Solutions for photovoltaic systems
From the solar cell to the feeding point
Technical data

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

Approvals
- EN 50618
- TÜV

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

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

NAYY
0,6/1kV, Alu, VDE approved

Core number: 1 to 5
Nominal cross-section: 10 mm² to 630 mm²
Temperature range: flexible installation: -5°C to +50°C  fixed installation: -40°C to +70°C

NYY
0,6/1kV, copper, VDE approved

Core number: 1 to 61
Nominal cross-section: 1,5 mm² to 630 mm²
Temperature range: 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

PV-CABLE COUPLER AND FEMALE CONNECTOR MC4

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

<table>
<thead>
<tr>
<th>Part no.</th>
<th>MC4 - Description</th>
<th>AD Ø approx. mm²</th>
<th>Cond. cross-section mm²</th>
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</thead>
<tbody>
<tr>
<td>905206</td>
<td>PV-KST4/2,5i-UR plug</td>
<td>3 - 6</td>
<td>2,5 50</td>
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<td>905207</td>
<td>PV-KBT4/2,5i-UR female connector</td>
<td>3 - 6</td>
<td>2,5 50</td>
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<td>905210</td>
<td>PV-KST4/6i-UR plug</td>
<td>3 - 6</td>
<td>4 50</td>
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<td>905211</td>
<td>PV-KBT4/6i-UR female connector</td>
<td>3 - 6</td>
<td>4 50</td>
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<tr>
<td>904963</td>
<td>PV-KST4/6i-UR plug</td>
<td>5,5 - 9</td>
<td>6 50</td>
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<td>904964</td>
<td>PV-KBT4/6i-UR female connector</td>
<td>5,5 - 9</td>
<td>6 50</td>
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<td>905863</td>
<td>PV-KST4/10 ii plug</td>
<td>5,5 - 9</td>
<td>10 50</td>
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<td>905864</td>
<td>PV-KBT 4/10 ii female connector</td>
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<td>10 50</td>
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<td>905228</td>
<td>PV-AZB4 female connector BBS</td>
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<td>2,5 - 10 50</td>
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<td>905229</td>
<td>PV-AZB4 plug BSS</td>
<td>x</td>
<td>2,5 - 10 50</td>
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<td>905516</td>
<td>Metal insert B female connector</td>
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<td>4 - 6 50</td>
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<td>906227</td>
<td>Metal insert S plug</td>
<td>3 - 6</td>
<td>4 - 6 50</td>
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<td>904972</td>
<td>Key set of 2</td>
<td>x</td>
<td>2,5 - 10 1</td>
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<tr>
<td>904971</td>
<td>Crimping tool + Locator</td>
<td>x</td>
<td>2,5 - 6 1</td>
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<tr>
<td>905866</td>
<td>Crimping tool</td>
<td>x</td>
<td>4 - 10 1</td>
</tr>
</tbody>
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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

<table>
<thead>
<tr>
<th>Cable structure:</th>
<th>S/FTP 4x2xAWG 23/1 PVC/PVC</th>
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</thead>
<tbody>
<tr>
<td>Inner conductor diameter:</td>
<td>0,58 mm</td>
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<tr>
<td>Conductor material:</td>
<td>bare copper</td>
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<td>Outer sheath material:</td>
<td>PVC</td>
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<td>Part no.</td>
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HELUKAT® 600AE S/FTP FRNC/PE
Direct burial, Cat. 7e

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<tr>
<th>Cable structure:</th>
<th>S/FTP 4x2xAWG 23/1 FRNC/PE</th>
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</thead>
<tbody>
<tr>
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<td>bare copper</td>
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<tr>
<td>Outer sheath material:</td>
<td>PE</td>
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<tr>
<td>Part no.</td>
<td>802168</td>
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</tbody>
</table>
WK POWERLINE ALU
0,6/1kV or 1,8/3kV

Nominal cross-section: 70 mm² to 400 mm²
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

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