer Sheath Radial Thickness (Nominal)	Overall Diameter (Nominal)	Cable weight (Approximate)	Cond. DC Resistance at 20 deg.C (Maximum)	Conductor Short Circuit	Bending Radius in mm (Mnimum)		Two cable Touching in air Unenclosed Spaced from surface	Two cable Touching in air on surface	Two cable Touching Direct Buried	Two cable Touching in enclosure	
Sq. mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1sec	Installation Phase/Bundled	Installed Phase/Bundled	Amps	Amps	Amps	Amps	
95	11.4	1.1	1.5	17.2 / 34.4	840	0.320	8.98	310 / 413	206 / 275	262	216	291	221	
120	12.8	1.2	1.5	18.8 / 37.6	1020	0.253	11.34	338 / 451	226 / 301	305	253	332	252	
150	14.2	1.4	1.6	20.8 / 41.6	1260	0.206	14.18	374 / 499	250 / 333	350	291	372	283	
185	16.1	1.6	1.6	23,1 / 46.2	1540	0.164	17.48	416 / 554	277 / 370	406	340	423	329	
240	18.5	1.7	1.7	25.9 / 51.8	1940	0.125	22.68	466 / 622	311 / 414	485	408	492	388	
300	20.6	1.8	1.8	28.4 / 56.8	2360	0.100	28.35	511 / 682	341 / 454	562	473	556	440	
400	23.6	2.0	1.9	32.0 / 64.0	3060	0.0778	37.80	576 / 768	384 / 512	660	559	638	516	
500	26.6	2.2	2.0	35.6 / 71.2	3760	0.0605	47.25	641 / 854	427 / 570	772	656	729	590	

The above dimension and parameter are indicative termed only for guidelines, due to regular development/improvisation subjected to change without prior information

Current rating conversion factors for other than 40 deg. C ambient temperature

15	20	25	30	35	45	50	55	60	65	70	75	80	85
1.26	1.20	1.15	1.10	1.05	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34	0.19

Current rating conversion factors for other than 25 deg. C ground temperature

10	15	20	30	35	40
1.11	1.07	1.03	0.97	0.93	0.89

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply





























^{***}Current ratings are based on Max, conductor Temperature 90 deg. C, Ambient Air temperature 40 deg. C.

2 x 1C, Aluminium Conductor XLPE Insulated, Termite protected Polyamide jacket & PVC Sheathed Feeder - Duplex Cable 1500 V DC to EN: 50618 & AS/NZS 5000.1



Cable Construction

Conductor :Aluminium Class 2

Insulation :Cross linked Polyethylene (X-90)

 Anti Termite :Polyamide Nylon-12 (Black)

:Polyvinyl Chloride (5V-90) Outer Sheath

:(+ ve) Black with red stripe

(- vel Black

• Reference Standards :EN 50618 & AS/NZS 5000.1

Characteristics

 Temperature Range -20 deg. C to +90 deg. C

Normal max conductor temperature of 90 °C.

Nominal DC Voltage

1.5/1.5 kV DC between conductors and between conductor

Spark Test

to EN 62230 Annex A

 Test Voltage 6500 V AC or 15000 V DC • Flame Retardant

to EN 60332-1

• UV Resistance to ASTM G-154

Expected Design life

30 years

TECHNICAL DETAILS

												Current	Rating ***	
Cross Sectional Area (Nominal)	Conductor diameter	Insulation Radial Thickness (Nominal)	Nylon Jacket Radial Thickness (min.avg)	Outer Sheath Radial Thickness (Nominal)	Overall Diameter (Nominal)	Cable weight	Cond. DC Resistance at 20 deg.C	Conductor Short Circuit (Maximum)	Bending in r	nm	Two cable Touching in air Unenclosed Spaced from surface	Two cable Touching in air on surface	Two cable Touching Direct Buried	Two cable Touching in enclosure Underground
Sq. mm	mm	mm	mm	mm	mm	kg/km	Ω/km	kA/1se c	Installation Phase/Bundled	Installed Phase/Bundled	Amps	Amps	Amps	Amps
95	11.4	1.1	0.4	1.5	18.8 / 37.6	960	0.320	8.98	564 / 752	376 / 564	262	216	291	221
120	12.8	1.2	0.4	1.5	20.4 / 40.8	1140	0.253	11.34	612 / 816	408 / 612	305	253	332	252
150	14.2	1.4	0.4	1.6	22.4 / 44.8	1400	0.206	14.18	672 / 896	448 / 672	350	291	372	283
185	16.1	1.6	0.4	1.6	24.7 / 49.4	1660	0.164	17.48	741 / 988	494 / 741	406	340	423	329
240	18.5	1.7	0.4	1.7	27.5 / 55.0	2080	0.125	22.68	825 / 1100	550 / 825	485	408	492	388
300	20.6	1.8	0.4	1.8	30.0 / 60.0	2520	0.100	28.35	900 / 1200	600 / 900	562	473	556	440
400	23.6	2.0	0.4	1.9	33.7 / 67.4	3240	0.0778	37.80	1011 / 1348	674 / 1011	660	559	638	516
500	26.6	2.2	0.4	2.0	37.3 / 74.6	3980	0.0605	47.25	1119 / 1492	746 / 1119	772	656	729	590

The above dimension and parameter are indicative termed only for guidelines, due to regular development/improvisation subjected to change without prior information

Current rating conversion factors for other than 40 deg. C ambient temperature

15	20	25	30	35	45	50	55	60	65	70	75	80	85
1.26	1.20	1.15	1.10	1.05	0.94	0.88	1.81	1.73	0.65	0.57	0.47	0.34	0.19

Current rating conversion factors for other than 25 deg. C ground temperature

10	15	20	30	35	40
1.11	1.07	1.03	0.97	0.93	0.89

For installation in groups the reduction factors for current rating according to HD 60364-5-52 Table B.52.17 shall apply





























^{***}Current ratings are based on Max, conductor Temperature 90 deg. C, Ambient Air temperature 40 deg. C, Ambient soil Temperature 25deg. C, Soil thermal resistivity 1.2 k,m/W, Depth of Laying 0.5m.

PRE-TERMINATED PV CABLE CONNECTION ASSEMBLIES

Most modern high power solar modules have MC4 connectors on the ends. Years ago, solar modules were built with a junction box on the back that required the installer to manually attach wires to the positive and negative terminal posts. This method is still used, but it's slowly becoming a thing of the past. Modern solar modules tend to use the MC4 connectors because they make wiring your solar array much simpler and faster. The connectors come in both male and female types which are designed to snap together. Due to the locking mechanism of the MC4 connectors, they will not come unplugged and are well suited for outdoor environments. The connectors can be separated but it requires a special MC4 unlocking tool.



KEI PV Pre-Terminated Assemblies & harness manufactured in controlled conditions utilizing high efficiency equipment, reducing job site risk and potential warranty claims & designed specifically to withstand harsh environmental exposure and abuse. Pre-made Whip, Jumper, Tail, String & Harness assemblies are ideal for speeding solar panel installation while being constructed to deliver long-term reliability that will decrease call-backs and warranty service. These Pre-Terminated assemblies are available in varieties of cable options, connectors & configuration as per site requirement.



Pre-fabricated assemblies save time and money by providing various configurations that allow quick connections for a wide variety of solar applications. All pre-fabricated assemblies are manufactured under controlled conditions utilizing the highest quality materials.



All assemblies are 100% continuity tested to ensure dependable service and are available in many standard lengths & combinations. The Cable and harness solutions satisfy the need for pre-cut and/or pre-terminated segments of PV wire for connecting PV modules to string combiners & inverters. Terminations are compatible with standard PV module connectors and string combiner whips or input fuse holders.



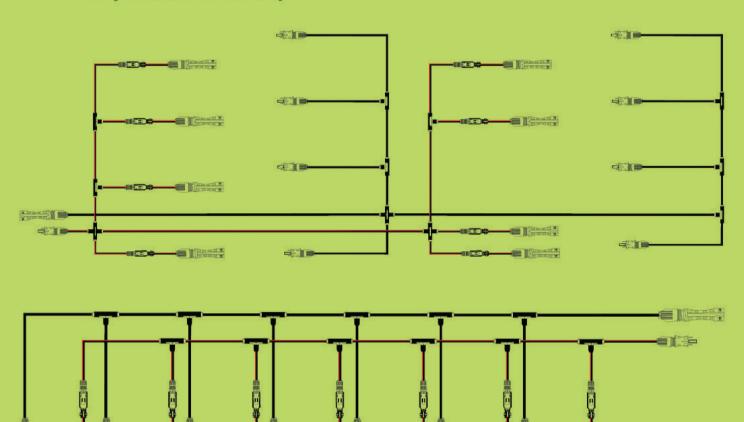


PV String Harness are produced in a dual molding procedure. This guarantees a long product life-time. Through pre-molding maximum impermeability is achieved. Then, final molding guarantees outstanding mechanical properties and high temperature resistance. The cables are pre-assembled according to customer requirements & designs so that it can connect quickly and easily at site. These harness can be manufactured & available in various cable cross-section between 2,5 mm², 4 mm², 6 mm² and 10 mm².



TYPES OF ASSEMBLIES

- 1. Pre-Terminated String Cable.
- 2. Pre-Terminated Whip & Tail Cable.
- 3. Pre-Terminated Jumper Cable.
- 4. Pre-Terminated Extended String Cable.
- Pre-Terminated Extended Jumper Cable.
- 6. Pre-Terminated & Bundled Whip, String, Tail & Jumper Assemblies.
- 7. PV String Harnesses 2 or 3 or 8 String.





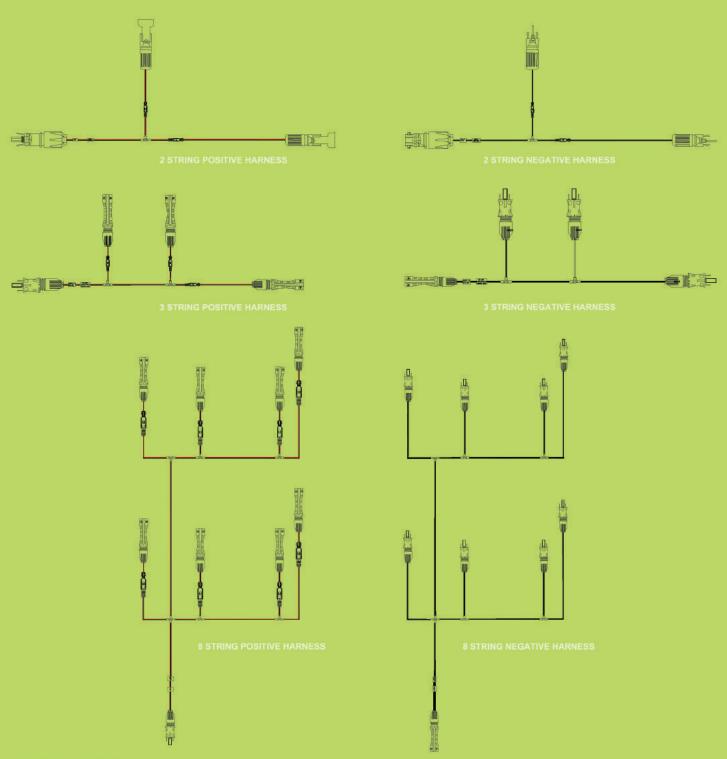
POSITIVE DC CABLE WITH BOTH END CONNECTORS

NEGATIVE DC CABLE WITH BOTH END CONNECTORS



JUMPER CABLE WITH BUNDLING ARRANGEMENT





FEATURES

- 1. Factory produced PV wire harness solutions improve consistency and quality.
- 2. Reduce field labor and waste, resulting in a lower total installed cost for your project.
- 3. Delivered pre-assembled, facilitating quicker installation.
- 4. Individual assemblies will have ID/marking for easy point to point connections on the field.
- 5. Improved durability and strain relief over traditional wiring.
- 6. Assemblies with replaceable / Over molded 3A-20A in line fuse. it will protect the power system once the current is too big.





REGISTERED CORPORATE OFFICE:

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MARKETING OFFICE

KEI INDUSTRIES LTD.

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