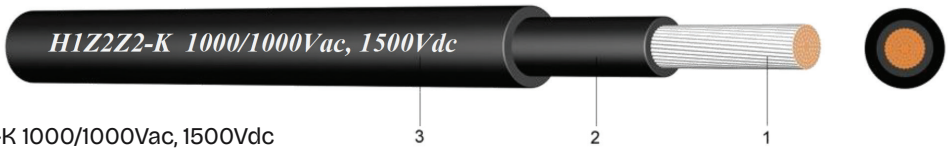
Cables for Use in Photovoltaic Systems, Resistant to Extreme Temperatures, with Insulation and Sheath of Cross-Linked Silicone Rubber, Rated Voltage Uo/U: 1000/1000 Vac, 1500 Vdc, (Umax: 1800 V)



Marking: H1Z2Z2-K 1000/1000Vac, 1500Vdc

Section:

RoHS COMPLIANT

HALOGEN FREE

Packing:

Coil

Plywood Drum

Wood Drum

Construction

1 – Flexible tinned copper conductor class 5, according to EN 60228

2 – Crosslinked silicone rubber insulation type EI2 according to EN 50363-1, heat-resistant, halogen-free, with increased flame retardancy and reduced smoke emission

3 – Crosslinked silicone rubber sheath type EM9 according to EN 50363-2-1heat-resistant, halogen-free, with increased flame retardancy and reduced smoke emission

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Technical data

Reference standard	SR EN 50618:2015
Nominal operating voltage Uo/U	1000/1000 Vac, 1500 Vdc
Test voltage	according to EN 50395, 5 kVDC, in water, for 5 minutes
Resistance to flame propagation	according to EN 60332-1-2
Resistance to ozon	according to SR EN 50396
Resistance to UV radiation	according to SR EN 50396
Thermal endurance	according to SR EN 60216-1
Ambient temperature when installing the cable	- 10 °C ÷ +50 °C
Ambient temperature during cable operation	- 60 °C ÷ +180 °C
Maximum permissible conductor temperature under normal operating conditions	+180 °C
Maximum temperature of objects it can come into contact with	+180 °C
Marking	according to SR EN 60216-1
Minimum bending radius	4 x outer diameter of the cable
Available colors	black, red, blue

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Application

- In photovoltaic systems, for interconnecting different elements;
- These cables ensure an optimal connection between photovoltaic panels and between panels and inverter, they can be installed outdoors, indoors, or buried in the ground (with adequate mechanical protection);
- Due to the double insulation, these cables can be used in safety class II installations, exposed to extreme temperatures (- 60 oC ÷ +180 oC);
- The outer surface of these cables can come into contact with objects (or parts thereof) having a temperature of +180 oC, and for a short time of +250 oC;
- These cables are tested for thermal endurance, the period of use under normal conditions is at least 25 years;
- These cables have excellent resistance to ozone, atmospheric oxygen and UV radiation, ensuring long-term performance in outdoor and industrial environments, without significant degradation of the insulation and sheath material;
- These cables do not spread flame and do not sustain combustion;
- This product complies with the EC Low Voltage Directive: "Low-Voltage Directive 2014/35/EU";
- This product falls under Class Eca, regarding reaction to fire, in the context of system 3 of attestation of conformity and marking, under the Construction Products Regulation 305/2011/EU;
- Packaging: coils, drums, cardboard boxes;

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Nominal cross-section of the copper conductor	Average exterior dimensions		Maximal electrical resistance at 20 °C
	Lower limit	Upper limit	
(mm^2)	(mm)	(mm)	Ω/km
2.5	4.9	5.3	8.21
4	5.4	5.8	5.09
6	5.9	6.3	3.39
10	7.0	7.4	1.95
16	8.5	9.2	1.24
25	10.2	10.9	0.795
35	11.3	12.0	0.565

NOTE : All dimensions are subject to a manufacturing tolerance of ±5%.