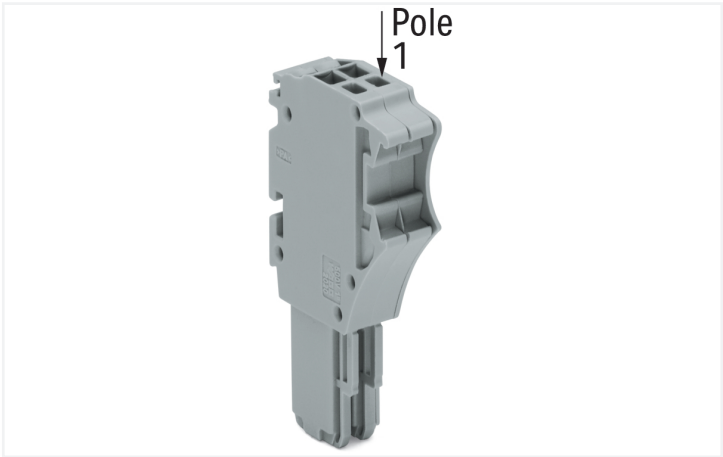
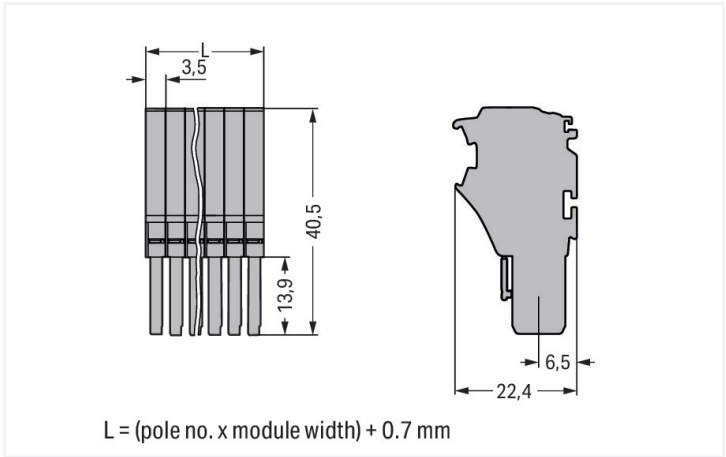




Color: ■ gray



Dimensions in mm

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

This female connector (item number 2020-102) simplifies electrical installations. Pluggable rail-mount terminal blocks are primarily found in switchgear units and control systems, most notably in railroad technology. These innovative systems combine the properties 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. Rated current and voltage are key factors to consider when choosing a pluggable rail-mount terminal block, as they indicate how the product can be used. This product has a rated voltage of 500 V and a rated current of 13.5 A. Conductors can only be connected to this female connector if their strip length is between 9 mm and 11 mm. This product features conductor terminals and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® connection technology is ideal for connecting all conductor types. It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing to use any tools—all thanks to its pluggable design. The dimensions are 7.7 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. There are two clamping points available that you can use to connect two different potentials / two poles. The gray housing is made of polyamide (PA66) for insulation. An operating tool is used to operate this female connector/socket. You can connect copper conductors thanks to front-entry wiring.

| 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  |               |       |         |       |



| Connection data            |   |                                                            |                                                                                                                                   |
|----------------------------|---|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Clamping units             | 2 | Connection 1                                               |                                                                                                                                   |
| Total number of potentials | 2 | 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                                                | 2                                                                                                                                 |
|                            |   | Wiring direction                                           | Front-entry wiring                                                                                                                |

| Physical data |                        |  |
|---------------|------------------------|--|
| Width         | 7.7 mm / 0.303 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                                                                     |  |
| Material group                     | I                                                                        |  |
| Insulation material (main housing) | Polyamide (PA66)                                                         |  |
| Flammability class per UL94        | V0                                                                       |  |
| Fire load                          | 0.091 MJ                                                                 |  |
| Weight                             | 4.9 g                                                                    |  |



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

| Commercial data       |               |
|-----------------------|---------------|
| PU (SPU)              | 100 pcs       |
| Packaging type        | Box           |
| Country of origin     | CN            |
| GTIN                  | 4050821245025 |
| 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 8.0               | EC001284             |
| ECCN                   | NO US CLASSIFICATION |

| Environmental Product Compliance |                         |
|----------------------------------|-------------------------|
| RoHS Compliance Status           | Compliant, No Exemption |

Approvals / Certificates

| General approvals                                    |          |                  |
|------------------------------------------------------|----------|------------------|
| <div><div>CCA</div><div>CSA</div><div>UL</div></div> |          |                  |
| Approval                                             | Standard | Certificate Name |
| CCA<br>DEKRA Certification B.V.                      | EN 60947 | NTR NL 7617      |
| CSA<br>DEKRA Certification B.V.                      | C22.2    | 2516073          |
| UL<br>UL International Germany GmbH                  | UL 1059  | E 45172          |

| Declarations of conformity and manufacturer's declarations |          |                  |
|------------------------------------------------------------|----------|------------------|
| Approval                                                   | Standard | Certificate Name |
| EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG    | -        | -                |
| UK-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG    | -        | -                |

| Approvals for marine applications                                                                                                                                                                                                                                                                                          |          |                  |                  |                                         |          |                |                                                       |   |            |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------|------------------|-----------------------------------------|----------|----------------|-------------------------------------------------------|---|------------|--|--|
| <div></div>                                                                                                                                           |          |                  |                  |                                         |          |                |                                                       |   |            |  |  |
| <table><thead><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr></thead><tbody><tr><td>ABS<br/>American Bureau of Ship-<br/>ping</td><td>EN 60947</td><td>24-0152298-PDA</td></tr><tr><td>DNV GL<br/>Det Norske Veritas, Ger-<br/>manischer Lloyd</td><td>-</td><td>TAE00001V2</td></tr></tbody></table> | Approval | Standard         | Certificate Name | ABS<br>American Bureau of Ship-<br>ping | EN 60947 | 24-0152298-PDA | DNV GL<br>Det Norske Veritas, Ger-<br>manischer Lloyd | - | TAE00001V2 |  |  |
| Approval                                                                                                                                                                                                                                                                                                                   | Standard | Certificate Name |                  |                                         |          |                |                                                       |   |            |  |  |
| ABS<br>American Bureau of Ship-<br>ping                                                                                                                                                                                                                                                                                    | EN 60947 | 24-0152298-PDA   |                  |                                         |          |                |                                                       |   |            |  |  |
| DNV GL<br>Det Norske Veritas, Ger-<br>manischer Lloyd                                                                                                                                                                                                                                                                      | -        | TAE00001V2       |                  |                                         |          |                |                                                       |   |            |  |  |



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2020-102

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| Documentation |            |      |          |               |
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| 2020-102      | 06.08.2018 | docx | 14.90 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.: 216-241**  
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.: 2022-141**  
Locking lever; gray



**Item No.: 2022-142**  
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.: 734-327**  
Strain relief plate; for female and male connectors; 6 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



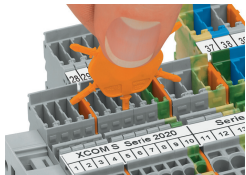
**Item No.: 210-648**  
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short



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

Installation Notes

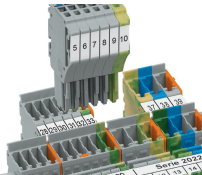
Coding



Insert coding pin into the corresponding slot and twist it off.

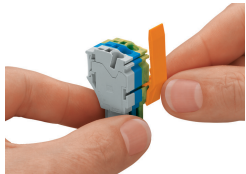


Coding a female plug: remove coding finger using a suitable tool.

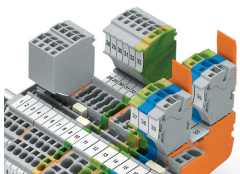


Insert coded female plug into X-COM®S-SYSTEM terminal block assembly.

Locking system



Slide the locking lever into position.



Female plugs can be individually locked.