KUKA CABLE Solar
EXPERT IN SOLAR POWER TRANSMISSION

SOLAR CABLE

EXPERT IN SOLAR POWER TRANSMISSION

KUKA CABLE Solar
EXPERT IN SOLAR POWER TRANSMISSION

Solar Cable H1Z2Z2-K/PV1-F

Tinned Copper · XLPO · XLPO

01 | APPLICATION:

Updated harmonised (H1Z2Z2-K) European standard solar cable intended for the interconnection within photovoltaic systems such as solar panel arrays. Suitable for fixed installations, internal and external, within conduit or systems.
Impact tested - Suitable for . For installations where fire, smoke emissions and toxic fumes create a potential risk to life and equipment.

02 | CONSTRUCTION:

Conductor	Class 5 flexible tinned copper acc. to IEC/EN 60228
Insulation	Halogen-free cross-linked compound
Sheath	Halogen-free cross-linked, flame retardant compound

Sheath Colour

● Black ● Red ● Blue

03 | CHARACTERISTICS:

Voltage Rating Uo/U

AC:1000/1000V
DC:1500/1500V

Maximum Voltage (Umax) 1800V
Test Voltage 6.5kV AC
Temperature Rating Fixed: -40°C to +90°C
Maximum Conductor Temperature +120°C (for 20000h)
Minimum Bending Radius 5 X overall diameter

04 | FEATURES:

Service Life:	30 Years
CPR:	Dca Class
Capacity:	500 KM per Day

Installation:
Open Air
Direct Burial
On Conduit

05 | STANDARDS:

06 | TESTS:

Halogen-free	acc. to EN 50525-1 Appendix B
Flame-retardant	acc. to EN 60332-1-2
Smoke density	acc. to EN 61034-2
UV-resistant/Weathering	acc. to EN 50618 Appendix E
Ozone-resistant	acc. to EN 50395 + EN 50618 Table 2
Water-resistant	acc. to EN 50525-2-21 Appendix E

DC Voltage resistance of the insulation
acc. to EN 50395 + EN 50618 Table 2

021-37110083 sales@kukacable.solar www.kukacable.solar / www.kukacable.com

DIMENSIONS

KUKA PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm²	NOMINAL OVERALL DIAMETER mm	NOMINAL WEIGHT kg/km
K1S10015BK000	1	1.5	4.6	34
K1S10025BK000	1	2.5	5.0	45
K1S10040BK000	1	4	5.5	59
K1S10060BK000	1	6	6.0	78
K1S10100BK000	1	10	7.9	130
K1S10160BK000	1	16	8.8	190
K1S10250BK000	1	25	11.0	292
K1S10350BK000	1	35	12.3	390
K1S10500BK000	1	50	14.6	558
K1S10700BK000	1	70	16.5	770
K1S10950BK000	1	95	18.0	960
K1S11200BK000	1	120	19.7	1185
K1S11500BK000	1	150	21.0	1470
K1S11850BK000	1	185	24.7	1845
K1S12400BK000	1	240	27.0	2350

ELECTRICAL CHARACTERISTICS

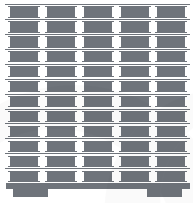
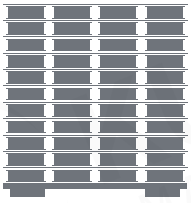
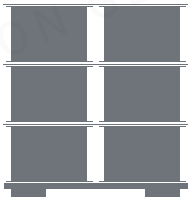
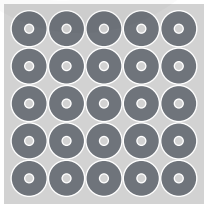
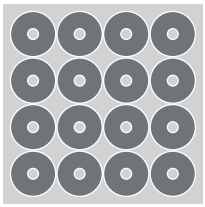
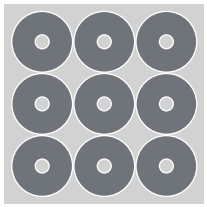
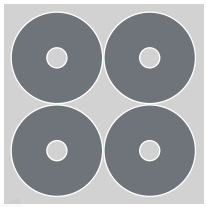
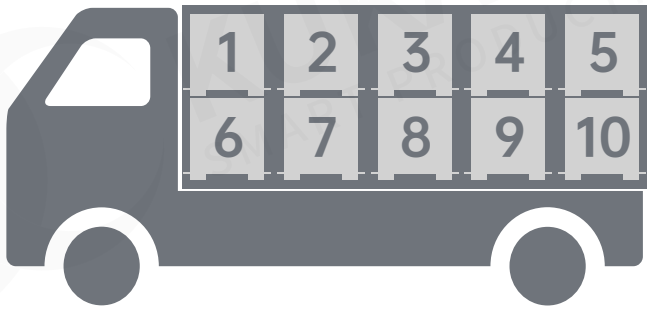
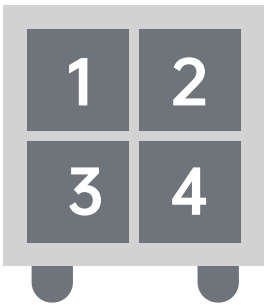
NOMINAL CROSS SECTIONAL AREA mm²	MAXIMUM DC RESISTANCE OF CONDUCTOR AT 20°C ohms/km	MAXIMUM DC RESISTANCE OF CONDUCTOR AT 90°C ohms/km	CURRENT CARRYING CAPACITY Amps		
			Single Cable In Air	Single Cable On Surface	Two Cables Adjacent On Surface
1.5	13.70	17.468	30	29	24
2.5	8.21	10.468	41	39	33
4	5.09	6.490	55	52	44
6	3.39	4.322	70	67	57
10	1.95	2.486	98	93	79
16	1.24	1.581	132	125	107
25	0.795	1.013	176	167	142
35	0.565	0.720	218	207	176
50	0.393	0.501	276	262	221
70	0.277	0.353	347	330	278
95	0.21	0.267	416	395	333
120	0.164	0.209	488	464	390
150	0.132	0.168	566	538	453
185	0.108	0.137	644	612	515
240	0.0817	0.104	775	736	620

DE-RATING FACTORS

AIR TEMPERATURE	UP TO 60°C	70°C	80°C	90°C	100°C	110°C
DE-RATING FACTOR	1.00	0.91	0.82	0.71	0.58	0.41

021-37110083 sales@kukacable.solar www.kukacable.solar / www.kukacable.com

Solar Cable Packing
4mm2, 6mm2

m/roll,drum	50m	100m	500m	1000m
drums,rolls /pallet	300 (5*5*12)	176 (4*4*11)	27 (3*3*3)	12 (2*2*3)
Front view				
Top-down view				
pallets/20ft container	20	20	20	20
Container Loading Perspective				

021-37110083 sales@kukacable.solar www.kukacable.solar / www.kukacable.com

KUKA SOLAR

KUKA CABLE Solar
EXPERT IN SOLAR POWER TRANSMISSION

Shanghai Kuka Special Cable Co, Ltd.

No. 5878, Tingwei Road, Jinshan District, Shanghai, China
183 1710 9559
sales@kukacable.solar
www.kukacable.solar