

# POWER COMBICON spring-cage connector

## 10.16 mm pitch

### SPC 16/...-ST(F)-10,16

---

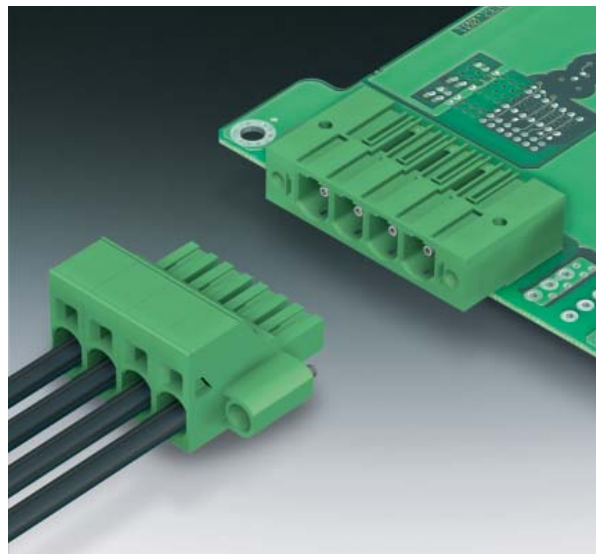
The already familiar PC 16 family is now also available with spring-cage connection. The SPC 16 connection with spring-cage offers the following advantages:

- Time-saving conductor connection with direct connection COMBI spring.
- Stripped solid conductors or stranded conductors up to 16 mm<sup>2</sup> cross section with ferrule can be contacted with little force without tools.
- Current carrying capacity up to 76 A and unlimited 600 V UL certification in a pitch of 10.16 mm can be used internationally without problems. For exact current values, observe the derating curves.
- The springs are opened with the screwdriver.

The SPC 16 spring-cage connector is compatible with the already existing PC 6-16 headers and is available in 2 to 9 number of positions.

The SPC 16-STF versions with fixing screw flange offer a vibration-resistant connection between plug and header and are securely held especially during vibrations.

To shield devices from electromagnetic interferences, the STF-SH version shield support was developed. The shield support provides a generous connection surface for the shielding cable using metal cable clips. Together with the screw of the fastening flange, the shielding function is passed onto the device metal housing. If there is a non-conductive device wall, the shielding function can be passed on to the PCB through the PCB-SHIELD metal.



#### COMBICON Select

The COMBICON search engine with CAD downloading



COMBICON Select – the printed circuit board connection software supports your workflow from the PCB and housing layout to the ordering process with:

- Systematic and fast selection of products
- Universal Internet aided engineering with extensive CAD downloading
- Easy-to-use e-shopping functions.

**Note:**

In compliance with DIN EN 61984, COMBICON plug connectors come without switching capacity. During designated use, they must not be plugged in or disconnected when carrying voltage or under load.

[select.phoenixcontact.com/combicon](http://select.phoenixcontact.com/combicon)

# POWER COMBICON

## Spring-cage connector

### SPC 16/...-ST-10,16

#### 10.16 mm Pitch



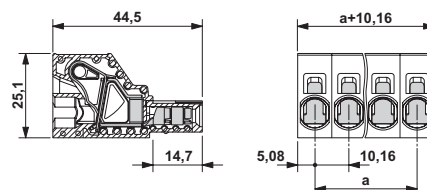
| Description                                                                                                      | No. of pos.         | Dim.<br>a<br>[mm] | Type               | Order No. | Pcs./Pkt. |
|------------------------------------------------------------------------------------------------------------------|---------------------|-------------------|--------------------|-----------|-----------|
| <b>POWER COMBICON spring-cage plugs, 10.16 mm pitch, color: green</b>                                            |                     |                   |                    |           |           |
|                                                                                                                  | 2                   | 10.16             | SPC 16/ 2-ST-10,16 | 1711268   | 50        |
|                                                                                                                  | 3                   | 20.32             | SPC 16/ 3-ST-10,16 | 1711271   | 50        |
|                                                                                                                  | 4                   | 30.48             | SPC 16/ 4-ST-10,16 | 1711284   | 50        |
|                                                                                                                  | 5                   | 40.64             | SPC 16/ 5-ST-10,16 | 1711297   | 50        |
|                                                                                                                  | 6                   | 50.80             | SPC 16/ 6-ST-10,16 | 1711307   | 50        |
|                                                                                                                  | 7                   | 60.96             | SPC 16/ 7-ST-10,16 | 1711310   | 50        |
|                                                                                                                  | 8                   | 71.12             | SPC 16/ 8-ST-10,16 | 1711323   | 50        |
|                                                                                                                  | 9                   | 81.28             | SPC 16/ 9-ST-10,16 | 1711336   | 50        |
| <b>Keying profile</b> , is inserted into the slot on the plug and header, red insulating material                |                     |                   |                    |           |           |
| <b>Screwdriver</b> ,<br>to actuate the COMBI spring                                                              |                     |                   |                    |           |           |
| <b>Marker card</b> , with 10 pcs.,<br>10-section marker strips, white, self-adhesive,<br>for 100 terminal blocks |                     |                   |                    |           |           |
| <b>Crimp pliers</b> , for ferrules of up to 16 mm²                                                               |                     |                   |                    |           |           |
| <b>Technical data</b>                                                                                            |                     |                   |                    |           |           |
| Dimensions                                                                                                       |                     |                   |                    |           |           |
| Pitch                                                                                                            | [mm]                |                   |                    |           |           |
| <b>Technical data in accordance with IEC/ DIN VDE</b>                                                            |                     |                   |                    |           |           |
| Insulating material group                                                                                        | —                   |                   |                    |           |           |
| Surge voltage category / contamination class                                                                     | — / —               |                   |                    |           |           |
| Rated voltage                                                                                                    | [V]                 |                   |                    |           |           |
| Rated surge voltage                                                                                              | [kV]                |                   |                    |           |           |
| Nominal current / cross section                                                                                  | [A] / [mm²]         |                   |                    |           |           |
| Maximum load current / cross section                                                                             | [A] / [mm²]         |                   |                    |           |           |
| <b>Connection capacity</b>                                                                                       |                     |                   |                    |           |           |
| Solid / stranded / conductor sizes                                                                               | [mm²] / [mm²] / AWG |                   |                    |           |           |
| Stranded with ferrule without / with plastic sleeve                                                              | [mm²]               |                   |                    |           |           |
| <b>Multiple connection (2 conductors with same cross section)</b>                                                |                     |                   |                    |           |           |
| Solid / stranded                                                                                                 | [mm²]               |                   |                    |           |           |
| Stranded with ferrules without plastic sleeve                                                                    | [mm²]               |                   |                    |           |           |
| Stranded with TWIN ferrule with plastic sleeve                                                                   | [mm²]               |                   |                    |           |           |
| <b>Stripping length</b>                                                                                          | [mm]                |                   |                    |           |           |
| <b>Internal cylindrical gage (IEC 60947-1)</b>                                                                   | —                   |                   |                    |           |           |
| <b>Screw thread</b>                                                                                              | —                   |                   |                    |           |           |
| <b>Tightening torque</b>                                                                                         | [Nm]                |                   |                    |           |           |
| <b>Insulation material</b>                                                                                       |                     |                   |                    |           |           |
| Inflammability class acc. to UL 94                                                                               | PA                  |                   |                    |           |           |
| <b>Approval data (UL/CUL and CSA)</b>                                                                            |                     |                   |                    |           |           |
| Usegroup B                                                                                                       | [V] / [A] / AWG     |                   |                    |           |           |
| Usegroup C                                                                                                       | [V] / [A] / AWG     |                   |                    |           |           |
| Usegroup D                                                                                                       | [V] / [A] / AWG     |                   |                    |           |           |

|                                       |                |        |
|---------------------------------------|----------------|--------|
| <b>CP-HCC 4</b>                       | <b>1600027</b> | 100    |
| <b>SZS 2 - 0.8 x 4,0</b>              | <b>1204520</b> | 10     |
| <b>SK 10/5</b> (see COMBICON catalog) |                |        |
| <b>CRIMPFOX 16 S</b>                  | <b>1207983</b> | 1      |
| see description                       |                |        |
| 10.16                                 |                |        |
| III / 3                               | I              | II / 2 |
| 1000                                  | 1000           | 1000   |
| 8                                     | 8              | 6      |
|                                       | 76 1) / 16     |        |
|                                       | 76 1) / 16     |        |
| 0.75 - 16 / 0.75 - 16 / 18 - 6        |                |        |
| 0.5 - 16 2) / 0.5 - 16 2)             |                |        |
| - / -                                 |                |        |
| -                                     |                |        |
| -                                     |                |        |
| 18                                    |                |        |
| -                                     |                |        |
| -                                     |                |        |
| -                                     |                |        |
| PA                                    |                |        |
| V0                                    |                |        |

| Type                                            | Order No.             | Pcs./Pkt. |
|-------------------------------------------------|-----------------------|-----------|
| SPC 16/ 2-ST-10,16                              | 1711268               | 50        |
| SPC 16/ 3-ST-10,16                              | 1711271               | 50        |
| SPC 16/ 4-ST-10,16                              | 1711284               | 50        |
| SPC 16/ 5-ST-10,16                              | 1711297               | 50        |
| SPC 16/ 6-ST-10,16                              | 1711307               | 50        |
| SPC 16/ 7-ST-10,16                              | 1711310               | 50        |
| SPC 16/ 8-ST-10,16                              | 1711323               | 50        |
| SPC 16/ 9-ST-10,16                              | 1711336               | 50        |
| CP-HCC 4                                        | 1600027               | 100       |
| SZS 2 - 0.8 x 4,0                               | 1204520               | 10        |
| SK 10/5 (see COMBICON catalog)                  |                       |           |
| CRIMPFOX 16 S                                   | 1207983               | 1         |
| see description                                 |                       |           |
| 10.16                                           |                       |           |
| III / 3                                         | I                     |           |
| 1000                                            | III / 2               | II / 2    |
| 8                                               | 1000                  | 1000      |
|                                                 | 8                     | 6         |
|                                                 | 76 <sup>1)</sup> / 16 |           |
|                                                 | 76 <sup>1)</sup> / 16 |           |
| 0.75 - 16 / 0.75 - 16 / 18 - 6                  |                       |           |
| 0.5 - 16 <sup>2)</sup> / 0.5 - 16 <sup>2)</sup> |                       |           |
| - / -                                           |                       |           |
| -                                               |                       |           |
| -                                               |                       |           |
| 18                                              |                       |           |
| -                                               |                       |           |
| -                                               |                       |           |
| -                                               |                       |           |
| PA                                              |                       |           |
| V0                                              |                       |           |
| on request                                      |                       |           |
| on request                                      |                       |           |
| on request                                      |                       |           |

<sup>1)</sup> Observe derating curve

<sup>2)</sup> Only in connection with CRIMPFOX 16 S



# POWER COMBICON

## Spring-cage connector

### SPC 16/...-STF-10,16

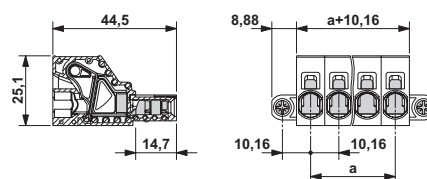
#### 10.16 mm Pitch



| Description                                                                                                      | No. of pos. | Dim.<br>a<br>[mm]   | Type                                            | Order No.             | Pcs./Pkt. |
|------------------------------------------------------------------------------------------------------------------|-------------|---------------------|-------------------------------------------------|-----------------------|-----------|
| <b>POWER COMBICON spring-cage plugs,</b>                                                                         |             |                     |                                                 |                       |           |
| <b>10.16 mm pitch, color: green</b>                                                                              |             |                     |                                                 |                       |           |
|                                                                                                                  | 2           | 10.16               | <b>SPC 16/ 2-STF-10,16</b>                      | <b>1711378</b>        | 50        |
|                                                                                                                  | 3           | 20.32               | <b>SPC 16/ 3-STF-10,16</b>                      | <b>1711381</b>        | 50        |
|                                                                                                                  | 4           | 30.48               | <b>SPC 16/ 4-STF-10,16</b>                      | <b>1711394</b>        | 50        |
|                                                                                                                  | 5           | 40.64               | <b>SPC 16/ 5-STF-10,16</b>                      | <b>1711404</b>        | 50        |
|                                                                                                                  | 6           | 50.80               | <b>SPC 16/ 6-STF-10,16</b>                      | <b>1711417</b>        | 50        |
|                                                                                                                  | 7           | 60.96               | <b>SPC 16/ 7-STF-10,16</b>                      | <b>1711420</b>        | 50        |
|                                                                                                                  | 8           | 71.12               | <b>SPC 16/ 8-STF-10,16</b>                      | <b>1711433</b>        | 50        |
|                                                                                                                  | 9           | 81.28               | <b>SPC 16/ 9-STF-10,16</b>                      | <b>1711446</b>        | 50        |
| <b>Keying profile</b> , is inserted into the slot on the plug and header, red insulating material                |             |                     |                                                 |                       |           |
| <b>Screwdriver</b> ,<br>to actuate the COMBI spring                                                              |             |                     |                                                 |                       |           |
| <b>Marker card</b> , with 10 pcs.,<br>10-section marker strips, white, self-adhesive,<br>for 100 terminal blocks |             |                     |                                                 |                       |           |
| <b>Crimp pliers</b> , for ferrules of up to 16 mm²                                                               |             |                     |                                                 |                       |           |
| <b>Technical data</b>                                                                                            |             |                     |                                                 |                       |           |
| Dimensions                                                                                                       |             |                     |                                                 |                       |           |
| Pitch                                                                                                            |             | [mm]                | see description                                 |                       |           |
| 10.16                                                                                                            |             |                     |                                                 |                       |           |
| <b>Technical data in accordance with IEC/ DIN VDE</b>                                                            |             |                     |                                                 |                       |           |
| Insulating material group                                                                                        |             | –                   | I                                               |                       |           |
| Surge voltage category / contamination class                                                                     |             | – / –               | III / 3                                         | III / 2               | II / 2    |
| Rated voltage                                                                                                    |             | [V]                 | 1000                                            | 1000                  | 1000      |
| Rated surge voltage                                                                                              |             | [kV]                | 8                                               | 8                     | 6         |
| Nominal current / cross section                                                                                  |             | [A] / [mm²]         |                                                 | 76 <sup>1)</sup> / 16 |           |
| Maximum load current / cross section                                                                             |             | [A] / [mm²]         |                                                 | 76 <sup>1)</sup> / 16 |           |
| <b>Connection capacity</b>                                                                                       |             |                     |                                                 |                       |           |
| Solid / stranded / conductor sizes                                                                               |             | [mm²] / [mm²] / AWG | 0.75 - 16 / 0.75 - 16 / 18 - 6                  |                       |           |
| Stranded with ferrule without / with plastic sleeve                                                              |             | [mm²]               | 0.5 - 16 <sup>2)</sup> / 0.5 - 16 <sup>2)</sup> |                       |           |
| <b>Multiple connection (2 conductors with same cross section)</b>                                                |             |                     |                                                 |                       |           |
| Solid / stranded                                                                                                 |             | [mm²]               | - / -                                           |                       |           |
| Stranded with ferrules without plastic sleeve                                                                    |             | [mm²]               | -                                               |                       |           |
| Stranded with TWIN ferrule with plastic sleeve                                                                   |             | [mm²]               | -                                               |                       |           |
| <b>Stripping length</b>                                                                                          |             | [mm]                | 18                                              |                       |           |
| <b>Internal cylindrical gage (IEC 60947-1)</b>                                                                   |             | –                   | -                                               |                       |           |
| <b>Screw thread</b>                                                                                              |             | –                   | -                                               |                       |           |
| <b>Tightening torque</b>                                                                                         |             | [Nm]                | -                                               |                       |           |
| <b>Insulation material</b>                                                                                       |             |                     |                                                 |                       |           |
| Inflammability class acc. to UL 94                                                                               |             |                     | PA                                              |                       |           |
| <b>Approval data (UL/CUL and CSA)</b>                                                                            |             |                     |                                                 |                       |           |
| Usegroup B                                                                                                       |             | [V] / [A] / AWG     | on request                                      |                       |           |
| Usegroup C                                                                                                       |             | [V] / [A] / AWG     | on request                                      |                       |           |
| Usegroup D                                                                                                       |             | [V] / [A] / AWG     | on request                                      |                       |           |

<sup>1)</sup> Observe derating curve

<sup>2)</sup> Only in connection with CRIMPFOX 16 S



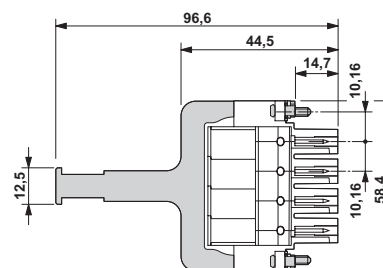
**POWER COMBICON**  
**Spring-cage connector**  
**SPC 16/...-STF-SH-10,16**  
**10.16 mm Pitch**



| Description                                                                                                      | No. of pos.     | Dim.<br>a<br>[mm] | Type                                            | Order No.      | Pcs./Pkt. |
|------------------------------------------------------------------------------------------------------------------|-----------------|-------------------|-------------------------------------------------|----------------|-----------|
| <b>POWER COMBICON spring-cage plugs,<br/>10.16 mm pitch, color: green</b>                                        |                 |                   | <b>SPC 16/ 4-STF-SH-10,16</b>                   | <b>1711488</b> | 50        |
|                                                                                                                  | 2               | 10.16             |                                                 |                |           |
|                                                                                                                  | 3               | 20.32             |                                                 |                |           |
|                                                                                                                  | 4               | 30.48             |                                                 |                |           |
|                                                                                                                  | 5               | 40.64             |                                                 |                |           |
|                                                                                                                  | 6               | 50.80             |                                                 |                |           |
|                                                                                                                  | 7               | 60.96             |                                                 |                |           |
|                                                                                                                  | 8               | 71.12             |                                                 |                |           |
|                                                                                                                  | 9               | 81.28             |                                                 |                |           |
| <b>Keying profile</b> , is inserted into the slot on the plug and header, red insulating material                |                 |                   | <b>CP-HCC 4</b>                                 | <b>1600027</b> | 100       |
| <b>Screwdriver</b> ,<br>to actuate the COMBI spring                                                              |                 |                   | <b>SZS 2 - 0.8 x 4,0</b>                        | <b>1204520</b> | 10        |
| <b>Marker card</b> , with 10 pcs.,<br>10-section marker strips, white, self-adhesive,<br>for 100 terminal blocks |                 |                   | <b>SK 10/5</b> (see COMBICON catalog)           |                |           |
| <b>Crimp pliers</b> , for ferrules of up to 16 mm²                                                               |                 |                   | <b>CRIMPFOX 16 S</b>                            | <b>1207983</b> | 1         |
| <b>Technical data</b>                                                                                            |                 |                   | see description                                 |                |           |
| Dimensions                                                                                                       |                 |                   | 10.16                                           |                |           |
| Pitch [mm]                                                                                                       |                 |                   |                                                 |                |           |
| <b>Technical data in accordance with IEC/ DIN VDE</b>                                                            |                 |                   |                                                 |                |           |
| Insulating material group                                                                                        |                 |                   | I                                               |                |           |
| Surge voltage category / contamination class                                                                     |                 |                   | III / 3 III / 2 II / 2                          |                |           |
| Rated voltage [V]                                                                                                |                 |                   | 1000 1000 1000                                  |                |           |
| Rated surge voltage [kV]                                                                                         |                 |                   | 8 8 6                                           |                |           |
| Nominal current / cross section [A] / [mm²]                                                                      |                 |                   | 76 <sup>1)</sup> / 16                           |                |           |
| Maximum load current / cross section [A] / [mm²]                                                                 |                 |                   | 76 <sup>1)</sup> / 16                           |                |           |
| <b>Connection capacity</b>                                                                                       |                 |                   |                                                 |                |           |
| Solid / stranded / conductor sizes [mm²] / [mm²] / AWG                                                           |                 |                   | 0.75 - 16 / 0.75 - 16 / 18 - 6                  |                |           |
| Stranded with ferrule without / with plastic sleeve [mm²]                                                        |                 |                   | 0.5 - 16 <sup>2)</sup> / 0.5 - 16 <sup>2)</sup> |                |           |
| <b>Multiple connection (2 conductors with same cross section)</b>                                                |                 |                   |                                                 |                |           |
| Solid / stranded [mm²]                                                                                           |                 |                   | - / -                                           |                |           |
| Stranded with ferrules without plastic sleeve [mm²]                                                              |                 |                   | -                                               |                |           |
| Stranded with TWIN ferrule with plastic sleeve [mm²]                                                             |                 |                   | -                                               |                |           |
| <b>Stripping length</b> [mm]                                                                                     |                 |                   | 18                                              |                |           |
| <b>Internal cylindrical gage (IEC 60947-1)</b>                                                                   |                 |                   | -                                               |                |           |
| <b>Screw thread</b>                                                                                              |                 |                   | -                                               |                |           |
| <b>Tightening torque</b> [Nm]                                                                                    |                 |                   | -                                               |                |           |
| <b>Insulation material</b>                                                                                       |                 |                   | PA                                              |                |           |
| Inflammability class acc. to UL 94                                                                               |                 |                   | V0                                              |                |           |
| <b>Approval data (UL/CUL and CSA)</b>                                                                            |                 |                   |                                                 |                |           |
| Usegroup B                                                                                                       | [V] / [A] / AWG |                   | on request                                      |                |           |
| Usegroup C                                                                                                       | [V] / [A] / AWG |                   | on request                                      |                |           |
| Usegroup D                                                                                                       | [V] / [A] / AWG |                   | on request                                      |                |           |

<sup>1)</sup> Observe derating curve

<sup>2)</sup> Only in connection with CRIMPFOX 16 S



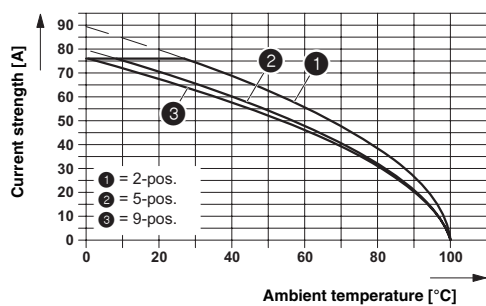
#### Derating curve

Type: SPC 16/...-ST-10,16 with PC 6-16/...-G1-10,16

Connected conductor cross section = 16 mm<sup>2</sup>

Reduction factor = 0.8

Number of positions = see diagram



## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9