

# PV-CF-S 2,5-6 (+) - Connector



1774674

<https://www.phoenixcontact.com/us/products/1774674>

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Photovoltaic connector, Range of articles: Sunclix, Connector, housing material: PPE, color: black, number of positions: 1, min. conductor cross section: 2.5 mm<sup>2</sup>, max. conductor cross section: 6 mm<sup>2</sup>, rated voltage: 1100 V DC, rated current: 40 A, Connection method: Spring-cage, Contact connection type: Socket, min. cable diameter: 5.5 mm, max. cable diameter: 8 mm. The follow-up item is 1386381

## Your advantages

- Convenient, secure spring connection technology
- High yield, thanks to silver-plated contacts
- Convenient release without a special tool
- One-piece DC connector

## Commercial data

Item number	1774674
Packing unit	1 pc
Minimum order quantity	50 pc
Sales key	AB02
Product key	ABLBBA
Catalog page	Page 422 (C-2-2013)
GTIN	4046356480208
Weight per piece (including packing)	11.58 g
Weight per piece (excluding packing)	11.22 g
Customs tariff number	85359000
Country of origin	DE

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## Technical data

### Notes

General	The follow-up item is 1386381
Safety note	
Safety note	<ul style="list-style-type: none"><li>• WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.</li><li>• WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.</li><li>• WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.</li><li>• The products are suitable for applications in plant, controller, and electrical device engineering.</li><li>• Assembled products may not be manipulated or improperly opened.</li><li>• Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a>).</li><li>• When using the product in direct connection with third-party manufacturers, the user is responsible.</li><li>• For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li><li>• Ensure that the protective or functional ground has been properly connected.</li><li>• Observe the corresponding technical data. You will find information:<ul style="list-style-type: none"><li>o On the product</li><li>o On the packing label</li><li>o In the supplied documentation</li><li>o Online at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> under the product</li></ul></li><li>• The installation notes/Design In documents online on the download page at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> must be observed for this product.</li><li>• Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a></li><li>• The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).</li><li>• Operate the connector only when it is fully plugged in and interlocked.</li><li>• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the</li></ul>

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standards.

- Observe the minimum bending radius of the cable. Lay the cable without twisting it.

## Product properties

Product type	Photovoltaic connector
Product family	Sunclix
Number of positions	1
Pitch	0 mm

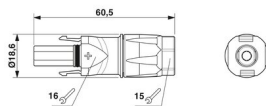
## Insulation characteristics

Protection class	II
Degree of pollution	2

## Electrical properties

Rated voltage (II/2)	1000 V
Rated voltage (III/2)	1100 V
Nominal voltage ATD	1100 V DC (II/2) in accordance with IEC 62852:2014/AMD1:2020
Rated surge voltage	12.8 kV
Rated surge voltage (II/2)	12 kV
Rated surge voltage (III/2)	12 kV
Rated surge voltage (III/3)	12.8 kV
Rated current (6.0 mm <sup>2</sup> )	40 A (in accordance with IEC 62852:2014-11)
Rated current (4.0 mm <sup>2</sup> )	35 A (in accordance with IEC 62852:2014-11)
Rated current (2.5 mm <sup>2</sup> )	27 A (in accordance with IEC 62852:2014-11)
Contact resistance	≤ 0.45 mΩ
Contact resistance	≤ 0.45 mΩ (when plugged in (without cable))

## Dimensions

Dimensional drawing	
Width	19 mm
Height	19 mm
Length	60.9 mm
Pitch	0 mm

## Material specifications

Color	black
Color of the housing part	black
Material	PPE
Flammability rating according to UL 94	V0
Insulating material group	III

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Insulating material	mPPE
Cable seal material	EPDM
Contact material	Cu alloy
Contact surface material	Ag
Contact carrier material	PA 6.6 V0
O-ring material	EPDM
Material for screw connection	PPE
Housing material	PPE

## Cable/line

Cable type	H1Z2Z2-K lines
External cable diameter ( )	5.5 mm ... 8 mm
External cable diameter	5.5 mm ... 8 mm
Single wire, cross section	2.5 mm <sup>2</sup> 6 mm <sup>2</sup>
Stripping length of the individual wire	15 mm
Cable pull-out force	> 330 N

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	100 (Test specification: IEC 60512-9-1:2010-03)
Insertion force	45 N ±10 N
Withdrawal force	250 N ±50 N (when locked)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection (when plugged in)	IP66 / IP68 (2 m / 24 h)
Degree of protection (not plugged in)	IP20
Degree of protection	IP66 / IP68 (2 m / 24 h)
Ambient temperature (operation)	-40 °C ... 85 °C (dependent on the derating curve)
Ambient temperature (assembly)	-5 °C ... 50 °C

## Mounting

Connection method	Spring-cage
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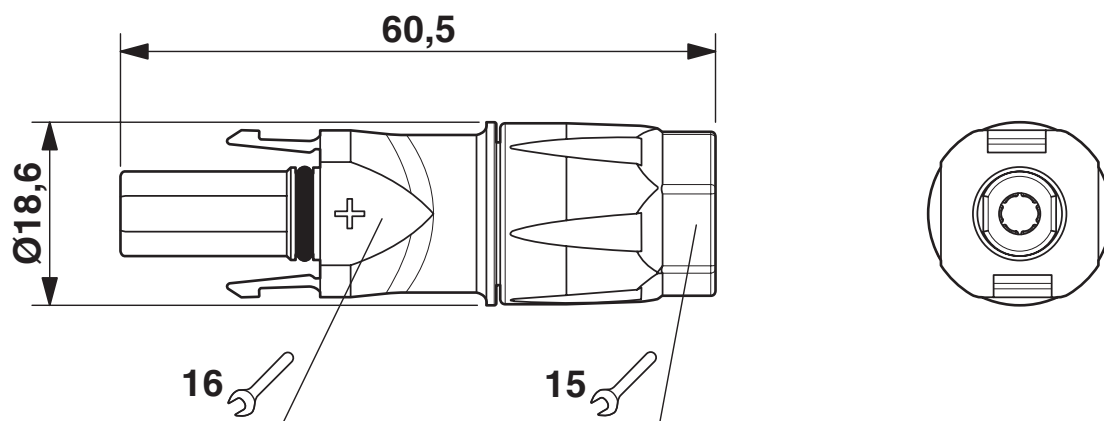
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## Drawings

Dimensional drawing



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## Classifications

### ECLASS

ECLASS-11.0	27440109
ECLASS-12.0	27440109
ECLASS-13.0	27440109

### ETIM

ETIM 8.0	EC003569
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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## Accessories

### PV-C PROTECTION CAP - Protective cap

1785430

<https://www.phoenixcontact.com/us/products/1785430>

Photovoltaic connector, Range of articles: Sunclix, Protective cap, color: black. self-sealing, without interlock, set consisting of: 1 protective cap for connector side and 1 protective cap for coupling side



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### SZF 1-0,6X3,5 - Screwdriver

1204517

<https://www.phoenixcontact.com/us/products/1204517>



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip



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## QUICK WIREFOX 6 SC - Stripping pliers

1207637

<https://www.phoenixcontact.com/us/products/1207637>



Stripping tool for short-circuit proof conductors, stripping range: 1.5 up to 6 mm<sup>2</sup>, wire cutting up to 6 mm<sup>2</sup> cable stopper up to 18 mm<sup>2</sup>

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## WIREFOX-D SR 6-1 - Stripping tool

1212511

<https://www.phoenixcontact.com/us/products/1212511>



Stripping tool, for standard 2.5, 4, and 6 mm<sup>2</sup> solar cables, with 15 mm length stop, for SUNCLIX field connectors

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## PV-C PLUG - Filler plugs

1775631

<https://www.phoenixcontact.com/us/products/1775631>

Photovoltaic connector, Range of articles: Sunclix, Filler plugs, color: black



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