

# SOLAR CABLE



**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

## 05 | STANDARDS:



## 03 | CHARACTERISTICS:

**Voltage Rating U<sub>0</sub>/U**

AC:1000/1000V

DC:1500/1500V

**Maximum Voltage (U<sub>max</sub>)** 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

## 06 | TESTS:

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

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

## 04 | FEATURES:

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

**Installation:**  
 Open Air  
 Direct Burial  
 On Conduit

## DIMENSIONS

KUKA PART NO.	NO. OF CORES	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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 mm <sup>2</sup>	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

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.

# Solar Cable Packing





## 4mm<sup>2</sup>, 6mm<sup>2</sup>

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

# KUKA SOLAR



## Shanghai Kuka Special Cable Co, Ltd.

-  No. 5878, Tingwei Road, Jinshan District, Shanghai, China
-  183 1710 9559
-  [sales@kukacable.solar](mailto:sales@kukacable.solar)
-  [www.kukacable.solar](http://www.kukacable.solar)