

1463070  
<https://www.phoenixcontact.com/us/products/1463070>

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Device connector front mounting, Range of articles: SUNCLIX, housing material: PPE, color: black, number of positions: 1, min. conductor cross-section: 2.5 mm<sup>2</sup>, rated voltage: 1000 V DC, rated current: 27 A, Connection method: Crimp, cable length: 165

Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1463070                        |
| Packing unit                         | 50 pc                          |
| Minimum order quantity               | 1,000 pc                       |
| Note                                 | Made to order (non-returnable) |
| Product key                          | ABLBA                          |
| GTIN                                 | 4046356889193                  |
| Weight per piece (including packing) | 13.33 g                        |
| Weight per piece (excluding packing) | 13.33 g                        |
| Country of origin                    | DE                             |

# PV-FT-CM-C-2,5-165-RD-FE - Device connector front mounting



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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](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

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standards.

- 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                  |

## 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               | 26.4 mm |
| Height              | 26.4 mm |
| Length              | 42 mm   |

## Electrical properties

|                                      |                                                       |
|--------------------------------------|-------------------------------------------------------|
| Nominal voltage ATD                  | 1000 V DC in accordance with IEC 62852:2014/AMD1:2020 |
| Rated surge voltage (III/3)          | 16 kV                                                 |
| Rated current (2.5 mm <sup>2</sup> ) | 27 A (in accordance with IEC 62852:2014/AMD1:2020)    |
| Contact resistance                   | 0.45 mΩ                                               |
| Contact resistance                   | ≤ 0.45 mΩ (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 |

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|                                        |                      |
|----------------------------------------|----------------------|
| Material                               | PPE                  |
| 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                                                                | 165 mm                                                       |
| Cable type                                                                  | S01                                                          |
| Structure of individual litz in acc. with VDE 0295 / smallest wire diameter | 50x0.25                                                      |
| Cable type                                                                  | Hose line                                                    |
| Cable structure                                                             | 50 x 0.25 mm Ø litz wires, tin-plated, 1x bunched            |
| External cable diameter                                                     | 4.25 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                                                  | 2.5 mm <sup>2</sup>                                          |
| Cable cross section                                                         | 2.5 mm <sup>2</sup>                                          |
| 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                                 | 21.25 mm (5x Ø)                                              |
| Smallest bending radius, movable installation                               | 40.25 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) (male connector/female connector) | -40 °C ... 85 °C       |
| Ambient temperature (assembly)                                    | -25 °C ... 50 °C       |
| Resistance to oil                                                 | no                     |

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## Standards and regulations

|                          |                          |
|--------------------------|--------------------------|
| Flame resistance         | no                       |
| Resistance to oil        | no                       |
| Standards/specifications | IEC 62852:2014/AMD1:2020 |

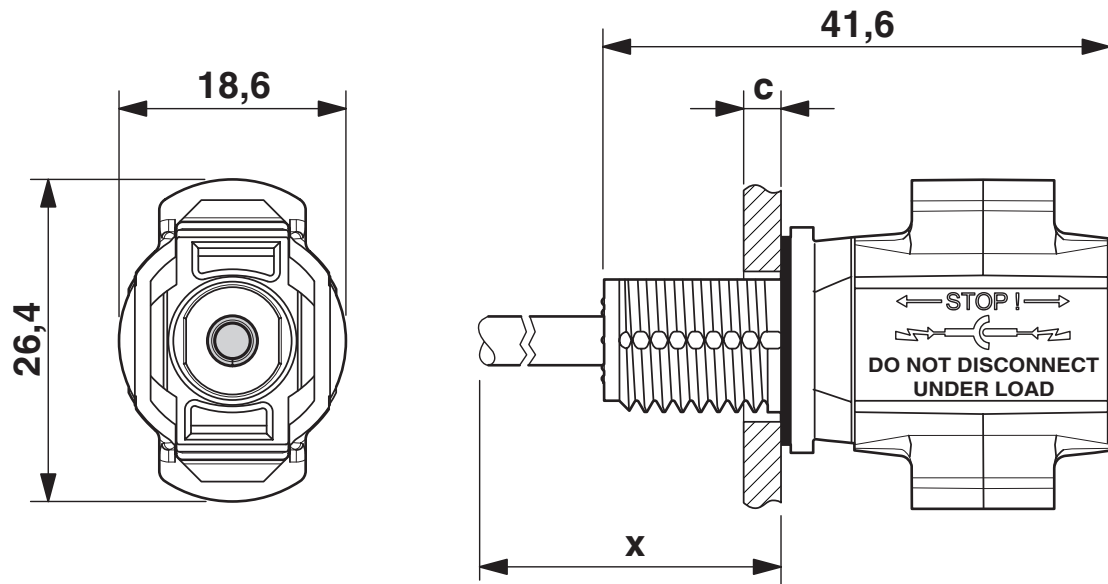
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## Drawings

Dimensional drawing



Dimension x = cable length

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

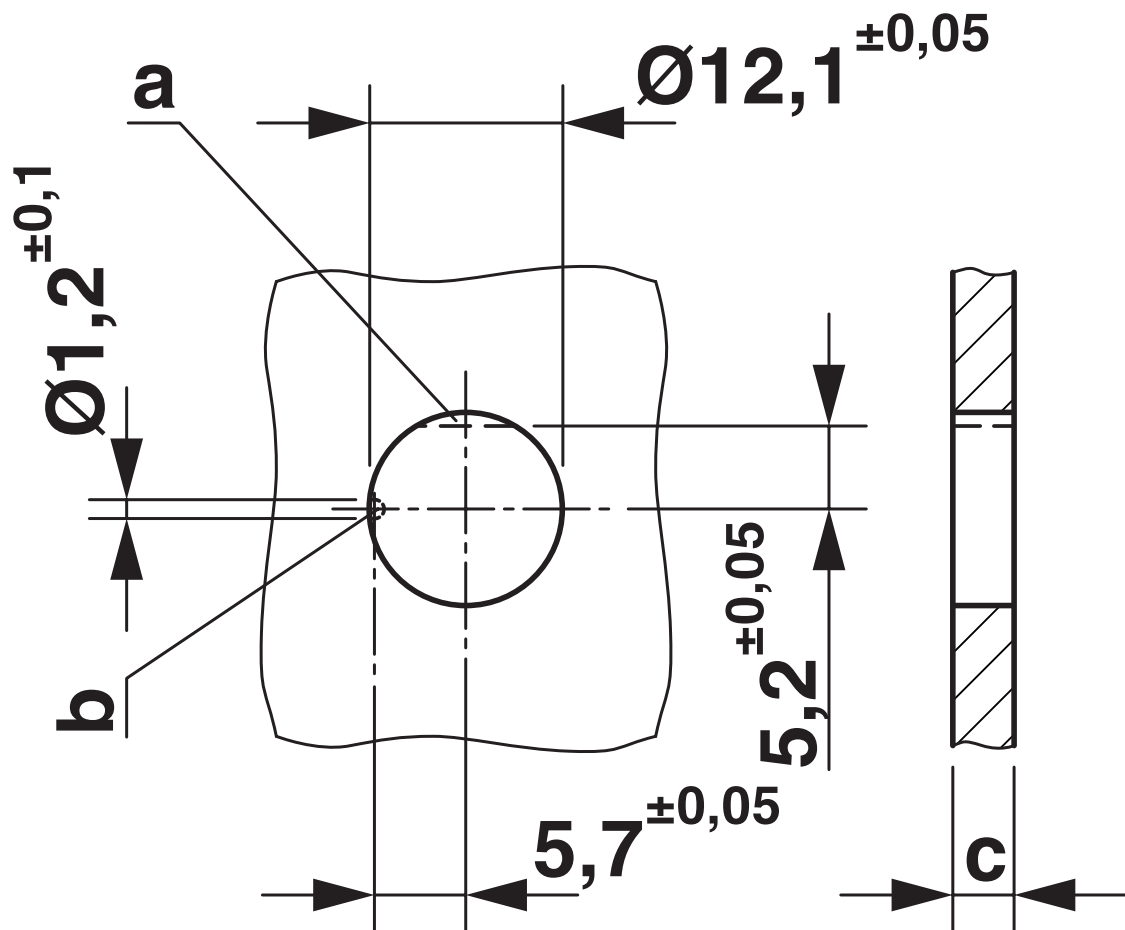
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Dimensional drawing



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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27440107 |
|-------------|----------|

### ETIM

|          |          |
|----------|----------|
| ETIM 8.0 | EC002635 |
|----------|----------|

### UNSPSC

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

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