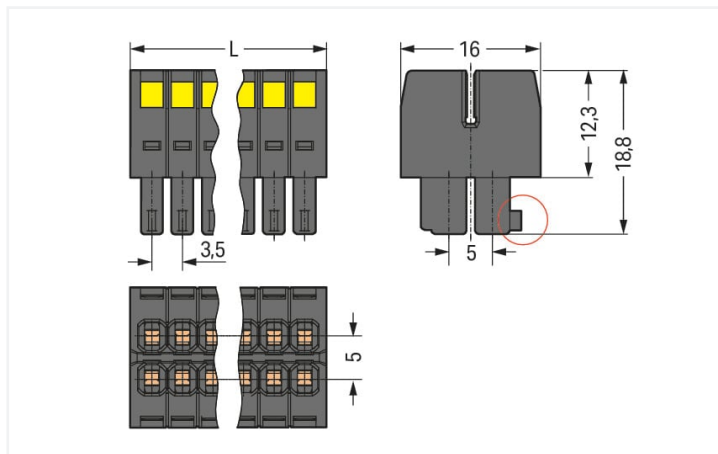


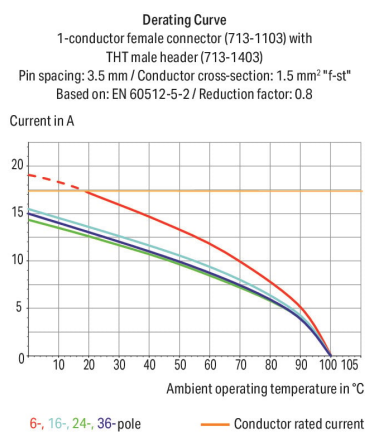
1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 12-pole; 100% protected against mismatching; 1,50 mm<sup>2</sup>; black



Similar to illustration



$L = [(pole\ no./2) - 1] \times pin\ spacing + 5.2\ mm$   
Coding finger (red circle)



- Universal connection for all conductor types
- Unique, compact, double-row connector system for conductor cross-sections up to 1.5 mm<sup>2</sup>
- High-density, wire-to-board connections in very confined spaces
- Centered strain relief plate anchors conductors, while acting as convenient connection and disconnection handle. It also provides easy access to operating slots – even when wired.
- Coding fingers provide 100% protection against mismatching

## 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.

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 surge 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

Connection points	12	Connection 1	
Total number of potentials	12	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 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	12
		Conductor entry direction to mating direction	0°

Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	22.5 mm / 0.886 inches
Height	18.8 mm / 0.74 inches
Depth	16 mm / 0.63 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



Material data	
Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	black
Material group	II
Insulation material	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	0.095 MJ
Weight	6.3 g

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

Commercial data	
Product Group	3 (Multi Conn. System)
eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
ETIM 8.0	EC001284
ETIM 7.0	EC001284
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4045454696092
Customs tariff number	85366990990

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

## 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



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 713-1106

↓

Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB

↓

CAD/CAE-Data

CAD data

2D/3D Models 713-1106

↓

CAE data

ZUKEN Portal 713-1106

↓

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



**Item No.: 713-1426/105-000/997-406**  
THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; in tape-and-reel packaging; Pin spacing 3.5 mm; 12-pole; black



**Item No.: 713-1426/105-000**  
THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 12-pole; black



**Item No.: 713-1406/105-000/997-406**  
THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; in tape-and-reel packaging; Pin spacing 3.5 mm; 12-pole; black



**Item No.: 713-1406/105-000**  
THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.5 mm; 12-pole; black



**Item No.: 713-1426**  
THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 12-pole; black



**Item No.: 713-1406**  
THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.5 mm; 12-pole; black




**Item No.: 713-1466**  
THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; with orientation nose; Pin spacing 3.5 mm; 12-pole; black


1.2 Optional Accessories

1.2.1 Ferrule


1.2.1.1 Ferrule




**Item No.: 216-301**  
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow




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




**Item No.: 216-151**  
Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated




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




**Item No.: 216-302**  
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



**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 / AWG 24; uninsulated; electro-tin plated



**Item No.: 216-152**  
Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated



1.2.1.1 Ferrule

 <b>Item No.: 216-241</b> Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	 <b>Item No.: 216-201</b> Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white	 <b>Item No.: 216-221</b> Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white	 <b>Item No.: 216-141</b> Ferrule; Sleeve for 0.5 mm² / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92
 <b>Item No.: 216-101</b> Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored	 <b>Item No.: 216-121</b> Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored	 <b>Item No.: 216-242</b> Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	 <b>Item No.: 216-262</b> Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray
 <b>Item No.: 216-202</b> Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	 <b>Item No.: 216-222</b> Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	 <b>Item No.: 216-142</b> Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 <b>Item No.: 216-102</b> Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; electro-tin plated; silver-colored
 <b>Item No.: 216-122</b> Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; electro-tin plated; silver-colored	 <b>Item No.: 216-243</b> Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	 <b>Item No.: 216-263</b> Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	 <b>Item No.: 216-203</b> Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red
 <b>Item No.: 216-223</b> Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red	 <b>Item No.: 216-103</b> Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated	 <b>Item No.: 216-143</b> Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 <b>Item No.: 216-123</b> Ferrule; Sleeve for 1 mm² / 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.: 713-130**  
Strain relief plate; for female connectors; 1 part; Pin spacing 3.5 mm; black

1.2.4 Tool

1.2.4.1 Operating tool

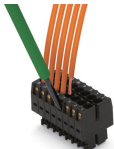


**Item No.: 210-719**  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

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

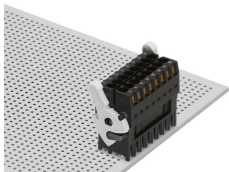
Installation Notes

Conductor termination

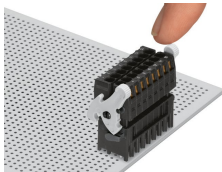


Inserting a conductor via (2.5 x 0.4) mm screwdriver.

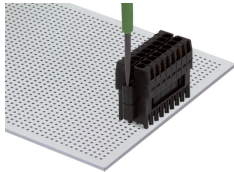
Locking system



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

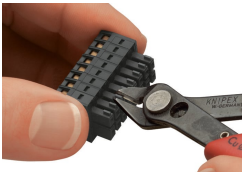


Lever as a disconnection aid – when opened, female connector is disconnected. Rotating the lever lifts the female connector out of the male header.



Screw interlock can only be disconnected using a tool.

Coding

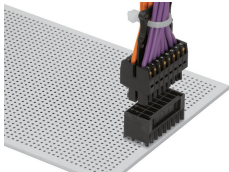


Coding a female connector by removing coding finger(s).

Strain relief



Strain relief plate for field assembly



Centered strain relief plate anchors conductors for easy disconnection.