

Data Sheet | Item Number: 713-1115/107-9037/035-000

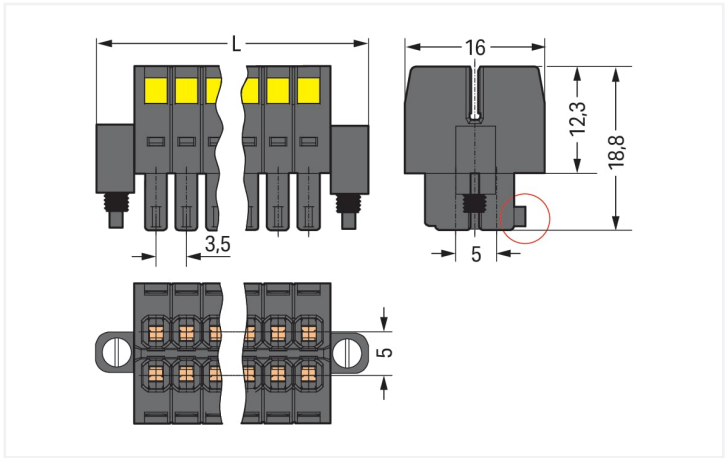
1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 30-pole; 100% protected against mismatching; Screw flange; Strain relief plate; direct marking; 1,50 mm²; black

<https://www.wago.com/713-1115/107-9037/035-000>

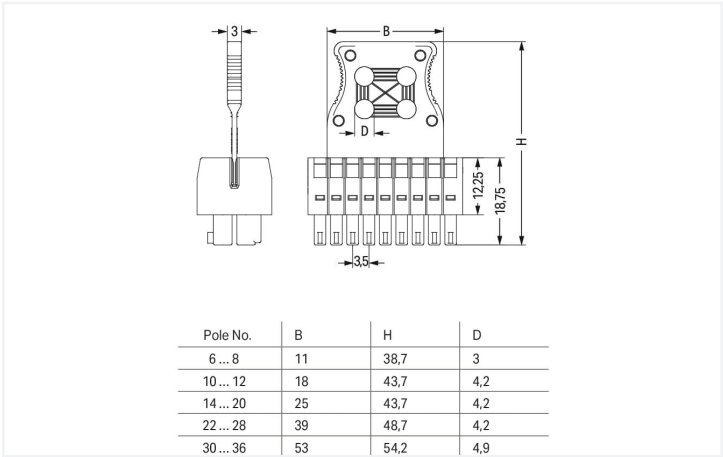


Color: ■ black

Similar to illustration



Dimensions in mm
 $L = [(pole\ no./2) - 1] \times pin\ spacing + 13.6\ mm$
Coding finger (red circle)

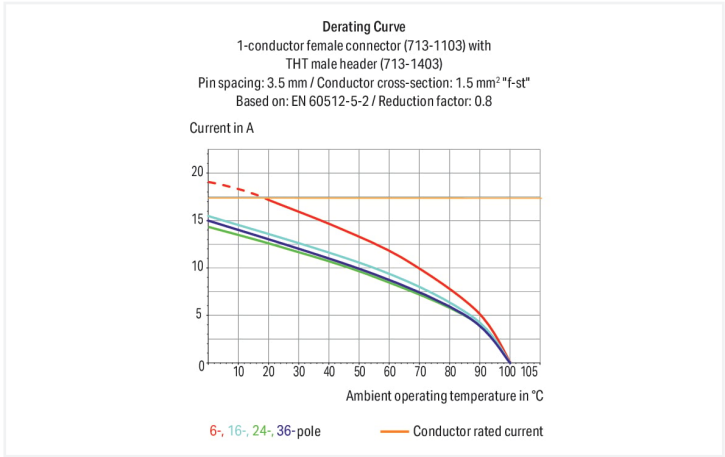


Dimensions in mm
The arrangement of the attachments for cable ties allows single conductors or multi-core cables to be secured in different ways. The width of the cable ties must correspond to the hole dimensions of the strain relief plates shown above.

Cable ties and binding tools are not offered by WAGO.

Federleiste/Buchse Serie 713 mit 0° Leiterabgang zur Steckrichtung

Die Federleiste/Buchse hat die Artikelnummer 713-1115/107-9037/035-000 und verspricht eine saubere ordentliche Elektroinstallation. Unsere Leiterplatten-Steckverbinder gewähren Ihnen die größtmögliche Flexibilität bei verschiedenen Montagearten. Bei dieser Federleiste/Buchse ist für den Leiteranschluss eine Abisolierlänge im Bereich von 6 bis 7 mm erforderlich. Dieses Produkt ist mit der CAGE CLAMP®-Technologie ausgestattet. Der zuverlässige und wartungsfreie CAGE CLAMP® Universalanschluss bietet die Möglichkeit, alle Arten von Leitern mit einer Käfigzugfeder anzuschließen, ohne, dass eine Vorbehandlung der Leiter erforderlich ist. Das Aufcrimpen von Aderendhülsen kann somit entfallen. Die Maße sind in Breite x Höhe x Tiefe (62,6 x 54,2 x 16) mm. In Abhängigkeit von der Leiterart ist diese Federleiste/Buchse für Leiterquerschnitte von 0,08 mm² bis 1,5 mm² ausgelegt. Für die Oberfläche der Kontakte wurde Zinn eingesetzt. Diese Federleiste/Buchse wird durch ein Betätigungswerkzeug betätigt. Das "Multi Connection System" – MCS von WAGO ist das vielfältige Steckverbindersystem mit überzeugenden Lösungen für Ihre Anwendungen. Durch die Zugentlastung werden angeschlossene Leiter gesichert und das Handling vereinfacht.



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	CSA		
Use group	B	C	D
Rated voltage	300 V	-	-
Rated current	10 A	-	-

Clamping units	30
Total number of potentials	30
Number of connection types	1
Number of levels	2

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	30
Conductor entry direction to mating direction	0 °

Pin spacing	3.5 mm / 0.138 inches
Width	62.6 mm / 2.465 inches
Height	54.2 mm / 2.134 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																												
Locking of plug-in connection		Screw flange																												
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		0.314 MJ																												
Weight		18.8 g																												
Environmental requirements																														
Limit temperature range	-60 ... +100 °C	<table><tr><th colspan="2">Environmental Testing (Environmental Conditions)</th></tr><tr><td>Test specification Railway applications – Rolling stock – Electronic equipment</td><td>DIN EN 50155 (VDE 0115-200):2022-06</td></tr><tr><td>Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests</td><td>DIN EN 61373 (VDE 0115-0106):2011-04</td></tr><tr><td>Spectrum/Installation location</td><td>Service life test, Category 1, Class A/B</td></tr><tr><td>Function test with noise-like vibration</td><td>Test passed according to Section 8 of the standard</td></tr><tr><td>Frequency</td><td>f₁ = 5 Hz to f₂ = 150 Hz f₁ = 5 Hz to f₂ = 150 Hz</td></tr><tr><td>Acceleration</td><td>0.101g (highest test level used for all axes) 0.572g (highest test level used for all axes) 5g (highest test level used for all axes)</td></tr><tr><td>Test duration per axis</td><td>10 min. 5 h</td></tr><tr><td>Test directions</td><td>X, Y and Z axes X, Y and Z axes X, Y and Z axes</td></tr><tr><td>Monitoring for contact faults/interruptions</td><td>Passed</td></tr><tr><td>Voltage drop measurement before and after each axis</td><td>Passed</td></tr><tr><td>Simulated service life test through increased levels of noise-like vibration</td><td>Test passed according to Section 9 of the standard</td></tr><tr><td>Extended test scope: Monitoring for contact faults/interruptions</td><td>Passed Passed</td></tr><tr><td>Extended test scope: Voltage drop measurement before and after each axis</td><td>Passed Passed</td></tr></table>	Environmental Testing (Environmental Conditions)		Test specification Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06	Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests	DIN EN 61373 (VDE 0115-0106):2011-04	Spectrum/Installation location	Service life test, Category 1, Class A/B	Function test with noise-like vibration	Test passed according to Section 8 of the standard	Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz f ₁ = 5 Hz to f ₂ = 150 Hz	Acceleration	0.101g (highest test level used for all axes) 0.572g (highest test level used for all axes) 5g (highest test level used for all axes)	Test duration per axis	10 min. 5 h	Test directions	X, Y and Z axes X, Y and Z axes X, Y and Z axes	Monitoring for contact faults/interruptions	Passed	Voltage drop measurement before and after each axis	Passed	Simulated service life test through increased levels of noise-like vibration	Test passed according to Section 9 of the standard	Extended test scope: Monitoring for contact faults/interruptions	Passed Passed	Extended test scope: Voltage drop measurement before and after each axis	Passed Passed
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Processing temperature	-35 ... +60 °C																													



Environmental Testing (Environmental Conditions)

Shock test	Test passed according to Section 10 of the standard
Shock form	Half sine
Shock duration	30 ms
Number of shocks per axis	3 pos. und 3 neg.
Vibration and shock stress for rolling stock equipment	Passed

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)	20 pcs
Packaging type	Box
Country of origin	PL
GTIN	4050821178231
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)	6580545b-3baa-4e18-acf7-49b10f3d6139
SCIP notification number (Belgium)	bfea052a-a606-464c-aa59-191341fc5455
SCIP notification number (Bulgaria)	599396a9-d4df-49c7-aa8e-d10495c954bc
SCIP notification number (Czech Republic)	c5ceeda8-b656-4df0-93bc-d4951a4eda3d
SCIP notification number (Denmark)	00c2dc85-f6a4-41cc-a248-99d37874b2e1
SCIP notification number (Finland)	bc9a8609-a7ee-4815-84bf-006fdb1d1176
SCIP notification number (France)	14f5ec66-a9b3-41ec-9294-e935799af7f6
SCIP notification number (Germany)	592b6156-fd97-48ab-90d3-ea5b802c81b3
SCIP notification number (Hungary)	203f39b3-07f3-423b-8aa0-9c3f197b0de2
SCIP notification number (Italy)	80b14cad-2a9e-49a8-a7df-a2f94ff82b61
SCIP notification number (Netherlands)	9aee840f-de0d-4070-914f-db1a4983a861
SCIP notification number (Poland)	d45166de-59d0-4720-8c36-3aab4dca0314
SCIP notification number (Romania)	d5bcea1b-6901-4f87-b460-173501581b04
SCIP notification number (Sweden)	45b7ae29-f686-420a-9d6d-382c11009663

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

Declarations of conformity and manufacturer's declarations



Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Z00004423.000



Downloads

Environmental Product Compliance

Compliance Search

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Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB	↓
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1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



Item No.: 713-1435/107-000
THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Threaded flange; Pin spacing 3.5 mm; 30-pole; black

Item No.: 713-1415/107-000
THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Threaded flange; Pin spacing 3.5 mm; 30-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.: 216-131
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



1.2.1.1 Ferrule

 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.: 713-129
Strain relief plate; for female connectors; 53 mm wide; 1 part; Pin spacing 3.5 mm; black

1.2.4 Tool

1.2.4.1 Operating tool



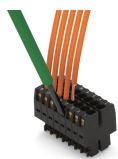
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



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

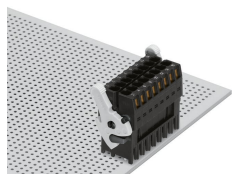
Installation Notes

Conductor termination

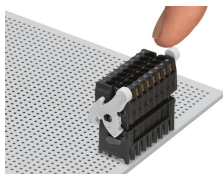


Inserting a conductor via (2.5 x 0.4) mm screwdriver.

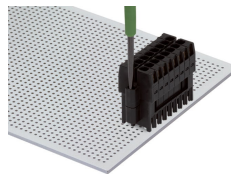
Locking system



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

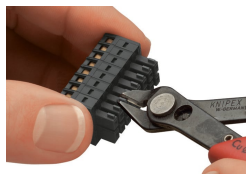


Lever as a disconnection aid – when opened, female connector is disconnected. Rotating the lever lifts the female connector out of the male header.



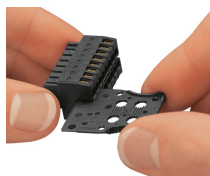
Screw interlock can only be disconnected using a tool.

Coding

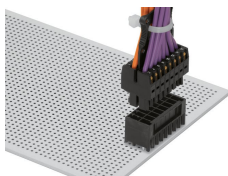


Coding a female connector by removing coding finger(s).

Strain relief



Strain relief plate for field assembly



Centered strain relief plate anchors conductors for easy disconnection.