

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



Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.



Photovoltaic connector, Range of articles: Sunclix, Connector, 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, Type of contact: 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	50 pc
Minimum order quantity	50 pc
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

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



#### **Technical Data**

#### Notes

er information:	The follow-up item is 1386384
y 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>
	Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the



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



		standards.
		<ul> <li>Observe the minimum bending radius of the cable. Lay the cable without twisting it.</li> </ul>
Product	t properties	
Pro	duct type	Photovoltaic connector
Pro	duct family	Sunclix
Nun	nber of positions	1
Pitc	h	0 mm
Insulat	ion characteristics	
Prof	tection class	II
Deg	gree of pollution	2
Electric	al properties	
Rate	ed voltage (II/2)	1000 V
Rate	ed voltage (III/2)	1100 V
Non	ninal voltage ATD	1100 V DC (II/2) in accordance with IEC 62852:2014/AMD1:2020
Rate	ed surge voltage	12.8 kV
Rate	ed surge voltage (II/2)	12 kV
Rate	ed surge voltage (III/2)	12 kV
Rate	ed surge voltage (III/3)	12.8 kV
Rate	ed current (6.0 mm²)	40 A (in accordance with IEC 62852:2014-11)
Rate	ed current (4.0 mm²)	35 A (in accordance with IEC 62852:2014-11)
Rate	ed current (2.5 mm²)	27 A (in accordance with IEC 62852:2014-11)
Con	ntact resistance	$0.45~\text{m}\Omega$
Con	ntact resistance	$\leq$ 0.45 m $\Omega$ (when plugged in (without cable))
Dimens	ions	
Dim	nensional drawing	018.6 018.6 15.2 16.2
Wid	lth	18.6 mm
Heig	ght	26.4 mm

#### Material specifications

Length

Pitch

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

58.3 mm

0 mm



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



Insulating material	mPPE
Contact surface	Tin Sn
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
	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

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

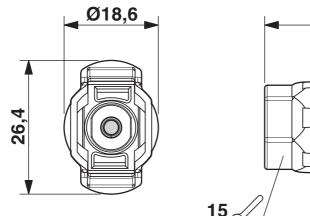


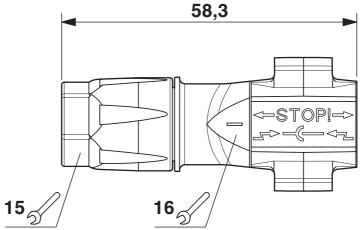
https://www.phoenixcontact.com/pc/products/1774687



### Drawings

#### Dimensional drawing







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



### Classifications

UNSPSC 21.0

#### **ECLASS**

EC	CLASS-11.0	27440109
EC	CLASS-12.0	27440109
EC	CLASS-13.0	27440109
ETIM		
L I IIVI		
ETI	0.8 MI	EC003569
UNSPS	SC	

39121400



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



### **Environmental Product Compliance**

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



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



#### Accessories

#### PV-C PROTECTION CAP - Protective cap

1785430

https://www.phoenixcontact.com/pc/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



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

1204517

https://www.phoenixcontact.com/pc/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



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



#### QUICK WIREFOX 6 SC - Stripping pliers

1207637

https://www.phoenixcontact.com/pc/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/pc/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



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



PV-C PLUG - Filler plugs

1775631

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



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

Phoenix Contact 2023 © - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstraße 8 D-32825 Blomberg +49 (0) 5235-3 00 info@phoenixcontact.com