

H1Z2Z2-K

DB 1023550

valid from: 25.04.2016

1. Application

H1Z2Z2-K cables are weather-, abrasion- and UV-resistant photovoltaic cables.

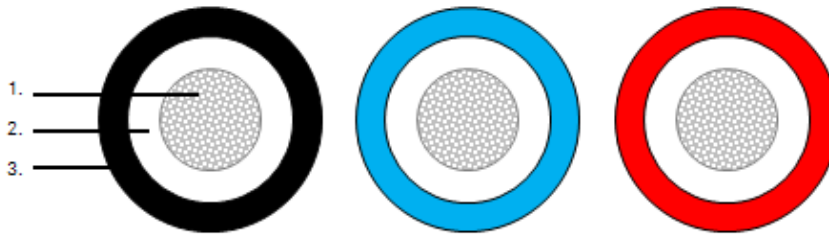
These cross-linked, halogen free and double insulated solar cables are suitable for permanent outdoor use and especially for the interconnection of grounded and ungrounded photovoltaic power systems. They are applicable for the connection of solar panels among themselves and as extension cable between the individual module strings or the DC/AC inverter.

According to DIN EN 50618 applies:

The expected period of use under normal usage conditions as specified in DIN EN 50618 is at least 25 years.

2. Cable design

Design	according to DIN EN 50618
Certification	Code designation H1Z2Z2-K, certified according to DIN EN 50618 TÜV Rheinland certificate No. R 60109128



1. Conductor:	Fine wire strands of non-porous tinned copper wires according to IEC 60228, Class 5
2. Core insulation:	Cross-linked polymer compound, halogen free Colour: white
3. Outer sheath:	Cross-linked Co-Polymer, halogen free and flame retardant Outer sheath colour: black or red or blue

3. Electrical properties

Rated voltage U_0/U acc. IEC	AC 1000/1000 V DC 1500/1500 V
Max. permissible operating voltage	DC 1800 V (according to DIN EN 50618)
Test voltage	AC 6,5 kV
Current carrying capacity	according to EN 50618, Table A.3 & A.4

4. Mechanical and thermal properties

Temperature range	fixed installation: -40°C up to $+120^{\circ}\text{C}$ (according to IEC 60216-2)
Temperature range according	fixed installation: -40°C up to $+90^{\circ}\text{C}$ ambient temperature (according to DIN EN 50618)
Minimum temperature for installation	-25°C (according to DIN EN 50618)
Minimum bending radius	occasional flexing: 15 x cable diameter fixed installation: 5 x cable diameter

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Weathering/UV-resistance	according to DIN EN 50618 Annex E
Ozone resistance	according to EN 50396
Halogen free	according to IEC 60754-1, IEC 60754-2
Smoke density	according to IEC 61034-2, EN 61034-2
Flame retardant	according to IEC 60332-1-2
Acid and alkaline resistance	according to EN 60811-404 (Oxal-acid and Sodium hydroxide)

EU directives This cable is conform to the EU directive 2014/35/EU (Low Voltage Directive)

5. Installation

H1Z2Z2-K cables are not suitable for the installation underground.

The cable should be installed according to VDE 0100, part 520, IEC 60364-5-52, EN 50174-1 or comparable standards. Long-term, permanent storage or constant use of the cables in or underwater is not permitted.

According to DIN EN 50618 applies:

Intended for use in PV installations e.g. acc. to HD 60364-7-712.

They are intended for permanent use outdoor and indoor, for free movable, free hanging and fixed installation. Installation also in conduits and trunkings on, in or under plaster as well as in appliances. Suitable for the application in/at equipment with protective insulation (protection class II).

They are inherently short-circuit and earth fault proof acc. to HD 60364-5-52.

6. Versions

Part.No.	Colour insulation	Colour outer sheath	Conductor cross section [mm ²]	Outer diameter approx. [mm]
1023552	white	black	1 x 4	5,9
1023553	white	black	1 x 6	6,4
1023554	white	black	1 x 10	7,5
1023572	white	red	1 x 4	5,9
1023573	white	red	1 x 6	6,4
1023574	white	red	1 x 10	7,5
1023582	white	blue	1 x 4	5,9
1023583	white	blue	1 x 6	6,4
1023584	white	blue	1 x 10	7,5