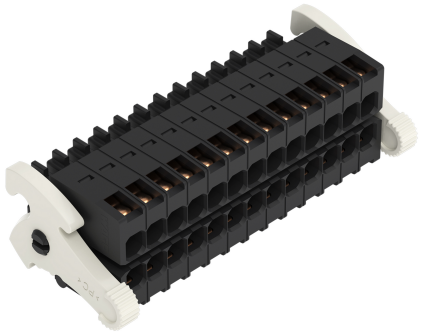
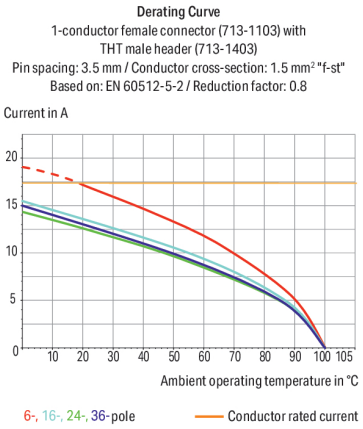
Data Sheet | Item Number: 713-1109/037-9037

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

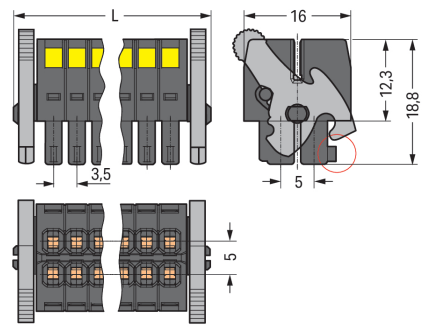
https://www.wago.com/713-1109/037-9037





Color: ■ black

Similar to illustration



Dimensions in mm
L = [(pole no./2) – 1] x pin spacing + 12.2 mmCoding finger (red circle)

Female connector, 713 Series, with 3.5 mm pin spacing

This female connector (item number 713-1109/037-9037) is designed for fault-free electrical installations. Strip lengths must be between 6 and 7 mm when connecting conductors to this female connector. Featuring one conductor terminal along with CAGE CLAMP®, this product delivers reliable performance. 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. The item's dimensions are (40.2 x 16.5 x 22.3) 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		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	80 V	160 V	250 V
Rated impulse withstand voltage	2.5 kV	2.5 kV	2.5 kV
Rated current	10 A	10 A	10 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	50 V	-
Rated current	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
Total number of potentials	18
Number of connection types	1
Number of levels	2

Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Actuation direction 1	Operation perpendicular to conductor entry
Solid conductor	0.08 … 1.5 mm² / 28 … 16 AWG
Fine-stranded conductor	0.08 … 1.5 mm² / 28 … 16 AWG
Fine-stranded conductor; with insulated ferrule	0.25 … 1 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 … 1 mm²
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	22.3 mm / 0.878 inches

Continued on next page

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)	Information on material specifications can be found here
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	0.104 MJ
Weight	10.2 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	4050821177241
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

Continued on next page

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption
SCIP notification number (Austria)	bbe60492-693c-43ba-8df1-e854b7c0f7e1
SCIP notification number (Belgium)	c272bfde-521c-4c71-a9d6-c0773a1e4164
SCIP notification number (Bulgaria)	a5f1a420-3a85-4d9e-bea6-a3bf51b27af2
SCIP notification number (Czech Republic)	a213bc1e-fd78-4c6f-b262-5381b705319c
SCIP notification number (Denmark)	acb5d1ff-4e16-4741-8801-44a97f1f59ea
SCIP notification number (Finland)	f511cb0e-e117-48b1-944f-54ebc3442b68
SCIP notification number (France)	a91cb6de-d4ea-4d58-9d3c-3d459dacd619
SCIP notification number (Germany)	45e9f713-194c-4fb1-a057-f89f37047b13
SCIP notification number (Hungary)	3e520c80-c8a9-47f3-ac04-cb143b617aa6
SCIP notification number (Italy)	5be6adc8-8996-46d4-b7f0-83eecf41d7a3
SCIP notification number (Netherlands)	6949bb35-b45d-4444-8053-8a56d2809b55
SCIP notification number (Poland)	d2f04e17-c17b-4dfb-b795-deb0439f1ec4
SCIP notification number (Romania)	b8f85368-793e-4fec-951a-55e0900e2b1c
SCIP notification number (Sweden)	ef62d5a2-fb4c-4dcf-b309-8c4083d90abb

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-L45172-6187124-1

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Z00004422.000

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance
713-1109/037-9037

Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB

Continued on next page

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 mismating; 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 mismating; 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 mismating; 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 mismating; 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 mismating; 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 mismating; Levers; Pin spacing 3.5 mm; 18-pole; black

1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 Ferrule

Item No.: 216-321
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

Item No.: 216-131
Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored

Item No.: 216-322
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

Item No.: 216-132
Ferrule; Sleeve for 0.34 mm² / 22 AWG; uninsulated; electro-tin plated

Item No.: 216-221
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white



Item No.: 216-121
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored

Item No.: 216-222
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-122
Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; silver-colored

Item No.: 216-223
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-123
Ferrule; Sleeve for 1 mm² / 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

 Continued on next page

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



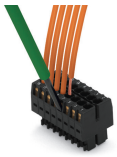
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



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

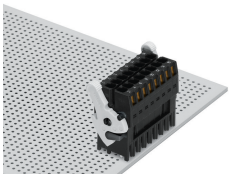
Installation Notes

Conductor termination

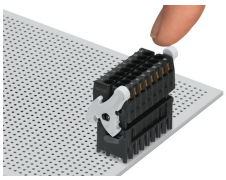


Inserting a conductor via (2.5 x 0.4) mm screwdriver.

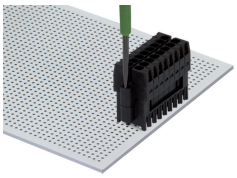
Locking system



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

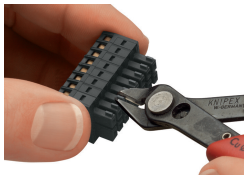


Lever as a disconnection aid – when opened, female connector is disconnected. Rotating the lever lifts the female connector out of the male header.



Screw interlock can only be disconnected using a tool.

Coding



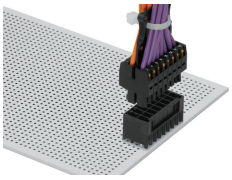
Coding a female connector by removing coding finger(s).

Continued on next page

Strain relief



Strain relief plate for field assembly



Centered strain relief plate anchors conductors for easy disconnection.