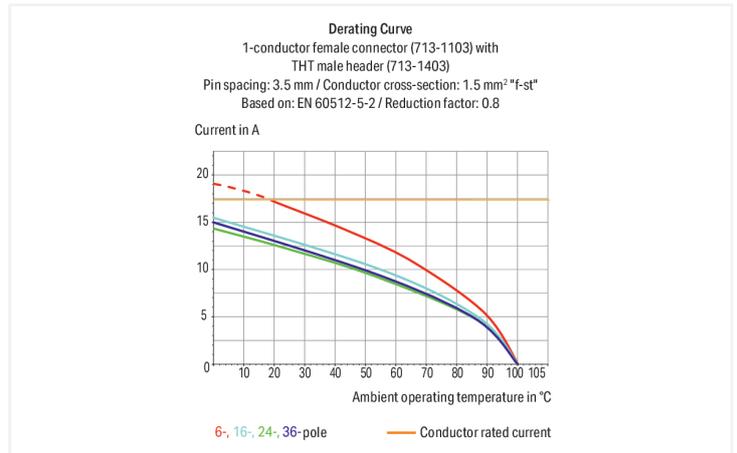


## Data Sheet | Item Number: 713-1112/037-000

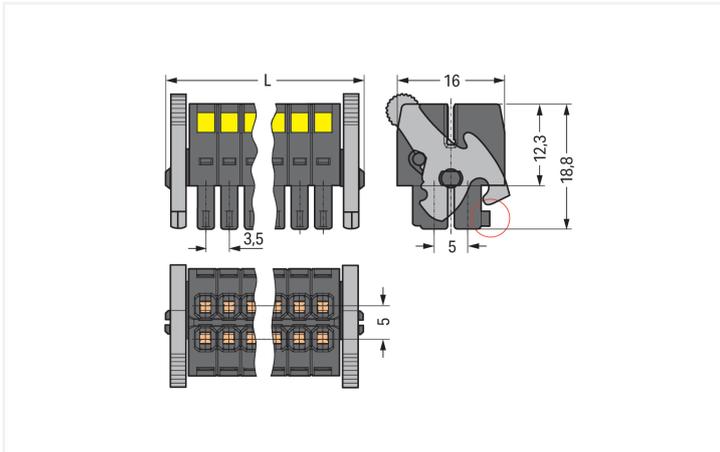
1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 24-pole; 100% protected against mismatching; Levers; 1,50 mm²; black

<https://www.wago.com/713-1112/037-000>



Color: ■ black

Similar to illustration



Dimensions in mm

$L = [(pole\ no./2) - 1] \times pin\ spacing + 12.2\ mm$  Coding finger (red circle)

Female connector, 713 Series, operating tool

Our female connector (item number 713-1112/037-000) simplifies electrical installations. Conductors can only be connected to this female connector if their strip length is between 6 and 7 mm. This product features one conductor terminal and utilizes CAGE CLAMP®. Our reliable and maintenance-free CAGE CLAMP® connection makes it easy to connect all types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. Dimensions: (50.5 x 18.8 x 16) mm (width x height x depth). This female connector is suitable for conductor cross sections ranging from 0.08 mm² to 1.5 mm².

The contact surface is coated with tin.

## Notes

## Safety Information

The MCS – MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected/disconnected when live or under load. When used as intended, these connectors must not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

## Variants:

Other pole numbers  
Gold-plated or partially gold-plated contact surfaces  
Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

## Electrical data

Ratings per		IEC/EN 60664-1			Approvals per		UL 1059		
Overvoltage category		III	III	II	Use group	B	C	D	
Pollution degree		3	2	2	Rated voltage	300 V	50 V	-	
Nominal voltage		80 V	160 V	250 V	Rated current	10 A	10 A	-	
Rated impulse withstand voltage		2.5 kV	2.5 kV	2.5 kV					
Rated current		10 A	10 A	10 A					

Approvals per		CSA		
Use group		B	C	D
Rated voltage		300 V	-	-
Rated current		10 A	-	-

## Connection Data

Clamping units	24	<b>Connection 1</b>	
Total number of potentials	24	Connection technology	CAGE CLAMP®
Number of connection types	1	Actuation type	Operating tool
Number of levels	2	Actuation direction 1	Operation perpendicular to conductor entry
		Solid conductor	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 16 AWG
		Fine-stranded conductor	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 16 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 1 mm <sup>2</sup>
		Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1 mm <sup>2</sup>
		Strip length	6 ... 7 mm / 0.24 ... 0.28 inches
		Pole number	24
		Conductor entry direction to mating direction	0°

## Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	50.7 mm / 1.996 inches
Height	16.5 mm / 0.65 inches
Depth	22.3 mm / 0.878 inches

### Mechanical data

Variable coding	Yes
Anti-rotation protection	Yes

### Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductor
Mismating protection	Yes
Locking of plug-in connection	Locking lever

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	black
Material group	II
Insulation material (main housing)	Glass fiber-reinforced polyamide (PA66 GF)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper alloy
Contact Plating	Tin
Fire load	0.182 MJ
Weight	13.1 g

### Environmental requirements

Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C

### Commercial data

Product Group	3 (Multi Conn. System)
PU (SPU)	20 pcs
Packaging type	Box
Country of origin	PL
GTIN	4045454806286
Customs tariff number	85366990990

### Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
ETIM 9.0	EC001284
ETIM 10.0	EC001284
ECCN	NO US CLASSIFICATION

**Environmental Product Compliance**

REACH Candidate List Substance	Perfluorobutane sulfonic acid (PFBS) and its salts
RoHS Compliance Status	Compliant, No Exemption
SCIP notification number (Austria)	0f02a9ed-dbf4-44b1-9bf9-ceef298cdc81
SCIP notification number (Belgium)	0f99b8c0-132a-4395-a56f-3d4a94b53969
SCIP notification number (Bulgaria)	e7ad23a8-191b-458a-967b-8396a290f824
SCIP notification number (Czech Republic)	5f80b93c-1963-4312-a6fa-5ca74cf6ea41
SCIP notification number (Denmark)	25f9165c-4a1f-471f-ae77-8d0761e04a2c
SCIP notification number (Finland)	ad57932f-6e1f-4160-a301-bb8d9d881436
SCIP notification number (France)	950b52ed-e722-4814-97c3-d1d6929d59ca
SCIP notification number (Germany)	5da01021-8110-468e-b909-8c8c8fe533a0
SCIP notification number (Hungary)	88c6afcb-206a-4856-9485-a49460c344ff
SCIP notification number (Italy)	478c23bc-956b-40d8-be81-e2214cf696bf
SCIP notification number (Netherlands)	ccdfb026-66ed-47cd-af4c-883d8fb91cea
SCIP notification number (Poland)	afb58e3d-73f7-4a32-a65d-494e3e58979a
SCIP notification number (Romania)	ef049a35-cbe9-425c-8dc3-065f4a8fb5c4
SCIP notification number (Sweden)	b1797f41-58fd-4353-8146-e0286898aa42

**Approvals / Certificates**

**General approvals**



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-102427
CSA CSA Group	C22.2	2315087
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-133740
UL Underwriters Laboratories Inc.	UL 1059	UL-US-L45172-6187124-22905991-1

**Declarations of conformity and manufacturer's declarations**



Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Z00004423.000

**Downloads**

**Environmental Product Compliance**

<b>Compliance Search</b>
Environmental Product Compliance 713-1112/037-000

**Documentation**

<b>Additional Information</b>
Technical Section 03.04.2019 pdf 2027.26 KB

CAD/CAE-Data

**CAD data**  
 2D/3D Models  
 713-1112/037-000

**CAE data**  
 ZUKEN Portal  
 713-1112/037-000

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



**Item No.: 713-1492/037-000**  
 Panel feedthrough male connector; 100% protected against mismatching; 24-pole; Pin spacing 3.5 mm; black



**Item No.: 713-1432/116-000/997-408**  
 THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Levers; in tape-and-reel packaging; Pin spacing 3.5 mm; 24-pole; black



**Item No.: 713-1432/116-000**  
 THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 24-pole; black



**Item No.: 713-1412/116-000/997-408**  
 THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Levers; in tape-and-reel packaging; Pin spacing 3.5 mm; 24-pole; black



**Item No.: 713-1412/116-000**  
 THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 24-pole; black



**Item No.: 713-1432/037-000**  
 THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 24-pole; black



**Item No.: 713-1412/037-000**  
 THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 24-pole; black



**Item No.: 713-1472/037-000**  
 THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; with orientation nose; Levers; Pin spacing 3.5 mm; 24-pole; black

1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 Ferrule



**Item No.: 216-301**  
 Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



**Item No.: 216-321**  
 Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



**Item No.: 216-131**  
 Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-302**  
 Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item No.: 216-322**  
 Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item No.: 216-132**  
 Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



**Item No.: 216-201**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white



**Item No.: 216-241**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



**Item No.: 216-221**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white



**Item No.: 216-141**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



**Item No.: 216-101**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-121**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-242**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item No.: 216-262**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item No.: 216-202**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-222**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray

1.2.1.1 Ferrule



**Item No.: 216-142**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

**Item No.: 216-102**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored

**Item No.: 216-122**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored

**Item No.: 216-243**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



**Item No.: 216-263**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

**Item No.: 216-203**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red

**Item No.: 216-223**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red

**Item No.: 216-103**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated



**Item No.: 216-143**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

**Item No.: 216-123**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored

1.2.2 Stickers with operating instructions

1.2.2.1 Stickers with operating instructions



**Item No.: 210-493**  
 Stickers for operating instructions

1.2.3 Strain relief

1.2.3.1 Strain relief plate



**Item No.: 713-128**  
 Strain relief plate; for female connectors; 39 mm wide; 1 part; Pin spacing 3.5 mm; black

1.2.4 Tool

1.2.4.1 Operating tool



**Item No.: 210-719**  
 Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

**Item No.: 210-647**  
 Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

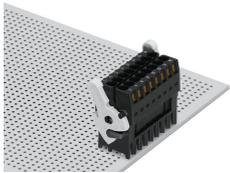
## Installation Notes

### Conductor termination



Inserting a conductor via (2.5 x 0.4) mm screwdriver.

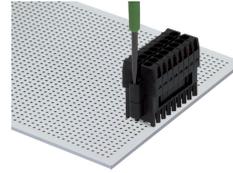
### Locking system



Lever as a lock – when closed, female connector is locked.



Lever as a disconnection aid – when opened, female connector is disconnected. Rotating the lever lifts the female connector out of the male header.



Screw interlock can only be disconnected using a tool.

### Coding

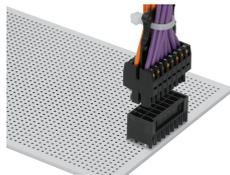


Coding a female connector by removing coding finger(s).

### Strain relief



Strain relief plate for field assembly



Centered strain relief plate anchors conductors for easy disconnection.