



# H1Z2Z2-K

## SOLAR CABLE



### DESCRIPTION

**Conductor:** Annealed Tinned Copper (APC Optional) according to IEC 60228, Class 5 or as per customer order  
**Insulation:** EBXL - XLPO 120°C (Colour White, Red & Black) Other colours as per customer order  
**Jacket:** Low smoke zero halogen (LSOH)

### APPLICATION

H1Z2Z2-K Solar Cable is TUV and EN certified and designed for the connection of photovoltaic panels. This extremely versatile single conductor cable is designed to meet the varying needs of the solar industry. Highly flexible, compatible with all brands of connectors and suitable for wet, damp and humid applications.

### FEATURES

- High volume resistance even after long term period in water.
- Resistance against UV, Water, Ozone, Fluids, Oil, Salt & General Weathering.
  - Electron Beam Cross Linked
- Halogen Free, Flame Retardant, Low Smoke Emission
- Permanent water contact AD8 acc. IEC 60364-5-51, 1 mtr. in max. submersion depth at temperature of widely unmoved water between 50°C and 400°C
  - Expected cable life > 25 years.
  - Water Resistant AD 8 to meet as per
    - IEC 60364-5-51 & IEC 60529
    - RoHS compliant as per EU norms

### TECHNICAL DATA

<b>Temperature Range:</b>	-40°C to +120°C
<b>Max. Temp. at Conductor:</b>	120°C (20,000h)
<b>Test Voltage:</b>	6500V AC for 5 minutes
<b>Insulation Resistance:</b>	EN 50395
<b>Test &amp; Voltage Test:</b>	1.0/1.0kV AC, 1.5/1.5 kV DC
<b>Rated Voltage</b>	
<b>Max. Voltage:</b>	1.8 kV DC
<b>Short Circuit Temp:</b>	+280°C
<b>Halogen Free:</b>	EN50525-1
<b>Flame Retardant:</b>	EN 60332-1-2
<b>Low Smoke Emission:</b>	EN 61034-2
<b>UV and Weathering</b>	
<b>Resistance:</b>	EN 50618, EN 50289-4-17
<b>Flame Retardant:</b>	EN60332-1-2
<b>Resistance against Acid and Alkaline:</b>	EN 60811-404
<b>Resistance to Fire:</b>	Eca approval (from BASEC & TUV)
<b>Shrinkage Test on Sheath:</b>	EN 60811-503
<b>Dynamic Penetration Test:</b>	EN 50618
<b>Expected Life Period:</b>	25 years (according EN 60216)
<b>Cold Resistance:</b>	EN 50618, EN 60811-504, EN 60811-505
<b>Min Bending Radius:</b>	(i) Cable OD x 4 for OD ≤ 8.0 mm (ii) Cable OD x 5 for 8.0 ≤ OD ≤ 12.0 mm (iii) Cable OD x 6 for OD >12.0 mm



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CROSS SECTION AREA	NOMINAL INSULATION THICKNESS	NOMINAL SHEATH	CABLE DIAMETER (MAX.)	MAX. DC CONDUCTOR RESISTANCE AT 20°C	CABLE WEIGHT (NOM.)	CURRENT RATING (A)		
						AT 60°C IN AIR	SINGLE CABLE ON SURFACE	2 CABLES ADJACENT ON SURFACE
mm <sup>2</sup>	mm	mm	mm	Ω/Km	Kg/Km			
1.5	0.7	0.8	5.4	13.7	37	35	32	24
2.5	0.7	0.8	5.9	8.21	45	41	39	33
4	0.7	0.8	6.6	5.09	58	55	52	44
6	0.7	0.8	7.4	3.39	78	70	67	57
10	0.7	0.8	8.8	1.95	125	98	93	79
16	0.7	0.9	10.1	1.24	175	132	125	107
25	0.9	1.0	12.5	0.795	274	176	167	142
35	0.9	1.1	14.0	0.565	368	218	207	176
50	1.0	1.2	16.3	0.393	511	276	262	221
70	1.1	1.2	18.7	0.277	690	347	330	278
95	1.1	1.3	20.8	0.210	908	-	-	333
120	1.2	1.3	22.8	0.164	1127	-	-	390
150	1.4	1.4	25.5	0.132	1406	-	-	453
185	1.6	1.6	28.5	0.108	1741	-	-	515
240	1.7	1.7	32.1	0.0817	2227	-	-	620
300	2.4	2.4	32.6	0.0654	2925	-	-	714
400	2.6	2.6	36.8	0.0495	3800	-	-	795

ALL FIGURES QUOTED ARE APPROXIMATE

E&OE. Manufacturers reserve the right to amend the specification without prior notice.

TDS 2 OF 2

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