

Data Sheet | Item Number: 713-1108/033-047

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Strain relief plate; direct marking; 1,50 mm²; black

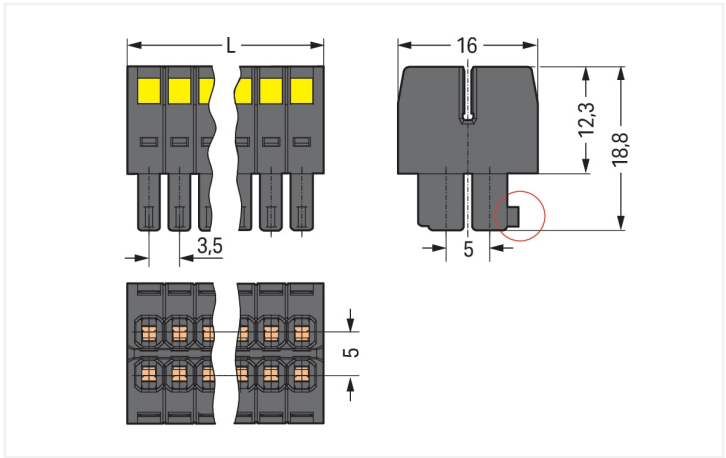


<https://www.wago.com/713-1108/033-047>

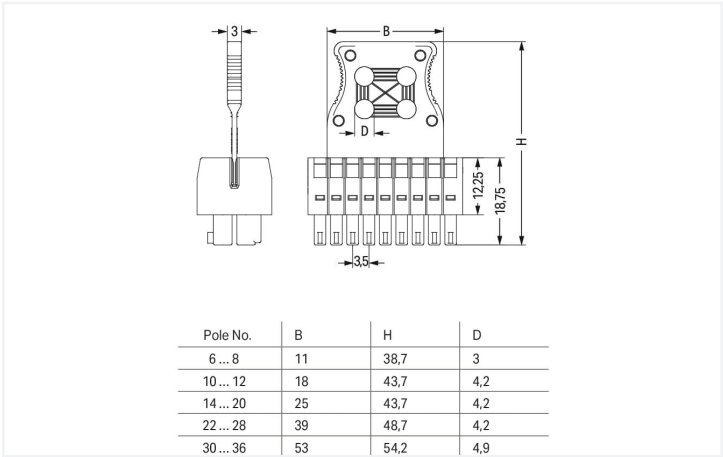


Color: ■ black

Similar to illustration



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

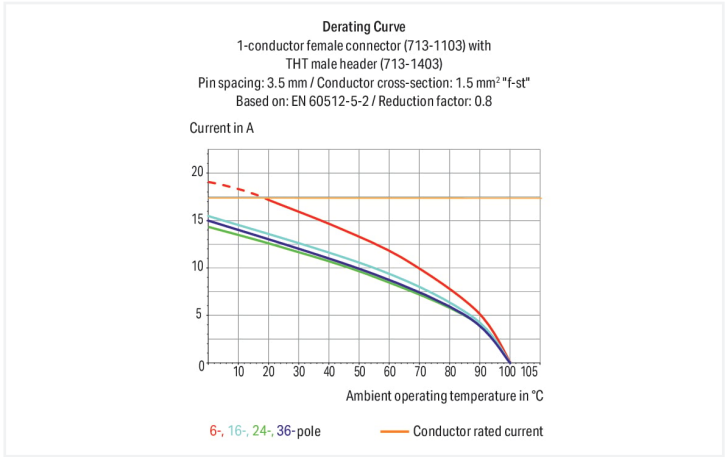


Dimensions in mm
The arrangement of the attachments for cable ties allows single conductors or multi-core cables to be secured in different ways. The width of the cable ties must correspond to the hole dimensions of the strain relief plates shown above.

Cable ties and binding tools are not offered by WAGO.

Federleiste/Buchse Serie 713 mit CAGE CLAMP®

Die Federleiste/Buchse mit der Artikelnummer 713-1108/033-047 ermöglicht eine ordentliche Elektroinstallation. Unsere Leiterplatten-Steckverbinder geben Ihnen die größtmögliche Flexibilität bei unterschiedlichen Montagearten. Diese Federleiste/Buchse benötigt für den Leiteranschluss eine Abisolierlänge zwischen 6 und 7 mm . Bei diesem Produkt kommt die CAGE CLAMP®-Technologie zum Tragen. Der erprobte und wartungsfreie CAGE CLAMP® Universalanschluss ermöglicht den Anschluss aller Leiterarten mit einer Käfigzugfeder. Eine Vorbehandlung der Leiter, z.B. durch das Aufcrimpen von Aderendhülsen, ist nicht erforderlich. Die Abmessungen betragen in Breite x Höhe x Tiefe (29,5 x 43,7 x 16) mm. Diese Federleiste/ Buchse ist in Abhängigkeit von der Leiterart für Leiterquerschnitte von 0,08 mm² bis 1,5 mm² geeignet. Die Oberfläche der Kontakte besteht aus Zinn. Diese Federleiste/Buchse wird durch ein Betätigungswerkzeug betätigt. Das MCS – "Multi Connection System" von WAGO umfasst insgesamt 7 Familien in den Rastermaßen 2,5 mm bis 10,16 mm und bietet mit dem Leiterquerschnittsbereich von 0,08 bis 25 mm² ein großes Portfolio an Einsatzmöglichkeiten. Durch die Zugentlastung werden angeschlossene Leiter gesichert und die Handhabung erleichtert.





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 surge 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	16	Connection 1 <table><tr><td>Connection technology</td><td>CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Operating tool</td></tr><tr><td>Actuation direction 1</td><td>Operation perpendicular to conductor entry</td></tr><tr><td>Solid conductor</td><td>0.08 ... 1.5 mm² / 28 ... 16 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.08 ... 1.5 mm² / 28 ... 16 AWG</td></tr><tr><td>Fine-stranded conductor; with insulated ferrule</td><td>0.25 ... 1 mm²</td></tr><tr><td>Fine-stranded conductor; with uninsulated ferrule</td><td>0.25 ... 1 mm²</td></tr><tr><td>Strip length</td><td>6 ... 7 mm / 0.24 ... 0.28 inches</td></tr><tr><td>Pole number</td><td>16</td></tr><tr><td>Conductor entry direction to mating direction</td><td>0 °</td></tr></table>	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	16	Conductor entry direction to mating direction	0 °
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Solid conductor	0.08 ... 1.5 mm² / 28 ... 16 AWG																					
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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	16																					
Conductor entry direction to mating direction	0 °																					
Total number of potentials	16																					
Number of connection types	1																					
Number of levels	2																					

Physical data	
Pin spacing	3.5 mm / 0.138 inches
Width	29.5 mm / 1.161 inches
Height	43.7 mm / 1.72 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)		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		0.148 MJ
Weight		9.1 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 9.0		EC001284
ETIM 8.0		EC001284
PU (SPU)		25 pcs
Packaging type		Box
Country of origin		PL
GTIN		4050821176787
Customs tariff number		85366990990
Environmental Product Compliance		
REACH Candidate List Substance		Perfluorobutane sulfonic acid (PFBS) and its salts
RoHS Compliance Status		Compliant, No Exemption
SCIP notification number (Austria)		75087710-7180-4b0c-a64e-2a6d9c50b6cd
SCIP notification number (Belgium)		ee680d24-b6bf-4050-a9ed-29668be7ee4b
SCIP notification number (Bulgaria)		55797c3d-d276-426a-a24f-10a7145e880e
SCIP notification number (Czech Republic)		28104752-955a-4010-bd4f-87af9b69fa32
SCIP notification number (Denmark)		e1cf8154-4653-48d2-ae29-6d3a091fc55a
SCIP notification number (Finland)		17574937-a63a-438f-964e-aca0752c4ca7
SCIP notification number (France)		444d692f-798e-41e0-a899-c651f2e22b22
SCIP notification number (Germany)		d3690ac3-4e0c-4351-8c4d-8684db1c3fc2
SCIP notification number (Hungary)		7705e887-c226-4642-bc82-d491a1b5a5b7
SCIP notification number (Italy)		010416cf-a79c-4201-9365-797b1d635574
SCIP notification number (Netherlands)		1d4d8725-8601-4c65-9d60-3c3c9d8e9652



Environmental Product Compliance

SCIP notification number (Poland)	5c94c832-9f45-4336-8302-20a7b3a3626e
SCIP notification number (Romania)	f279dcc9-020d-4d58-8cbe-073fd681f95b
SCIP notification number (Sweden)	c8cb4896-9972-4891-b4b7-dc740bfeadc1

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-102427	Railway WAGO GmbH & Co. KG	-	Z00004422.000
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 713-1108/033-047	

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: 713-1428 THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 16-pole; black	Item No.: 713-1408 THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.5 mm; 16-pole; black
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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.: 216-131 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.: 216-201 Ferrule; Sleeve for 0.5 mm² / 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 mm² / 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 mm² / 20 AWG; insulated; electro-tin plated; white	 Item No.: 216-141 Ferrule; Sleeve for 0.5 mm² / 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 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored	 Item No.: 216-121 Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; 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	 Item No.: 216-202 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	 Item No.: 216-222 Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray
 Item No.: 216-142 Ferrule; Sleeve for 0.75 mm² / 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 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored	 Item No.: 216-122 Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored	 Item No.: 216-243 Ferrule; Sleeve for 1 mm² / 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 mm² / 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 mm² / AWG 18; insulated; electro-tin plated; red	 Item No.: 216-223 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red	 Item No.: 216-103 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated
 Item No.: 216-143 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 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

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



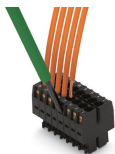
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a
partially insulated shaft



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

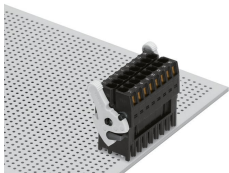
Installation Notes

Conductor termination

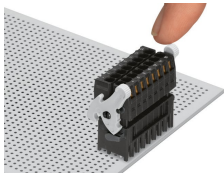


Inserting a conductor via (2.5 x 0.4) mm
screwdriver.

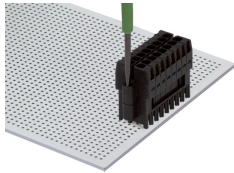
Locking system



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

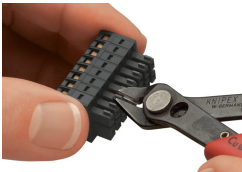


Lever as a disconnection aid – when ope-
ned, female connector is disconnected.
Rotating the lever lifts the female
connector out of the male header.



Screw interlock can only be disconnected
using a tool.

Coding

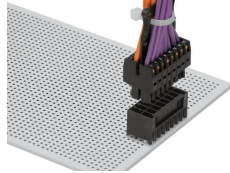


Coding a female connector by removing
coding finger(s).

Strain relief



Strain relief plate for field assembly



Centered strain relief plate anchors conductors for easy disconnection.