

# Photovoltaic connector - PV-C1M-C-HSG - 1050770


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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Photovoltaic connector, Range of articles: PV-CF-C, Photovoltaic connector, housing material: PPE, color: black, number of positions: 1, min. conductor cross section: 2.5 mm<sup>2</sup>, max. conductor cross section: 6 mm<sup>2</sup>, nom. voltage: 1500 V, rated current: 27 A, Connection method: Crimp, Type of contact: Pin, min. cable diameter: 5.00 mm, max. cable diameter: 8.00 mm



## Key Commercial Data

Packing unit	50 pc
Minimum order quantity	50 pc
GTIN	 4 055626 670218
GTIN	4055626670218
Weight per Piece (excluding packing)	13.270 g

## Technical data

### Dimensions

External cable diameter	5 mm ... 8 mm
-------------------------	---------------

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (assembly)	-25 °C ... 50 °C

### General

Design	Pin
Insertion force	45 N ±10 N
Disconnect force	250 N ±50 N (when locked)
Pull-out force of cable >= disconnect force	> 80 N (IEC 62852:2014)
Insertion/withdrawal cycles	100
Degree of pollution	2
Number of positions	1
Current	40 A
Rated surge voltage (III/3)	16 kV

# Photovoltaic connector - PV-C1M-C-HSG - 1050770

## Technical data

### General

pluggable	Yes
Degree of protection	IP66 / IP68 (2 m / 24 h)
Connection cross-section AWG (min.)	14
Connection cross-section AWG (max.)	10
Rated current (2.5 mm <sup>2</sup> )	27 A
Rated current (4.0 mm <sup>2</sup> )	34 A
Rated current (6.0 mm <sup>2</sup> )	40 A
Protection class	II

### Material

Color	black
Insulating material	mPPE
Contact material	Cu
Contact surface material	Ag

### Connection data

Connection method	Crimp
Connection capacity	2.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Contact resistance with connected conductor	≤ 0.45 mΩ
Stripping length	8 mm
Cable type	H1Z2Z2-K lines
Type of contact	Pin

### Standards and Regulations

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>
	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 phoenixcontact.com/products).</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>

# Photovoltaic connector - PV-C1M-C-HSG - 1050770

## Technical data

### Standards and Regulations

	<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>

## Classifications

eCl@ss

eCl@ss 10.0.1	27440107
eCl@ss 11.0	27440107
eCl@ss 9.0	27440107

## Accessories

### Accessories

#### Crimping tool

Crimping pliers - CRIMPFOX-P SR 6 - 1212755



Crimping pliers, for SUNCLIX solar crimp connectors 2.5 ... 6 mm<sup>2</sup>, unlockable pressure lock, precise parallel crimping, lateral entry, B crimp, incl. positioning tool

## Photovoltaic connector

## Photovoltaic connector - PV-C1M-C-HSG - 1050770

### Accessories

#### 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

---

#### Crimp contact - PV-C3M-C-6-R3000 - 1050766



Photovoltaic connector, Range of articles: PV-CF-C, Crimp contact, color: black, number of positions: 1, min. conductor cross section: 6 mm<sup>2</sup>, max. conductor cross section: 6 mm<sup>2</sup>, Connection method: Crimp, Type of contact: Pin

---

#### Crimp contact - PV-C3M-C-2,5-4-R3000 - 1050768



Photovoltaic connector, Range of articles: PV-CF-C, Crimp contact, color: black, number of positions: 1, min. conductor cross section: 2.5 mm<sup>2</sup>, max. conductor cross section: 4 mm<sup>2</sup>, rated current: 27 A, Connection method: Crimp, Type of contact: Pin

---

#### Contact removal tool - PV-A-C-DC-TOOL - 1069522



Photovoltaic connector, Contact removal tool