

## Photovoltaic connector - PV-FT-CM-C-6-130-RD - 1805180

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Photovoltaic connector, Photovoltaic connector, housing material: PPE, color: black, number of positions: 1, min. conductor cross section: 6 mm<sup>2</sup>, Connection method: Crimp, Type of contact: Pin, cable length: 130



### Key Commercial Data

Packing unit	50 pc
GTIN	
GTIN	4046356671453

### Technical data

#### Dimensions

Fixed cable length	130 mm
External cable diameter	5.4 mm ±0.15 mm

#### Ambient conditions

Degree of protection (when plugged in)	IP66 / IP68 (2 m / 24 h)
Degree of protection (not plugged in)	IP20
Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (assembly)	-25 °C ... 50 °C

#### General

Design	Pin
Tightening torque nut	1.8 Nm ±0.1 Nm
Insertion force	45 N ±10 N
Disconnect force	250 N ±50 N (when locked)
Pull-out force of cable >= disconnect force	> 80 N
Insertion/withdrawal cycles	100
Cable cross section	6 mm <sup>2</sup>
Degree of pollution	3
Degree of protection	IP20

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## Technical data

### General

Number of positions	1
Locking type	Latching (can only be released using tool)
Current	40 A
Rated surge voltage (III/3)	16 kV
pluggable	Yes
Rated voltage	1500 V
Rated current (6.0 mm <sup>2</sup> )	40 A
Nominal cross section	6 mm <sup>2</sup>
Protection class	II

### Material

Color	black
Insulating material	mPPE
Contact material	Cu
Contact surface material	Ag
Flammability rating according to UL 94	V0

### Connection data

Connection method	Crimp
Connection capacity	6 mm <sup>2</sup>
Contact resistance with connected conductor	≤ 0.45 mΩ
Cable type	S03

### Conductor

Outer sheath, material	PE-X
External sheath, color	red, similar to RAL 3000
Smallest bending radius, fixed installation	27 mm (5x Ø)
Smallest bending radius, movable installation	54 mm (10x Ø)

### Standards and Regulations

Flame resistance	no
Resistance to oil	no
Halogen-free	yes
Flammability rating according to UL 94	V0
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> </ul>
	<ul style="list-style-type: none"> <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>

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## Technical data

### Standards and Regulations

	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 style="list-style-type: none"> <li>The products are suitable for applications in plant, controller, and electrical device engineering.</li> </ul>
	<ul style="list-style-type: none"> <li>Assembled products may not be manipulated or improperly opened.</li> </ul>
	<ul style="list-style-type: none"> <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> </ul>
	<ul style="list-style-type: none"> <li>When using the product in direct connection with third-party manufacturers, the user is responsible.</li> </ul>
	<ul style="list-style-type: none"> <li>For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>
	<ul style="list-style-type: none"> <li>Ensure that the protective or functional ground has been properly connected.</li> </ul>
	<ul style="list-style-type: none"> <li>Observe the corresponding technical data. You will find information:                             <ul style="list-style-type: none"> <li>On the product</li> <li>On the packing label</li> <li>In the supplied documentation</li> <li>Online at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> under the product</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <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> </ul>
	<ul style="list-style-type: none"> <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> </ul>
	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Operate the connector only when it is fully plugged in and interlocked.</li> </ul>
	<ul style="list-style-type: none"> <li>Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li> </ul>
	<ul style="list-style-type: none"> <li>Observe the minimum bending radius of the cable. Lay the cable without twisting it.</li> </ul>

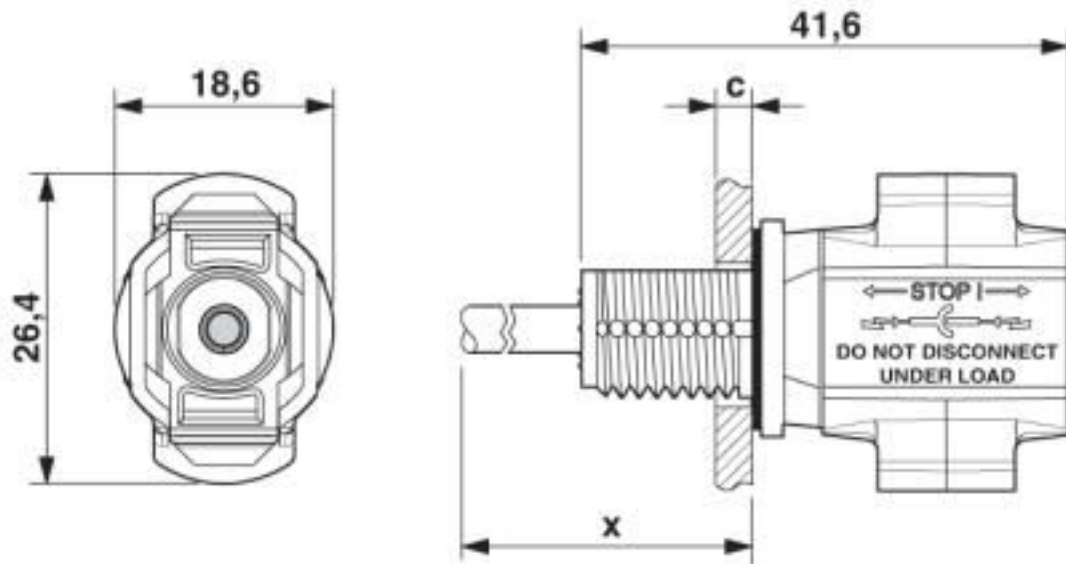
### Environmental Product Compliance

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

## Drawings

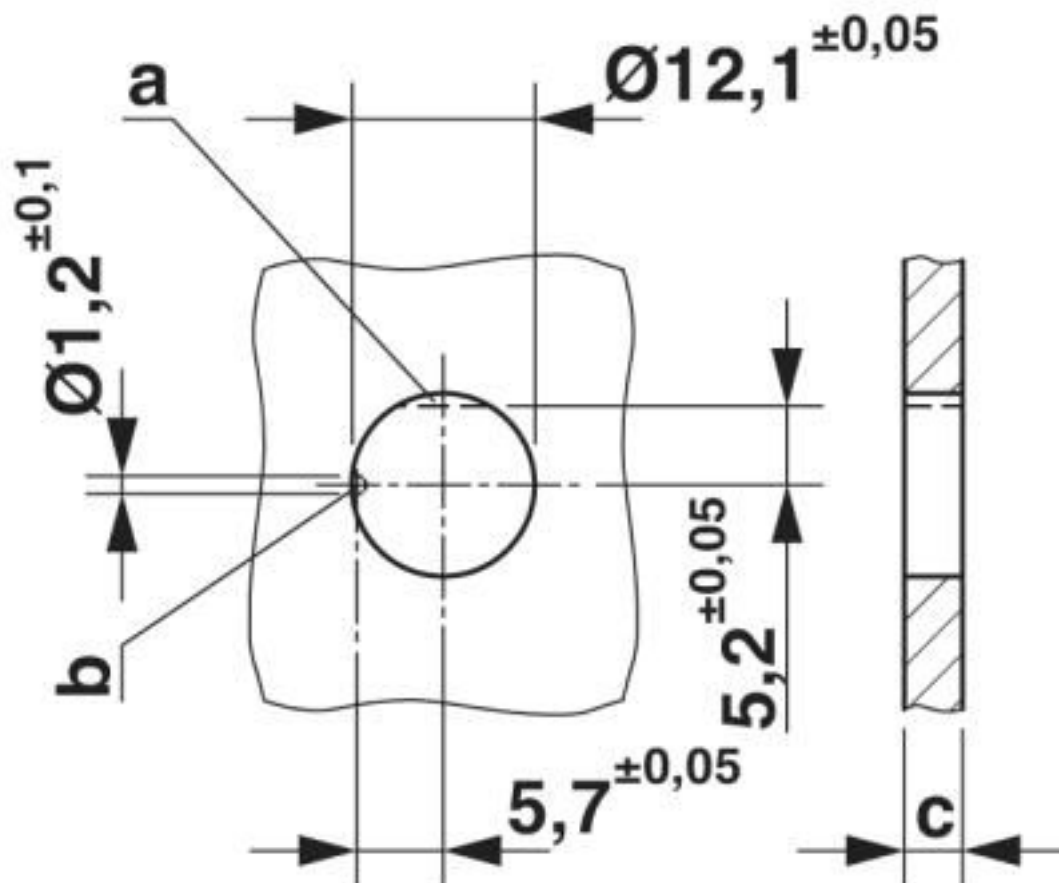
## Photovoltaic connector - PV-FT-CM-C-6-130-RD - 1805180

Dimensional drawing



Dimension x = cable length  
c: panel thickness - plastic: 2 - 6 mm; metal: 2 - 5 mm

## Dimensional drawing



c: panel thickness - plastic: 2 - 6 mm; metal: 2 - 5 mm

eCl@ss

eCl@ss 10.0.1	27440107
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700
eCl@ss 7.0	27440102
eCl@ss 8.0	27440102
eCl@ss 9.0	27440107

ETIM 3.0	EC001121
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## Photovoltaic connector - PV-FT-CM-C-6-130-RD - 1805180

### Classifications

#### ETIM

ETIM 4.0	EC001753
ETIM 5.0	EC002635
ETIM 6.0	EC002061

#### UNSPSC

UNSPSC 6.01	30211810
UNSPSC 7.0901	39121409
UNSPSC 11	39121409
UNSPSC 12.01	39121409
UNSPSC 13.2	39121413
UNSPSC 18.0	39121413
UNSPSC 19.0	39121413
UNSPSC 20.0	39121413
UNSPSC 21.0	39121413

### Approvals


#### Approvals

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TÜV Rheinland / EAC

#### Ex Approvals

### Approval details

TÜV Rheinland		<a href="http://www.certipedia.com">http://www.certipedia.com</a>	R 60126961
Nominal voltage UN		1500 V	

EAC		B.01687
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### Accessories

#### Accessories

Photovoltaic connector

## Photovoltaic connector - PV-FT-CM-C-6-130-RD - 1805180

### Accessories

Nut - PV-FT-C NUT BK - 1775880



Photovoltaic connector, Range of articles: SUNCLIX, Nut, number of positions: 0

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Protective cap - PV-C PROTECTION CAP - 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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