

1613611

https://www.phoenixcontact.com/pc/products/1613611

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Device connector front mounting, straight, for standard and SPEEDCON interlock, M17, number of positions: 5+3+PE, contact connection type: Pin, shielded: yes, flange dimensions: 21.6 mm x 21.6 mm, degree of protection: IP67, number of positions: 9, connection method: Crimp connection, series: ST

#### Your advantages

- Consistent EMC protection for reliable connection solutions in the industrial environment
- · Crimping connection: vibration- and temperature-resistant assembly
- · Flexible mounting, thanks to snap-in contact inserts

#### Commercial data

| Item number                          | 1613611                        |
|--------------------------------------|--------------------------------|
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Product key                          | ABRBEL                         |
| Catalog page                         | Page 135 (C-2-2019)            |
| GTIN                                 | 4046356442183                  |
| Weight per piece (including packing) | 38.6 g                         |
| Weight per piece (excluding packing) | 26.4 g                         |
| Customs tariff number                | 85366990                       |
| Country of origin                    | DE                             |



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#### Technical data

#### Notes

| Order information: | Order crimp contacts 5 x 0.6 mm, 4 x Ø 1 mm separately   |
|--------------------|--|
| Safety note        |  |
| Safety note        | 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> <li>WARNING: Commission properly functioning products only.</li> <li>The products must be regularly inspected for damage.</li> <li>Decommission defective products immediately. Replace damaged products. Repairs are not possible.</li> </ul>  |
|                    | <ul> <li>WARNING: Only electrically qualified personnel may install and<br/>operate the product. They must observe the following safety<br/>notes. The qualified personnel must be familiar with the basics of<br/>electrical engineering. They must be able to recognize and<br/>prevent danger. The relevant symbol on the packaging indicates<br/>that only personnel familiar with electrical engineering are<br/>allowed to install and operate the product.</li> </ul> |
|                    | <ul> <li>The products are suitable for applications in plant, controller,<br/>and electrical device engineering.</li> </ul>  |
|                    | <ul> <li>When operating the connectors in outdoor applications, they<br/>must be separately protected against environmental influences.</li> </ul>   |
|                    | <ul> <li>Assembled products may not be manipulated or improperly opened.</li> </ul>  |
|                    | <ul> <li>Only use mating connectors that are specified in the technical<br/>data of the standards listed (e.g. the ones listed in the product<br/>accessories online at phoenixcontact.com/products).</li> </ul>   |
|                    | <ul> <li>When using the product in direct connection with third-party<br/>manufacturers, the user is responsible.</li> </ul>   |
|                    | <ul> <li>For operating voltages &gt; 50 V AC, conductive connector<br/>housings must be grounded</li> </ul>  |
|                    | Ensure that the protective or functional ground has been properly connected.   |
|                    | VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector  |
|                    | Only use tools recommended by Phoenix Contact  |
|                    | <ul> <li>The installation notes/Design In documents online on the<br/>download page at phoenixcontact.com/products must be<br/>observed for this product.</li> </ul>   |
|                    | <ul> <li>Operate the connector only when it is fully plugged in and<br/>interlocked.</li> </ul>  |
|                    | <ul> <li>Ensure that when laying the cable, the tensile load on the<br/>connectors does not exceed the upper limit specified in the<br/>standards.</li> </ul>  |
|                    | Observe the minimum bending radius of the cable. Lay the cable without twisting it.  |
|                    | 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   |



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|  | Warnings (o. R. DIN EN ICO 12722 1:2008 12)              |
|--|--|
|  | warnings (e.g. DIN EN ISO 13732-1:2008-12).              |
| ounting  |  |
| Mounting type  | Front mounting   |
| roduct properties  |  |
| Product type   | Circular connectors (device side)                        |
| Series   | ST   |
| Application  | Power  |
| Number of positions  | 9  |
| Connection profile   | 5+3+PE   |
| Shielded   | yes  |
| Coding   | N  |
| Thread type  | M17  |
| Data management status   |  |
| Article revision   | 06   |
| Housing  Flange dimensions   | 21.6 mm x 21.6 mm  |
|  | 21.6 mm x 21.6 mm  |
| Housing Flange dimensions  Material specifications   |  |
| Housing Flange dimensions  Material specifications  Seal material  | FPM  |
| Housing Flange dimensions  Material specifications   |  |
| Housing Flange dimensions  Material specifications  Seal material  | FPM  |
| Housing Flange dimensions  Material specifications Seal material Housing material  | FPM  |
| Housing Flange dimensions  Material specifications Seal material Housing material Electrical properties  | FPM  |
| Housing Flange dimensions  Material specifications Seal material Housing material Electrical properties Contact  | FPM<br>Metal   |
| Housing Flange dimensions  Material specifications Seal material Housing material Electrical properties  Contact Contact diameter  | FPM Metal  1 mm  |
| Housing Flange dimensions  Material specifications Seal material Housing material Electrical properties  Contact Contact diameter Max. current   | FPM Metal  1 mm 14 A                                     |
| Housing Flange dimensions  Material specifications Seal material Housing material Electrical properties  Contact Contact Contact diameter Max. current Nominal voltage U <sub>N</sub>  | FPM Metal  1 mm 14 A 630 V                               |
| Housing Flange dimensions  Material specifications Seal material Housing material  Electrical properties  Contact Contact Contact diameter Max. current Nominal voltage U <sub>N</sub> Overvoltage category  | FPM Metal  1 mm 14 A 630 V III                           |
| Housing Flange dimensions  Material specifications Seal material Housing material  Electrical properties  Contact Contact Contact diameter Max. current Nominal voltage U <sub>N</sub> Overvoltage category Degree of pollution  | FPM Metal  1 mm 14 A 630 V III 3                         |
| Flange dimensions  Material specifications  Seal material  Housing material  Electrical properties  Contact  Contact  Contact diameter  Max. current  Nominal voltage U <sub>N</sub> Overvoltage category  Degree of pollution  Rated surge voltage  | FPM Metal  1 mm 14 A 630 V III 3                         |
| Housing Flange dimensions  Material specifications Seal material Housing material  Electrical properties  Contact Contact diameter Max. current Nominal voltage U <sub>N</sub> Overvoltage category Degree of pollution Rated surge voltage  Contact   | FPM Metal  1 mm 14 A 630 V III 3 6 kV                    |
| Flange dimensions  Material specifications  Seal material Housing material  Electrical properties  Contact Contact diameter Max. current Nominal voltage U <sub>N</sub> Overvoltage category Degree of pollution Rated surge voltage  Contact Contact diameter   | FPM Metal  1 mm 14 A 630 V III 3 6 kV                    |
| Housing Flange dimensions  Material specifications Seal material Housing material  Electrical properties  Contact Contact diameter Max. current Nominal voltage U <sub>N</sub> Overvoltage category Degree of pollution Rated surge voltage  Contact Contact Contact Contact Contact Max. current                                      | FPM Metal  1 mm 14 A 630 V III 3 6 kV  0.6 mm 3.6 A      |
| Flange dimensions  Material specifications  Seal material Housing material  Electrical properties  Contact Contact diameter Max. current Nominal voltage U <sub>N</sub> Overvoltage category Degree of pollution Rated surge voltage  Contact Contact diameter Max. current Nominal voltage UN Negree of pollution Rated surge voltage | FPM Metal  1 mm 14 A 630 V III 3 6 kV  0.6 mm 3.6 A 60 V |

#### Connection data



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#### Conductor connection

| Connection method       | Crimp connection |  |
|-------------------------|------------------|--|
| Contact connection type | Pin              |  |

#### Connector

| Туре                  | straight |
|-----------------------|----------|
| Direction of rotation | Standard |

#### Environmental and real-life conditions

#### Ambient conditions

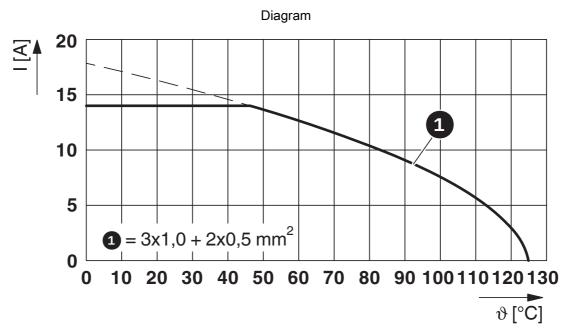
| Degree of protection                     | IP67          |
|--|---------------|
| Ambient temperature (operation)          | -40 °C 125 °C |
| Ambient temperature (storage/transport)  | 15 °C 25 °C   |
| Altitude                                 | 2000 m        |
| Permissible humidity (storage/transport) | 50 % 65 %     |



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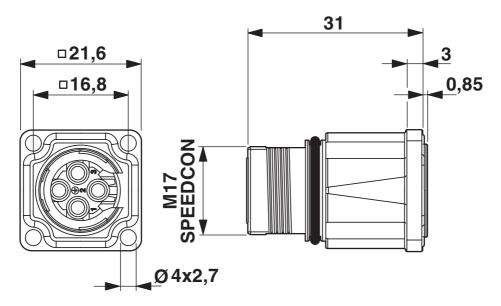
https://www.phoenixcontact.com/pc/products/1613611

### **Drawings**



I = current strength, ϑ = ambient temperature, 3x 14 A + 2x 2 A constant

#### Dimensional drawing



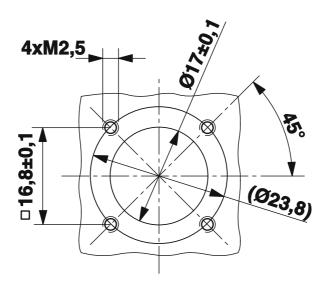
Dimensional drawing



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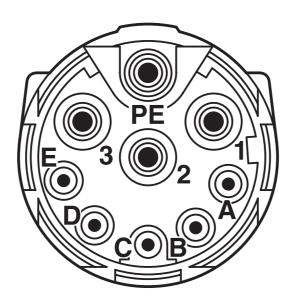
https://www.phoenixcontact.com/pc/products/1613611

#### Dimensional drawing



Installation dimensions

Schematic diagram



Connector pin assignment



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### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/1613611

| <b>91</b> UL Red | <b>xognized</b><br>ID: E153698-20140124 |                                |                   |                               |
|------------------|---|--------------------------------|-------------------|-------------------------------|
|                  | Nominal voltage U <sub>N</sub>          | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
| Power            | 600 V                                   | 3.5 A                          | -                 | -                             |
| Signal           | 60 V                                    | 3.5 A                          | -                 | -                             |

| CUL Recognized Approval ID: E153698-20140124 |                                |                                |                   |                               |
|--|--------------------------------|--------------------------------|-------------------|-------------------------------|
|  | Nominal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
| Power  | 600 V                          | 3.5 A                          | -                 | -                             |
| Signal                                       | 60 V                           | 3.5 A                          | -                 | -                             |

| CUL Recognized Approval ID: E335019-20111129 |                       |                                |                   |                               |  |
|--|-----------------------|--------------------------------|-------------------|-------------------------------|--|
|  | Nominal voltage $U_N$ | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |  |
| Power  | 600 V                 | 3.5 A                          | -                 | -                             |  |
| Signal                                       | 60 V                  | 3.5 A                          | -                 | -                             |  |

| UL Recognized Approval ID: E335019-20111129 |   |                                |                   |                               |  |
|---|---|--------------------------------|-------------------|-------------------------------|--|
|   | Nominal voltage $\mathbf{U}_{\mathrm{N}}$ | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |  |
| Power                                       | 600 V                                     | 3.5 A                          | -                 | -                             |  |
| Signal                                      | 60 V                                      | 3.5 A                          | -                 | -                             |  |

| UL Listed Approval ID: E468743-20210825 |                                |                                |                   |                               |
|---|--------------------------------|--------------------------------|-------------------|-------------------------------|
|   | Nominal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
| Power                                   | 600 V                          | 10 A                           | -                 | 18 - 18                       |
| Signal                                  | 60 V                           | 2 A                            | -                 | 20 - 20                       |

| cUL Listed Approval ID: E468743-202 | 210825                         |                                |                   |                               |
|-------------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
|                                     | Nominal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
| Power                               | 600 V                          | 8 A                            | 18 - 18           | -                             |
| Signal                              | 60 V                           | 2 A                            | 20 - 20           | -                             |



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cULus Listed



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### Classifications

UNSPSC 21.0

#### **ECLASS**

|        | ECLASS-11.0 | 27440102 |  |
|--------|-------------|----------|--|
|        | ECLASS-12.0 | 27440116 |  |
|        | ECLASS-13.0 | 27440116 |  |
| ETIM   |             |          |  |
|        | ETIM 9.0    | EC002635 |  |
| UNSPSC |             |          |  |

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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#### Accessories

#### ST-06KP010 - Crimp contact

1607577

https://www.phoenixcontact.com/pc/products/1607577



Crimp contact, Pin, turned, contact diameter: 0.6 mm, crimp range:  $0.06 \text{ mm}^2 \dots 0.25 \text{ mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1242311

#### ST-06KP020 - Crimp contact

1607578

https://www.phoenixcontact.com/pc/products/1607578



Crimp contact, Pin, turned, contact diameter: 0.6 mm, crimp range: 0.14 mm $^2$  ... 0.34 mm $^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1242311



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https://www.phoenixcontact.com/pc/products/1613611

#### ST-06KP030 - Crimp contact

1607579

https://www.phoenixcontact.com/pc/products/1607579



Crimp contact, Pin, turned, contact diameter: 0.6 mm, crimp range:  $0.34 \text{ mm}^2 \dots 0.5 \text{ mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1242312

#### ST-10KP010 - Crimp contact

1618255

https://www.phoenixcontact.com/pc/products/1618255



Crimp contact, Pin, turned, Single contact, contact diameter: 1 mm, crimp range:  $0.06~\text{mm}^2$ ...  $0.25~\text{mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1~%) item no.: 1243215



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#### ST-10KP035 - Crimp contact

1618458

https://www.phoenixcontact.com/pc/products/1618458



Crimp contact, Pin, turned, contact diameter: 1 mm, crimp range:  $0.25 \text{ mm}^2 \dots 1 \text{ mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1%) item no.: 1243215

#### ST-Z0019 - Color coding

1620621

https://www.phoenixcontact.com/pc/products/1620621

Color coding, color: green





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ST-Z0020 - Color coding

1620622

https://www.phoenixcontact.com/pc/products/1620622

Color coding, color: orange



ST-Z0021 - Color coding

1620623

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Color coding, color: black





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#### ST-Z0001 - Contact removal tool

1607770

https://www.phoenixcontact.com/pc/products/1607770



Unlocking tool for contact carriers for snapping in the M17 device connectors

#### ST-Z0014 - Metal protective cap

1616069

https://www.phoenixcontact.com/pc/products/1616069



Metal protective cap, M17, degree of protection: IP67, series: ST, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1243010



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#### ST-Z0013 - Metal protective cap

1616068

https://www.phoenixcontact.com/pc/products/1616068



Metal protective cap, M17, degree of protection: IP67, series: ST, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1243009

#### PROT-M17PRO-OT-IP20 - Plastic protective cap

1055708

https://www.phoenixcontact.com/pc/products/1055708



Plastic protective cap, M17, degree of protection: IP20, series: M17 PRO

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