

Data Sheet | Item Number: 769-504

Start module for 2-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 1-pole; coding finger; with integrated end plate; 4,00 mm²; gray

<https://www.wago.com/769-504>



Color: ■ gray

Female connector, 769 Series, operating tool

Our female connector (item number 769-504) is designed for seamless electrical installations. Conductors should only be connected to this female connector if their strip length is between 8 and 9 mm . 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 connector delivers reliable performance. 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). Depending on the type of conductor, this female connector is designed for conductor cross sections ranging from 0.08 mm² to 4 mm².

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 | Connection 1                    |                                   |
| Total number of potentials | 1 | Connection technology           | CAGE CLAMP®                       |
|                            |   | Actuation type                  | Operating tool                    |
|                            |   | Connectable conductor materials | Copper                            |
|                            |   | Nominal cross-section           | 4 mm² / 12 AWG                    |
|                            |   | Solid conductor                 | 0.08 ... 4 mm² / 28 ... 12 AWG    |
|                            |   | Fine-stranded conductor         | 0.08 ... 4 mm² / 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                          | 0.096 MJ                                                                 |
| Halogen-free                       | Yes                                                                      |
| Weight                             | 5.7 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                  | 4017332331449     |  |
| 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 |
| CCA<br>DEKRA Certification B.V.         | EN 60947 | NTR NL-7626      | EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG    | -        | -                |
| CCA<br>DEKRA Certification B.V.         | EN 61984 | 2190419.02       | Railway<br>WAGO GmbH & Co. KG                              | -        | Z00004428.000    |
| CCA<br>DEKRA Certification B.V.         | EN 61984 | NL-47799/A1      |                                                            |          |                  |
| CSA<br>CSA Group                        | C22.2    | 1101144          |                                                            |          |                  |
| KEMA/KEUR<br>DEKRA Certification B.V.   | EN 60947 | 2190419.01       |                                                            |          |                  |
| UL<br>Underwriters Laboratories<br>Inc. | UL 1059  | E45172           |                                                            |          |                  |
| UL<br>Underwriters Laboratories<br>Inc. | UL 1977  | E 45171          |                                                            |          |                  |



Downloads

Environmental Product Compliance

Compliance Search

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| Documentation |            |     |          |               |
|---------------|------------|-----|----------|---------------|
| Bid Text      |            |     |          |               |
| 769-504       | 19.02.2019 | xml | 3.15 KB  | Download icon |
| 769-504       | 04.10.2017 | doc | 25.50 KB | Download icon |

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1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule

**Item No.: 216-301**  
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

**Item No.: 216-302**  
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

**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.: 216-101**  
Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored

**Item No.: 216-202**  
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray

**Item No.: 216-102**  
Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; electro-tin plated; silver-colored

**Item No.: 216-203**  
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red

**Item No.: 216-103**  
Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated

**Item No.: 216-204**  
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black

**Item No.: 216-104**  
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored

**Item No.: 216-206**  
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; blue



1.1.2 Insulation stop

1.1.2.1 Insulation stop



**Item No.: 769-470**  
Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white



**Item No.: 769-471**  
Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray



**Item No.: 769-472**  
Insulation stop; 0.75 - 1 mm²; 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

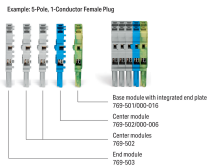
1.1.8.1 Operating tool



**Item No.: 769-434**  
Operating tool; made of insulating material; 1-way; loose; white

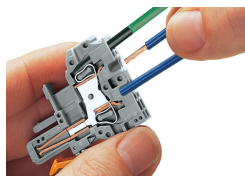
Installation Notes

Installation



Female plugs for self-assembly

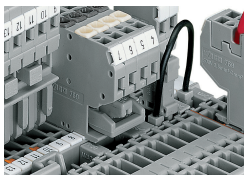
## Conductor termination



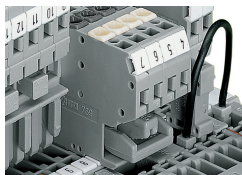
### CAGE CLAMP® connection

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:

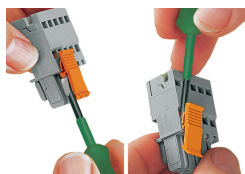
- After removal, commoned potentials still remain commoned
- Use of plug-in jumpers instead of additional wired jumpers
- Can be used as a "hardware" key for safety lockout
- Can also be used as a commoning jumper for sensor circuits or machine programming

## Coding



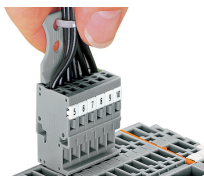
Coding a female plug by removing coding finger(s) via cutting tool. Do not remove the first and last coding fingers or use an additional locking lever.

## Locking system



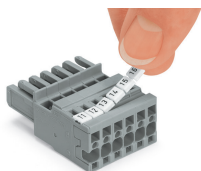
Locking/releasing a lever.

## 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.