Product data sheet

Miniature connectors

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**Product description**
Snap-In Male cable connector, Contacts: 5, 6.0-8.0 mm, unshielded, solder, IP67, UL, VDE
- Snap-In IP67 series 720
  99 9113 02 05

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**Technical data**

**General features**

<table>
<thead>
<tr>
<th>Part no.</th>
<th>99 9113 02 05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector design</td>
<td>Male cable connector</td>
</tr>
<tr>
<td>Version</td>
<td>Connector pin straight</td>
</tr>
<tr>
<td>Connector locking system</td>
<td>snap-in</td>
</tr>
<tr>
<td>Termination</td>
<td>solder</td>
</tr>
<tr>
<td>Degree of protection</td>
<td>IP67</td>
</tr>
<tr>
<td>Cross-sectional area</td>
<td>max. 0.75 mm² / AWG 18</td>
</tr>
<tr>
<td>Cable outlet</td>
<td>6.0-8.0 mm</td>
</tr>
<tr>
<td>Temperature range from/to</td>
<td>-25 °C / 85 °C</td>
</tr>
<tr>
<td>Mechanical operation</td>
<td>&gt; 500 Mating cycles</td>
</tr>
<tr>
<td>Weight (g)</td>
<td>11.14</td>
</tr>
<tr>
<td>Customs tariff number</td>
<td>85369010</td>
</tr>
<tr>
<td>Country of Origin</td>
<td>DE</td>
</tr>
</tbody>
</table>

**Electrical parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated voltage</td>
<td>125 V</td>
</tr>
<tr>
<td>Rated impulse voltage</td>
<td>1500 V</td>
</tr>
<tr>
<td>Rated current</td>
<td>5.0 A</td>
</tr>
<tr>
<td>Insulation resistance</td>
<td>≥ 10^9 Ω</td>
</tr>
<tr>
<td>Pollution degree</td>
<td>2</td>
</tr>
<tr>
<td>Overvoltage category</td>
<td>II</td>
</tr>
<tr>
<td>Insulating material group</td>
<td>II</td>
</tr>
<tr>
<td>EMC compliance</td>
<td>unshielded</td>
</tr>
</tbody>
</table>

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You can find the assembly instructions on the next page.

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Snap-In Male cable connector, Contacts: 5, 6.0-8.0 mm, unshielded, solder, IP67, UL, VDE
Snap-In IP67 series 720
99 9113 02 05

Material

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing material</td>
<td>PA</td>
</tr>
<tr>
<td>Contact body material</td>
<td>PA (UL94 V-0) black</td>
</tr>
<tr>
<td>Contact material</td>
<td>CuZn (brass)</td>
</tr>
<tr>
<td>Contact plating</td>
<td>Au (gold)</td>
</tr>
<tr>
<td>REACH SVHC</td>
<td>CAS 96-45-7 (imidazolidine-2-thione)</td>
</tr>
<tr>
<td></td>
<td>CAS 7439-92-1 (Lead)</td>
</tr>
<tr>
<td>SCIP number</td>
<td>40bd56ee-8006-4b6e-8181-19339203db02</td>
</tr>
</tbody>
</table>

Authorization/approvals

<table>
<thead>
<tr>
<th>Approval</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Approvals</td>
<td>UL, VDE</td>
</tr>
</tbody>
</table>

Classifications

<table>
<thead>
<tr>
<th>Classification</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>eCl@ss 11.1</td>
<td>27-44-01-02</td>
</tr>
<tr>
<td>ETIM 9.0</td>
<td>EC002635</td>
</tr>
</tbody>
</table>

Declarations of conformity

<table>
<thead>
<tr>
<th>Directive</th>
<th>Code</th>
</tr>
</thead>
</table>

Assembly instructions

1. Braid sleeve, solder, pinch ring and pressing screw to cable.
2. Bimetallic cable to 15 mm length.
3. Strip and insert single wire.
4. Screw the sleeve onto the assembled contact insert.
5. Push seal and pinch ring into the sleeve and tighten it with the pressing screw.
General Disclaim Notice

The connector must not be plugged or unplugged under load. Non-observance and improper use can result in personal injury.

The connectors have been developed for applications in plant engineering, control and electrical equipment construction. The user is responsible for checking whether the connectors can also be used in other areas of application.

To protect against unintentional opening of the connector, the thread between the housing and the connector head must be secured with a suitable cyanoacrylate adhesive when used in circuits with voltages dangerous to the touch. This does not apply to connectors used in SELV and PELV circuits according to IEC 61140 (EN 61140, VDE 0140-1).

 Connectors which are used in circuits with voltages dangerous to the touch may only be installed and used by, or under the supervision of, persons with electrical engineering training, taking into account the applicable regulations and standards.

Plug connectors with enclosure protection IP67 and IP68 are not suitable for use under water. When used outdoors, the plug connectors must be protected separately against corrosion. For further information on the IP protection classes, please refer to the "Technical Information" download centre.
DECLARATION FROM THE MANUFACTURER

For part no.: 99 9113 02 05 26/01/2024


With the REACH regulation, the EU has created a uniform system for the Registration, Evaluation, Authorisation and restriction of Chemicals – or REACH. The purpose of this regulation is to ensure a high level of protection of human health and the environment.

Franz Binder GmbH & Co. Elektrische Bauelemente KG hereby confirms that it acts as a downstream user (producer of products) according to the aforementioned regulation.

We obtain all raw materials and/or preparations, from which the connectors are made, from suppliers who have already registered or pre-registered all substances, including those present in the preparations. The products supplied by the company are not subject to registration.

With regard to Article 33(1) of the REACH regulation, Franz Binder GmbH & Co. Elektrische Bauelemente KG complies with its information obligations:

An up-to-date candidate list (candidate list of substances of very high concern for authorisation, as of 14/06/2023 see: https://echa.europa.eu/de/candidate-list-table) in accordance with Article 59 (1, 10) of the regulation (EC) No 1907/2006 (REACH) has been published. The aforementioned article includes the following substances from the up-to-date candidate list in concentrations of more than 0,1 percent by mass:

- CAS 96-45-7 (Imidazolidine-2-thione)
- CAS 7439-92-1 (Lead)

Please refer any questions to our Product Compliance Team:

Product-Compliance@binder-connector.de
DECLARATION FROM THE MANUFACTURER

For part no.: 99 9113 02 05

With regard to the

COMMISSION DELEGATED DIRECTIVE (EU) 2015/863
of 31 March 2015
the list of restricted substances

Directive 2011/65/EU stipulates provisions on the restriction of the use of hazardous substances in
electrical and electronic equipment (EEE) with a view to contributing to the protection of human health
and the environment, including the environmentally sound recovery and disposal of EEE waste.

ANNEX II
Restricted substances referred to in Article 4(1) and maximum concentration values tolerated by
weight in homogeneous materials

Lead (0,1%) mercury (0,1%) cadmium (0,01%) hexavalent chromium (0,1%) polybrominated biphenyls
(PBB) (0,1%) polybrominated diphenyl ethers (PBDE) (0,1%) bis(2-ethylhexyl) phthalate (DEHP) (0,1%)
butyl benzyl phthalate (BBP) (0,1%) dibutyl phthalate (DBP) (0,1%) diisobutyl phthalate (DIBP) (0,1%)

Franz Binder GmbH & Co. Elektrische Bauelemente KG hereby confirms that it complies with all
standard articles of the aforementioned Directive. Our products do not contain any of the specified
prohibited substances above the maximum permitted concentrations specified therein, taking into
account the exemptions in Annex III of Directive 2011/65/EU.

- Complies with RoHS III with exemption 6c

Please refer any questions to our Product Compliance Team:

Product-Compliance@binder-connector.de
MANUFACTURER’S DECLARATION

For part no.: 99 9113 02 05 26/01/2024

with regard to

Declaration of compliance with China RoHS – Components

We herewith declare the compliance of this product with the Chinese marking requirements.
This product can be recycled and used safely during its environmentally friendly use period of 50 years.
These articles will be sold as components only for manufacturing. According to the Electronic Industry Standard SJ/T 11364-2014 it needs not to be marked with Environmentally Friendly Use Period (EFUP) label. This product should be recycled after its environmental protection use period has expired because it may contain substances or elements as shown in the following table:

<table>
<thead>
<tr>
<th>Part Name</th>
<th>Hazardous Substance</th>
<th>Lead (Pb)</th>
<th>Mercury (Hg)</th>
<th>Cadmium (Cd)</th>
<th>Hexavalent Chromium (Cr(VI))</th>
<th>Polybrominated biphenyls (PBB)</th>
<th>Polybrominated diphenyl ethers (PBDE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connectors</td>
<td>X</td>
<td>O</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

This table is prepared in accordance with the provisions of SJ/T 11364.

O: Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572

X: Indicates that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572

The table shows where these substances may be found in this Electrical and Electronic Product.

Please refer any questions to our Product Compliance Team:

Product-Compliance@binder-connector.de
## EU DECLARATION OF CONFORMITY

| Manufacturer | Franz Binder GmbH & Co.  
Elektrische Bauelemente KG  
Rötelstraße 27  
D-74172 Neckarsulm |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Part no.</td>
<td>99 9113 02 05</td>
</tr>
<tr>
<td>Product</td>
<td>Snap-In IP67 series 720</td>
</tr>
<tr>
<td>Series</td>
<td>Snap-In IP67 series 720</td>
</tr>
</tbody>
</table>

This product complies with the requirements of the following European Directive:

The following harmonized standards have been applied for conformity assessment:

EN 60204-1:2018;EN 60529:1991

References to standards apply to references to their amendments, if these amendments are listed to the respective directives in the Official Journal of the European Union.

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Neckarsulm, 2020-06-30

i.A. Markus Grimm  
Product Compliance Manager
The object of the declaration described above is in conformity with the relevant UK-Regulations and UK-Guidelines:

The Electrical Equipment (Safety) Regulations 2016
STATUTORY INSTRUMENTS
2016 No. 1101
CONSUMER PROTECTION
HEALTH AND SAFETY

References of standards and/or technical specifications applied for this declaration of conformity, or parts thereof:

2016 No. 1101: EN 61984:2009

This declaration is issued under the sole responsibility of the manufacturer.

Neckarsulm, 2021-09-17

i.A. Markus Grimm
Product Compliance Manager