

Data Sheet | Item Number: 713-1102/031-047

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 4-pole; 100% protected against mismating; Strain relief plate; direct marking; 1,50 mm²; black

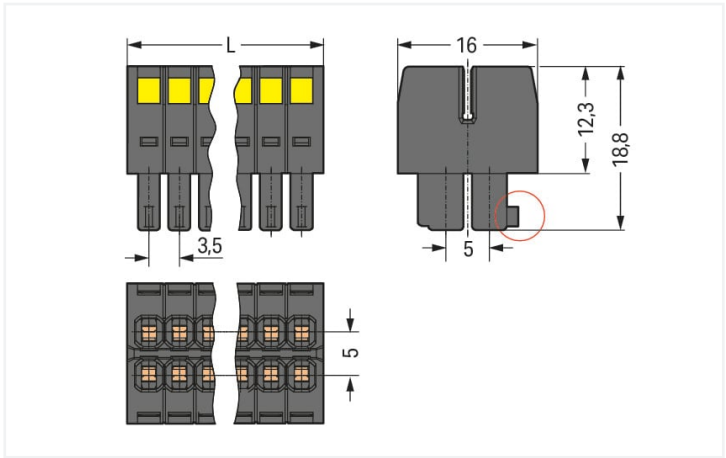


<https://www.wago.com/713-1102/031-047>

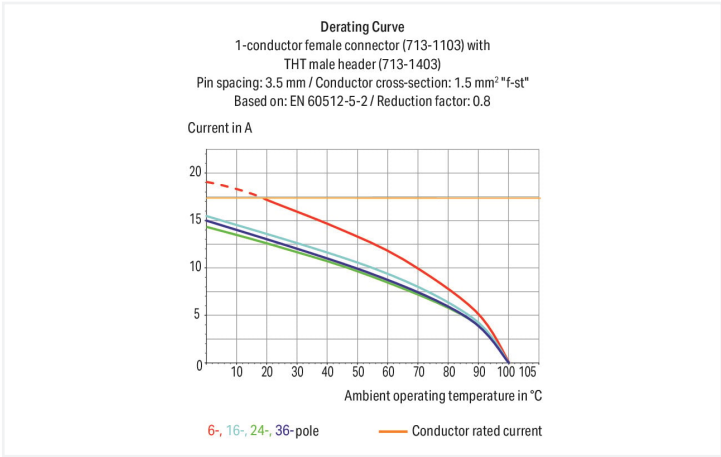


Color: ■ black

Similar to illustration



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



- Universal connection for all conductor types
- Unique, compact, double-row connector system for conductor cross-sections up to 1.5 mm²
- 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 mismating

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



Electrical data

Ratings per IEC/EN		Ratings per UL	
Ratings per	IEC/EN 60664-1	Approvals per	UL 1059
Nominal voltage (III/3)	80 V	Rated voltage UL (Use Group B)	300 V
Rated impulse voltage (III / 3)	2.5 kV	Rated current UL (Use Group B)	10 A
Rated voltage (III/2)	160 V	Rated voltage UL (Use Group C)	50 V
Rated surge voltage (III/2)	2.5 kV	Rated current UL (Use Group C)	10 A
Nominal voltage (II/2)	250 V		
Rated surge voltage (II/2)	2.5 kV		
Rated current	10 A		
Legend (ratings)	(III / 2) $\triangleq$ Overvoltage category III / Pollution degree 2		

Ratings per CSA	
Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	10 A

Connection data

		Connection 1	
Clamping units	4	Connection technology	CAGE CLAMP®
Total number of potentials	4	Actuation type	Operating tool
Number of connection types	1	Actuation direction 1	Operation perpendicular to conductor entry
Number of levels	2	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	4
		Conductor entry direction to mating direction	0°

Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	8.7 mm / 0.343 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
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	0.049 MJ
Weight	2.6 g

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

Commercial data	
ETIM 8.0	EC001284
ETIM 7.0	EC001284
PU (SPU)	100 pcs
Country of origin	PL
GTIN	4066966456820
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 No. 158	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  
713-1102/031-047

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Documentation

Additional Information


Technical Section03.04.2019pdf2027.26 KB

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1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



[Item No.: 713-1422](#)  
THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 4-pole; black




[Item No.: 713-1402](#)  
THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.5 mm; 4-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




[Item No.: 216-241](#)  
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




[Item No.: 216-201](#)  
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white




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




[Item No.: 216-141](#)  
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92




[Item No.: 216-101](#)  
Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored



[Item No.: 216-121](#)  
Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored















[Item No.: 216-242](#)  
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



[Item No.: 216-262](#)  
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



1.2.1.1 Ferrule

 <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; uninsulated; 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; uninsulated; electro-tin plated; silver-colored
 <b>Item No.: 216-122</b> Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; 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; uninsulated; electro-tin plated	 <b>Item No.: 216-143</b> Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; 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; 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.: 713-126**  
Strain relief plate; for female connectors; 11 mm wide; 1 part; Pin spacing 3.5 mm; black

1.2.4 Tool

1.2.4.1 Operating tool



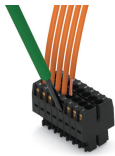
**Item No.: 210-719**  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



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

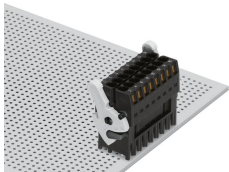
Installation Notes

Conductor termination

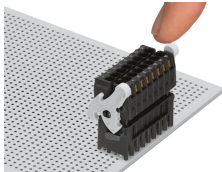


Inserting a conductor via (2.5 x 0.4) mm screwdriver.

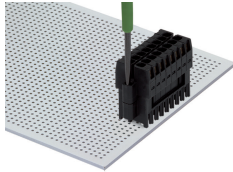
Locking system



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

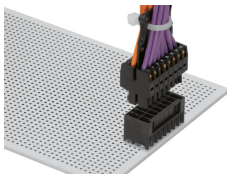


Coding a female connector by removing coding finger(s).

Strain relief



Strain relief plate for field assembly



Centered strain relief plate anchors conductors for easy disconnection.