

Product data sheet

Automation technology - Data transmission

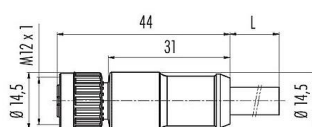


Product description	M12 Female cable connector, Contacts: 2+7, moulded on the cable, IP67, PUR, black, Power: 2 x 0.75 (AWG 18), Signal: 7 x 0.14 (AWG 26), 1.85 m
Area	M12 Hybrid
Part no.	77 8406 0000 30709-0185

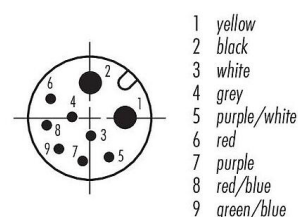
Illustration



Scale drawing



Contact arrangement (Plug-in side)



Technical data

General features

Part no.	77 8406 0000 30709-0185
Connector design	Female cable connector
Cable length	1.85 m (Other lengths are available on request.)
Version	Connector socket straight
Connector locking system	screw
Termination	moulded on the cable
Degree of protection	IP67
Cross-sectional area	Power: 0.75–1.5 mm ² , Signal: 0.14–0.25 mm ² / Power: AWG 20-18, Signal: AWG 26-24
Temperature range from/to	-25 °C / 85 °C
Mechanical operation	> 100 Mating cycles
Weight (g)	129.00
Customs tariff number	85444290
Country of Origin	DE

Electrical parameters

Rated voltage	Power: 63 V, Signal: 12.5 V
Rated impulse voltage	Power: 800 V, Signal: 500 V
Rated current	12 A Power / 0,5 A Signal
Pollution degree	2
Overvoltage category	II
Insulating material group	I

Material

Housing material	PUR
Contact body material	TPU
Contact material	CuSn (bronze)

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Area **M12 Hybrid**
Part no. **77 8406 0000 30709-0185**

Contact plating	Au (gold)
Locking material	PA
REACH SVHC	CAS 7439-92-1 (Lead)
SCIP number	3144a082-1ade-4507-85a6-84a879637a68

Classifications

ETIM 9.0	EC002638
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Cable data - Structure of the cable

Cable diameter	7.0 mm
Cross section	Power: 2 x 0.75 (AWG 18), Signal: 7 x 0.14 (AWG 26)
Sheath material	PUR
Single-lead insulation	PP
Single-lead structure	2 x 0.75 mm ² / 7 x 0.14 mm ²
Cable color	black

Cable data - Mechanical properties

Bending radius, fixed cable	3 x Ø
Bending radius, moving cable	9 x Ø

Cable data - Thermal properties

Temperature range cable in move from/to	-20 °C / 60 °C
Temperature range cable fixed from/to	-40 °C / 85 °C

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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.

DECLARATION FROM THE MANUFACTURER

For part no.: 77 8406 0000 30709-0185

28/04/2024

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 23/01/2024 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.: 77 8406 0000 30709-0185

28/04/2024

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.: 77 8406 0000 30709-0185

28/04/2024

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:

Part Name	Hazardous Substance					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr(VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Connectors	X	0	0	0	0	0

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

0: 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:

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