

# Data Sheet | Item Number: 713-1109/037-9037/033-000

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 18-pole; 100% protected against mismatching; Levers; Strain relief plate; direct marking; 1,50 mm²; black

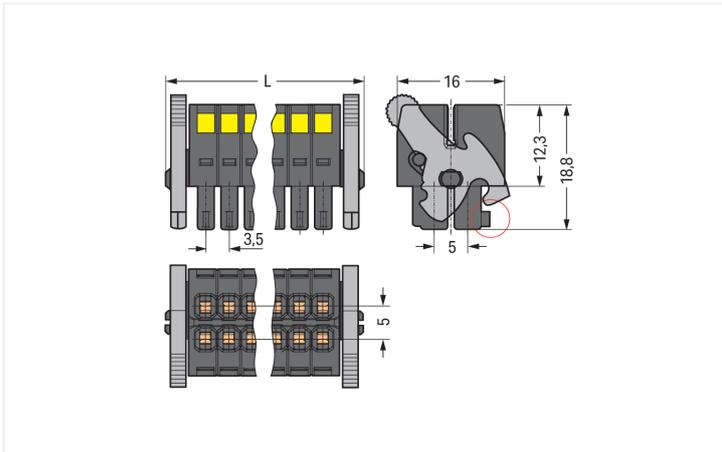
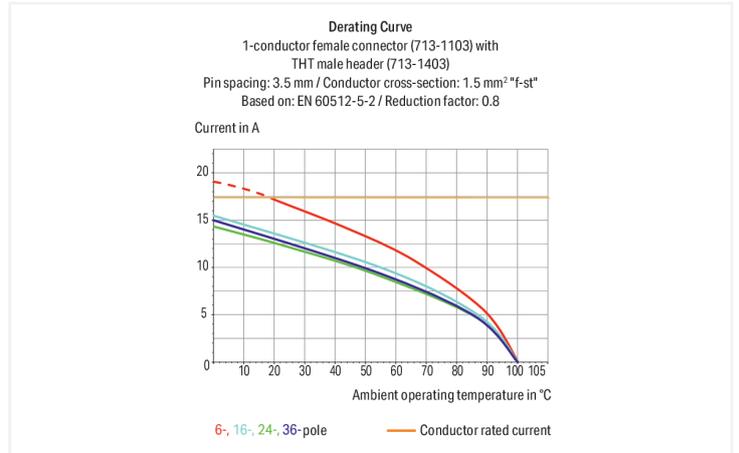


<https://www.wago.com/713-1109/037-9037/033-000>



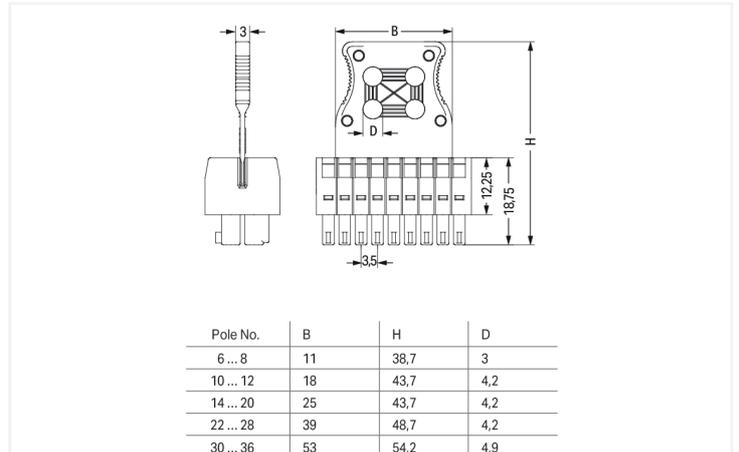
Color: ■ black

Similar to illustration



Dimensions in mm

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



Dimensions in mm

The arrangement of the attachments for cable ties allows single conductors or multi-core cables to be secured in different ways. The width of the cable ties must correspond to the hole dimensions of the strain relief plates shown above. Cable ties and binding tools are not offered by WAGO.

## Female connector, 713 Series, 0° conductor exit to connection direction

This female connector (item number 713-1109/037-9037/033-000) simplifies electrical installations. Conductors should only be connected to this female connector if their strip length is between 6 and 7 mm. Featuring one conductor terminal along with CAGE CLAMP®, this product is highly versatile. Our CAGE CLAMP® connection offers a reliable and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. The dimensions are (40 x 43.7 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.

Tin is used for coating the contact surfaces. The strain relief plate is a safety precaution for connected conductors that also makes cables easier to handle.

## 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		
	III	III	II		Use group	B	C
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	18	<b>Connection 1</b>	
Total number of potentials	18	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	18
		Conductor entry direction to mating direction	0°

## Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	40.2 mm / 1.583 inches
Height	16.5 mm / 0.65 inches
Depth	43.7 mm / 1.72 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
Strain relief	Strain relief plate

### 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	0.165 MJ
Weight	11 g

### Environmental requirements

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

### Commercial data

Product Group	3 (Multi Conn. System)
PU (SPU)	25 pcs
Packaging type	Box
Country of origin	PL
GTIN	4050821177647
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)	b1b0435d-e597-4497-848f-4eea90bf7dc4
SCIP notification number (Belgium)	4e7ebaec-0fe2-4550-9dff-477bd3aa2706
SCIP notification number (Bulgaria)	c965fd34-1eb8-4487-acee-d1caf175529b
SCIP notification number (Czech Republic)	eea2290d-db23-4fa1-8b6e-e9dc5d483843
SCIP notification number (Denmark)	d3cdae10-5524-4370-b2e0-851127bed1f8
SCIP notification number (Finland)	16e3596c-db5e-448e-99f7-734d71993700
SCIP notification number (France)	a34d8eab-0c7e-49ff-9bfd-10a9f2030a7f
SCIP notification number (Germany)	a76b13cf-126c-419c-8545-e2fd80725a01
SCIP notification number (Hungary)	02a15dc6-3d43-4208-a68e-c056c4fbca1d
SCIP notification number (Italy)	e87c4219-8f5a-4aba-bec1-5cef97cc4d02
SCIP notification number (Netherlands)	2c21d8ad-5537-4023-b79d-545265ae9a68
SCIP notification number (Poland)	5b196b33-be49-43a9-bafc-69bbb12b78c
SCIP notification number (Romania)	ec49794c-415a-4ebe-9690-7f488ec22e6b
SCIP notification number (Sweden)	d4ab1bbd-831d-4a5f-afd0-30586b084e69

**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	-	Z00004422.000

**Downloads**

**Environmental Product Compliance**

Compliance Search

[↓](#)

**Documentation**

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	<a href="#">↓</a>

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Male connector/plug



**Item No.: 713-1429/116-000/997-407**  
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; 18-pole; black



**Item No.: 713-1429/116-000**  
THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 18-pole; black



**Item No.: 713-1409/116-000/997-407**  
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; 18-pole; black



**Item No.: 713-1409/116-000**  
THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 18-pole; black



**Item No.: 713-1429/037-000**  
THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 18-pole; black



**Item No.: 713-1409/037-000**  
THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Levers; Pin spacing 3.5 mm; 18-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; insulated; 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



**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

### 1.2.1.1 Ferrule



**Item No.: 216-143**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; 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; un-insulated; 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.: 713-127**

Strain relief plate; for female connectors; 25 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

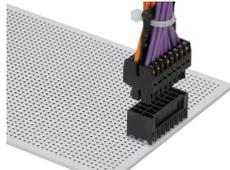


Coding a female connector by removing coding finger(s).

### Strain relief



Strain relief plate for field assembly



Centered strain relief plate anchors conductors for easy disconnection.