Product description: M12-A female cable connector, Contacts: 5, shielded, moulded on cable, IP67, UL listed, PVC grey, 5 x 0.25 mm²

Order number: 77 3530 0000 20705-0500

### General features

**Order number**
- 77 3530 0000
- 20705-0500

**Notice**
- Please note that, due to the change from the old to the new order number, there may be deviations in the technical specifications. For questions about product details, please use the 'Contact Customer Service' form on the right.

**Connector design**
- female cable connector

**Version**
- connector female

**Connector locking system**
- screw

**Termination**
- moulded on cable

**Degree of protection**
- IP67

**Cross-sectional area**
- 0.25 mm² / AWG 24

**Temperature range from/to**
- -25 °C / 90 °C

**Degree of mechanical operation**
- > 100 Mating cycles

**Weight (g)**
- 126

**Customs tariff number**
- 85444290

### Technical data

#### Material

- **Housing material**
  - PUR

- **Contact body material**
  - CuSn (bronze)

- **Contact material**
  - Au (gold)

- **Locking material**
  - CuZn (Brass nickel plated)

#### Cable data

- **Cable length**
  - 5 m

- **Sheath material**
  - PVC

- **Single-lead insulation**
  - PVC

- **Halogen free**
  - No

- **Cable color**
  - grey

- **Cable diameter**
  - 5.7 mm

- **Cable length**
  - 5.7 mm

- **Conductor resistance**
  - 75 Ω/Km

- **Temperature range cable in move from/to**
  - -5°C / +105°C

- **Temperature range cable fixed from/to**
  - -40°C / +105°C

- **Bending radius, fixed cable**
  - ≥ 5 x Ø

- **Bending radius, moving cable**
  - ≥ 10 x Ø

- **Bending cycles**
  - > 2 Mio.

- **Permitted acceleration**
  - max. 5 m/s² + 1 m/s²

- **Travel distance, horizontal**
  - 5 m/sec² -> 5 m

- **Travel distance, vertical**
  - 5 m/sec² -> 2 m

- **Travel speed**
  - ≤ 200 m/min (5 m horizontal distance)

### Electrical parameters

- **Rated voltage**
  - 60 V

- **Rated impulse voltage**
  - 1500 V

- **Rated current (40 °C)**
  - 4 A

- **Insulation resistance**
  - ≥ 10¹⁰ Ω

- **Pollution degree**
  - 3

- **Overvoltage category**
  - II

- **Insulating material group**
  - II

- **EMC compliance**
  - shielded

### Authorization/approvals

- **Approval 1**
  - UL listed

Date: 2020-10-07 - Page 1 of 3
Product data sheet
Automation technology - sensors and actuators

Product description
M12-A female cable connector, Contacts: 5, shielded, moulded on cable, IP67, UL listed, PVC grey, 5 x 0.25 mm²

Area
M12-A series 763

Order number
77 3530 0000 20705-0500

Technical data

Declarations of conformity

Low Voltage Directive

RoHS Directive
2011/65/EU (EN 50581:2012)
Product data sheet

Automation technology - sensors and actuators

<table>
<thead>
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Security notices

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.

Plug connectors with enclosure protection IP 67 and IP 68 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.

To lock the cable connector with the device connector, the threaded ring is tightened "hand-tight" (approx. 60 cNm).
DECLARATION FROM THE MANUFACTURER

For part no.: 77 3530 0000 20705-0500

With regard to the


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 25/06/2020 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:

Please refer any questions to our Product Compliance Team:

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

For part no.: 77 3530 0000 20705-0500

07/10/2020

With regard to the

COMMISSION DELEGATED DIRECTIVE (EU) 2015/863 of 31 March 2015
amending Annex II to Directive 2011/65/EU of the European Parliament and of the Council as regards 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 exceptions in Annex III of Directive 2011/65/EU.

- Complies with RoHS III without exception

Please refer any questions to our Product Compliance Team:

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

For part no.: 77 3530 0000 20705-0500 07/10/2020

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>Lead (Pb)</th>
<th>Mercury (Hg)</th>
<th>Cadmium (Cd)</th>
<th>Hexavalent Chromium (Cr(VI))</th>
<th>Polybrominate d biphenyls (PBB)</th>
<th>Polybrominate d diphenyl ethers (PBDE)</th>
</tr>
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<tr>
<td>Connectors</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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</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

Order number
77 3530 0000 20705-0500
M12-A female cable connector, Contacts: 5, shielded, moulded on cable, IP67, UL listed, PVC grey, 5 x 0.25 mm²
M12-A series 763

This product complies with the requirements of the following European Directive:
The following harmonized standards have been applied for conformity assessment:

EN 60529:1991;EN 60204-1:2018

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, 2017-09-20

Peter Schall
Peter Schall, vice president
EU DECLARATION OF CONFORMITY

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This declaration of conformity is issued under the sole responsibility of the manufacturer. The object of the declaration described above is in conformity with Directive 2011/65/EU of the European Parliament and of the council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (recast). The following harmonized standards have been applied for conformity assessment:

EN 50581:2012

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.

Neckarsulm, 2017-09-20

Peter Schall

Peter Schall, vice president