

## Data Sheet | Item Number: 769-505

Center module for 2-conductor female connector; CAGE CLAMP®; 4 mm<sup>2</sup>; Pin spacing 5 mm; 1-pole; coding finger; 4,00 mm<sup>2</sup>; gray

<https://www.wago.com/769-505>



Color: ■ gray

Female connector, 769 Series, CAGE CLAMP®

This female connector (item number 769-505) simplifies electrical installations. Ensure that the strip lengths are between 8 and 9 mm when connecting conductors to this female connector. Pluggable rail-mount terminal blocks are primarily found in switchgear units and control systems, most notably in railroad technology. These innovative systems combine the benefits of rail-mount terminal blocks and connectors for a flexible and reliable wiring system. You also have the option of pre-assembling installations, which not only makes production but also installation, operation, and maintenance more efficient and cost-effective. Featuring conductor terminals along with CAGE CLAMP®, this product outperforms the competition. Our CAGE CLAMP® connection offers a convenient and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. The dimensions are (5 x 45.2 x 35.9) mm (width x height x depth). This female connector is suitable for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 4 mm<sup>2</sup>.

This female connector/socket is operated with an operating tool.

### Notes

Safety Information

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

Safety information 2

Staggered jumpers cannot be installed in terminal blocks when using 2-conductor female plugs.

### Electrical data

Ratings per	IEC/EN 61984		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	500 V	-	-
Rated impulse withstand voltage	6 kV	-	-
Rated current	32 A	-	-

### General information

Wiring direction Front-entry wiring

### Connection Data

Clamping units	2
Total number of potentials	1

### Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper
Nominal cross-section	4 mm <sup>2</sup> / 12 AWG
Solid conductor	0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Pole number	1
Wiring direction	Front-entry wiring

### Physical data

Width	5 mm / 0.197 inches
Height	45.2 mm / 1.78 inches
Depth	35.9 mm / 1.413 inches
Module width	5 mm / 0.197 inches

### Mechanical data

Variable coding	Yes
Direct ground contact to DIN-rail/drilled hole/housing	No
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)	<a href="#">Information on material specifications can be found here</a>
Color	gray
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.086 MJ
Halogen-free	Yes
Weight	5.2 g

### Environmental requirements

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

**Commercial data**

Product Group	18 (X-COM-System)
PU (SPU)	250 pcs
Packaging type	Bag
Country of origin	PL
GTIN	4017332331456
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
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7626
CCA DEKRA Certification B.V.	EN 61984	2190419.02
CCA DEKRA Certification B.V.	EN 61984	NL-47799/A1
CSA CSA Group	C22.2	1101144
KEMA/KEUR DEKRA Certification B.V.	EN 60947	2190419.01
UL Underwriters Laboratories Inc.	UL 1059	E45172
UL Underwriters Laboratories Inc.	UL 1977	E 45171

**Declarations of conformity and manufacturer's declarations**



Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
Railway WAGO GmbH & Co. KG	-	Z00004428.000

## Downloads

### Environmental Product Compliance

Compliance Search			
Environmental Product Compliance 769-505			↓

## Documentation

Bid Text			
769-505	19.02.2019	xml 3.10 KB	↓
769-505	04.10.2017	doc 25.50 KB	↓

## CAD/CAE-Data

CAD data	
2D/3D Models 769-505	↓

CAE data	
EPLAN Data Portal 769-505	↓
WSCAD Universe 769-505	↓
ZUKEN Portal 769-505	↓

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Ferrule

##### 1.1.1.1 Ferrule

<p><b>Item No.: 216-301</b>                  Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow</p>	<p><b>Item No.: 216-302</b>                  Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise</p>	<p><b>Item No.: 216-201</b>                  Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white</p>	<p><b>Item No.: 216-101</b>                  Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored</p>
<p><b>Item No.: 216-202</b>                  Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray</p>	<p><b>Item No.: 216-102</b>                  Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored</p>	<p><b>Item No.: 216-203</b>                  Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red</p>	<p><b>Item No.: 216-103</b>                  Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated</p>
<p><b>Item No.: 216-204</b>                  Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black</p>	<p><b>Item No.: 216-104</b>                  Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; silver-colored</p>	<p><b>Item No.: 216-206</b>                  Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; blue</p>	

### 1.1.2 Insulation stop

#### 1.1.2.1 Insulation stop



**Item No.: 769-470**

Insulation stop; 0.08 - 0.2 mm<sup>2</sup> "s" (0.14 mm<sup>2</sup> "f-st"); 5 pieces/strip; white



**Item No.: 769-471**

Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; 5 pieces/strip; light gray



**Item No.: 769-472**

Insulation stop; 0.75 - 1 mm<sup>2</sup>; 5 pieces/strip; dark gray

### 1.1.3 Locking system

#### 1.1.3.1 Locking system



**Item No.: 769-428**

Locking lever; for female connectors; 1 part; Pin spacing 5 mm; 1-pole; gray



**Item No.: 769-429**

Locking lever; for female connectors; 1 part; Pin spacing 5 mm; 1-pole; orange



**Item No.: 769-430**

Locking lever; for female connectors; 1 part; Pin spacing 5 mm; 2-pole; gray



**Item No.: 769-431**

Locking lever; for female connectors; 1 part; Pin spacing 5 mm; 2-pole; orange

### 1.1.4 Marking

#### 1.1.4.1 Marker



**Item No.: 2009-145**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 248-501**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

#### 1.1.4.2 Marking strip



**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

### 1.1.5 Protective warning marker

#### 1.1.5.1 Cover



**Item No.: 280-415**

Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

## 1.1.6 Strain relief

### 1.1.6.1 Strain relief



**Item No.: 769-414**

Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 10- to 15-pole; gray



**Item No.: 769-410**

Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 1-pole; gray



**Item No.: 769-411**

Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 2- to 3-pole; gray



**Item No.: 769-412**

Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 4- to 5-pole; gray



**Item No.: 769-413**

Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 6- to 9-pole; gray

## 1.1.7 Test and measurement

### 1.1.7.1 Testing accessories



**Item No.: 210-136**

Test plug; 2 mm Ø; with 500 mm cable; red

## 1.1.8 Tool

### 1.1.8.1 Operating tool

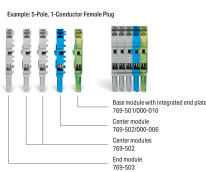


**Item No.: 769-434**

Operating tool; made of insulating material; 1-way; loose; white

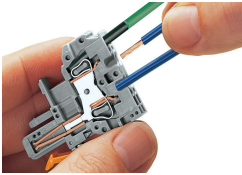
## Installation Notes

### Installation



Female plugs for self-assembly

## Conductor termination



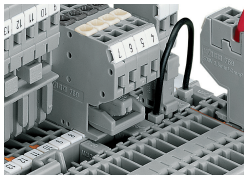
### CAGE CLAMP® connection

Female plug: Inserting/removing a conductor via operating tool.

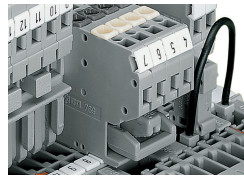
Operation 90° to conductor is also possible.

With ferruled conductors, it is necessary to use a terminal block one size smaller than the conductor's nominal cross-section.

## Commoning



Commoning a 2-conductor female plug via staggered jumper and carrier terminal blocks via adjacent jumpers.



### Commoning options of female plugs:

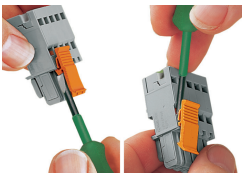
- After removal, commoned potentials still remain commoned
- Use of plug-in jumpers instead of additional wired jumpers
- Can be used as a "hardware" key for safety lockout
- Can also be used as a commoning jumper for sensor circuits or machine programming

## Coding



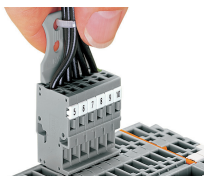
Coding a female plug by removing coding finger(s) via cutting tool. Do not remove the first and last coding fingers or use an additional locking lever.

## Locking system



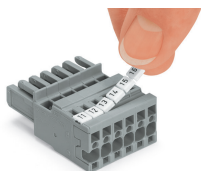
Locking/releasing a lever.

## Strain relief



Removing a female plug via conductor bundle provided with strain relief plate.

## Marking



Labeling a female plug with CAGE CLAMP® connection via Mini-WSB Quick Markers.