

EN50618/IEC62930 H1Z2Z2-K Solar Cable

APPLICATION

Suitable for the DC side of photovoltaic systems, the DC voltage between the conductor and the ground is 1.5kV, suitable for use with Class II equipment, low-smoke zero-halogen, flexible cable with cross-linked insulation and sheath.

TECHNICAL INDICATORS

Nominal voltage: U₀/U 1.0/1.0KV(AC) 1500V(DC)
 Test voltage: AC6.5KV/5min(20°C±0.5) or
 DC15KV/5min(20°C±0.5) without breakdown
 Ambient temperature: -40°C~+90°C
 Conductor maximum temperature: 120°C
 Expected service life: 25 years
 Bending radius: ≥4D

STRUCTURE

Conductor: Tinned copper flexible conductor of Class 5 in EN 50618
 Insulation: LSZH electron-beam cross-linked Polyolefin (125°C)
 Sheath: LSZH electron-beam cross-linked Polyolefin (125°C)
 Color: red or black

CHARACTERISTICS COMPLIANCE

Fire resistance: EN 60332-1-2
 Weather resistance/UV resistance: EN 50289-4-17/ENISO4892
 Halogen determination: EN 50525
 Salt spray emission: IEC 61034
 Compliance certification: ROHS TUV
 Executive standard: EN 50618:2014/IEC 62930:2017

Structural dimensions and parameters

Model	Specification (mm ²)	Insulation Nominal Thickness (mm)	Sheath Nominal Thickness (mm)	Approximate outer diameter (mm)	Maximum DC resistance of conductor at 20°C (Ω/km)	Minimum insulation resistance at 90°C (MΩ/km)
H1Z2Z2-K	1.5	0.7	0.8	4.6	13.7	0.86
H1Z2Z2-K	2.5	0.7	0.8	5.0	8.21	0.69
H1Z2Z2-K	4.0	0.7	0.8	5.55	5.09	0.58
H1Z2Z2-K	6.0	0.7	0.8	6.15	3.39	0.50
H1Z2Z2-K	10	0.7	0.8	7.4	1.95	0.42
H1Z2Z2-K	16	0.7	0.9	8.52	1.24	0.34
H1Z2Z2-K	25	0.9	1.0	10.6	0.795	0.34
H1Z2Z2-K	35	0.9	1.1	12.5	0.565	0.29
H1Z2Z2-K	50	1.0	1.2	14.2	0.393	0.27
H1Z2Z2-K	2×1.5	0.7	0.8	4.6×9.7	13.7	0.86
H1Z2Z2-K	2×2.5	0.7	0.8	5.0×10.5	8.21	0.69
H1Z2Z2-K	2×4.0	0.7	0.8	5.55×11.6	5.09	0.58
H1Z2Z2-K	2×6.0	0.7	0.8	6.15×12.8	3.39	0.50
H1Z2Z2-K	2×10	0.7	0.8	7.4×15.3	1.95	0.42

Reference table for quick selection of carrying capacity

Cross-sectional area	Recommended value of ampacity (A)	Download traffic conversion factor for different ambient temperatures	
		Ambient temperature °C	Conversion factor
Copper conductor	Laying in the air		
1.5	30	10	1.15
2.5	41	20	1.08
4	55	30	1.0
6	70	40	0.91
10	98	50	0.82
16	132	60	0.71
25	176	70	0.58
35	218	80	0.41
50	276		
2×1.5	24		
2×2.5	33		
2×4.0	44		
2×6.0	57		
2×10	79		

Note: Ambient temperature is 30°C; conductor maximum temperature is 90°C

PRODUCT CHARACTERISTICS

- UV and ozone resistant, hydrolysis resistant
- High temperature resistance, service life of more than 25 years
- Good flexibility, easy installation and laying
- Halogen-free and low-smoke material, in line with environmental protection requirements
- Compatible with all common connectors