

https://www.phoenixcontact.com/au/products/1020776



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Connector, Range of articles: SUNCLIX, color: black, number of positions: 1, min. conductor cross section: 2.5 mm², max. conductor cross section: 6 mm², rated voltage: 1500 V DC, rated current: 35 A, Connection method: Spring-cage, Contact connection type: Socket, min. cable diameter: 5 mm, max. cable diameter: 8 mm

## 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	1020776
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	ABLBBA
Product key	ABLBBA
GTIN	4055626511535
Weight per piece (including packing)	16.72 g
Weight per piece (excluding packing)	22.991 g
Customs tariff number	85359000
Country of origin	IN

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#### Technical data

#### Notes

#### Safety note

Safety note

- 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.
- 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.

WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.

- The products are suitable for applications in plant, controller, and electrical device engineering.
- Assembled products may not be manipulated or improperly opened.
- 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).
- When using the product in direct connection with third-party manufacturers, the user is responsible.
- For operating voltages > 50 V AC, conductive connector housings must be grounded
- Ensure that the protective or functional ground has been properly connected.
- 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
- The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.
- 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 phoenixcontact.com/products
- 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).
- Operate the connector only when it is fully plugged in and interlocked.
- Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.



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Dimensional drawing

Width

Height

Length



	Observe the minimum bending radius of the cable. Lay the cable without twisting it.
oduct properties	
Product type	Photovoltaic connector
Product family	SUNCLIX
Number of positions	1
nsulation characteristics	
Protection class	II.
Degree of pollution	2
ectrical properties	
Rated voltage (II/2)	1000 V
Rated voltage (III/2)	1500 V
Nominal voltage ATD	1500 V DC (III/2.00) in accordance with IEC 62852:2014/AMD1 020
	1500 V DC in accordance with UL 6703
Rated surge voltage	16 kV
Rated surge voltage (II/2)	12 kV
Rated surge voltage (III/2)	12 kV
Rated surge voltage (III/3)	16 kV
Rated current (6.0 mm²)	35 A (in accordance with IEC 62852:2014-11)
Rated current (4.0 mm²)	30 A (in accordance with IEC 62852:2014-11)
Rated current (2.5 mm²)	20 A (in accordance with IEC 62852:2014-11)
Rated current	30 A (in accordance with UL 6703)
	35 A (in accordance with UL 6703)
	50 A (in accordance with UL 6703)
Contact resistance	$0.45~\text{m}\Omega$
Contact resistance	≤ 0.45 m $\Omega$ (when plugged in (without cable))
nnection data	
Connection method	Spring-cage
	15 mm

20 mm

20 mm

82 mm

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## Material specifications

Color	black
Color of the housing part	black
Material Housing	PPE
Material Contact	Cu
Flammability rating according to UL 94	V0
Insulating material group	II
Insulating material	mPPE
Cable seal material	EPDM
Contact surface material	Ag
O-ring material	Silopren LSR 2660

## Cable/line

External cable diameter	5 mm 8 mm
External cable diameter	5 mm 8 mm
Single wire, cross section	2.5 mm² 6 mm² 14 AWG 10 AWG
Stripping length of the individual wire	15 mm
Cable pull-out force	> 80 N

## Mechanical properties

### Mechanical data

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

## Standards and regulations

Standards/specifications	IEC 62852:2014/AMD1:2020

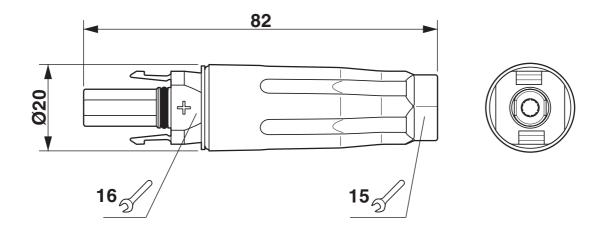
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## Drawings

## Dimensional drawing





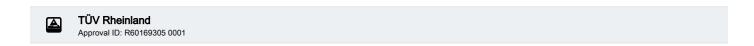
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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/au/products/1020776

UL Recognized Approval ID: E477377-20180202					
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		1500 V	50 A	- 10	-





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## Classifications

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	ECLASS-13.0	27440107	
ΕΊ	TIM		
	ETIM 9.0	EC002635	
UI	NSPSC		
	UNSPSC 21.0	39121400	



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## Environmental product compliance

#### EU RoHS

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		
20 NEXOTION OF THE		
REACH candidate substance (CAS No.)	Triphenyl phosphate(CAS: 115-86-6)	

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