

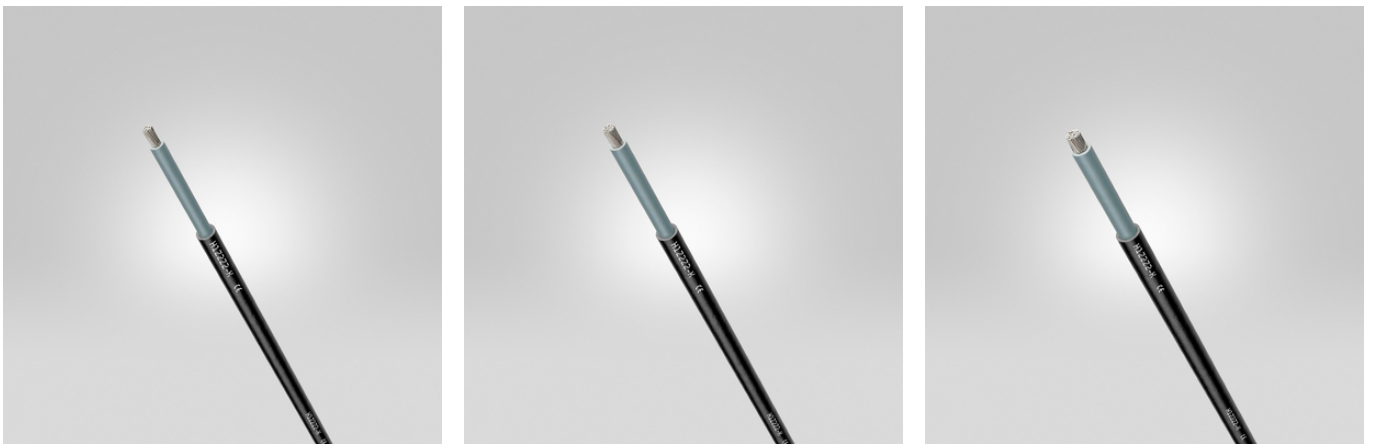
## H1Z2Z2-K, optimized version

H1Z2Z2-K/EN 50618 solar cable, Burial in ground: Impact-/Crushing-Resistance, AD8, Dca

H1Z2Z2-K - cross-linked solar photovoltaic (PV) cable per EN 50618, UV/ Ozone resistant, UL Crushing- & Impact-Resistance Test, AD8, Burial in Ground, CPR Dca

### Info

AD8 - Permanent Submersion  
 Tested Burial in Ground  
 Dca classified per CPR



-  Mechanical and plant engineering
-  Solar Energy
-  Suitable for outdoor use
-  Good chemical resistance
-  Flame-retardant
-  Halogen-free
-  Heat-resistant
-  Cold-resistant

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## H1Z2Z2-K, optimized version



Corrosion-resistant



Mechanical resistance



Low weight



Robust



Acid-resistant



Voltage



Temperature-resistant



UV-resistant



Waterproof



Variety of approval certifications



### Benefits

For outdoor applications

Robust against mechanical impacts, Burial in professionally made cable trench inside or without protection system

Reduction of flame propagation and of toxic combustion gases in the event of fire

Inside the EU, and particularly on site, applicable for many building types as per local, legal implementation of EU CPR -

Construction Product Regulation (EU) No. 305/2011, thanks to Dca Classification

25 years in expectable lifespan under normal use conditions as defined in EN 50618

### Application range

For free and stationary or for freely suspended outdoor and indoor cabling between the solar modules, or between the module strings and the DC/AC inverter, for example in line with HD 60364-7-712 on PV systems, and EN 50618 on H1Z2Z2-K cable type, etc....; Short circuit and earth fault protected per EN 50618, Annex A, and per HD 60364-5-52

As per EN 50618, Annex A, inside electrical installation pipe/ duct/ channel, plaster, and appliance, as well as inside or connected to double insulated/ protected appliance or system of protection class II

Photovoltaic systems with DC system voltage up to 1800 V to ground

AD8: Permanent water contact and submersion down to 1 metre in water depth

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Increased, mechanical robustness, for instance in the event of impact;

Burial in Ground in professionally made cable trench (see Section 4.2 of VDE 0891-6, or Section 300.5 in Article 300 of NFPA 70/ NEC - National Electrical Code of the USA) with or without additional protection system, such as tube/ duct/ conduit for burial in ground;

Where additional protection system for burial in ground is used, internal waterlogging of **contaminated** water in contact with the cable's outer sheath must be avoided.

### Product features

Weather/ UV resistant per EN 50618, Annex E, as well as ozone resistant per EN 50396;

Transversely watertight "AD8" per IEC 60364-5-51/ HD 60364-5-51, IEC 62440, and EN 50525-2-21 down to 1 metre in water depth

Flame retardant per IEC 60332-1-2, and Dca classified per EU CPR - Construction Product Regulation (EU) No. 305/2011

Halogen-free according to IEC 60754-1 (amount of halogen acid gas),

Low Corrosiveness of combustion gases according to IEC 60754-2 (degree of acidity)

Good notch and abrasion resistance

Tested against burial-related, mechanical UL 854 Tests Impact-Resistance and Crushing-Resistance

### Norm references / Approvals

H1Z2Z2-K type certified according to EN 50618

Items with other cross-sections on request

### Product Make-up

Fine-wire, tinned-copper conductor

Coreinsulation made of cross-linked copolymer

Outer sheath made of cross-linked copolymer

Outer sheath colour: black, red or blue

Further single colours for the outer sheath on request

### Technical Data

Classification ETIM 5:	ETIM 5.0 Class-ID: EC001578 ETIM 5.0 Class-Description: Flexible cable
Classification ETIM 6:	ETIM 6.0 Class-ID: EC001578 ETIM 6.0 Class-Description: Flexible cable
Conductor stranding:	Fine wire according to VDE 0295, class 5/IEC 60228 class 5
Minimum bending radius:	4 x OD
Nominal voltage:	AC $U_0/U$ : 1.0/1.0 kV DC $U_0/U$ : 1.5/1.5 kV Max. permissible DC operating voltage: 1.8 kV
Test voltage:	AC 6500 V DC 15000 V
Current rating:	$I_m$ compliance with EN 50618, Table A.3 Acc. to EN 50618, reduction factors for clustered wiring per... HD 60364-5-52
Temperature range:	>Conductor..., max., per EN 60216-1: 120 °C; >Conductor..., max., short-circuit/ earth fault (period of max. 5 s): 250 °C; >Ambient..., min., stationary use: -40 °C; >Ambient..., min., flexible use or during installation: -25 °C; >Ambient..., max., in conjunction with EN 60216-1: 90 °C; >Ambient..., constant, in conjunction with HD 60364-7-712: 70 °C

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to 90 °C;  
>Ambient..., ambient temp. related reduction factor 1.00: 60 °C;  
>Ambient..., max., storage: 40 °C

### Note

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

\* Trade product, no Lapp product

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Prices are net prices without VAT and surcharges. Sale to business customers only.

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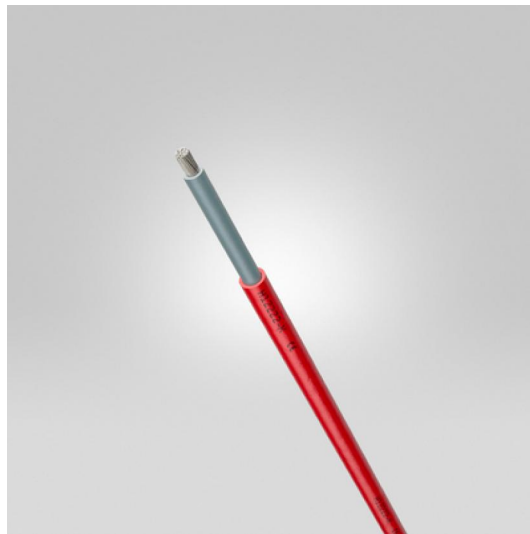
Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
Color of the outer jacket: Black				
1023759	1 X 4	5.5	38.4	60
1023760	1 X 6	6	57.6	80
1023761	1 X 10	7.1	96	123
Color of the outer jacket: Red				
1023774	1 X 4	5.5	38.4	60
1023775	1 X 6	6	57.6	80
1023776	1 X 10	7.1	96	123
Color of the outer jacket: Blue				
1023789	1 X 4	5.5	38.4	60
1023790	1 X 6	6	57.6	80
1023791	1 X 10	7.1	96	123

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