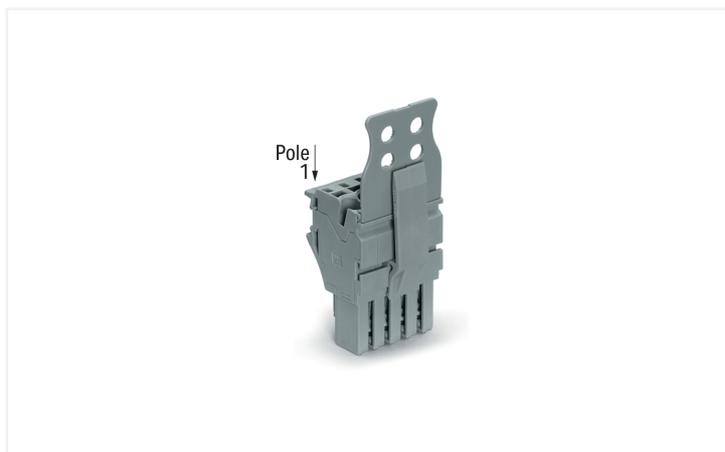


## Data Sheet | Item Number: 2022-106/144-000

1-conductor female connector; Push-in CAGE CLAMP®; 4 mm<sup>2</sup>; Pin spacing 5.2 mm; 6-pole; Centered locking levers; Strain relief plate; 4,00 mm<sup>2</sup>; gray

<https://www.wago.com/2022-106/144-000>



Color: ■ gray

Similar to illustration

Female connector, 2022 Series, operating tool

Error-free electrical installations are guaranteed with this female connector (item number 2022-106/144-000). Conductors should 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. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, featuring a winning design: It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing tools. No preparation is required; for example, crimping the conductor's ferrule is not necessary. The item's dimensions are (31.2 x 64 x 27.2) mm (width x height x depth). Depending on the conductor type, this female connector is suitable for conductor cross sections ranging from 0.25 mm<sup>2</sup> to 4 mm<sup>2</sup>.

An operating tool is used to operate this female connector/socket. The strain relief plate is a safety precaution for connected conductors that also makes wires easier to handle..

### 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			Approvals per	UL 1059		
	III	III	II		Use group	B	C
Overtoltage category	III	III	II	Rated voltage	600 V	600 V	-
Pollution degree	3	2	2	Rated current	20 A	20 A	-
Nominal voltage	690 V	-	-				
Rated impulse withstand voltage	6 kV	-	-				
Rated current	24 A	-	-				
Current at conductor cross-section (max.) mm <sup>2</sup>	32 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	6
Total number of potentials	6

Connection 1	
Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper
Nominal cross-section	2.5 mm <sup>2</sup>
Solid conductor	0.25 ... 4 mm <sup>2</sup> / 22 ... 12 AWG
Solid conductor; push-in termination	0.75 ... 4 mm <sup>2</sup> / 18 ... 12 AWG
Fine-stranded conductor	0.25 ... 4 mm <sup>2</sup> / 22 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm <sup>2</sup> / 22 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1 ... 2.5 mm <sup>2</sup> / 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	6
Wiring direction	Front-entry wiring

## Physical data

Width	31.2 mm / 1.228 inches
Height	64 mm / 2.52 inches
Depth	27.2 mm / 1.071 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
Locking of plug-in connection	Locking lever
Strain relief	Strain relief plate

## Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.423 MJ
Weight	22.4 g

## Environmental requirements

Processing temperature	-35 ... +85 °C	<b>Environmental Testing</b>
Continuous operating temperature	-60 ... +105 °C	
		Test specification: DIN EN 50155 (VDE 0115-200):2022-06 Railway applications – Rolling stock – Electronic equipment
		Test procedure: DIN EN 61373 (VDE 0115-0106):2011-04 Railway applications – Rolling stock equipment – Vibration and shock tests
		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**

Product Group	18 (X-COM-System)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4066966668131
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
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**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	Railway WAGO GmbH & Co. KG	-	Z00004391.000

**Downloads**

**Environmental Product Compliance**

Compliance Search	
Environmental Product Compliance 2022-106/144-000	↓

**Documentation**

Bid Text			
2022-106/144-000	16.05.2019	xml 4.22 KB	↓
2022-106/144-000	14.05.2019	docx 15.23 KB	↓

CAD/CAE-Data

**CAD data**

2D/3D Models  
2022-106/144-000

**CAE data**

EPLAN Data Portal  
2022-106/144-000

WSCAD Universe  
2022-106/144-000

ZUKEN Portal  
2022-106/144-000

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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup>; 5 pieces/strip; light gray



**Item No.: 2002-172**  
Insulation stop; 0.75 - 1 mm<sup>2</sup>; 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 Screwless end stop

#### 1.1.5.1 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

## 1.1.6 Tool

### 1.1.6.1 Operating tool

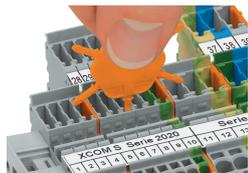


**Item No.: 210-720**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

## Installation Notes

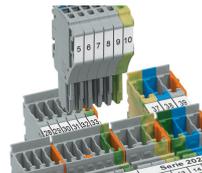
### Coding



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.