

Data sheet | Item number: 2022-181

End module for 1-conductor female connector; Push-in CAGE CLAMP®; 4 mm²; Pin spacing 5.2 mm; 1-pole; 4,00 mm²; gray

www.wago.com/2022-181



Color:

Item description

Customizing Modular Female Plugs

WAGO's modular X-COM®S-SYSTEM female plugs can be customized for applications that require a varying number of poles (e.g., when designing prototypes).

Subject to changes. Please also observe the further product documentation!

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Modules and Pole Numbers

A customized X-COM®S-SYSTEM

female plug consists of:

- One base module with an integrated end plate
- Up to 13 center modules (corresponding to a 15-pole female plug = maximum pole number)
- One end module

Intended Use

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

Assembly

The appropriate mounting tool shall be used to ensure that the individual modules are properly attached to each other without damaging the locking latches.

Data

Notes

Safety information

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

Electrical data

Ratings per IEC/EN

| Ratings per | IEC/EN 61984 |
|---|---|
| Nominal voltage (III/3) | 690 V |
| Rated impulse voltage (III/3) | 6 kV |
| Rated current | 24 A |
| Current at conductor cross-section (max.) mm ² | 32 A |
| Legend (ratings) | (III / 3) ≙ Overvoltage category III / Pollution degree 3 |

Ratings per UL

| | |
|--------------------------------|---------|
| Approvals per | UL 1059 |
| Rated voltage UL (Use Group B) | 600 V |
| Rated current UL (Use Group B) | 20 A |
| Rated voltage UL (Use Group C) | 600 V |

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| | |
|--------------------------------|------|
| Rated current UL (Use Group C) | 20 A |
|--------------------------------|------|

Ratings per CSA

| | |
|---------------------------------|-----------------|
| Approvals per | CSA 22.2 No 158 |
| Rated voltage CSA (Use Group C) | 600 V |
| Rated current CSA (Use Group C) | 20 A |

Connection data

| | |
|----------------------------|---|
| Connection points | 1 |
| Total number of potentials | 1 |

Connection 1

| | |
|--|---|
| Connection technology | Push-in CAGE CLAMP® |
| Actuation type | Operating tool |
| Connectable conductor materials | Copper |
| Nominal cross-section | 2.5 mm ² |
| Solid conductor | 0.25 ... 4 mm ² / 22 ... 12 AWG |
| Solid conductor; push-in termination | 0.75 ... 4 mm ² / 18 ... 12 AWG |
| Fine-stranded conductor | 0.25 ... 4 mm ² / 22 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 ... 2.5 mm ² / 22 ... 14 AWG |
| Fine-stranded conductor; with ferrule; push-in termination | 1 ... 2.5 mm ² / 18 ... 14 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 | 10 ... 12 mm / 0.39 ... 0.47 inches |
| Pole number | 1 |
| Wiring direction | Front-entry wiring |

Physical data

| | |
|--------|------------------------|
| Width | 5.2 mm / 0.205 inches |
| Height | 40.5 mm / 1.594 inches |
| Depth | 22.4 mm / 0.882 inches |

Mechanical Data

| | |
|--------------------------|--------------|
| Variable coding | Yes |
| Marking level | Side marking |
| Anti-rotation protection | Yes |

Subject to changes. Please also observe the further product documentation!



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) | Information on material specifications can be found here |
| Color | gray |
| Material group | I |
| Insulation material | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Fire load | 0.053 MJ |
| Weight | 3.2 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|-------------------|
| Product Group | 18 (X-COM-System) |
| eCl@ss 10.0 | 27-14-11-06 |
| eCl@ss 9.0 | 27-14-11-06 |
| ETIM 8.0 | EC001284 |
| ETIM 7.0 | EC001284 |
| PU (SPU) | 250 pcs |
| Packaging type | Box |
| Country of origin | CN |
| GTIN | 4050821243403 |
| Customs tariff number | 85366990990 |

Environmental Product Compliance

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

Subject to changes. Please also observe the further product documentation!



Approvals / Certificates

General approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|------|--|--------------------------|------------------|
| | CSA DEKRA Certification B.V. | C22.2 No. 158 | 2437422 |
| | KEMA/KEUR DEKRA Certification B.V. | EN 61984 | 71- 101560 |
| | UL Underwriters Laboratories Inc. | UL 1059 | E45172 |

Declarations of conformity and manufacturer's declarations

| Logo | Approval | Additional Approval Text | Certificate name |
|------|---|--------------------------|------------------|
| | EU-Declaration of Conformity WAGO GmbH & Co. KG | - | - |
| | UK-Declaration of Conformity WAGO GmbH & Co. KG | - | - |

Approvals for marine applications

| Logo | Approval | Additional Approval Text | Certificate name |
|------|---|--------------------------|--------------------------|
| | ABS American Bureau of Shipping | EN 60947 | 20- HG1941090- PDA |
| | BV Bureau Veritas S.A. | EN 60947 | 38586/B0 BV |
| | DNV GL Det Norske Veritas, Germanischer Lloyd | - | TAE00001V2 |
| | LR Lloyds Register | EN 60947 | 91/20112 (E9) |

Optional accessories

Insulation stop

| Insulation stop | |
|---|--|
| Item no.: 2002-171 Insulation stop; 0.25 - 0.5 mm ² ; 5 pieces/strip; light gray | www.wago.com/2002-171 |
| Item no.: 2002-172 Insulation stop; 0.75 - 1 mm ² ; 5 pieces/strip; dark gray | www.wago.com/2002-172 |

Protective warning marker

| Cover |
|-------|
| |

Subject to changes. Please also observe the further product documentation!

**Item no.: 2002-115**

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

www.wago.com/2002-115**Strain relief**

Strain relief plate

Item no.: 734-326

Strain relief plate; for female and male connectors; 35 mm wide; 1 part; gray

www.wago.com/734-326**Item no.: 734-327**

Strain relief plate; for female and male connectors; 6 mm wide; 1 part; gray

www.wago.com/734-327**Item no.: 734-328**

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

www.wago.com/734-328**Item no.: 734-329**

Strain relief plate; for female and male connectors; 25 mm wide; 1 part; gray

www.wago.com/734-329**Item no.: 734-430**

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

www.wago.com/734-430**Item no.: 734-431**

Strain relief plate; for female and male connectors; 75 mm wide; 1 part; gray

www.wago.com/734-431**Marking accessories**

Marking strip

Item no.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

www.wago.com/2009-110**Item no.: 210-831**

Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white

www.wago.com/210-831**Item no.: 210-833**

Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white

www.wago.com/210-833**Item no.: 210-834**

Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

www.wago.com/210-834**Item no.: 210-832**

Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white

www.wago.com/210-832

Marker

Item no.: 2009-115

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/2009-115**Item no.: 793-5501**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/793-5501**Tool**

Operating tool

Item no.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

www.wago.com/210-720

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| Ferrule | | |
|---------------------------|--|--|
| Ferrule | | |
| Item no.: 216-241 | Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white | www.wago.com/216-241 |
| Item no.: 216-242 | Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray | www.wago.com/216-242 |
| Item no.: 216-243 | Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red | www.wago.com/216-243 |
| Item no.: 216-244 | Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black | www.wago.com/216-244 |
| Item no.: 216-263 | Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red | www.wago.com/216-263 |
| Item no.: 216-246 | Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue | www.wago.com/216-246 |
| Item no.: 216-266 | Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue | www.wago.com/216-266 |
| Item no.: 216-264 | Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black | www.wago.com/216-264 |
| Item no.: 216-286 | Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue | www.wago.com/216-286 |
| Item no.: 216-262 | Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray | www.wago.com/216-262 |
| Locking levers | | |
| Locking system | | |
| Item no.: 2022-141 | Locking lever; gray | www.wago.com/2022-141 |
| Item no.: 2022-151 | Locking lever; gray | www.wago.com/2022-151 |
| Item no.: 2022-142 | Locking lever; orange | www.wago.com/2022-142 |
| Item no.: 2022-152 | Locking lever; orange | www.wago.com/2022-152 |

Subject to changes. Please also observe the further product documentation!



Downloads Documentation

Bid Text

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| 2022-181 docx - Datei | 2019 年5月14 日 | docx 16.5 kB | Download |
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|-------------------------|--------------|---------------|----------|
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Additional Information

| | | | |
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CAD/CAE-Data

CAD data

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CAE data

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Environmental Product Compliance

Compliance Search

| | | | |
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End module for 1-conductor female connector; Push-in CAGE CLAMP®; 4 mm²; Pin spacing 5.2 mm; 1-pole; 4,00 mm²; gray

Installation Notes

Coding

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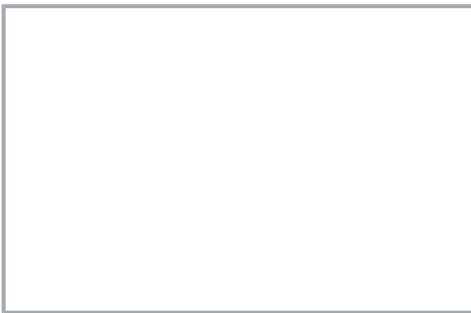
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Insert coding pin into the corresponding slot and twist it off.



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

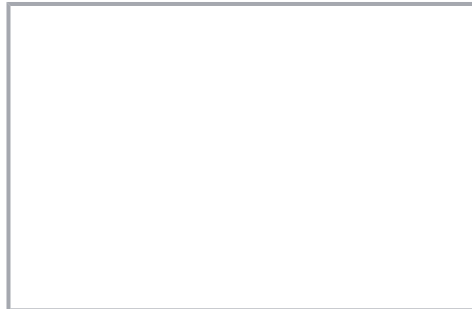


Insert coded female plug into X-COM[®]S-SYSTEM terminal block assembly.

Locking system



Slide the locking lever into position.



Female plugs can be individually locked.

Product family

X-COM S

[Show all products from the family](#)

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