

In our production area of 4,500 square metres, 100 employees have obtained an annual production of about 4,500 tons, while in about 25,000 km of cable and 130,000 km of wire.



According to the international standards DIN EN ISO 9001:2000 and 14001:1996

HELUKABEL responds to market demands by continually developing new cable types. The new connection types consist of special construction for extreme conditions. The new products are tested in our modern well-equipped test center before going into production.



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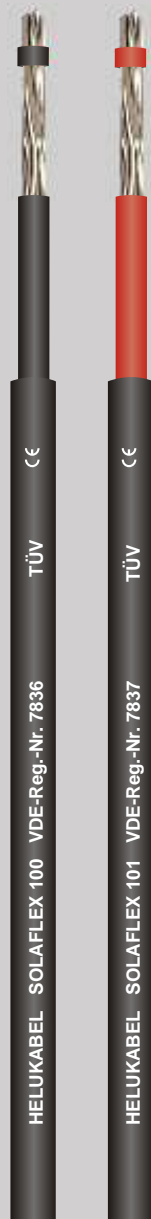
## Cables for Photo-voltaic



# SOLARFLEX

100 · 101 · 102 · 104

double-insulation,  
0,6/1 kV,  
UV-resistant,  
halogen-free,  
with VDE Reg. No.  
and TÜV Certificate



## Application

The power of the wind, sun and water are alternative power sources which are always available to us here on earth and inexhaustible.

These cables are intended for photovoltaic systems.

Photo-voltaic systems convert the energy of the sun directly into electrical energy.

The cable is UV radiation and temperature resistant, and can be used to connect individual solar cells. Because of their excellent weather resistance, the cables can also be installed outdoors, but not buried in the ground or laid in water.

## SOLARFLEX 102

2-pole special cable for installation

protected against short-circuit to earth

and short-circuit, as a connecting cable from a module to an inverter.

CE = The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

## Technical data

### SOLARFLEX 100

Temperature range  
Flexing -40°C to +80°C  
Flexing installation -50°C to +90°C

Nominal voltage 600/1000V AC  
1500V DC

a. c. test voltage 50 Hz, 3500V

Minimum bending radius  
For flexible installation Approx. 8x cable diameters

### SOLARFLEX 101

as above, but with  
Temperature range  
Flexing -30°C to +120°C  
Fixed installation -50°C to +120°C

### SOLARFLEX 102

as above, but with  
Temperature range  
Flexing -5°C to +80°C  
Fixed installation -40°C to +80°C

## SOLARFLEX 100 LiTPE11Y with TÜV Certificate and VDE Reg. No. 7837

| Part No. | No cores x cross-sec mm <sup>2</sup> | Outer Ø ca. mm | Cop. weight kg/km | Weight ca. kg/km | Core/jacket colour |
|----------|--------------------------------------|----------------|-------------------|------------------|--------------------|
| 700549   | 1x2,5                                | 5,8            | 24,0              | 55               | rd/bk              |
| 700277   | 1x4                                  | 6,7            | 38,4              | 85               | rd/bk              |
| 700278   | 1x6                                  | 7,6            | 57,6              | 95               | rd/bk              |
| 700368   | 1x10                                 | 9,6            | 96,0              | 110              | bk/bk              |
| 700369   | 1x16                                 | 11,0           | 153,6             | 170              | bk/bk              |

## SOLARFLEX 101 LiTPE/TPE with TÜV Certificate and VDE Reg. No. 7836

| Part No. | No cores x cross-sec mm <sup>2</sup> | Outer Ø ca. mm | Cop. weight kg/km | Weight ca. kg/km | Core/jacket colour |
|----------|--------------------------------------|----------------|-------------------|------------------|--------------------|
| 78990    | 1x2,5                                | 6,6            | 24,0              | 46               | bk/bk              |
| 700400   | 1x4                                  | 7,5            | 38,4              | 68               | bk/bk              |
| 78166    | 1x6                                  | 8,3            | 57,6              | 95               | rd/bk              |
| 700610   | 1x10                                 | 10,2           | 96,0              | 110              | bk/bk              |
| 700611   | 1x16                                 | 11,4           | 153,6             | 170              | bk/bk              |

## Cable structure

### SOLARFLEX 100 (LiTPE11Y)

doubleinsulation VDE Reg. No. and TÜV Certificate

Bare copper, fine wire conductors acc. to DIN VDE 0295 cl. 5 and IEC 60228 cl. 5, 1st insulation TPE, colours see table, 2. Insulation PUR, halogen-free and flame-retardant acc. to test type B acc. to VDE 0472 part 804 and IEC 60332-1, colour black

### SOLARFLEX 101 (LiTPE/TPE)

doubleinsulation VDE Reg. No. and TÜV Certificate as above, but with 1. Core insulation TPE black, 2. Core insulation TPE black

### SOLARFLEX 102 (LiYY-OB-600)

doubleinsulation as above, but not halogen-free, 1. Core insulation, special PVC T12 to DIN VDE 0207, part 4, 2. Core insulation, special PVC YM2 to DIN VDE 0207 part 5, extensively oil resistant self-extinguishing and flame retardant, test method B according to VDE 0472 part 804 and IEC 60332-1, for chemical Resistance see Technical Information table, for colours see table

### SOLARFLEX 104 (Li11Y11Y)

doubleinsulation same as SOLARFLEX 100, but with 1. Core insulation PUR

## SOLARFLEX 102

## LiYY

| Part No. | No cores x cross-sec mm <sup>2</sup> | Outer Ø ca. mm | Cop. weight kg/km | Weight ca. kg/km | Core/jacket colour |
|----------|--------------------------------------|----------------|-------------------|------------------|--------------------|
| 73740    | 2x2,5                                | 9,4            | 48,0              | 115              | rd/bk              |
| 73604    | 2x4,0                                | 11,4           | 77,0              | 195              | rd/bk              |
| 78164    | 2x6,0                                | 13,1           | 115,2             | 300              | rd/bk              |

## SOLARFLEX 104

## Li11Y11Y

| Part No. | No cores x cross-sec mm <sup>2</sup> | Outer Ø ca. mm | Cop. weight kg/km | Weight ca. kg/km | Core/jacket colour |
|----------|--------------------------------------|----------------|-------------------|------------------|--------------------|
| 700019   | 1x2,5                                | 5,8            | 24,0              | 55               | rd/bk              |
| 74653    | 1x2,5                                | 5,8            | 24,0              | 55               | bu/bk              |
| 700020   | 1x4,0                                | 6,3            | 38,4              | 80               | rd/bk              |
| 74655    | 1x4,0                                | 6,3            | 38,4              | 80               | bu/bk              |
| 700021   | 1x6,0                                | 7,6            | 57,6              | 95               | rd/bk              |
| 78163    | 1x6,0                                | 7,6            | 57,6              | 95               | bu/bk              |
| 700612   | 1x10                                 | 9,6            | 96,0              | 110              | rd/bk              |
| 700613   | 1x10                                 | 9,6            | 96,0              | 110              | bu/bk              |
| 700614   | 1x16                                 | 11,0           | 153,6             | 170              | rd/bk              |
| 701437   | 1x16                                 | 11,0           | 153,6             | 170              | bu/bk              |