



EN 50618 / IEC 62930 Solar PV & 1500 V DC Energy Storage Cables

H1Z2Z2-K

Solar PV Cable

1.5/1.5 kV DC (1.8 kV max) EN 50618 / IEC 62930 double-insulated cross-linked LSZH solar P



1.5 kV DC (1.8 kV max) EN 50618

Class 5 Tinned Cu + Dual E-Beam Z2

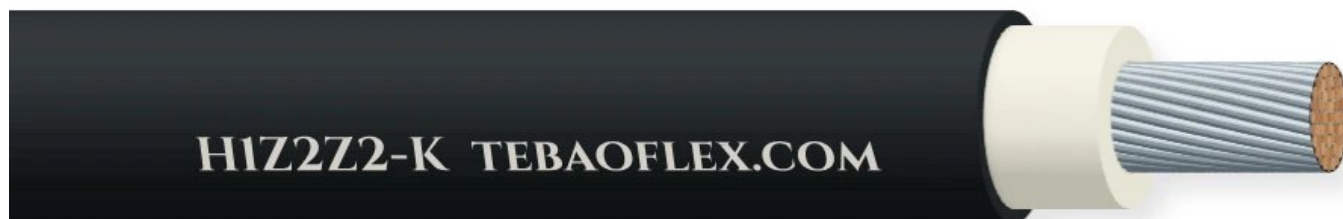
25-Year UV, Ozone & AD8 Rated

Application

H1Z2Z2-K is the harmonized European and international photovoltaic string and array DC power cable per BS EN 50618 and IEC 62930 (62930 IEC 131, superseding TÜV PV1-F). Rated for 1.5/1.5 kV DC nominal (up to 1.8 kV DC maximum operating voltage) and 1.0/1.0 kV

Typical uses: 1500 V DC utility-scale solar, Single-axis PV tracker jumpers, Commercial & industrial rooftop PV, Floating solar (FPV) installations, DC combiner & string inverter links

Construction



Cross-section, not to scale

1	Class 5 tinned copper (EN 60228)	EN 60228
2	Cross-linked LSZH polyolefin (Z2)	EN 50618
3	UV/ozone cross-linked LSZH jacket (Z2)	EN 50618

Technical data

Typical values

Nominal DC voltage (U0/U)	1.5 / 1.5 kV DC (max. permitted operating voltage 1.8 kV DC)	Nominal AC voltage (U0/U)	1.0 / 1.0 kV AC (1.2 kV AC max.)
Test voltage (5 min water bath)	6.5 kV AC rms or 15 kV DC	Ambient & conductor temperature	-40 °C to +90 °C continuous · +120 °C max conductor temp (20,000 h)
Short-circuit temperature (5 s)	+250 °C (thermoset e-beam cross-linked Z2)	Expected service lifetime	≥25 years per EN 50618 Arrhenius thermal endurance index
Minimum bending radius	4 × D (fixed installation) · 5 × D (during flexing/tracker motion)	Dynamic penetration & shrinkage	Passes EN 50618 spring-steel needle penetration & ≤2 % longitudinal shrinkage
Weathering, UV & ozone	720 h Xenon-arc UV + water spray (EN 50289-4-17) & ozone EN 50396 Method B	Water immersion & ammonia	AD7 / AD8 long-term DC water stability (UL 44 / EN 50618) & agricultural ammonia resistant
Fire, smoke & halogen emission	IEC 60332-1-2 flame, IEC 61034-2 (≥70 % light), EN 50525-1 Annex B halogen-free	Standards	BS EN 50618:2014 & IEC 62930 (62930 IEC 131)

Sizes

8 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Designation	Cross-Section	Insul / Sheath mm	Nom. OD mm	Copper kg/km	Total mass ≈ kg/km	Min. bend R mm
H1Z2Z2-K size schedule 8 sizes						
☐ H1Z2Z2-K 1×1.5	1 × 1.5 mm ²	0.7 / 0.8 mm	4.60	14.4	34.0	18.4
☐ H1Z2Z2-K 1×2.5	1 × 2.5 mm ²	0.7 / 0.8 mm	5.00	24.0	46.0	20.0
☐ H1Z2Z2-K 1×4.0	1 × 4.0 mm ²	0.7 / 0.8 mm	5.60	38.4	62.0	22.4
☐ H1Z2Z2-K 1×6.0	1 × 6.0 mm ²	0.7 / 0.8 mm	6.20	57.6	84.0	24.8
☐ H1Z2Z2-K 1×10	1 × 10 mm ²	0.7 / 0.8 mm	7.40	96.0	130.0	29.6
☐ H1Z2Z2-K 1×16	1 × 16 mm ²	0.7 / 0.9 mm	8.80	153.6	198.0	35.2
☐ H1Z2Z2-K 1×25	1 × 25 mm ²	0.9 / 1.0 mm	10.80	240.0	305.0	43.2
☐ H1Z2Z2-K 1×35	1 × 35 mm ²	0.9 / 1.1 mm	12.20	336.0	415.0	48.8

– Dimensions and tolerances conform to EN 50618 / IEC 62930 / TÜV 2 PFG 1169.

Electrical data

8 sizes

Cross-Section	Max. DC R @ 20 °C Ω/km	Current in air A	Installed / duty A
1 × 1.5 mm ²	13.700	30	24
1 × 2.5 mm ²	8.210	41	33
1 × 4.0 mm ²	5.090	55	44
1 × 6.0 mm ²	3.390	70	56
1 × 10 mm ²	1.950	98	78
1 × 16 mm ²	1.240	132	106
1 × 25 mm ²	0.795	176	141
1 × 35 mm ²	0.565	218	174

– Reference ampacities at +30 °C ambient; apply duty-cycle or grouping correction factors per standard.

Standards and approvals

- ✓ BS EN 50618 (H1Z2Z2-K)
- ✓ IEC 62930 (62930 IEC 131)
- ✓ TÜV Rheinland / VDE Certified
- ✓ CPR EN 50575 Dca-s2,d2,a1
- ✓ RoHS 3 & REACH Compliant

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone
+86 185 9591 3361

Email
info@tebaoflex.com

Web
tebaoflex.com/cables/h1z2z2-k-solar-pv-cable



Typical values for this cable type, based on EN 50618 / IEC 62930 / TÜV 2 PFG 1169. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.