

PV-FT-CM-C-6-130-RD - Device connector front mounting



1805180  
<https://www.phoenixcontact.com/us/products/1805180>

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.



Device connector front mounting, Range of articles: SUNCLIX, housing material: PPE, color: black, number of positions: 1, min. conductor cross section: 6 mm<sup>2</sup>, Connection method: Crimp, Contact connection type: Pin, cable length: 130

Commercial data

Item number	1805180
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	AB02
Product key	ABLBA
Catalog page	Page 420 (C-2-2013)
GTIN	4046356671453
Weight per piece (including packing)	17.055 g
Weight per piece (excluding packing)	16.7 g
Customs tariff number	85444290
Country of origin	DE

# PV-FT-CM-C-6-130-RD - Device connector front mounting



1805180

<https://www.phoenixcontact.com/us/products/1805180>

## 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](https://www.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](https://www.phoenixcontact.com/products) under the product
- The installation notes/Design In documents online on the download page at [phoenixcontact.com/products](https://www.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](https://www.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.

# PV-FT-CM-C-6-130-RD - Device connector front mounting



1805180

<https://www.phoenixcontact.com/us/products/1805180>

- Observe the minimum bending radius of the cable. Lay the cable without twisting it.

## Product properties

Product type	Panel feed-through
Product family	SUNCLIX
Number of positions	1

## Data management status

Article revision	11
------------------	----

## Insulation characteristics

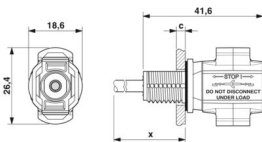
Protection class	II
Degree of pollution	2

## Connection data

### Conductor connection

Tightening torque	1.8 Nm $\pm$ 0.1 Nm
-------------------	---------------------

## Dimensions

Dimensional drawing	
Width	26.3 mm
Height	26.3 mm
Length	41.5 mm

## Electrical properties

Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	12 kV
Rated current (6.0 mm <sup>2</sup> )	40 A
Contact resistance	$\leq$ 0.45 m $\Omega$
Contact resistance	$\leq$ 0.45 m $\Omega$ (when plugged in (without cable))

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	100
Insertion force	45 N $\pm$ 10 N
Withdrawal force	250 N $\pm$ 50 N (when locked)

## Material specifications

Color	black
Color of the housing part	black

# PV-FT-CM-C-6-130-RD - Device connector front mounting



1805180

<https://www.phoenixcontact.com/us/products/1805180>

Flammability rating according to UL 94	V0
Insulating material group	III
Seal material	EPDM
Insulating material	mPPE
Contact surface	Silver Ag
Housing material	PPE
Cable seal material	Elastosil LR 3065/50
Contact material	Cu
Contact surface material	Ag
Contact carrier material	PPE
Outer sheath, material	PE-X

## Cable/line

Cable length	130 mm
Cable type	S03
Structure of individual litz in acc. with VDE 0295 / smallest wire diameter	84x0.3
Cable type	Hose line
Cable structure	84 x 0.30 mm Ø litz wires, tin-plated, 1x bunched
External cable diameter	5.40 mm ±0.15 mm
Outer sheath, material	PE-X
External sheath, color	red, similar to RAL 3000
Single wire, material	Cu
Single wire, cross section	6 mm²
Cable cross section	6 mm²
Nominal voltage, cable	1.8 kV DC (max U (conductor / conductor, ungrounded system))
Test voltage, cable	≥ 8 kV AC (Spark test online (standard designation))
Smallest bending radius, fixed installation	27 mm (5x Ø)
Smallest bending radius, movable installation	54 mm (10x Ø)
Cable pull-out force	> 80 N
Halogen-free	yes
Resistance to oil	no
Flame resistance	no

## 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
Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (assembly)	-25 °C ... 50 °C
Resistance to oil	no

## Standards and regulations

Flame resistance	no
------------------	----

PV-FT-CM-C-6-130-RD - Device connector front mounting



1805180  
<https://www.phoenixcontact.com/us/products/1805180>

Resistance to oil	no
-------------------	----

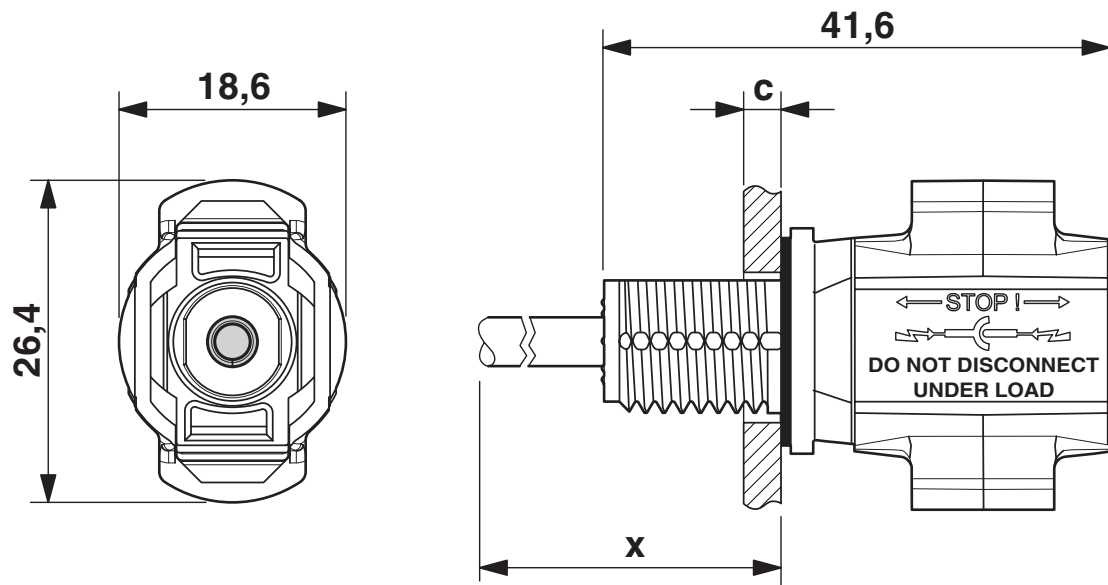
# PV-FT-CM-C-6-130-RD - Device connector front mounting

1805180

<https://www.phoenixcontact.com/us/products/1805180>

## Drawings

Dimensional drawing



Dimension x = cable length

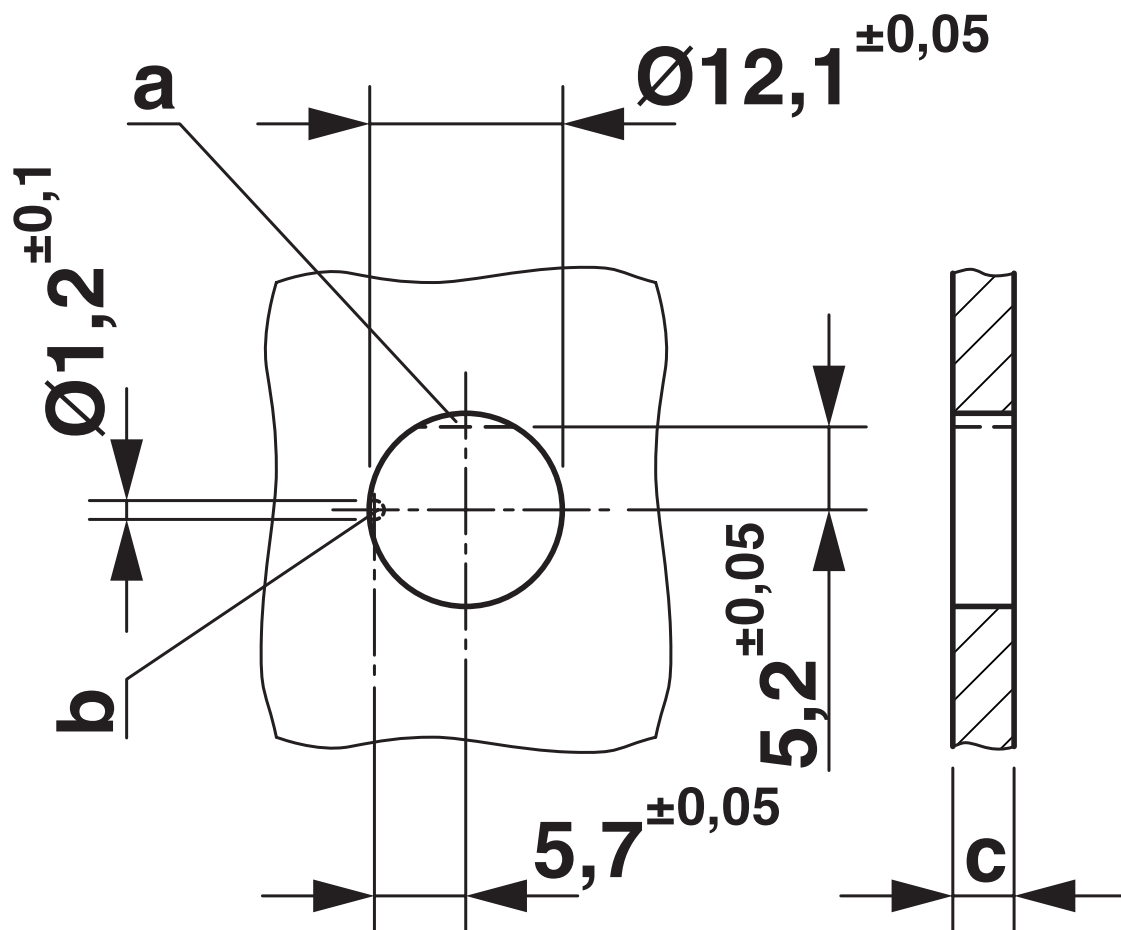
c: panel thickness - plastic: 2 - 6 mm; metal: 2 - 5 mm

# PV-FT-CM-C-6-130-RD - Device connector front mounting

1805180

<https://www.phoenixcontact.com/us/products/1805180>

Dimensional drawing



a: anti-rotation protection

b: coding

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

# PV-FT-CM-C-6-130-RD - Device connector front mounting



1805180

<https://www.phoenixcontact.com/us/products/1805180>

## Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1805180>



**TÜV Rheinland**

Approval ID: R 60165003-0001

# PV-FT-CM-C-6-130-RD - Device connector front mounting



1805180  
<https://www.phoenixcontact.com/us/products/1805180>

## Classifications

### ECLASS

ECLASS-11.0	27440107
ECLASS-12.0	27440107
ECLASS-13.0	27440107

### ETIM

ETIM 9.0	EC002635
----------	----------

### UNSPSC

UNSPSC 21.0	39121400
-------------	----------

# PV-FT-CM-C-6-130-RD - Device connector front mounting



1805180  
<https://www.phoenixcontact.com/us/products/1805180>

## 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	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

# PV-FT-CM-C-6-130-RD - Device connector front mounting



1805180

<https://www.phoenixcontact.com/us/products/1805180>

## Accessories

### PV-FT-C NUT BK - Screw connection

1775880

<https://www.phoenixcontact.com/us/products/1775880>

Screw connection, Range of articles: SUNCLIX, Packing unit: 100 pcs. (polybag)



---

### 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



---

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

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