

PV-FT-CM-C-2,5-450-BK-SP - Device connector front mounting



1705709

<https://www.phoenixcontact.com/us/products/1705709>

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Device connector front mounting, Range of articles: SUNCLIX, color: black, number of positions: 1, min. conductor cross-section: 2.5 mm², rated voltage: 1000 V DC, rated current: 27 A, Connection method: Crimp, cable length: 450

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1705709 |
| Packing unit | 50 pc |
| Minimum order quantity | 50 pc |
| Sales key | AB02 |
| Product key | ABLBA |
| GTIN | 4046356795555 |
| Weight per piece (including packing) | 22.54 g |
| Weight per piece (excluding packing) | 22.506 g |
| Customs tariff number | 85359000 |
| Country of origin | DE |

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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

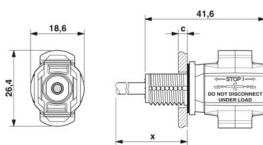
| | |
|---------------------|----|
| Protection class | II |
| Degree of pollution | 2 |

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 | 41.5 mm |

Electrical properties

| | |
|--------------------------------------|--|
| Rated voltage (III/2) | 1000 V |
| Rated voltage | 1000 V DC in accordance with IEC 62852:2014/AMD1:2020 |
| Rated surge voltage (III/2) | 12 kV |
| Rated current (2.5 mm ²) | 27 A (in accordance with IEC 62852:2014/AMD1:2020) |
| Contact resistance | 0.45 m Ω |
| Contact resistance | \leq 0.45 m Ω (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 |

Material specifications

| | |
|-------|-------|
| Color | black |
|-------|-------|

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| | |
|--|--------------------------|
| Color of the housing part | black |
| Material Housing | PPE |
| Material Contact carrier | PPE |
| Material Contact | Cu alloy (silver-plated) |
| Material Seal | EPDM |
| Material Contact surface | Ag |
| Flammability rating according to UL 94 | V0 |
| Insulating material group | III |
| Insulating material | mPPE |
| Contact surface | Silver Ag |
| Cable seal material | Elastosil LR 3065/50 |
| Outer sheath, material | PE-X |

Cable/line

| | |
|---|---|
| Cable length | 450 mm |
| Cable type | Stranded hook-up wire |
| 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 4.25 mm 4.10 mm 4.40 mm ±0.15 mm |
| Outer sheath, material | PE-X |
| External sheath, color | black |
| Single wire, material | Cu |
| Single wire, cross section | 2.5 mm ² |
| Cable cross section | 2.5 mm ² |
| Smallest bending radius, fixed installation | 21.25 mm (5x Ø) |
| Smallest bending radius, movable installation | 42.5 mm (10x Ø) |
| Cable pull-out force | > 80 N |
| Halogen-free | Yes, in accordance with DIN VDE 0472 Part 815 Yes, in accordance with DIN EN 50267-2-1 |
| 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 |
| Degree of protection | IP66/IP68 (2 m / 24 h) |
| Ambient temperature (operation) (male connector/female connector) | -40 °C ... 85 °C |
| Ambient temperature (assembly) | -25 °C ... 50 °C |

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

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

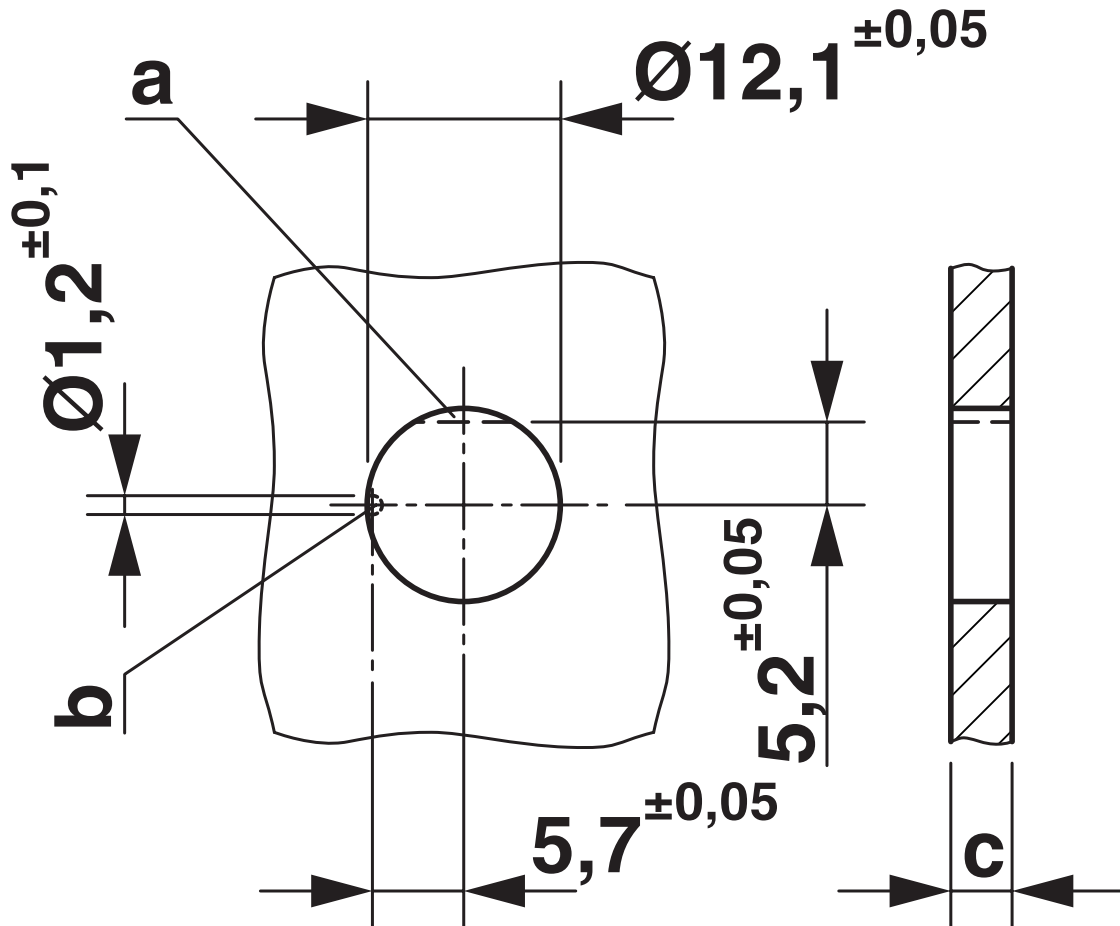
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Dimensional drawing



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Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1705709>



TÜV Rheinland

Approval ID: R 60165003-0001

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27440107 |
| ECLASS-15.0 | 27440107 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | 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.) | Triphenyl phosphate(CAS: 115-86-6) |
| SCIP | ed4c91cd-11f5-4ce3-92e0-60939cbf12aa |

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