

HIKRA®

solar cables
part of HIS CONNECT™

HIKRA® SOL B2 EN50618 (H1Z2Z2-K) IEC62930

DATA SHEET

**IN FOCUS IS THE PLANT REVENUE
IN OPERATION OUR SOLAR CABLES**

- B2ca tested according to CPR
- Improved burning behavior acc. EN 50575:2014
- Global availability
- 25 Years expected lifetime
- Meter marking



HIKRA® SOL B2

TECHNICAL DATA

Construction	
Strand construction	Tin-plated copper strand (electrolytic copper), fine wire acc. IEC 60228 Class 5
Insulation	Electron-beam cross-linked Polyolefin; Shore hardness D 32
Outer Sheath	Electron-beam cross-linked special compound XLPO; Shore hardness D 36
Colour	Sheath: black, red; Insulation: clear – naturally colored
Marking	HIKRA SOL B2 H1Z2Z2-K IEC62930 1x6,0mm ² R 50363076 CE <i>with meter marking</i>
Standards	EN50618 (H1Z2Z2-K) TÜV R 50363076; IEC62930 131

Technical characteristics	
Nominal voltage	1,5kV DC and 1,0kV AC
Maximum permitted operating voltage:	1,8kV DC (2,0 kV DC internal examination)
Voltage test on complete cable	6,5kV AC / 15kV DC (5 minutes water bath, 20±5°C)
Current carrying capacity	See document „Current rating – HIKRA® Solar Cable“ October 2020
Short-circuit-temperature	250° C/5s

Material properties	
UV stability	Tensile strength and ultimate-elongation after 720 h (360 cycles) ≥ 70% of initial values; EN 50289-4-17 acc. Method A; EN ISO 4892-1 (2000) and EN ISO 4892-2 (2006)
Ozone resistance	72h, relative humidity 55±5%, Temperature 40±2°C (EN 50396 Method B; Ozone concentration (200±50)x10 ⁻⁶)
Insulation resistance	Insulation resistance in water bath, each 2h at +90°C and 2h at 20°C (Limit values acc. EN 50618 Table 1)
Dynamic penetration test	Spring-steel-needle through insulation or sheath (EN50618 Annex D)
Crushing- and impact-resistance	Impact-Resistance UL 854.23 and Crushing-Resistance UL 854.24 (internal examination)
Sheath resistance against acid and alkaline	168h at 23°C in N-Oxal acid and N-Sodium hydroxide (EN 60811-404); ammoniac-resistant
Behavior in case of fire	Flame-retardant acc. EN 60332-1-2 Annex A, low smoke emission (EN 61034,-2)
CPR-Performance	B2ca s1, d0, a1; burning behavior acc. EN 50575:2014
Halogen-free	EN 50525-1, Annex B
Cold impact test	EN 60811-506, EN 50618 Annex C.1 at -40°C
Cold elongation test	Max. 30% elongation at -40±2°C, 16h (EN 60811-505)
Damp heat test	Duration 1000h at 90°C and min. 85% relative humidity (EN 60068-2-78)
Minimum bending radius flexible / fixed	10x cable diameter 4x cable diameter

Temperature Range	
Temperature	Ambient temperature: -40° C to +90°C; Maximum conductor temperature: +120° C
Maximum storage temperature	+40°C
Minimum temperature for installation	-25°C

Order No. black	Order No. red	Cross-section mm ²	Construction n x max.-∅ (mm)	Max. resistance (Ω/km)	External diameter (+/- 0,2 mm)	Copper index kg/km	Approx. Weight kg/km
750249	750250	1 x 4.0	52 x 0.3	5.09	5.4	38.4	57.0
750251	750252	1 x 6.0	78 x 0.3	3.39	6.0	57.6	76.0
750253	750254	1 x 10.0	77 x 0.4	1.95	7.2	96.0	119.0
750255	-	1 x 16.0	126 x 0.4	1.24	8.7	153.6	196.0

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