



APPLICATION

The Topsolar® PV H1Z2Z2-K cable, which is TÜV certified according to IEC 62930 and EN 50618, is suitable for both fixed and mobile solar installations (solar farms, rooftop solar installations and floating plants).

It is a highly flexible cable compatible with all major connectors and specially designed for the connection of photovoltaic panels. This versatile single-conductor cable is designed to meet the varying needs of the solar industry. Suitable for wet, damp and humid locations.

- Solar PV installations - string cable.

CONSTRUCTION

Conductor

Electrolytic annealed tinned copper conductor, Class 5 (flexible) according to IEC 60228 and EN 60228.

Insulation

Low smoke Halogen Free (LSHF) cross linked rubber insulation. Insulation requirements according to EN 50618 table B1, Annex B and IEC 62930.

Outer sheath

Low smoke Halogen Free (LSHF) cross linked flexible rubber outer sheath. Outer sheath requirements according to EN 50618 table B1, Annex B and IEC 62930. Red or black colour.

CHARACTERISTICS

Electrical performance

Low voltage: 1,5/1,5 1kV (1,8) kV DC.
1,0/1,0 kV (U0/U).

Thermal performance

Maximum service temperature: 120°C.
Maximum short-circuit temperature: 250°C (max. 5 s).
Minimum service temperature: -40°C (fixed and protected installations).

Fire performance

Flame non-propagation according to EN 60332-1, IEC 60332-1-2 and EN 50399.
Fire non-propagation according to EN 50399.
LSHF (Low Smoke Halogen Free) according to EN 60754-1 and IEC 60754-1.
Low smoke emission according to EN 61034 and IEC 61034:
Light transmittance > 60%.
Low corrosive gases emission according to EN 60754-2 and IEC 60754-2.
Reaction to fire CPR: C_{ca} -s1b, d2, a1, according to EN 50575.

Mechanical performance

Minimum bending radius: x5 cable diameter.
Impact resistance: AG2 Medium severity.

Environmental performance


Chemical performance:
Chemical & Oil resistance: Excellent.
Grease & mineral oils resistance: Excellent.
UV Resistant according to EN 50618.
Ozone resistant according to EN 50618.
Water resistance:
AD8 submerged.


Installation conditions

Open Air.
Buried.
In conduit.

STANDARDS / COMPLIANCE

 According to
EN 50618/ IEC 62930 / UTE C 32-502.

 Standards and approvals
TÜV / RETIE / RoHS / CE.

 CPR (Construction Products Regulation)
C_{ca} -s1b, d2, a1.



DIMENSIONS & ADMISSIBLE INTENSITIES



Cross-section (mm ²)	Diameter (mm)	Weight (kg/km)	Open air (A)	Int. on surface (A)	Int. adjoining to surface (A)	Voltage drop (V/A-km)
1 x 1,5	4,6	35	30	29	24	38,2
1 x 2,5	5	45	41	39	33	23
1 x 4	5,4	60	55	52	44	14,3
1 x 6	6	80	70	67	57	9,49
1 x 10	7	120	98	93	79	5,46
1 x 16	8,2	180	132	125	107	3,47
1 x 25	10,2	280	176	167	142	2,23
1 x 35	11,5	375	218	207	176	1,58
1 x 50	13,3	525	276	262	221	1,1
1 x 70	15	720	347	330	278	0,772
1 x 95	17	930	416	395	333	0,585
1 x 120	18,7	1.175	488	464	390	0,457
1 x 150	21	1.475	566	538	453	0,368
1 x 185	23,5	1.805	644	612	515	0,301
1 x 240	26,3	2.345	775	736	620	0,228