# POWER CABLES FOR PHOTOVOLTAIC INSTALLATIONS

### **APPLICATION**

Used in photovoltaic installations for connections between individual photovoltaic panels and between the panels and the inverter.

## **STANDARD**

PN-EN 50618:2015-03 and IEC 62930

#### **CHARACTERISTICS**

Rated voltage: 1,0/1,0 kV AC

Operating voltage: 1.5kV (1.8kV) DC, compliant with EN 50618,

U0/U 1000/1000 VAC

Insulation resistance:  $1000 \text{ M}\Omega/\text{km}$ 

Max. wire temperature during wire operation +90°C

Max. conductor temperature during cable operation:  $+120^{\circ}\text{C}/20000\text{h}$  Min. ambient temperature for permanently installed cables:  $-40^{\circ}\text{C}$ 

Minimum cable laying temperature: – 25°C

50Hz test voltage: 6500V (AC)

UV-resistant, ozone-resistant, weatherproof, according to EN 50618,

IEC 62930

Increased resistance to hydrolysis and ammonia Increased resistance

to alkalis and acids

Flame retardant to EN 60332-1, PN-EN 60332-1, IEC 60332-1

The cables meet the requirements of the PN-EN 61034-2, PN-EN

60754-2

Do not give off aggressive fumes when burning

Min. bending radius of the permanent connection:  $4 \times \emptyset$ 

**Expected lifetime:** 25 years CPR – Certificates/DoP

Reaction to fire: class Dca, classification in accordance with PN-EN

50575 (CPR)

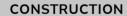
Certificate No: 1200020 (complies with EN50618)

Possibility of direct underground cable laying certified by UL LLC

Laboratory – NY USA – project no. 4790117513

Standard UL 854 Section 23 Impact-Resistance Test – item 24:

Crushing-Restistance Test



Conductor: made of soft tinned copper wires class 5 according to PN-

EN 60228

**Insulation:** cross-linked halogen-free plastic **Coating:** cross-linked halogen-free plastic

Color of insulation: white Coating color: black or red

## **PACKAGING**

Shielding / Arming: as option with CuSn / FeZn wires

Packaging: Reels, spools

Available length: 50 m, 100 m, 500 m













MADE IN POLAND

Nominal conductor cross-section [mm²]	4,00	6,00	10,00
Largest permissible wire diameter in conductor [mm]	0,31	0,31	0,41
Nominal insulation wall thickness [mm]	0,7	0,7	0,7
Nominal shell wall thickness [mm]	0,8	0,8	0,8
Max. outer diameter of the cable [mm]	6,6	7,4	8,8
Min. wire resistance at 20°C [M $\Omega$ .km]	5,09	3,39	1,95
Min. insulation resistance at 20°C [M $\Omega$ .km]	580	500	420