

Technical Data Sheet

**SOLARA PV-1.0/1KV
H1Z2Z2-K**

Halogen Free Photovoltaic Power Cables, Halogen Free, Flame Retardant, Low Smoke Emission, UV.



Consuratcions

- 1- Tinned fine copper strands acc. to IEC 60228, Class 5
- 2- XLPO, flame retardant, halogen free compound
- 3- XLPO, flame retardant, halogen free compound

Applications

They are used in solar power and solar energy production applications, solar cells and solar panel systems. It is suitable for usage in PV systems manufactured in compliance with HD 60364-7-712. Recommended service life is 25 years.

Permissible Operating Temperature

90°C

Operating Voltage (Rated Voltage)

1.0/1KV Ac

Operating Voltage (max. Voltage Dc)

1.8/1.8Kv

Max.Short Circuit Tempature

250°C

Outer Sheet Colour

Contact With Us.

Technical Specifications

Desing Standarts

EN 50618

Bending Radius

Fixed installation > 4 × D
Occasionally move > 5 × D

Flame Retardant Test

IEC 60332-1

Low Smoke Test

IEC 61034-1, IEC 61034-2

Halogen Free Test

IEC 60754-1, IEC 60754-2

Long-term Behavior

EN 60216

Ozone Resistance Test

EN 50396

Weather /UV-Resistant

EN 50618, Appendix E

Cross Section (mm ²)	Nom. Outer Diameter (mm)	Max. DC Resistance (20°C) (Ohm/Km)	Current Carrying Capacity for Single Cable Free in Air (60°C Ambient Temp.) A	Current Carrying Capacity for Single Cable on a Surface (60°C Ambient Temp.) A	Delivery Length (Mt)
1,50	4,49 ±0,1	13,700	30	29	1000
2,50	4,93 ±0,1	8,210	41	39	1000
4,00	5,47 ±0,1	5,090	55	52	1000
6,00	6,01 ±0,1	3,390	70	67	1000
10,00	7,01 ±0,2	1,950	98	93	1000
16,00	8,60 ±0,2	1,240	132	125	1000
25,00	10,32 ±0,3	0,795	176	167	1000
35,00	11,70 ±0,3	0,565	218	207	1000
50,00	13,60 ±0,3	0,393	276	262	1000
70,00	16,00 ±0,4	0,277	347	330	1000
95,00	17,30 ±0,4	0,210	416	395	1000
120,00	19,30 ±0,4	0,164	488	464	1000
150,00	22,40 ±0,5	0,132	566	538	1000
185,00	24,97 ±0,5	0,108	644	612	1000
240,00	28,15 ±0,5	0,0817	775	736	1000

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Temperature Correction Factor in Air: K1

Ground Temperature Correction Factor: K2

Ambient Temperature (°C)	Insulation XLPE/EPR	Ground Temperature (°C)	Insulation XLPE/EPR
10	1,15	10	1,07
15	1,12	15	1,04
20	1,08	20	0,96
25	1,04	25	0,93
35	0,96	35	0,89
40	0,91	40	0,85
45	0,87	45	0,80
50	0,82	50	0,76
55	0,76	55	0,71
60	0,71	60	0,65
65	0,65	65	0,60
70	0,58	70	0,53
75	0,50	75	0,46
80	0,41	80	0,38

Cross Section (mm ²)	Delivery Length (m)	Length of Drum (mm)	Width of Drum (mm)	Height of Drum (mm)
4	1000	500	500	400
6	1000	500	500	400
10	1000	600	600	400
95	500	900	900	600
120	500	1000	1000	600
150	500	1100	1100	600
185	500	1200	1200	700
240	500	1300	1300	800

Installation Conditions

Photovoltaic (Solar) cables are suitable for direct burial under the ground. According to EN 50618 standart. (Table A.2 - Recommended use of cables for PV systems, Table 2 - Tests for cables to EN 50618 (Long term resistance of insulation to d.c. and Damp heat test))