ÖLFLEX® SOLAR XLWP

E-beam cross-linked H1Z2Z2-K with optimized water performance and for burial

ÖLFLEX® SOLAR cable, type H1Z2Z2-K certified by TÜV per EN 50618, e-beam crosslinked, particularly watertight design, burial in ground, UL 854 impact tests, AD8

Info
Optimised cable design - high volume resistance even after long-term period in water
H1Z2Z2-K type certified according to EN 50618
Mechanical UL 854 burial tests

AD8

- Solar Energy
- Suitable for outdoor use
- Halogen-free
- Cold-resistant
- Acid-resistant
- Temperature-resistant
- UV-resistant
- Waterproof

Last Update (27.01.2026)

Product Management www.lappkabel.de
You can find the current technical data in the corresponding data sheet.
PN 0456 / 02_03.16

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Benefits

Robust against mechanical impact, for instance in case of unprotected burial in professionally made cable trench: Additional impact tests per UL 854
The alternative for water coverage, e.g. due to elevated water line caused by flooding
Reduction of flame propagation and of toxic combustion gases in the event of fire
Extruded colour stripe serves as reverse polarity protection during installation.
Exact quantity control during installation by meter marking on the cable sheath

Application range

Photovoltaic systems with DC system voltage up to 1800 V to ground
For the cabling between the solar modules and as extension cable between the module strings and the DC/AC inverter
Underground use without protection conduit/ duct in professionally built cable trench with at least 50 cm of back-fill soil (70 cm underneath roads), above indicating tape, above covering plastic slab, above at least 10 cm of covering sand layer, above the cable laid on at least 10 cm high sand bed layer (cf.: Section 4.2 of VDE 0891-6, or Section 300.5 in Article 300 of NFPA 70/ NEC - National Electrical Code of the USA)
In September 2018 and based on AD8 watertightness and particularly watertight design, this product was recommended by Solartechnik Bayern for underground use typically realized via underground conduits/ ducts (...) for PV applications; Damp build-up of **contaminated** water inside underground conduit/duct shall be avoided
The expected service life at normal use conditions in line with EN 50618 amounts to 25 years

Product features

Weather/ UV resistant per EN 50618 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
Halogen-free and flame-retardant
Good notch and abrasion resistance
Tested against burial-related, mechanical UL 854 Tests Impact-Resistance and Crushing-Resistance
XLWP = X-Linked + Water-Proof (Permanent water contact AD8 acc. to IEC 60364-5-51, 10 mtr. in max. submersion depth @ temperature of widely unmoved water between 5 °C and 40 °C), Proven electron beam cross-linked quality

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
Core insulation made of electron beam cross-linked copolymer
Colour of core insulation: white
Outer sheath made of electron beam cross-linked copolymer
Outer sheath colour: Black only, or Black with Red or Blue stripe

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

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Conductor stranding:	Fine wire according to VDE 0295, class 5/IEC 60228 class 5
Minimum bending radius:	D</=8mm: 4D; 8<D</=12mm: 5D; D>12mm: 6D **D* = Cable's outer diameter
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
Current rating:	Im compliance with EN 50618
Temperature range:	-40 °C to +120 °C max. conductor temperature based on EN 60216-1 Ambient temperature range according to EN 50618: -40 °C to +90 °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
Packaging size: Coil 100 m; Drum (500; 1000) m
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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PRODUCT INFORMATION

Article number	Conductor cross-section (mm^2)	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
1023601	4	5.8	38.4	68.1
1023602	6	6.4	57.6	91.6
1023603	10	7.6	96	138.6
1023604	16	9.1	153.6	209.7
Core insulation: white / Outer sheath: black with red stripe				
1023621	4	5.8	38.4	68.1
1023622	6	6.4	57.6	91.6
1023623	10	7.6	96	138.6
1023624	16	9.1	153.6	209.7
Core insulation: white / Outer sheath: black with blue stripe				
1023625	4	5.8	38.4	68.1
1023626	6	6.4	57.6	91.6

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