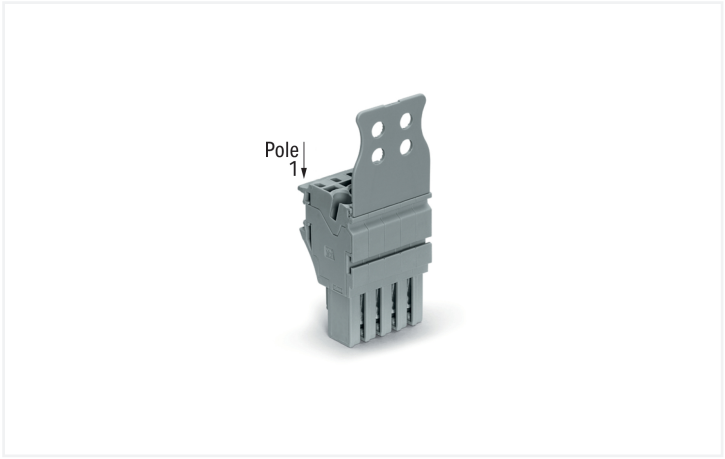
Data Sheet | Item Number: 2022-115/137-000

1-conductor female connector; Push-in CAGE CLAMP®; 4 mm²; Pin spacing 5.2 mm; 15-pole; Strain relief plate; 4,00 mm²; gray

https://www.wago.com/2022-115/137-000



Color: gray

Similar to illustration

Female connector, 2022 Series, Push-in CAGE CLAMP®

Our female connector (item number 2022-115/137-000) ensures effortless electrical installations. Conductors can only be connected to this female connector if their strip length is between 10 and 12 mm . Pluggable rail-mount terminal blocks are mainly used in switchgear units and control systems (e.g., in railroad technology). They are essentially a combination of rail-mount terminal blocks and pluggable connectors. You can also pre-assemble installations thanks to the variable wiring system. This saves both time and money during manufacture, installation, operation, and maintenance. Featuring conductor terminals along with Push-in CAGE CLAMP®, this connector outperforms the competition. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, featuring a winning design: both solid and fine-stranded conductors with ferrules can be directly inserted without the need for tools or any preparation, such as crimping the ferrule. The item's dimensions are (78 x 79 x 22.4) mm (width x height x depth). This female connector is suitable for conductor cross sections ranging from 0.25 mm² to 4 mm².

An operating tool is used to operate this female connector/socket. The strain relief plate secures the connected conductors, simplifying wire handling..

Notes

Safety Information	According to EN 61984, pluggable connectors without current interrupting capacity must not be mated or unmated when live or under load.

Electrical data

Ratings per	IEC/EN 61984		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	690 V	-	-
Rated impulse withstand voltage	6 kV	-	-
Rated current	24 A	-	-
Current at conductor cross-section (max.) mm²	32 A	-	-

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	600 V	600 V	-
Rated current	20 A	20 A	-

Continued on next page

Approvals per	CSA 22.2 No 158		
Use group	B	C	D
Rated voltage	-	600 V	-
Rated current	-	20 A	-

General information	
Wiring direction	Front-entry wiring

Connection Data

Clamping units	15
Total number of potentials	15

Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper
Nominal cross-section	2.5 mm²
Solid conductor	0.25 … 4 mm² / 22 … 12 AWG
Solid conductor; push-in termination	0.75 … 4 mm² / 18 … 12 AWG
Fine-stranded conductor	0.25 … 4 mm² / 22 … 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 … 2.5 mm² / 22 … 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1 … 2.5 mm² / 18 … 14 AWG
Note (conductor cross-section)	Depending on the conductor characteristic, a conductor with a smaller cross-section can also be inserted via push-in termination.
Strip length	10 … 12 mm / 0.39 … 0.47 inches
Pole number	15
Wiring direction	Front-entry wiring

Physical data

Width	78 mm / 3.071 inches
Height	79 mm / 3.11 inches
Depth	22.4 mm / 0.882 inches
Module width	5.2 mm / 0.205 inches

Mechanical data

Variable coding	Yes
Marking level	Side marking
Anti-rotation protection	Yes

Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductor
Mismating protection	No
Plugging without loss of pin spacing	Yes
Strain relief	Strain relief plate

 Continued on next page

Material data

Note (material data)	Information on material specifications can be found here
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.981 MJ
Weight	57 g

Environmental requirements

Processing temperature	-35 … +85 °C
Continuous operating temperature	-60 … +105 °C

Environmental Testing

Test specification: Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure: Railway applications – Rolling stock equipment – Vibration and shock tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Mounting location	Service life test, Category 1, Class A/B
Functional test with noise-like oscillations	Test passed according to Section 8 of the standard
Frequency	f_1 = 5 Hz to f_2 = 150 Hz
Acceleration	0.101g (highest test level used for all axes)
Test duration per axis	10 min.
Test directions	X, Y and Z axes
Monitoring of contact faults and interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like oscillations	Test passed according to Section 9 of the standard
Frequency	f_1 = 5 Hz to f_2 = 150 Hz
Acceleration	0.572g (highest test level used for all axes)
Test duration per axis	5 h
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Shock test	Test passed according to Section 10 of the standard
Shock pulse form	Half sine
Acceleration	5g (highest test level used for all axes)
Shock duration	30 ms
Number of shocks (per axis)	3 pos. und 3 neg.
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Vibration and shock stress for rolling stock equipment	Passed

 Continued on next page

Commercial data

Product Group	18 (X-COM-System)
PU (SPU)	15 pcs
Packaging type	Box
Country of origin	DE
GTIN	4066966666267
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

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
CSA CSA Group	C22.2 No. 158	2437422

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Z00004392.000

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2022-115/137-000

Documentation

Bid Text

2022-115/137-000	17.05.2019	xml 4.17 KB	
2022-115/137-000	14.05.2019	docx 15.44 KB	

 Continued on next page

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 2022-115/137-000	EPLAN Data Portal 2022-115/137-000
	WSCAD Universe 2022-115/137-000
	ZUKEN Portal 2022-115/137-000

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule

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.: 216-242
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.: 216-243
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.: 216-244
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-264
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-246
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue



Item No.: 216-266
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

1.1.2 Insulation stop

1.1.2.1 Insulation stop



Item No.: 2002-171
Insulation stop; 0.25 - 0.5 mm²; 5 pieces/ strip; light gray



Item No.: 2002-172
Insulation stop; 0.75 - 1 mm²; 5 pieces/ strip; dark gray

1.1.3 Marking

1.1.3.1 Label



Item No.: 210-805
Labels; for Smart Printer; permanent adhesive; 6 x 15 mm; 3000 pieces on roll; white



Item No.: 210-805/000-002
Labels; for Smart Printer; permanent adhesive; 6 x 15 mm; 3000 pieces on roll; yellow

1.1.3.2 Marker

Item No.: 793-5501
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white



Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.3.3 Marking strip



Item No.: 210-833
Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white



Item No.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white



Item No.: 210-831
Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white



Item No.: 210-832
Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white



Item No.: 210-834
Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

1.1.4 Protective warning marker

1.1.4.1 Cover



Item No.: 2002-115
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.1.5 Tool

1.1.5.1 Operating tool

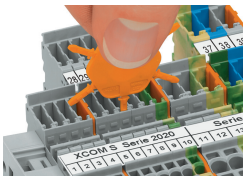


Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

 Continued on next page

Installation Notes

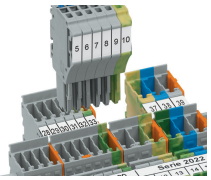
Coding



Insert coding pin into the corresponding slot and twist it off.



Coding a female plug: remove coding finger using a suitable tool.



Insert coded female plug into X-COM®S-SYSTEM terminal block assembly.