HELUKABEL®

Wide product range available in-stock!



PHOTOVOLTAIC

Cables, Wires & Accessories

Cable Solutions for Photovoltaic Systems

From the solar cells to the grid

Nominal voltage
AC 1 kV / DC 1.5 kV

HELUKABEL®

SOLARFLEX®-X H1Z2Z2-K

1500 V DC, EN 50618



Technical data

- **Temperature range**
  -40°C to +90°C
  max. temperature at conductor +120°C
- **Nominal voltage**
  AC 1.0/1.0 kV / DC 1.5/1.5 kV
- **Test voltage**
  AC 6.5 kV
- **Minimum bending radius**
  fixed installation 5x cable Ø

Part no.	No.cores x cross-sec. mm²	Sheath colour	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG no.
713529	1 x 2.5	black	5.0	24.0	41.0	14
713544	1 x 2.5	blue	5.0	24.0	41.0	14
713543	1 x 2.5	red	5.0	24.0	41.0	14
713530	1 x 4	black	5.4	38.4	55.0	12
713546	1 x 4	blue	5.4	38.4	55.0	12
713545	1 x 4	red	5.4	38.4	55.0	12
713531	1 x 6	black	6.2	57.6	82.0	10
713570	1 x 6	blue	6.2	57.6	82.0	10
713569	1 x 6	red	6.2	57.6	82.0	10
713532	1 x 10	black	7.4	96.0	123.0	8
713572	1 x 10	blue	7.4	96.0	123.0	8
713571	1 x 10	red	7.4	96.0	123.0	8

Dimensions and specifications may be changed without prior notice

Cable structure

- Tinned copper conductor, fine wired acc. to DIN VDE 0295 cl.5, IEC 60228 cl.5
- 1st core insulation: special cross-linked compound
- 2nd core insulation: special cross-linked compound
- Sheath colour: see table

Properties

- Double-insulated
- Complies with protection class II
- UV-resistant
- Ozone-resistant

Tests

- Halogen-free acc. to EN 50267, IEC 60754
- Flame retardant acc. to IEC 60332-1-2
- Smoke density acc. to IEC 61034
- Weathering/UV-resistant acc. to EN 50618 Annexe E
- EN 50289-4-17 Method A
- Ozone-resistant acc. to EN 50396 Clause 8.1.3 Method B

Approvals

- EN 50618
  TÜV Rheinland 2 PfG 1990/05.12
  TÜV R60115689

Application

The SOLARFLEX®-X is used for cabling solar panels. CE = Product conforms with Low-Voltage Directive 2014/35/EU.

Connecting cable - from the inverter to the grid

HELUKABEL® supplies a wide range of connecting cables for wiring the inverter to the grid. With a wide range of stock and the most modern logistics centre in the cable industry, we can deliver directly to the customer's location, quickly and on time. **www.helukabel.com/power-cables**

With power cables, you have the choice - copper or aluminium

NAYY Power Cable

0.6/1kV, Aluminium, VDE approved



No. of cores: 1 to 5
Cross-section: 16 mm² to 630 mm²
Temperature range: flexing: -5°C to +50°C,
fixed installation: -40°C to +70°C

NYY Power Cable

0.6/1kV, Copper, VDE approved



No. of cores: 1 to 61
Cross-section: 1.5 mm² to 240 mm²
Temperature range: flexing: -5°C to +50°C,
fixed installation: -40°C to +70°C

SOLARFLEX®-X H1Z2Z2-K

Version with rodent protection



Especially recommended for PV systems in the agriculture sector. Technical data, structure, and properties correspond with the standard version.

Part no.	No.cores x cross-sec. mm²	Sheath colour	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG no.
17000101	1 x 4	black	4.0	38.4	85	12
17000102	1 x 6	black	6.0	57.6	112	10
17000103	1 x 10	black	10.0	96	158	8

PV Plug Connectors MC4

Compatible with SOLARFLEX® -X H1Z2Z2-K



Protection classification: IP 67
Protection type: II
Temperature range: -40°C up to +90°C
Rated voltage: 1000 V (IEC)
Rated current: 22A (2.5 mm²), 30A (4 mm² and 6 mm²)
Contact resistance: <0.5 mΩ
Contact system: MC contact lamination
Contact material: Tinned copper, punched

Part no.	Type	Description	Outer Ø app. mm	Cross-section mm²	Unit
905206	MC4 PV-KST4/2,5I-UR	male-coupler	3 to 6	2.5	50
905207	MC4 PV-KBT4/2,5I-UR	female-coupler	3 to 6	2.5	50
905210	MC4 PV-KST4/6I-UR	male-coupler	3 to 6	4	50
905211	MC4 PV-KBT4/6I-UR	female-coupler	3 to 6	4	50
904963	MC4 PV-KST4/6II-UR	male-coupler	5.5 to 9	6	50
904964	MC4 PV-KBT4/6II-UR	female-coupler	5.5 to 9	6	50
905863	MC4 PV-KST4/10 II	male-coupler	5.5 to 9	10	50
905864	MC4 PV-KBT 4/10 II	female-coupler	5.5 to 9	10	50
905228	MC4 PV-AZB4	branch socket	x	2.5 to 10	50
905229	MC4 PV-AZS4	branch plug	x	2.5 to 10	50
905516	MC4-Metal insert B	female-coupler	3 to 6	4 to 6	50
906227	MC4-Metal insert S	male-coupler	3 to 6	4 to 6	50
904972	MC4 Wrench	Set of 2	x	2.5 to 10	1
904971	Crimping pliers +Locator	MC4	x	2.5 to 6	1
905866	Crimping pliers	MC4	x	4 to 10	1

Other PV Connecting Systems like H4, Sunclix, Solarlok and many more available on request.

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. The HELUKAT® 600AE series is equipped with a double FRNC / PE sheath and metallic rodent-protection, making it suitable for direct burial.

CAT 7e LAN-data cable suitable for outdoor installation or direct burial

HELUKAT® 600A S/FTP PVC/PVC

Outdoor use



Cable structure: S/FTP 4x2xAWG 23/1 PVC/PVC
Inner conductor diameter: 0.58 mm
Conductor material: bare copper
Outer sheath material: PVC
Part no. 802167

HELUKAT® 600AE S/FTP FRNC/PE

Burial



Cable structure: S/FTP 4x2xAWG 23/1 FRNC/PE
Inner conductor diameter: 0.58 mm
Conductor material: bare copper
Outer sheath material: PE
Part no. 802168

WK POWERLINE ALU 105°C

0.6/1kV or 1.8/3kV



Cross-section: 70 mm² to 400 mm²
Temperature range: flexing: -20°C to +105°C,
fixed installation: -40°C to +105°C

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

The WK POWERLINE ALU is a highly flexible aluminium cable constructed of fine-stranded wires that can be used for power cabling in the power engineering sector. Due to its high flexibility and low weight, this cable is ideal for tight bending radii.

Cable for laying underground available upon request.

PHOTOVOLTAIC CABLE ACCESSORIES



Assembling tools 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 assembly
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 can also be purchased individually.



Everything from one source - HELUKABEL® has cable accessories covered:

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

See the complete assortment at: **www.helukabel.com/accessories**

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