



**HELUKABEL®**

Large product portfolio  
available from stock



PHOTOVOLTAICS

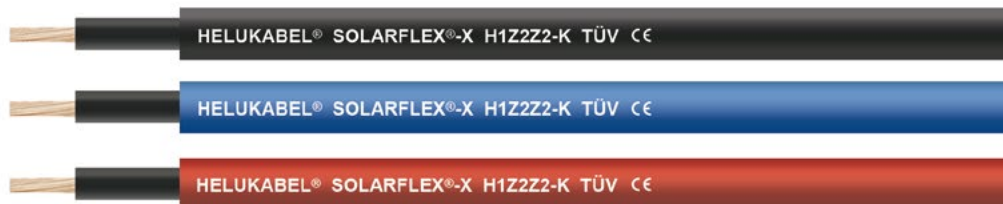
■ Cables, wires & accessories

# Solutions for photovoltaic systems

From the solar cell to the feeding point

# SOLARFLEX®-X H1Z2Z2-K

## 1500 V DC, EN 50618



### Technical data

<b>Temperature range</b>	-40°C to +90°C
<b>Max. operating temperature at the conductor</b>	+120°C
<b>Nominal voltage</b>	AC 1,0/1,0 kV / DC 1,5/1,5 kV
<b>AC Test voltage</b>	6,5 kV
<b>Min. bending radius</b>	fixed installation 5x conductor Ø

### Cable structure

- Tinned copper conductor, finely stranded acc. to DIN VDE 0295 cl.5, IEC 60228 cl.5
- Core insulation: special cross-linked compound
- Sheath: special cross-linked compound
- Sheath colour: see table

### Properties

- Complies with protection class II
- UV-resistant
- Ozone-resistant
- Direct burial

### Tests

- Halogen-free acc. to DIN VDE 0285-525-1 / DIN EN 50525.1 Annexe B / DIN EN 60754-1 / IEC 60754-1
- Flame retardant acc. to IEC 60332-1-2
- Smoke density acc. to IEC 61034
- Weathering/UV-resistant acc. to EN 50289-4-17 Annexe A
- Ozone-resistant acc. to EN 50396, Annexe 8.1.3 Method B

Part no.	AD x nominal cross-section mm <sup>2</sup>	Sheath colour	OD Ø approx. mm	Cu no. kg / km	Weight approx. kg / km
713529	1 x 2,5	black	5,0	24,0	41,0
713544	1 x 2,5	blue	5,0	24,0	41,0
713543	1 x 2,5	red	5,0	24,0	41,0
713530	1 x 4	black	5,4	38,4	55,0
713546	1 x 4	blue	5,4	38,4	55,0
713545	1 x 4	red	5,4	38,4	55,0
713531	1 x 6	black	6,2	57,6	82,0
713570	1 x 6	blue	6,2	57,6	82,0
713569	1 x 6	red	6,2	57,6	82,0
713532	1 x 10	black	7,4	96,0	123,0
713572	1 x 10	blue	7,4	96,0	123,0
713571	1 x 10	red	7,4	96,0	123,0

Subject to technical modifications.

### Approvals

- EN 50618  
TÜV

### Application

The SOLARFLEX®-X is used for wiring solar modules. Suitable for direct burial. Recommendation: For laying in pipes.

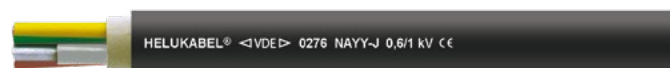
CE= Product complies to the Low-Voltage Directive 2014/95/EU.

## EARTH CABLE - FROM THE INVERTER TO THE FEEDING POINT

HELUKABEL® offers you a wide range of connection cables for cabling from the inverter to the feeding point. Thanks to the wide range of products in stock and the most modern logistics center in the cable industry, direct deliveries to the customer construction site are also possible at short notice and on schedule. Additional connection cables can be found at: [www.helukabel.com/powercables](http://www.helukabel.com/powercables)

### NAYY

0,6/1kV, Alu, VDE approved



<b>Core number:</b>	1 to 5
<b>Nominal cross-section:</b>	10 mm <sup>2</sup> to 630 mm <sup>2</sup>
<b>Temperature range:</b>	flexible installation: -5°C to +50°C fixed installation: -40°C to +70°C

### NYY

0,6/1kV, copper, VDE approved



<b>Core number:</b>	1 to 61
<b>Nominal cross-section:</b>	1,5 mm <sup>2</sup> to 630 mm <sup>2</sup>
<b>Temperature range:</b>	flexible installation: -5°C to +50°C fixed installation: -40°C to +70°C

## ■ SOLARFLEX®-X H1Z2Z2-K NTS

Version with rodent protection. Protective mesh: stainless steel, V2A 1-way



Especially recommended for PV systems in the agricultural sector.  
Data sheet at:  
[www.helukabel.com/17000101en](http://www.helukabel.com/17000101en)

Part no.	AD x nominal cross-section mm <sup>2</sup>	OD Ø approx. mm	Cu no. kg / km	Weight approx. kg / km
17000101	1 x 4	6,0	38,4	85
17000102	1 x 6	6,8	57,6	112
17000103	1 x 10	8,0	96,0	158

## ■ PV-CABLE COUPLER AND FEMALE CONNECTOR MC4



<b>Protection classification:</b>	IP 67
<b>Protection type:</b>	II
<b>Temperature range:</b>	-40°C to +90°C
<b>Rated voltage:</b>	1000 V (IEC)
<b>Rated current:</b>	22A (2,5 mm <sup>2</sup> ) 30A (4 mm <sup>2</sup> and 6 mm <sup>2</sup> )
<b>Contact resistance:</b>	<0,5 mΩ
<b>Contact system:</b>	MC contact lamination
<b>Contact material:</b>	Cu, tinned, punched

Part no.	MC4 - Description	AD Ø approx. mm	Cond. PU cross-section mm <sup>2</sup>
905206	PV-KST4/2,5I-UR plug	3 - 6	2,5 50
905207	PV-KBT4/2,5I-UR female connector	3 - 6	2,5 50
905210	PV-KST4/6I-UR plug	3 - 6	4 50
905211	PV-KBT4/6I-UR female connector	3 - 6	4 50
904963	PV-KST4/6II-UR plug	5,5 - 9	6 50
904964	PV-KBT4/6II-UR female connector	5,5 - 9	6 50
905863	PV-KST4/10 II plug	5,5 - 9	10 50
905864	PV-KBT 4/10 II female connector	5,5 - 9	10 50
905228	PV-AZB4 female connector BBS	x	2,5 - 10 50
905229	PV-AZS4 plug BBS	x	2,5 - 10 50
905516	Metal insert B female connector	3 - 6	4 - 6 50
906227	Metal insert S plug	3 - 6	4 - 6 50
904972	Key set of 2	x	2,5 - 10 1
904971	Crimping tool + Locator	x	2,5 - 6 1
905866	Crimping tool	x	4 - 10 1

Subject to technical modifications.

## ■ MONITORING THE PHOTOVOLTAIC SYSTEM

HELUKAT® 600 data cables are characterised by large power reserves and outstanding performance. These cables enable problem-free monitoring of the photovoltaic system. With its double PVC sheath, the HELUKAT® 600A series is designed specifically for outdoor installations such as housewalls and routes. The HELUKAT® 600AE series is equipped with a double FRNC / PE sheath and metallic rodent-protection, making it suitable for direct burial.

### HELUKAT® 600A S/FTP PVC/PVC

Outdoor use, Cat. 7e



<b>Cable structure:</b>	S/FTP 4x2xAWG 23/1 PVC/PVC
<b>Inner conductor diameter:</b>	0,58 mm
<b>Conductor material:</b>	bare copper
<b>Outer sheath material:</b>	PVC
<b>Part no.</b>	801147

### HELUKAT® 600AE S/FTP FRNC/PE

Direct burial, Cat. 7e



<b>Cable structure:</b>	S/FTP 4x2xAWG 23/1 FRNC/PE
<b>Inner conductor diameter:</b>	0,58 mm
<b>Conductor material:</b>	bare copper
<b>Outer sheath material:</b>	PE
<b>Part no.</b>	802168



## WK POWERLINE ALU

### 0,6/1kV or 1,8/3kV



**Nominal cross-section:** 70 mm<sup>2</sup> to 400 mm<sup>2</sup>  
**Temperature range:** flexible installation: -20°C to +90°C  
 fixed installation: -40°C to +105°C

### More flexibility for tight bending radii at the feed-in point

The HELUWIND® WK Powerline ALU is a highly flexible aluminium cable with a finely stranded structure and is designed for use in the power engineering sector; specifically, for power cabling. Due to its high flexibility and low weight, this cable is ideal for tight bending radii.

**Cable for laying underground available upon request.**

## PHOTOVOLTAIC-CABLEACCESSORIES



### Toolset for photovoltaic cables

HELUKABEL® offers tools for cutting and stripping cables and wires, which can even be used on high-grade sheath materials.

#### Crimping and Mounting

Also available in the product range are assembling tools for connecting solar cables to the fitting plug-connector, facilitating precise crimping of the contacts. If required, we also offer specialised assembling tools.

**All tools available separately**



### HELUKABEL® accessories - everything from one source

Cable Glands · Cable Protection Tubing · Insulating, Shrink, Braided and High-Temperature Tubing · Sealing Ends and Straight-Joints Bundling Binding and Fastening · Identification and Marking · Wire End Ferrules and Cable Lugs · Tools

Find our product range here  
[www.helukabel.com/cableaccessories](http://www.helukabel.com/cableaccessories)

## CONTACTS

### International Locations

Austria · Belgium · Brazil · Bulgaria · Canada · China · Czech Republic · Denmark · France · Finland · Germany · Hungary · India · Indonesia · Italy · Malaysia · Mexico · Myanmar · Netherlands · Peru · Poland · Portugal · Romania · Russia · Singapore · South Africa · South Korea · Spain · Sweden · Switzerland · Thailand · Turkey · United Arab Emirates · UK · USA · Vietnam

Want to order a catalogue online?  
[www.helukabel.com/publicationorder](http://www.helukabel.com/publicationorder)



### National Locations

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