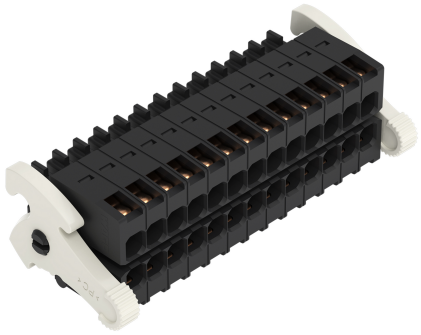
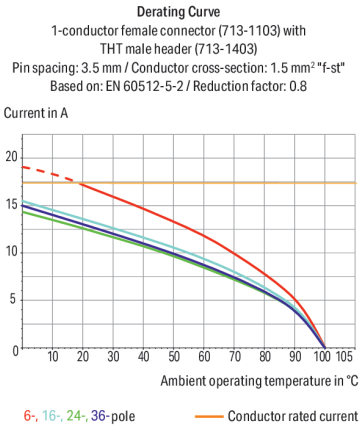
Data Sheet | Item Number: 713-1109/037-047

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

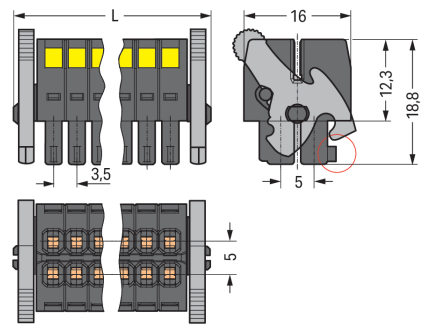
https://www.wago.com/713-1109/037-047





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, operating tool

Our female connector (item number 713-1109/037-047) ensures effortless electrical installations. Ensure that the strip lengths are between 6 and 7 mm when connecting conductors to this female connector. This product features one conductor terminal and utilizes CAGE CLAMP®. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. Dimensions: (40.2 x 16.5 x 22.3) mm (width x height x depth). Depending on the conductor type, 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.

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	4050821177098
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)	49e672af-7b5a-415c-801a-427a05e23c70
SCIP notification number (Belgium)	dfb8836a-44d1-48f2-86ca-f2105c7e420f
SCIP notification number (Bulgaria)	095177bb-1dd5-416a-9f36-21b50449dd75
SCIP notification number (Czech Republic)	cc23e7ed-47c9-4ce3-95d6-c7cbcad9c578
SCIP notification number (Denmark)	95e9a77e-d9bc-46df-a538-931a37f569cc
SCIP notification number (Finland)	8c85e5f8-b74b-4cec-a4ca-ba69e9907ecd
SCIP notification number (France)	48591a8f-d750-4202-916b-e59b24ca4907
SCIP notification number (Germany)	10ffdd63-4061-40c9-8cdb-cb2291af15b8
SCIP notification number (Hungary)	237c4d71-9151-4be8-896c-973eea817a4d
SCIP notification number (Italy)	132063ea-0f80-496f-837d-65ffdad14d64
SCIP notification number (Netherlands)	ab550502-36f3-4445-a690-1a70b59a0747
SCIP notification number (Poland)	f76dae7b-ec4f-4455-a59c-946e94a4160a
SCIP notification number (Romania)	752e97d1-0d5e-46c5-b7c9-bfad67b92447
SCIP notification number (Sweden)	8cfaabdc-117b-4c92-81c7-bf5c73471cd8

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
713-1109/037-047

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



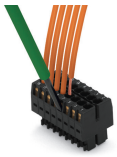
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



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

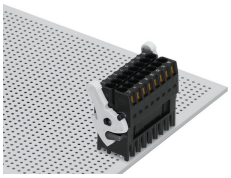
Installation Notes

Conductor termination

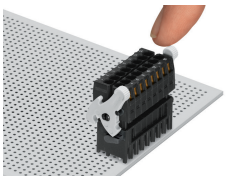


Inserting a conductor via (2.5 x 0.4) mm screwdriver.

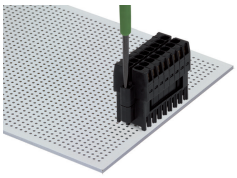
Locking system



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

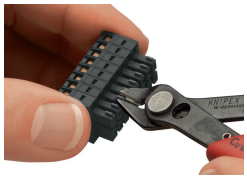


Lever as a disconnection aid – when opened, female connector is disconnected. Rotating the lever lifts the female connector out of the male header.



Screw interlock can only be disconnected using a tool.

Coding



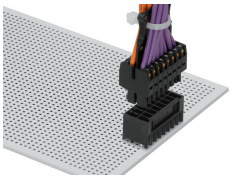
Coding a female connector by removing coding finger(s).

Continued on next page

Strain relief



Strain relief plate for field assembly



Centered strain relief plate anchors conductors for easy disconnection.