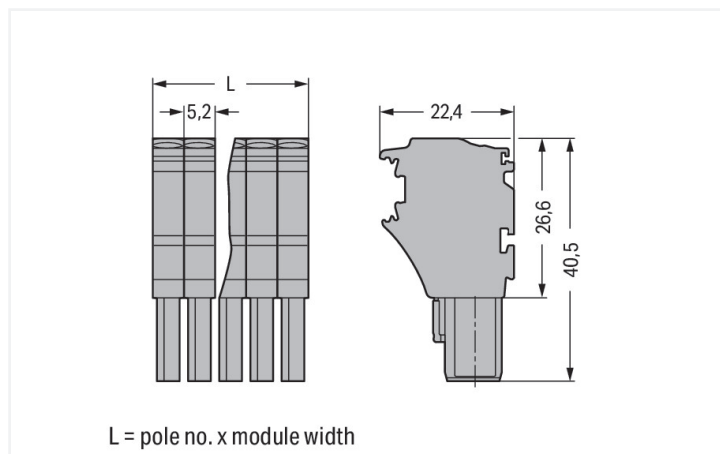
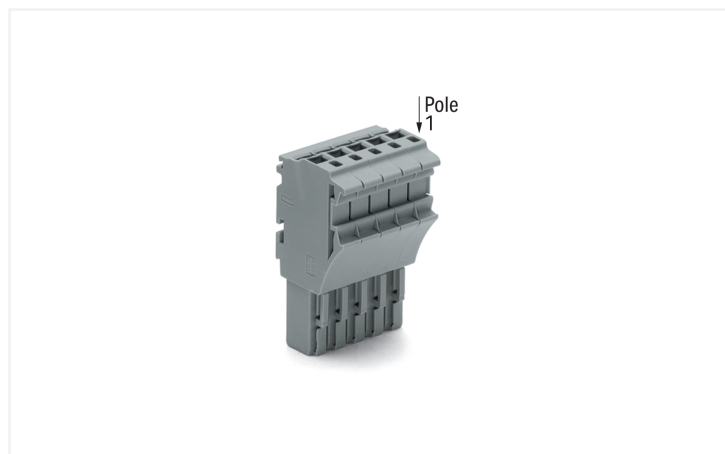


1-conductor female connector; Push-in CAGE CLAMP®; 4 mm²; Pin spacing 5.2 mm;
15-pole; 4,00 mm²; gray



Dimensions in mm

Our female connector (item number 2022-115) ensures effortless electrical installations. Strip lengths must be between 10 and 12 mm when connecting conductors to this female connector. Pluggable rail-mount terminal blocks are hugely popular in switchgear and control systems, for example, in rail-road technology. They combine the best of rail-mount terminal blocks and connectors for the perfect solution. Variable wiring systems make pre-assembly easy, which saves both time and money in production, installation, operation, and maintenance. Featuring conductor terminals along with Push-in CAGE CLAMP®, this connector delivers reliable performance. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. Both solid and fine-stranded conductors with ferrules can be pushed in without the need for tools—all thanks to its pluggable design. The dimensions are (78 x 40.5 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.

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.) mm ²	32 A	-	-

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



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	Connection 1	
Total number of potentials	15	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	40.5 mm / 1.594 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

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	0.947 MJ
Weight	52.4 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	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
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	$f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$
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



Commercial data		
PU (SPU)		25 pcs
Packaging type		Box
Country of origin		CN
GTIN		4066966666151
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			Declarations of conformity and manufacturer's declarations		
  					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CSA CSA Group	C22.2 No. 158	2437422	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-101560	Railway WAGO GmbH & Co. KG	-	Z00004392.000
UL Underwriters Laboratories Inc.	UL 1059	E45172	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

  		
Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	EN 60947	24-0152298-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE00001V2
PRS Polski Rejestr Statków	-	TE/1094/880590/23



Downloads

Environmental Product Compliance

Compliance Search			
Environmental Product Compliance 2022-115			

Documentation

Bid Text			
2022-115	17.05.2019	xml 4.11 KB	
2022-115	14.05.2019	docx 15.37 KB	

CAD/CAE-Data

CAD data	
2D/3D Models 2022-115	

CAE data	
EPLAN Data Portal 2022-115	
WSCAD Universe 2022-115	
ZUKEN Portal 2022-115	

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.: 216-284 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	Item No.: 216-286 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 Locking system

1.1.3.1 Locking system



Item No.: 2022-151
Locking lever; gray



Item No.: 2022-152
Locking lever; orange

1.1.4 Marking

1.1.4.1 Label



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



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

1.1.4.2 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 pie-
ces on roll; stretchable 5 - 5.2 mm; plain;
snap-on type; white

1.1.4.3 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; whi-
te



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

1.1.5 Protective warning marker

1.1.5.1 Cover



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

1.1.6 Screwless end stop

1.1.6.1 Mounting accessories



Item No.: 249-117
Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray



Item No.: 249-116
Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

1.1.7 Strain relief

1.1.7.1 Strain relief plate



Item No.: 734-431
Strain relief plate; for female and male connectors; 75 mm wide; 1 part; gray

1.1.8 Tool

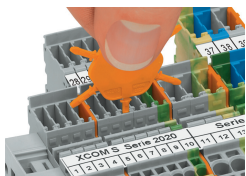
1.1.8.1 Operating tool



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

Installation Notes

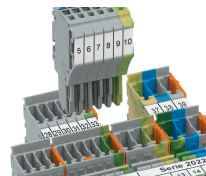
Coding



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

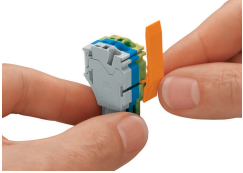


Coding a female plug: remove coding finger using a suitable tool.

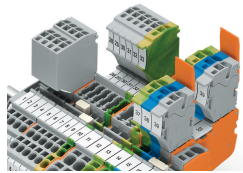


Insert coded female plug into X-COM®S-SYSTEM terminal block assembly.

Locking system



Slide the locking lever into position.



Female plugs can be individually locked.