

# PV-C1F-S 2,5-6 (+) - Connector

1789821

<https://www.phoenixcontact.com/us/products/1789821>



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Connector, Range of articles: SUNCLIX, 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 current: 27 A, Connection method: Spring-cage, Contact connection type: Socket

## Commercial data

Item number	1789821
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	AB02
Product key	ABLBBA
Catalog page	Page 422 (C-2-2013)
GTIN	4046356626828
Weight per piece (including packing)	16.34 g
Weight per piece (excluding packing)	16.34 g
Customs tariff number	85359000
Country of origin	DE

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## Technical data

### Product properties

Product type	Photovoltaic connector
Product family	SUNCLIX
Number of positions	1
Pitch	2.5 mm

### Insulation characteristics

Protection class	II
Degree of pollution	3

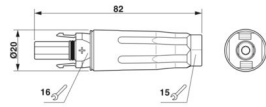
### Electrical properties

Rated voltage (III/2)	1500 V
Rated surge voltage (III/3)	16 kV
Rated current (2.5 mm <sup>2</sup> )	27 A
Rated current (4.0 mm <sup>2</sup> )	40 A
Rated current	40 A
Contact resistance	0.45 mΩ
Contact resistance	≤ 0.45 mΩ (when plugged in (without cable))

### Connection data

Connection method	Spring-cage
Stripping length	15 mm

### Dimensions

Dimensional drawing	
Width	20 mm
Height	20 mm
Length	60 mm
Pitch	2.5 mm

### Material specifications

Color	black
Color of the housing part	black
Flammability rating according to UL 94	V0
Insulating material group	CTI 600
Insulating material	mPPE
Contact surface	Tin Sn
Cable seal material	EPDM

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Contact material	Cu
Contact surface material	Ag
Contact carrier material	PA 6.6 V0
O-ring material	Elastosil LR 3065/50
Material for screw connection	PPE
Housing material	PPE

## Cable/line

Cable type	PV1-F cables
External cable diameter ( )	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
Halogen-free	yes

## Mechanical properties

Outside conductor diameter	8.00 mm 5.00 mm
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### Mechanical data

Outside conductor diameter	8.00 mm 5.00 mm
Insertion/withdrawal cycles	100
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	IP66 / IP68 (2 m / 24 h)
	IP66 / IP68 (2 m / 24 h)
Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (assembly)	-25 °C ... 50 °C

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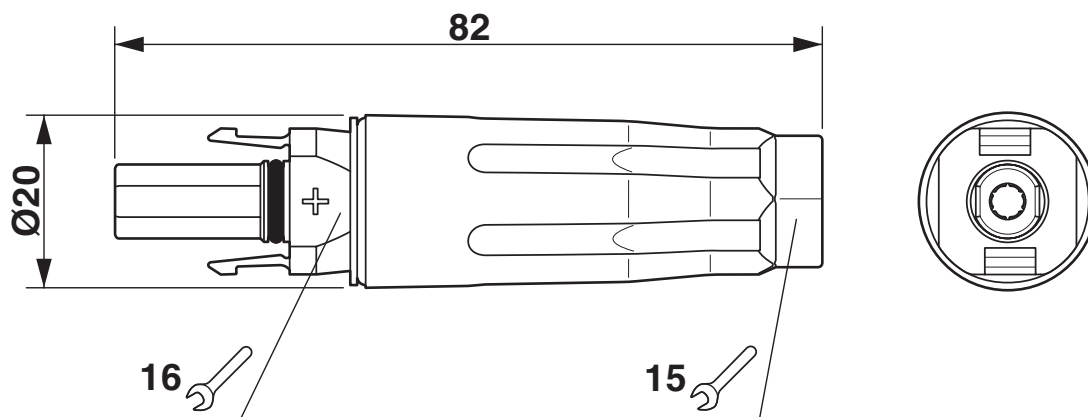
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## Drawings

Dimensional drawing



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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>

Protective cap, Range of articles: SUNCLIX, 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-HV - Filler plug

1623478

<https://www.phoenixcontact.com/us/products/1623478>

Filler plug, Range of articles: SUNCLIX, housing material: PA 6



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Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)