

ES III H1Z2Z2-K sect. 4 & 6 mm²

Solar cables

Low smoke halogen-free, flexible, single-core power cables with cross-linked insulation and sheath.



TECHNICAL DATA

Nominal tension	1,0/1,0 kVca - 1,5 kVcc
Conditions of employment	H1Z2Z2-K is a low smoke halogen-free, flexible, single-core power cable with cross-linked insulation and sheath. In particular for use at the direct current (d.c.) side of photovoltaic systems, with a nominal d.c. voltage of 1,5 kV between conductors and between conductor and earth. The cable is suitable to be used with Class II equipment. The cable is designed to operate at a normal maximum conductor temperature of 90 °C, but for a maximum of 20 000 hours a max. conductor temperature of 120 °C at a max. ambient temperature of 90 °C is permitted.
Type of electrical conductor	Flexible tinned copper
Type of insulation	Compound conforming to EN 50618
Type of outer sheath	Compound conforming to EN 50618
Color of the outer sheath	Black, blue, red, white
Operating temperature	-40° C +90° C (max temp. at conductor 120°C @ 20.000h)
Short circuit temperature	+250° C on the conductor (max 5 sec.)
Test voltage	6500 Vac - 15000 Vdc
Cable marking	ELETTRO BRESCIA ES III H1Z2Z2-K 1xsect. mm ² TÜV Rheinland Reg. Nr. R 60187210 max 1,8KVdc 62930 IEC 131 HALOGEN FREE LOW SMOKE Dca – s2, d2, a1
Minimum radius of curvature	4 times the cable diameter for fixed and mobile laying.

REFERENCES STANDARDS

Main rule	EN 50618; IEC 62930
UV	EN 50618
Conductor	Class 5, EN 60228; IEC 60228
Self-extinguishing	Vertical-flame propagation according to IEC 62930 & EN 50618
Ozone	EN 60811-403 (Method A)

DIMENSIONS

Nominal section	Wires max diameter	Conductor diameter	Insulation thickness	Insulation diameter $\pm$ 0,1	Minimum average external diameter	Medium outer diameter $\pm$ 0,2	Electrical resistance 20°C	Approximate weight	CU Factor
(Nxmm ²)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(Ω /km)	(kg/km)	(kg/km)
1x4,00	0,30	N/A	0,72	3,80	0,80	5,4	5,0900	N/A	38,4000
1x6,00	0,30	N/A	0,74	4,40	0,80	6,0	3,3900	N/A	57,6000

CORES IDENTIFICATION

Cores number	Insulation colour sequence
1	NA

Refer to the CEI EN 50565 standard series as a guide to the use of cables with nominal voltage not exceeding 450/750 V (U0/U) and to the CEI 20-92 standard as a guide for the handling and storage of wooden reels for cables electrical.

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