

https://www.phoenixcontact.com/us/products/1774687



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Connector, Range of articles: SUNCLIX, housing material: PPE, color: black, number of positions: 1, min. conductor cross section: 2.5 mm², max. conductor cross section: 6 mm², rated voltage: 1100 V DC, rated current: 40 A, Connection method: Spring-cage, Contact connection type: Pin, min. cable diameter: 5.5 mm, max. cable diameter: 8 mm, The follow-up item is 1386384

### 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	1774687
Packing unit	1 pc
Sales key	AB02
Product key	ABLBBA
Catalog page	Page 422 (C-2-2013)
GTIN	4046356480192
Weight per piece (including packing)	13.716 g
Weight per piece (excluding packing)	13.4 g
Customs tariff number	85359000
Country of origin	DE

1774687

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### Technical data

#### Notes

Order information:	The follow-up item is 1386384
fety note	
Safety note	<ul> <li>WARNING: Commission properly functioning products only.</li> <li>The products must be regularly inspected for damage.</li> <li>Decommission defective products immediately. Replace damaged products. Repairs are not possible.</li> </ul>
	<ul> <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> </ul>
	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	<ul> <li>The products are suitable for applications in plant, controller, and electrical device engineering.</li> </ul>
	<ul> <li>Assembled products may not be manipulated or improperly opened.</li> </ul>
	<ul> <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 phoenixcontact.com/products).</li> </ul>
	<ul> <li>When using the product in direct connection with third-party manufacturers, the user is responsible.</li> </ul>
	<ul> <li>For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>
	<ul> <li>Ensure that the protective or functional ground has been properly connected.</li> </ul>
	Observe the corresponding technical data. You will find information:     o On the product     o On the packing label     o In the supplied documentation     o Online at phoenixcontact.com/products under the product
	<ul> <li>The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.</li> </ul>
	<ul> <li>Use a protective cap to protect connectors that are not in use.</li> <li>The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products</li> </ul>
	<ul> <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> </ul>
	<ul> <li>Operate the connector only when it is fully plugged in and interlocked.</li> </ul>
	<ul> <li>Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the</li> </ul>



Width

Height

Length

Pitch

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	<ul> <li>• Observe the minimum bending radius of the cable. Lay the cable without twisting it.</li> </ul>
oduct properties	
Product type	Photovoltaic connector
Product family	SUNCLIX
Number of positions	1
Pitch	0 mm
Data management status	
Article revision	15
Insulation characteristics	
Protection class	II .
Degree of pollution	2
ectrical properties	
Rated voltage (II/2)	1000 V
Rated voltage (III/2)	1100 V
Nominal voltage ATD	1100 V DC (II/2.00) in accordance with IEC 62852:2014/AMD 020
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 mm²)	40 A (in accordance with IEC 62852:2014-11)
Rated current (4.0 mm²)	35 A (in accordance with IEC 62852:2014-11)
Rated current (2.5 mm²)	27 A (in accordance with IEC 62852:2014-11)
Contact resistance	0.45 mΩ
Contact resistance	≤ 0.45 m $\Omega$ (when plugged in (without cable))
onnection data	
Connection method	Spring-cage
Stripping length	15 mm
mensions	
Dimensional drawing	018.6 58.3 15.6 16.6

18.6 mm

26.4 mm

58.3 mm

0 mm



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### Material specifications

Color	black
Color of the housing part	black
Material	PPE (Housing)
Flammability rating according to UL 94	V0
Insulating material group	III
Insulating material	mPPE
Contact surface	Tin Sn
Housing material	PPE
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

### 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 mm² 6 mm²
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

, and one containers	
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

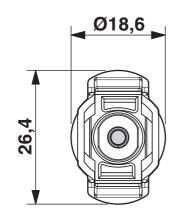


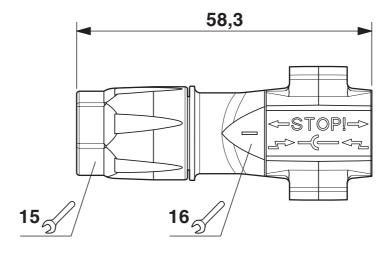
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## Drawings

### Dimensional drawing







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## Classifications

UNSPSC 21.0

### **ECLASS**

ECLASS-11.0	27440109
ECLASS-12.0	27440109
ECLASS-13.0	27440109
ETIM	
ETIM 9.0	EC003569
UNSPSC	

39121400



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## Environmental product compliance

Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%



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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



### 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:  $0.6 \times 3.5 \times 100$  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 $^2$ , wire cutting up to 6 mm $^2$  cable stopper up to 18 mm $^2$ 

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

1212511

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



Stripping tool, for standard 2.5, 4, and 6  $\mathrm{mm}^2$  solar cables, with 15  $\mathrm{mm}$  length stop, for SUNCLIX field connectors



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PV-C PLUG - Filler plug

1775631

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



Filler plug, Range of articles: SUNCLIX, color: black

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