Automation technology - Data transmission



M12/M12 Connecting cable 2 male cable connectors, Contacts: 4, shielded, moulded on the cable, IP67, UL, Ethernet CAT5e, TPE, blue/green, $2 \times 2 \times AWG$ 24, $2 \times MG$ 24, $2 \times$ Product description

Area

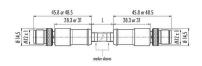
series 876 77 4529 4529 34704-0200 Part no.

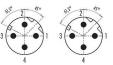
Illustration

Scale drawing

Contact arrangement (Plug-in side)









Technical data

General features

Part no.	77 4529 4529 34704-0200	
Connector design	Connecting cable 2 male cable connectors	
Type standard	DIN EN 61076-2-101	
Cable length	2 m (Standard 1 m and 2 m. Other lengths are available on request.)	
Version	Connecting cable	
Connector locking system	screw	
Termination	moulded on the cable	
Degree of protection	IP67	
Connection cross-section	2 x 2 x AWG 24	
Temperature range from/to	-40 °C / 85 °C	
Mechanical operation	> 100 Mating cycles	
Weight (g)	152.92	

Electrical parameters

Rated voltage	25 V AC (60 V DC)	
Rated impulse voltage	2500 V	
Rated current	4.0 A	
Insulation resistance	> 10 ¹⁰ Ω	
Pollution degree	3	
Transmission rate	CAT 5	
Overvoltage category	II	
Insulating material group	1	
EMC compliance	shielded	
Shield connection	Shield on the threaded ring	
Voltage	1400 V DC	

Automation technology - Data transmission



M12/M12 Connecting cable 2 male cable connectors, Contacts: 4, shielded, moulded on the cable, IP67, UL, Ethernet CAT5e, TPE, blue/green, $2 \times 2 \times AWG$ 24, $2 \times MG$ 24, $2 \times$ Product description

series 876 77 4529 4529 34704-0200 Area Part no.

Material

Housing material	PUR
Contact body material	PUR
Contact material	CuZn (brass)
Contact plating	Au (gold)
Locking material	Zinc die-cast nickel-plated
REACH SVHC	CAS 7439-92-1 (Lead)
SCIP number	SCIP-number not available

Classifications

eCl@ss 11.1	27-06-03-11
ETIM 9.0	EC002638

Declarations of conformity

Low Voltage Directive	2014/35/EU (EN 60529:1991;EN 60204-1:2018)
RoHS Directive	2011/65/EU (EN 50581:2012)

Cable data - Structure of the cable

Cable type	Ethernet CAT5e
Cable diameter	6.6 mm
Cross section	2 x 2 x AWG 24
Sheath material	TPE
Single-lead insulation	PE
Single-lead structure	AWG 24
Cable color	blue/green

Cable data - Electrical properties

Conductor resistance	55 Ω/Km (20°C)	
Conductor redictance	00 11/1(11 (20 0)	

Cable data - Mechanical properties

Bending radius, fixed cable	≥ 5 x Ø	
Bending radius, moving cable	≥ 15 x Ø	
Bending cycles	> 10 million	
Permitted acceleration	max. 2 m/s²	
Travel distance, horizontal	at 5 m/s ² -> 5 m	
Travel distance, vertical	at 5 m/s ² -> 5 m	
Travel speed	≤ 200 m/min (5 m horizontal distance)	

Cable data - Thermal properties

Temperature range cable in move from/to	-40 °C / 80 °C
Temperature range cable fixed from/to	-40 °C / 80 °C

Automation technology - Data transmission



 $M12/M12\ Connecting\ cable\ 2\ male\ cable\ connectors,\ Contacts:\ 4,\ shielded,\ moulded\ on\ the\ cable,\ IP67,\ UL,\ Ethernet\ CAT5e,\ TPE,\ blue/green,\ 2\ x\ 2\ x\ AWG\ 24,\ 2\ m$ Product description

Area Part no.

series 876 77 4529 4529 34704-0200

Cable data - Other features

Halogen free

Automation technology - Data transmission



Product description M12/M12 Connecting cable 2 male cable connectors, Contacts: 4, shielded, moulded on the cable, IP67, UL, Ethernet

CAT5e, TPE, blue/green, 2 x 2 x AWG 24, 2 m

Area series 876

Part no. **77 4529 4529 34704-0200**

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.

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".



Date: 14/07/2025

DECLARATION FROM THE MANUFACTURER

For part no.: 77 4529 4529 34704-0200 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



Date: 14/07/2025

DECLARATION FROM THE MANUFACTURER

For part no.: 77 4529 4529 34704-0200 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



Date: 14/07/2025

MANUFACTURER'S DECLARATION

For part no.: 77 4529 4529 34704-0200 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	0	0	0	0	0

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 Number UL-CA-2000081-1
Report Reference E363498-20190330

Date 29-Sep-2020

Issued to: Franz Binder GmbH & Co. Elektrische Bauelemente KG

Roetelstrasse 27 Neckarsulm

Germany 74172

This is to certify that representative samples of

DUXR7 - Communications-, Audio/Video-, Data- and Other

Signaling-circuit Accessories Certified for Canada

See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety: CSA C22.2 NO. 233-17, 3rd Ed., Issue Date: 2017-05-01

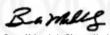
Additional Information: See the UL Online Certifications Directory at

https://ig.ulprospector.com for additional information

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

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

Look for the UL Certification Mark on the product.





Certificate Number UL-CA-2000081-1
Report Reference E363498-20190330

Date 29-Sep-2020

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

Model	Category Description		
Series 876, Cat. No. 77 followed by 9750, 9752, 9753, 9755, 9756, 4503, 4504, 4506, 4508, 4509, 4511, 4527, 4529, 4559, 4557, 4510, 4512, 4530, 4534, 4550 or 4554 followed by 9750, 9752, 9753, 9755, 9756, 4503, 4504, 4506, 4508, 4509, 4511, 4527, 4529, 4559, 4557, 4510, 4512, 4530, 4534, 4550 or 4554, followed by 2, 3, 4, 5, 6, 7 or 8, followed by 00, 07, 10, 17 or 18 followed by 04 or 08 followed by four digits denoting customer options	Cable Assembly		

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Bruce Mahrenholz, Director North American Certification Program

UL LLC

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Certificate Number Report Reference

UL-US-2000177-1 E363498-20190330

Date 29-Sep-2020

Issued to:

Franz Binder GmbH & Co. Elektrische Bauelemente KG

Roetelstrasse 27 Neckarsulm

Germany 74172

This is to certify that representative samples of

DUXR - Communications-, Audio/Video-, Data- and Other

Signaling-circuit Accessories

See Addendum Page for Product Designation(s).

Have been investigated by UL in accordance with the

Standard(s) indicated on this Certificate.

Standard(s) for Safety:

UL 1863, 4th Ed, Issue Date: 2004-05-14, Revision Date:

2019-10-14

Additional Information:

See the UL Online Certifications Directory at

https://ig.ulprospector.com for additional information

This Certificate of Compliance does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

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Model	Category Description		
Series 876, Cat. No. 77 followed by 9750, 9752, 9753, 9755, 9756, 4503, 4504, 4506, 4508, 4509, 4511, 4527, 4529, 4559, 4557, 4510, 4512, 4530, 4534, 4550 or 4554 followed by 9750, 9752, 9753, 9755, 9756, 4503, 4504, 4506, 4508, 4509, 4511, 4527, 4529, 4559, 4557, 4510, 4512, 4530, 4534, 4550 or 4554, followed by 2, 3, 4, 5, 6, 7 or 8, followed by 00, 07, 10, 17 or 18 followed by 04 or 08 followed by four digits denoting customer options	Cable Assembly		

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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.

77 4529 4529 34704-0200

Product

Series series 876

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;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



UKCA DECLARATION OF CONFORMITY

Manufacturer Franz Binder GmbH & Co.

Elektrische Bauelemente KG

Rötelstraße 27 D-74172 Neckarsulm

Object of the declaration

Connector (COC)

Product **77 4529 4529 34704-0200**

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



EU DECLARATION OF CONFORMITY

Manufacturer Franz Binder GmbH & Co.

Elektrische Bauelemente KG

Rötelstraße 27 D-74172 Neckarsulm

Part no.

77 4529 4529 34704-0200

Product

Series series 876

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 *)

*) 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.

Neckarsulm, 2021-07-27

i.A. Soner Cakar



UKCA DECLARATION OF CONFORMITY

Manufacturer Franz Binder GmbH & Co.

Elektrische Bauelemente KG

Rötelstraße 27 D-74172 Neckarsulm

Object of the declaration

Connector (COC)

Product 77 4529 4529 34704-0200

The object of the declaration described above is in conformity with the relevant UK-Regulations and UK-Guidelines:

The Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

STATUTORY INSTRUMENTS 2012 No. 3032 ENVIRONMENTAL PROTECTION

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

2012 No. 3032: EN IEC 63000:2018

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

Neckarsulm, 2021-09-17

i.A. Soner Cakar