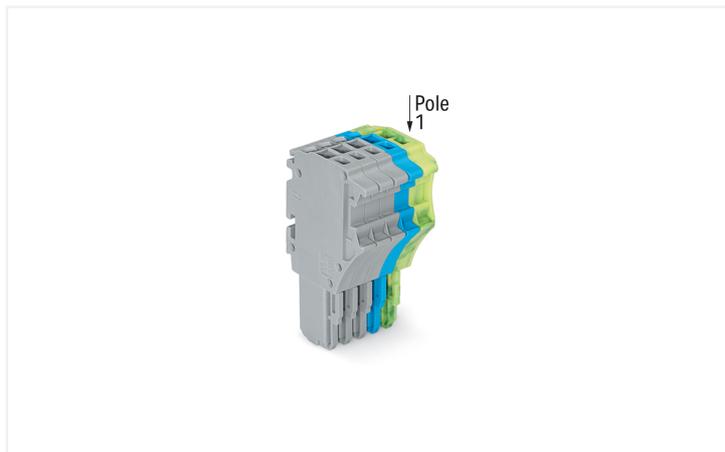


## Data Sheet | Item Number: 2020-105/000-038

1-conductor female connector; Push-in CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 5-pole; 1,50 mm<sup>2</sup>; gray/blue/green-yellow

<https://www.wago.com/2020-105/000-038>



Color:  gray/blue/green-yellow

Female connector, 2020 Series, Push-in CAGE CLAMP®

Error-free electrical installations are guaranteed with this female connector (item number 2020-105/000-038). Ensure that the strip lengths are between 9 and 11 mm when connecting conductors to this female connector. Pluggable rail-mount terminal blocks are hugely popular in switchgear and control systems, for example, in railroad technology. They combine the best of rail-mount terminal blocks and connectors to create 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. 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 (18.2 x 40.5 x 22.4) mm (width x height x depth). This female connector is suitable for conductor cross sections ranging from 0.14 mm<sup>2</sup> to 1.5 mm<sup>2</sup>.

An operating tool is used to operate this female connector/socket.

### 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

Notice: An appropriate end plate must be applied to the carrier terminal blocks after each female plug.

### Electrical data

| Ratings per                     | IEC/EN 61984 |     |    | Approvals per | UL 1059 |       |       |
|---------------------------------|--------------|-----|----|---------------|---------|-------|-------|
|                                 | III          | III | II |               | B       | C     | D     |
| Overvoltage category            | III          | III | II | Use group     | B       | C     | D     |
| Pollution degree                | 3            | 2   | 2  | Rated voltage | 300 V   | 300 V | 300 V |
| Nominal voltage                 | 500 V        | -   | -  | Rated current | 15 A    | 15 A  | 15 A  |
| Rated impulse withstand voltage | 6 kV         | -   | -  |               |         |       |       |
| Rated current                   | 13.5 A       | -   | -  |               |         |       |       |

| Approvals per | CSA 22.2 No 158 |       |       |
|---------------|-----------------|-------|-------|
| Use group     | B               | C     | D     |
| Rated voltage | 300 V           | 300 V | 300 V |
| Rated current | 10 A            | 10 A  | 10 A  |

| General information |                    |
|---------------------|--------------------|
| Wiring direction    | Front-entry wiring |

## Connection Data

|                            |   |
|----------------------------|---|
| Clamping units             | 5 |
| Total number of potentials | 5 |

| Connection 1   |   |
|--|---|
| Connection technology                                      | Push-in CAGE CLAMP®   |
| Actuation type   | Operating tool  |
| Connectable conductor materials                            | Copper  |
| Nominal cross-section                                      | 1 mm <sup>2</sup>   |
| Solid conductor  | 0.14 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG  |
| Solid conductor; push-in termination                       | 0.5 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG   |
| Fine-stranded conductor                                    | 0.14 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG  |
| Fine-stranded conductor; with insulated ferrule            | 0.14 ... 0.75 mm <sup>2</sup> / 24 ... 18 AWG   |
| Fine-stranded conductor; with ferrule; push-in termination | 0.5 ... 0.75 mm <sup>2</sup> / 20 ... 18 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   | 9 ... 11 mm / 0.35 ... 0.43 inches  |
| Pole number  | 5   |
| Wiring direction   | Front-entry wiring  |

## Physical data

|              |                        |
|--------------|------------------------|
| Width        | 18.2 mm / 0.717 inches |
| Height       | 40.5 mm / 1.594 inches |
| Depth        | 22.4 mm / 0.882 inches |
| Module width | 3.5 mm / 0.138 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                      |

## Material data

|                                    |  |
|------------------------------------|--|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | gray/blue/green-yellow   |
| Material group                     | I  |
| Insulation material (main housing) | Polyamide (PA66)   |
| Flammability class per UL94        | V0   |
| Fire load                          | 0.212 MJ   |
| Weight                             | 11.6 g   |

### Environmental requirements

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

### Commercial data

|                       |                   |
|-----------------------|-------------------|
| Product Group         | 18 (X-COM-System) |
| PU (SPU)              | 50 pcs            |
| Packaging type        | Box               |
| Country of origin     | DE                |
| GTIN                  | 4050821027218     |
| 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 |
|---|----------|------------------|
| UL<br>Underwriters Laboratories<br>Inc. | UL 1059  | E 45172          |

### Downloads

#### Environmental Product Compliance

##### Compliance Search

Environmental Product  
Compliance  
2020-105/000-038



## Documentation

| Bid Text         |            |                  |                   |
|------------------|------------|------------------|-------------------|
| 2020-105/000-038 | 19.02.2019 | xml<br>4.01 KB   | <a href="#">↓</a> |
| 2020-105/000-038 | 06.08.2018 | docx<br>15.16 KB | <a href="#">↓</a> |

## CAD/CAE-Data

| CAD data                         |                   |
|----------------------------------|-------------------|
| 2D/3D Models<br>2020-105/000-038 | <a href="#">↓</a> |

| CAE data                              |                   |
|---------------------------------------|-------------------|
| EPLAN Data Portal<br>2020-105/000-038 | <a href="#">↓</a> |
| WSCAD Universe<br>2020-105/000-038    | <a href="#">↓</a> |
| ZUKEN Portal<br>2020-105/000-038      | <a href="#">↓</a> |

## 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.: 216-243**  
 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

#### 1.1.2 Locking system

##### 1.1.2.1 Locking system



**Item No.: 2022-151**  
 Locking lever; gray

**Item No.: 2022-152**  
 Locking lever; orange

#### 1.1.3 Marking

##### 1.1.3.1 Marker



**Item No.: 793-3501**  
 WMB marking card; as card; plain; snap-on type; white

**Item No.: 2009-113**  
 WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; white

### 1.1.3.2 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.: 2000-115**

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 Strain relief

#### 1.1.6.1 Strain relief plate



**Item No.: 734-328**

Strain relief plate; for female and male connectors; 12.5 mm wide; 1 part; gray

### 1.1.7 Tool

#### 1.1.7.1 Operating tool



**Item No.: 210-719**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft



**Item No.: 210-648**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

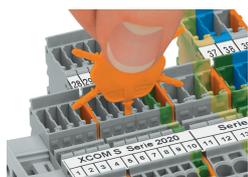


**Item No.: 210-647**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

## Installation Notes

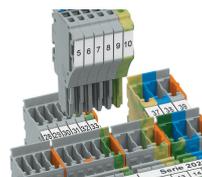
### Coding



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.