

# Photovoltaic connector - PV-FT-CM-C-4-130-RD - 1805164


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Photovoltaic connector, Photovoltaic connector, housing material: PPE, color: black, min. conductor cross section: 4 mm<sup>2</sup>, Connection method: Crimp, Type of contact: Pin, cable length: 130



## Key Commercial Data

|              |   |
|--------------|---|
| Packing unit | 50 pc   |
| GTIN         | <br>4 046356 671446 |
| GTIN         | 4046356671446   |

## Technical data

### Dimensions

|                         |                 |
|-------------------------|-----------------|
| Fixed cable length      | 130 mm          |
| External cable diameter | 4.6 mm ±0.15 mm |

### Ambient conditions

|  |                          |
|--|--------------------------|
| Degree of protection (when plugged in) | IP66 / IP68 (2 m / 24 h) |
| Degree of protection (not plugged in)  | IP65                     |
| 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    |
| Pull-out force of cable >= disconnect force | > 80 N         |
| Degree of pollution                         | 3              |
| Degree of protection                        | IP65           |
| Current                                     | 35 A           |
| Rated voltage                               | 1500 V         |

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## Technical data

### General

|                                      |                   |
|--------------------------------------|-------------------|
| Rated current (4.0 mm <sup>2</sup> ) | 35 A              |
| Nominal cross section                | 4 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                         | 4 mm <sup>2</sup> |
| Contact resistance with connected conductor | 0.45 mΩ           |
| Cable type                                  | S02               |

### Conductor

|                        |      |
|------------------------|------|
| Outer sheath, material | PE-X |
| External sheath, color | red  |

### Standards and Regulations

|  |  |
|--|--|
| 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> <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> <li>WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.</li> <li>• The products are suitable for applications in plant, controller, and electrical device engineering.</li> <li>• Assembled products may not be manipulated or improperly opened.</li> <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> <li>• When using the product in direct connection with third-party manufacturers, the user is responsible.</li> <li>• For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul> |

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## Technical data

### Standards and Regulations

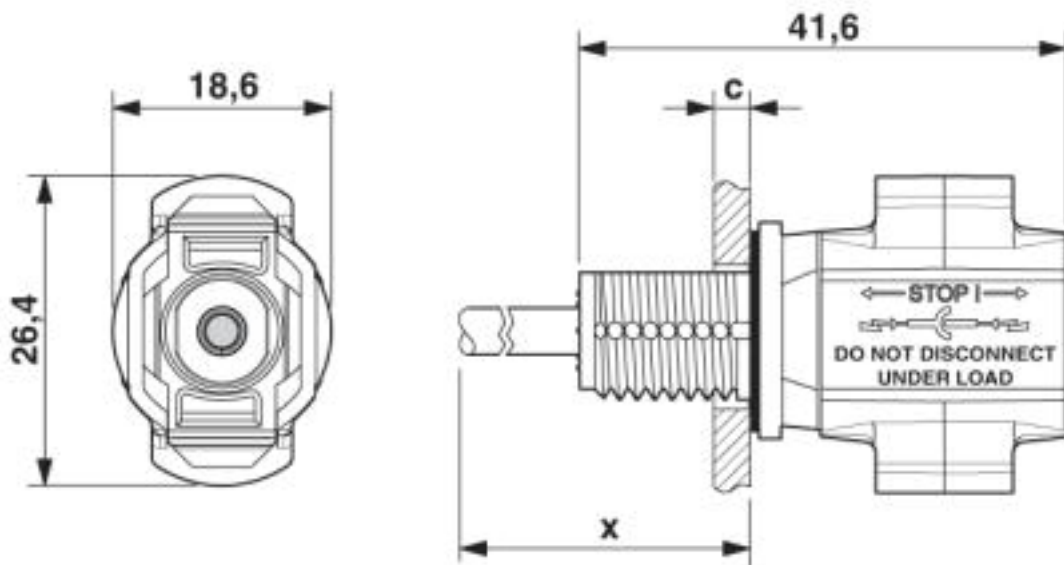
|  |   |
|--|---|
|  | <ul style="list-style-type: none"> <li>• Ensure that the protective or functional ground has been properly connected.</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>• Observe the corresponding technical data. You will find information:                             <ul style="list-style-type: none"> <li>o On the product</li> <li>o On the packing label</li> <li>o In the supplied documentation</li> <li>o Online at <a href="http://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="http://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="http://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

Dimensional drawing

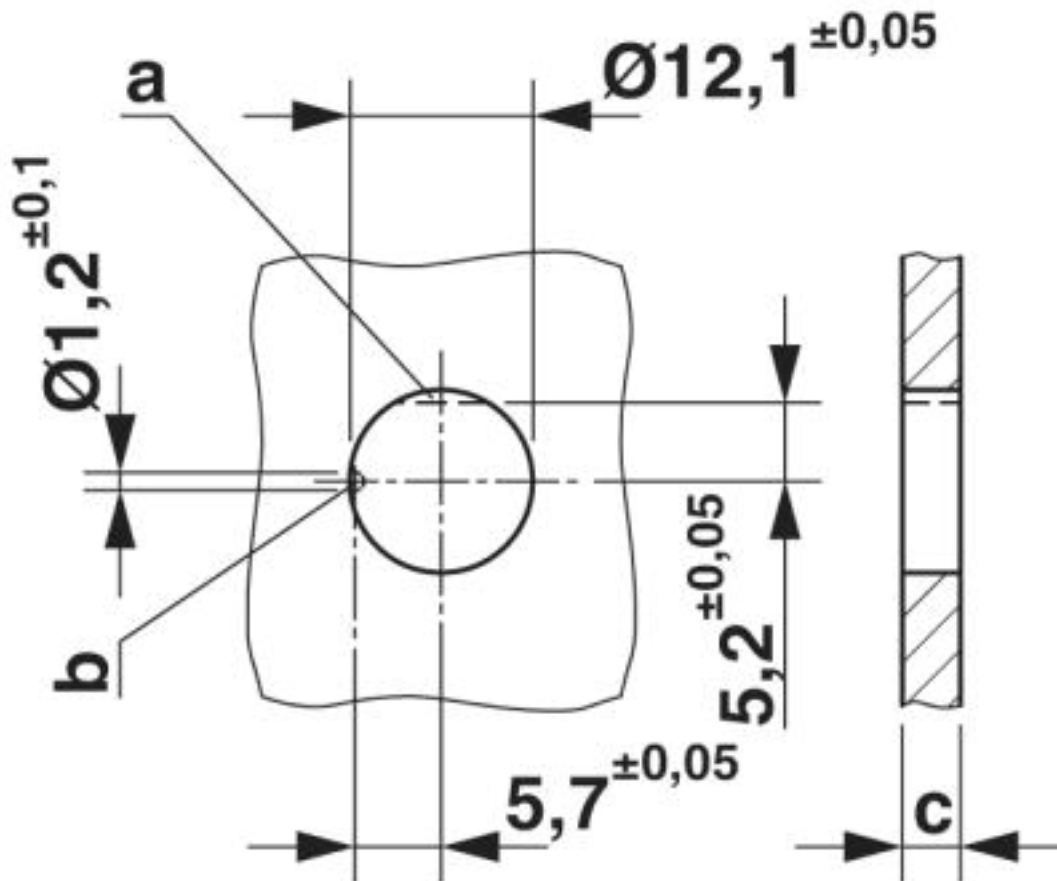


Dimension x = cable length

# Photovoltaic connector - PV-FT-CM-C-4-130-RD - 1805164

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

Dimensional drawing



## Classifications

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

|          |          |
|----------|----------|
| ETIM 3.0 | EC001121 |
| ETIM 4.0 | EC001753 |
| ETIM 5.0 | EC002635 |

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## Classifications

### ETIM

|          |          |
|----------|----------|
| 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


#### Approvals

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 |
|-----|---|---------|

## Accessories

### Accessories

Photovoltaic connector

## Photovoltaic connector - PV-FT-CM-C-4-130-RD - 1805164

### Accessories

Nut - PV-FT-C NUT BK - 1775880



Photovoltaic connector, Range of articles: PV-JB TF, 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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