# Solar cables for photovoltaics systems

**H1Z2Z2-K**
**-40°C ÷ +90°C**
**EN 50618**

**Standard:**
PN-EN 50618:2015-03

**General information:**
Rated Voltage: 1,0/1,0 kV AC
Operating Voltage: 1,5kV (1,8kV) DC, acc. EN 50618, $U_0$/U 1000/1000 VAC
Insulation resistance: 1000 MΩ/km
Ambient temperature in operation: +90°C
Short-ciruit temperature: +250°C (max. 5 sec on conductor)
Max. temperature at conductor: +120°C/20000h
Min. allowable ambient temperature: - 40°C
Min. allowable ambient temperature: - 25°C
Spark test 50Hz: 6500V (AC)
Higher UV-stability and weathering acc. EN 50618
Resistance against Ammonia
Resistance against acid and alkaline solution
Test for vertical flame propagation on complete cable: acc. EN 60332-1, IEC 60332-1
Smoke emission acc. PN-EN 61034-2, PN-EN 60754-2
Bending radius: 4 x Ø
Expected period of use: 25 years
Construction Product Regulation: class Dca, acc. EN 50575 (CPR)
Direct Burial UL 854: -Section 23 Impact-resistance Test -Section 24 Crushing-Resistance Test
Certificate No. : 1200020 (acc. EN50618)

| **Construction:** | |
|---|---|
| **Conductor** | E-Cu tinned acc. IEC 60228 class 5 |
| **Insulation** | Crosslinked special halogenfree compound |
| **Outer sheath** | Crosslinked special halogenfree compound |
| **Insulation colour** | white |
| **Sheath colour** | black, red, blue |
| **Screen** | as option, galvanized steel wires |

**Applications:**
Used in photovoltaic installations for connections between individual solar panels and between the panels and the inverter. It is possible to use an anti-rodent agent in the wire insulation, to prevent damage to the ducts by rodents or termites.

**Packing:** Rolls, spools or drums.


| Cross section | Max. diam. of single wire in conductor | Nominal insulation thickness | Nominal jacket thickness | Max. diam. of cable | Min. resistance of insulation at 20°C |
|---|---|---|---|---|---|
| mm² | mm | mm | mm | mm | MΩ.km |
| 2,5 | 0,26 | 0,7 | 0,8 | 5,9 | 690 |
| 4,0 | 0,31 | 0,7 | 0,8 | 6,6 | 580 |
| 6,0 | 0,31 | 0,7 | 0,8 | 7,4 | 500 |
| 10,0 | 0,41 | 0,7 | 0,8 | 8,8 | 420 |
| 16,0 | 0,41 | 0,7 | 0,9 | 10,1 | 340 |

Other cross sec. and construction on request.

**MG WIRES GROUP Sp. z o. o.**

PL 40-246 Katowice
ul. Porcelanowa 23
T: +48 33 474 08 00
E: biuro@mgwires.pl
www.mgwires.pl