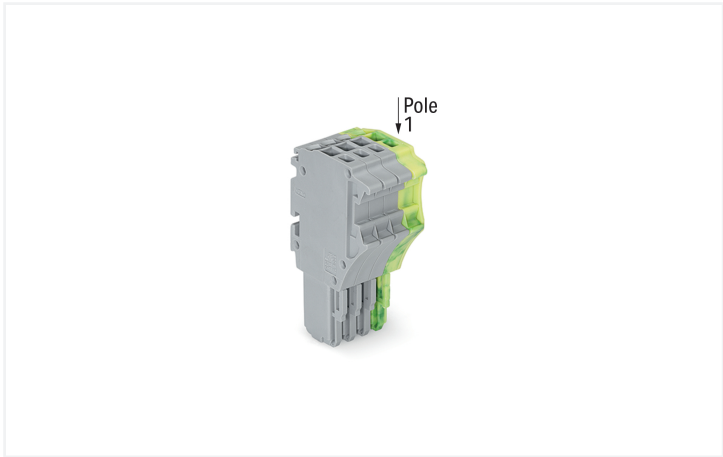




Color: gray/green-yellow

Female connector, 2020 Series, operating tool

Our female connector (item number 2020-104/000-036) simplifies electrical installations. Strip lengths must be between 9 and 11 mm when connecting conductors to this female connector. 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. Featuring conductor terminals along with Push-in CAGE CLAMP®, this connector is highly versatile. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, offering a key advantage: 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 (14.7 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 mm² to 1.5 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 | 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       |                   |
| 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             | 4 |
| Total number of potentials | 4 |

| Connection 1                                               |                                                                                                                                   |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Connection technology                                      | Push-in CAGE CLAMP®                                                                                                               |
| Actuation type                                             | Operating tool                                                                                                                    |
| Connectable conductor materials                            | Copper                                                                                                                            |
| Nominal cross-section                                      | 1 mm²                                                                                                                             |
| Solid conductor                                            | 0.14 ... 1.5 mm² / 24 ... 16 AWG                                                                                                  |
| Solid conductor; push-in termination                       | 0.5 ... 1.5 mm² / 20 ... 16 AWG                                                                                                   |
| Fine-stranded conductor                                    | 0.14 ... 1.5 mm² / 24 ... 16 AWG                                                                                                  |
| Fine-stranded conductor; with insulated ferrule            | 0.14 ... 0.75 mm² / 24 ... 18 AWG                                                                                                 |
| Fine-stranded conductor; with ferrule; push-in termination | 0.5 ... 0.75 mm² / 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                                                | 4                                                                                                                                 |
| Wiring direction                                           | Front-entry wiring                                                                                                                |

Physical data

|              |                        |
|--------------|------------------------|
| Width        | 14.7 mm / 0.579 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/green-yellow                                                        |
| Material group                     | I                                                                        |
| Insulation material (main housing) | Polyamide (PA66)                                                         |
| Flammability class per UL94        | V0                                                                       |
| Fire load                          | 0.173 MJ                                                                 |
| Weight                             | 9.4 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                  | 4050821026815     |
| 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<br>Compliance<br>2020-104/000-036 |  |



Documentation

| Bid Text         |            |                  |  |
|------------------|------------|------------------|--|
| 2020-104/000-036 | 19.02.2019 | xml<br>4.01 KB   |  |
| 2020-104/000-036 | 06.08.2018 | docx<br>15.10 KB |  |

CAD/CAE-Data

| CAD data                         |
|----------------------------------|
| 2D/3D Models<br>2020-104/000-036 |



| CAE data                              |
|---------------------------------------|
| EPLAN Data Portal<br>2020-104/000-036 |
| WSCAD Universe<br>2020-104/000-036    |
| ZUKEN Portal<br>2020-104/000-036      |



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.: 216-243](#)  
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

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



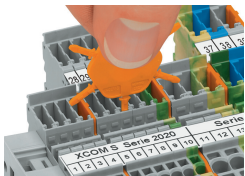
**Item No.: 210-648**  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short



**Item No.: 210-647**  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

Installation Notes

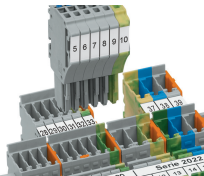
Coding



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.