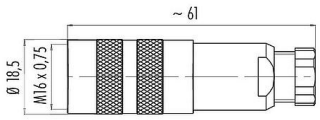
Product data sheet
Miniature connectors

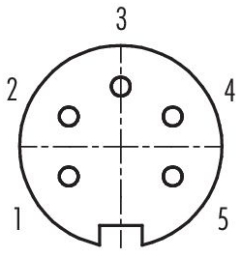
Product description	**M16 Female cable connector, Contacts: 5 (05-a), 4.0-6.0 mm, shieldable, solder, IP67, UL 2238**
Area	**series 423**
Part no.	**99 5114 15 05**

Illustration

Scale drawing



Contact arrangement (Plug-in side)



You can find the assembly instructions on the next page.

Technical data

General features

Part no.	99 5114 15 05
Connector design	Female cable connector
Type standard	DIN EN 61076-2-106
Version	Connector socket straight
Connector locking system	screw
Termination	solder
Degree of protection	IP67
Connection cross-section	max. 0.75 mm² / AWG 18
Cable outlet	4.0-6.0 mm
Temperature range from/to	-30 °C / 95 °C
Mechanical operation	> 500 Mating cycles
Weight (g)	52.95
Customs tariff number	85369010
Country of Origin	DE

Electrical parameters

Rated voltage	250 V
Rated impulse voltage	1500 V
Rated current	6.0 A
Insulation resistance	≥ 10^{10} Ω
Pollution degree	1
Overvoltage category	I
Insulating material group	III

Product data sheet
Miniature connectors

Product description	**M16 Female cable connector, Contacts: 5 (05-a), 4.0-6.0 mm, shieldable, solder, IP67, UL 2238**
Area	**series 423**
Part no.	**99 5114 15 05**

EMC compliance	shieldable
Shield connection	Shielding ring

Material

Housing material	CuZn (Brass nickel plated)
Contact body material	PBT (UL94 V-0)
Contact material	CuSn (bronze)
Contact plating	Ag (silver)
REACH SVHC	CAS 7439-92-1 (Lead)
SCIP number	939963c7-1fdd-4ea7-8941-66cb3695b86a

Authorization/approvals

Approvals	UL 2238

Classifications

eCl@ss 11.1	27-44-01-02
ETIM 9.0	EC002635

Declarations of conformity

Low Voltage Directive	2014/35/EU (EN 60529:1991 | 2014/35/EU;EN 60204-1:2018)

Product data sheet
Miniature connectors

Product description	**M16 Female cable connector, Contacts: 5 (05-a), 4.0-6.0 mm, shieldable, solder, IP67, UL 2238**
Area	**series 423**
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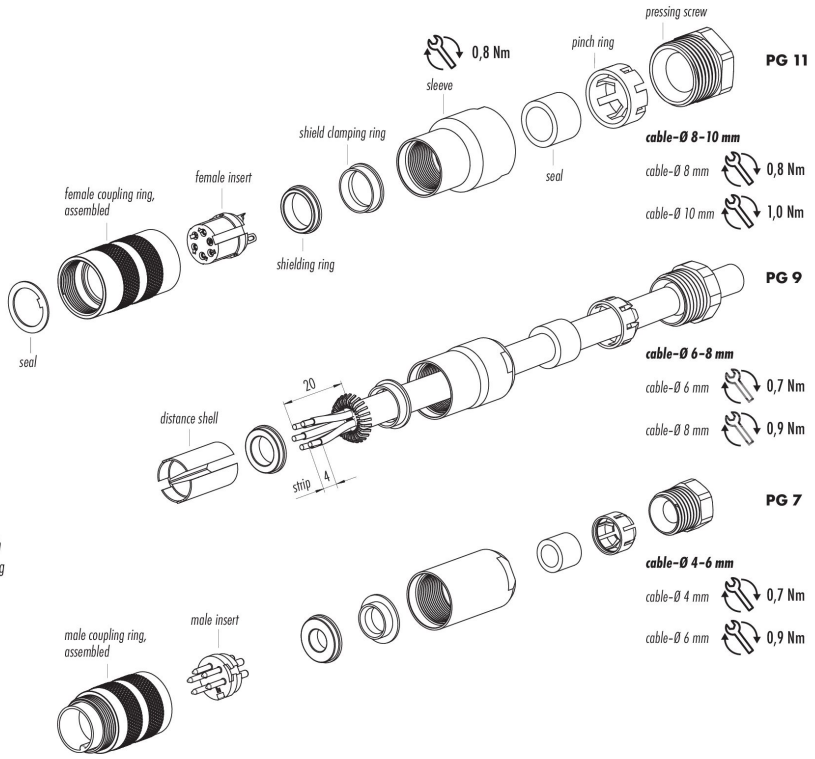
Assembly instructions



1. Bead pressing screw, pinch ring, seal, distance shell and shield clamping ring on cable.
2. Dismantle cable to 20 mm length.
3. Strip wires, widen shield and bead shielding ring.
4. Solder wires, snap distance shell, push the shield clamping ring and shielding ring together and cutt off projecting shielding braid.
5. Assemble remaining parts.

Product description	**M16 Female cable connector, Contacts: 5 (05-a), 4.0-6.0 mm, shieldable, solder, IP67, UL 2238**
Area	**series 423**
Part no.	**99 5114 15 05**

Security notices

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.

The user must take suitable safety precautions to ensure that the connector cannot be accidentally disconnected.

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.

Please observe the pollution degree and the overvoltage category. For further information, please refer to the download center "Technical Information".

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.: 99 5114 15 05 **14/07/2025**

With regard to the

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

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 25/06/2025 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 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 5114 15 05 **14/07/2025**

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 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 5114 15 05 **14/07/2025**

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:

	Hazardous Substance					
Part Name	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr(VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Connectors	X	O	O	O	O	O

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

CERTIFICATE OF COMPLIANCE

Certificate Number	E302391
Report Reference	E302391-2011-09-08
Date	2022-November-09
Issued to:	Franz Binder GmbH & Co. Elektrische Bauelemente KG Roetelstrasse 27 Neckarsulm 74172 DE
This is to certify that representative samples of	CABLE ASSEMBLIES AND FITTINGS FOR INDUSTRIAL CONTROL AND SIGNAL DISTRIBUTION - COMPONENT See Addendum Page for Product Designation(s).
	Have been evaluated by UL in accordance with the component requirements in the Standard(s) indicated on this Certificate. UL Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for installation in complete equipment submitted for investigation to UL LLC.
Standard(s) for Safety:	UL 2238, Standard for Cable Assemblies and Fittings for Industrial Control and Signal Distribution C22.2 No. 182.3, Special Use Attachment Plugs, Receptacles and Connectors
Additional Information:	See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Recognized Component Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Recognized Component Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Recognized Component Mark on the product.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at http://ul.com/aboutul/locations/

CERTIFICATE OF COMPLIANCE

Certificate Number	E302391
Report Reference	E302391-2011-09-08
Date	2022-November-09

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements

Cable Assemblies, Series 423/425/723 as follows:

Female cable connector with cable clamp, solder, shieldable, size: 4 – 6mm, 6 - 8mm.
Female cable connector with cable clamp, screw clamp, size: 4 – 6mm, 6 - 8mm.
Female cable connector with cable clamp, crimp, size: 4 – 6mm, 6 - 8mm.
Female cable connector with cable clamp, crimp, short version size: 4 - 8mm.
Female angled, crimp, size: 4 – 6mm, 6 - 8mm.
Female cable connector, solder, short version size: 4-8 mm.
Female cable connector with shielding ring, solder, size: 4 - 6mm, 6 - 8mm, 8-10mm.
Female angled connector, solder, shieldable size: 4 - 6mm, 6 - 8mm.
Female cable connector with cable clamp, solder, short version, shieldable, size: 2-19 pole.
Female cable connector with cable clamp, crimp, short version, shieldable, size: 4-8 pole.
Female socket solder connector, size: 2-24 pole.
Female socket crimp connector, size: 4-8 pole.
Female socket crimp connector, front fastened, size: 4-8 pole.
Female socket, solder connector front fastened, size: 2-24 pole.
Female socket, dip solder, front fastened, size: 2-24 pole.
Female socket, rectangular, solder, size: 2-19 pole.
Female socket, rectangular, crimp, size: 4-8 pole.
Female socket, rectangular, with single wires, size: 4-8 pole.

Male angled connector, solder, shieldable size: 4 - 6mm, 6 - 8mm.
Male cable connector with cable clamp, solder, shieldable size: 4 - 6mm, 6 - 8mm.
Male cable connector with cable clamp, screw clamp, size: 4 – 6mm, 6 - 8mm.
Male cable connector with cable clamp, crimp, size: 4 – 6mm, 6 - 8mm.
Male cable connector with cable clamp, crimp, short version size: 4 - 8mm.
Male angled, crimp, size: 4 – 6mm, 6 - 8mm.
Male cable connector, solder, short version size: 4-8 mm.
Male cable connector with shielding ring, solder, size: 4 - 6mm, 6 - 8mm, 8-10mm.
Male cable connector with cable clamp, solder, short version, shieldable, size: 2-19 pole.
Male cable connector with cable clamp, crimp, short version, shieldable, size: 4-5 pole.
Male socket solder connector, size: 2-24 pole.
Male socket crimp connector, size: 4-8 pole.
Male socket crimp connector, front fastened, size: 4-8 pole.
Male socket, solder connector front fastened, size: 2-24 pole.
Male socket, dip solder, front fastened, size: 2-24 pole.
Male socket, rectangular, solder, size: 2-19 pole.
Male socket, rectangular, crimp, size: 4-8 pole.
Male socket, rectangular, with single wires, size: 4-8 pole.

Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at http://ul.com/aboutul/locations/

EU DECLARATION OF CONFORMITY

Manufacturer	**Franz Binder GmbH & Co.** **Elektrische Bauelemente KG** **Rötelstraße 27** **D-74172 Neckarsulm**
Part no.	**99 5114 15 05**
Product	
Series	**series 423**

This product complies with the requirements of the following European Directive:
Directive 2014/35/EU of the European Parliament and of the council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits (recast).
The following harmonized standards have been applied for conformity assessment:

EN 60529:1991 | 2014/35/EU;EN 60204-1:2018 *)

*) This standard is currently not harmonized

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, 2025-03-05

i.A. Soner Cakar
Product Compliance Manager

UKCA DECLARATION OF CONFORMITY

Manufacturer	**Franz Binder GmbH & Co.** **Elektrische Bauelemente KG** **Rötelstraße 27** **D-74172 Neckarsulm**
Object of the declaration	**Connector (COC)**
Product	**99 5114 15 05**

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 standard is currently not listed in the assigned directive.

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

Neckarsulm, 2025-03-05

i.A. Soner Cakar
Product Compliance Manager