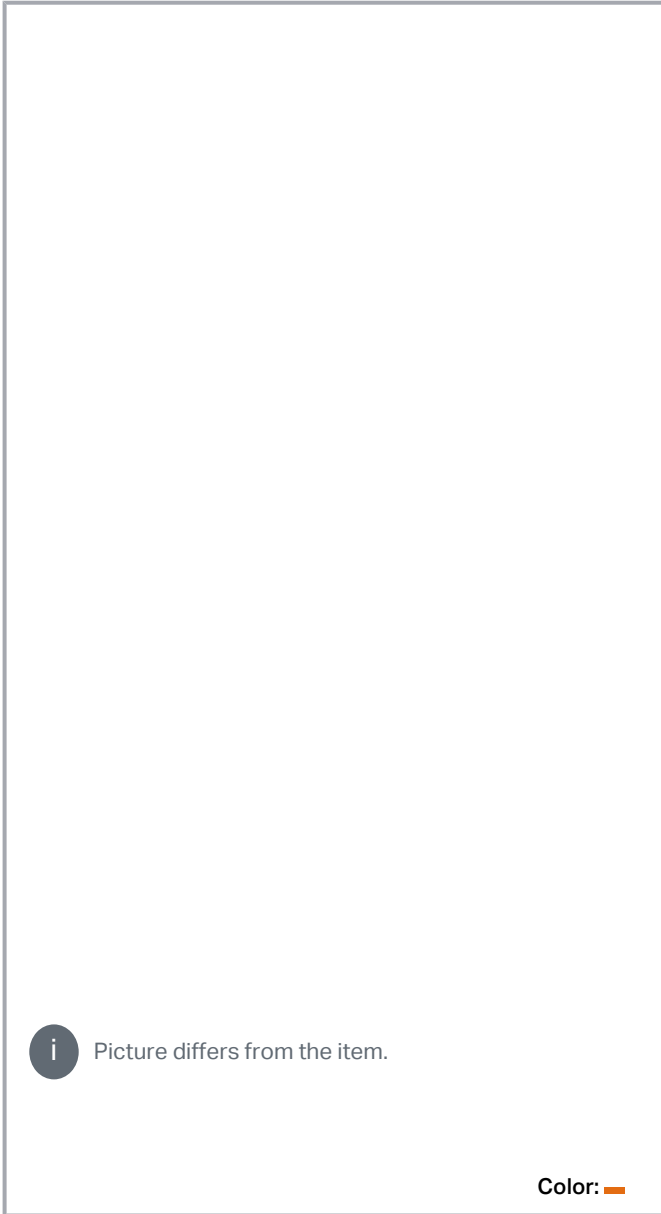


Data sheet | Item number: 231-643/114-000

Male connector; 13-pole; Pin spacing 5.08 mm ; snap-in flange; orange

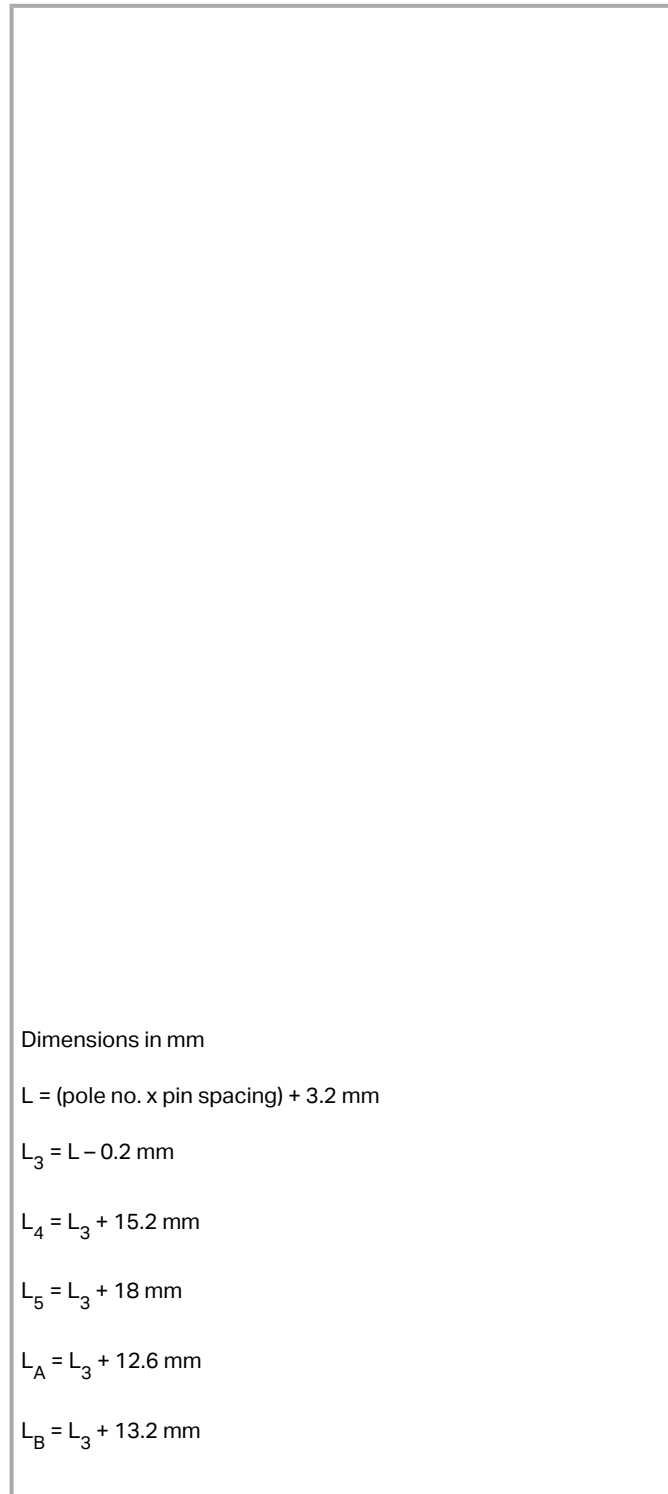
www.wago.com/231-643_114-000



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

WAGO Corporation
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Dimensions in mm

$$L = (\text{pole no.} \times \text{pin spacing}) + 3.2 \text{ mm}$$

$$L_3 = L - 0.2 \text{ mm}$$

$$L_4 = L_3 + 15.2 \text{ mm}$$

$$L_5 = L_3 + 18 \text{ mm}$$

$$L_A = L_3 + 12.6 \text{ mm}$$

$$L_B = L_3 + 13.2 \text{ mm}$$

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



Item description

- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For wire-to-wire and board-to-wire connections
- Versions available with snap-in mounting feet or flanges for panel or through-panel mounting
- With coding fingers

Data

Notes

Safety information 1

The *MCS – MULTI CONNECTION SYSTEM* includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected /disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated.

Variants:

Other pole numbers
Gold-plated or partially gold-plated contact surfaces
Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>

Electrical data

IEC Approvals

| | |
|-----------------------------|---|
| Ratings per | IEC/EN 60664-1 |
| Rated voltage (III / 3) | 320 V |
| Rated surge voltage (III/3) | 4 kV |
| Rated voltage (III/2) | 320 V |
| Rated surge voltage (III/2) | 4 kV |
| Nominal voltage (II/2) | 630 V |
| Rated surge voltage (II/2) | 4 kV |
| Rated current | 12 A |
| Legend (ratings) | (III / 2) ≙ Overvoltage category III / Pollution degree 2 |

UL Approvals

| | |
|--------------------------------|---------|
| Approvals per | UL 1059 |
| Rated voltage UL (Use Group B) | 300 V |
| Rated current UL (Use Group B) | 15 A |
| Rated voltage UL (Use Group D) | 300 V |

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

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| | |
|--------------------------------|------|
| Rated current UL (Use Group D) | 10 A |
|--------------------------------|------|

Ratings per UL

| | |
|-----------------------|-------|
| Rated voltage UL 1977 | 600 V |
| Rated current UL 1977 | 15 A |

CSA Approvals

| | |
|---------------------------------|-------|
| Approvals per | CSA |
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 15 A |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 10 A |

Connection data

| | |
|-----------------------------------|----|
| Total number of connection points | 13 |
| Total number of potentials | 13 |
| Number of connection types | 1 |
| Number of levels | 1 |

Connection 1

| | |
|---|--|
| Connection technology | CAGE CLAMP® |
| Actuation type | Operating tool |
| Solid conductor | 0.08 ... 2.5 mm ² / 28 ... 12 AWG |
| Fine-stranded conductor | 0.08 ... 2.5 mm ² / 28 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 ... 1.5 mm ² |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm ² |
| Strip length | 8 ... 9 mm / 0.31 ... 0.35 inch |
| Number of poles | 13 |
| Conductor entry direction to mating direction | 0° |

Physical data

| | |
|-------------|-----------------------|
| Pin spacing | 5.08 mm / 0.2 inch |
| Width | 87.04 mm / 3.427 inch |
| Height | 17.5 mm / 0.689 inch |
| Depth | 27.5 mm / 1.083 inch |

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Mechanical data

| | |
|-------------------------|--------------------------------------|
| Housing sheet thickness | 0.5 ... 2.5 mm / 0.02 ... 0.098 inch |
| Mounting type | Snap-in |
| Mounting type | Feed-through mounting |

Plug-in connection

| | |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector (connection type) | for conductor |
| Mismating protection | No |
| Locking of plug-in connection | Without |

Material data

| | |
|-----------------------------|--|
| Color | orange |
| Material group | I |
| Insulation material | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Clamping spring material | Chrome nickel spring steel (CrNi) |
| Contact material | Electrolytic copper (E _{Cu}) |
| Contact plating | tin-plated |
| Fire load | 0.393 MJ |
| Weight | 22.3 g |

Environmental requirements

| | |
|-------------------------|-----------------|
| Limit temperature range | -60 ... +100 °C |
|-------------------------|-----------------|

Commercial data

| | |
|-----------------------|------------------------|
| Product Group | 3 (Multi Conn. System) |
| PU (SPU) | 25 Stück |
| Packaging type | box |
| Country of origin | DE |
| GTIN | 4050821279853 |
| Customs tariff number | 8536694040 |

Approvals / Certificates

Country specific Approvals



Certificate

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


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| Logo | Approval | Additional Approval Text | name |
|--|--|--------------------------|------------|
| | CB DEKRA Certification B.V. | IEC 61984 | NL-39756 |
|  | CSA DEKRA Certification B.V. | C22.2 | 1466354 |
|  | KEMA/KEUR DEKRA Certification B.V. | EN 61984 | 2190761.01 |

Ship Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|---|----------------------------------|--------------------------|------------------|
|  | BV Bureau Veritas S.A. | IEC 60998 | 11915/D0 BV |

UL-Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|--|--------------------------|------------------|
|  | cURus Underwriters Laboratories Inc. | UL 1059 | E45172 |
|  | UR Underwriters Laboratories Inc. | UL 1977 | E45171 |

Counterpart



Item no.231-313/026-000

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 13-pole; 2,50 mm²; orange

www.wago.com/231-313/026-000

Optional accessories

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

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

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Item no.: 231-669
Lockout caps; for covering unused clamping units; orange

www.wago.com/231-669

Marking accessories

Marking strip

Item no.: 210-331/508-103
Marking strips; as a DIN A4 sheet; MARKED; 1-12 (200x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white www.wago.com/210-331/508-103

Item no.: 210-331/508-104
Marking strips; as a DIN A4 sheet; MARKED; 13-24 (200x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white www.wago.com/210-331/508-104

Item no.: 210-332/508-202
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white www.wago.com/210-332/508-202

Item no.: 210-332/508-204
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white www.wago.com/210-332/508-204

Item no.: 210-332/508-206
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white www.wago.com/210-332/508-206

Item no.: 210-332/508-205
Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white www.wago.com/210-332/508-205

Insulations stops

Insulation stop



Item no.: 231-672
Insulation stop; 0.75 - 1 mm²; dark gray www.wago.com/231-672



Item no.: 231-670
Insulation stop; 0.08-0.2 mm² / 0.2 mm² "s"; white www.wago.com/231-670



Item no.: 231-671
Insulation stop; 0.25 - 0.5 mm²; light gray www.wago.com/231-671

Tools

Operating tool



















Item no.: 209-130
Operating tool; suitable for 264, 280 and 281 Series; 1-way; of insulating material; white www.wago.com/209-130



Item no.: 209-132
Operating tool; for connecting comb-style jumper bar; 2-way; of insulating material www.wago.com/209-132

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

| | | |
|--|---|--|
|  | Item no.: 210-657 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured | www.wago.com/210-657 |
|  | Item no.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured | www.wago.com/210-720 |
|  | Item no.: 231-131 Operating tool; made of insulating material; 1-way; loose; white | www.wago.com/231-131 |
|  | Item no.: 231-291 Operating tool; made of insulating material; 1-way; loose; red | www.wago.com/231-291 |
|  | Item no.: 280-432 Operating tool; made of insulating material; 2-way; white | www.wago.com/280-432 |
|  | Item no.: 280-434 Operating tool; made of insulating material; 4-way | www.wago.com/280-434 |
|  | Item no.: 280-437 Operating tool; made of insulating material; 7-way | www.wago.com/280-437 |
|  | Item no.: 280-440 Operating tool; made of insulating material; 10-way | www.wago.com/280-440 |
|  | Item no.: 280-435 Operating tool; made of insulating material; 5-way; gray | www.wago.com/280-435 |
|  | Item no.: 280-436 Operating tool; made of insulating material; 6-way | www.wago.com/280-436 |
|  | Item no.: 280-438 Operating tool; made of insulating material; 8-way | www.wago.com/280-438 |
|  | Item no.: 280-433 Operating tool; made of insulating material; 3-way | www.wago.com/280-433 |
| Jumpers | | |
| Jumper | | |
|  | Item no.: 231-905 Jumper; for conductor entry; 5-way; insulated; gray | www.wago.com/231-905 |
|  | Item no.: 231-903 Jumper; for conductor entry; 3-way; insulated; gray | www.wago.com/231-903 |
|  | Item no.: 231-907 Jumper; for conductor entry; 7-way; insulated; gray | www.wago.com/231-907 |
|  | Item no.: 231-910 Jumper; for conductor entry; 10-way; insulated; gray | www.wago.com/231-910 |

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



Item no.: 231-902
Jumper; for conductor entry; 2-way; insulated; gray

www.wago.com/231-902

Coding

Coding

















Item no.: 231-129
Coding key; snap-on type; light gray

www.wago.com/231-129

Ferrules

Ferrule

| | | |
|---|--|--|
|  | Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-101 |
|  | Item no.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-104 |
|  | Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-106 |
|  | Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-102 |
|  | Item no.: 216-103 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated | www.wago.com/216-103 |
|  | Item no.: 216-123 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-123 |
|  | Item no.: 216-122 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-122 |
|  | Item no.: 216-124 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated | www.wago.com/216-124 |
|  | Item no.: 216-142 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 | www.wago.com/216-142 |
|  | Item no.: 216-132 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-132 |
|  | Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-121 |
|  | Item no.: 216-143 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 | www.wago.com/216-143 |
|  | Item no.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated; silver-colored | www.wago.com/216-131 |
|  | Item no.: 216-141 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight | www.wago.com/216-141 |

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



crimped; acc. to DIN 46228, Part 1/08.92

| | | |
|---|---|--|
|  | Item no.: 216-152 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-152 |
|  | Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red | www.wago.com/216-203 |
|  | Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray | www.wago.com/216-202 |
|  | Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated | www.wago.com/216-151 |
|  | Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black | www.wago.com/216-204 |
|  | Item no.: 216-144 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored | www.wago.com/216-144 |
|  | Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white | www.wago.com/216-201 |
|  | Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red | www.wago.com/216-223 |
|  | 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.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray | www.wago.com/216-222 |
|  | Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white | www.wago.com/216-221 |
|  | Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black | www.wago.com/216-224 |
|  | 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.: 216-264 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight | www.wago.com/216-264 |

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



crimped; acc. to DIN 46228, Part 4/09.90; black

| | | |
|--|--|--|
| | Item no.: 216-284 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/216-284 |
| | 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 |
| | Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow | www.wago.com/216-301 |
| | Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow | www.wago.com/216-321 |
| | Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green | www.wago.com/216-322 |
| | Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; light turquoise | www.wago.com/216-302 |

Downloads

Documentation

Additional Information

| | | | |
|------------------------|------------|---------------|----------|
| Technical explanations | 2019 Apr 3 | pdf 2.0 MB | Download |
|------------------------|------------|---------------|----------|

CAD files

CAD data

| | | |
|------------------------------|-----|----------|
| 2D/3D Models 231-643/114-000 | URL | Download |
|------------------------------|-----|----------|

CAE data

| | | |
|------------------------------|-----|----------|
| ZUKEN Portal 231-643/114-000 | URL | Download |
|------------------------------|-----|----------|

Environmental Product Compliance

Compliance Search

| | | |
|--|-----|----------|
| Environmental Product Compliance 231-643/114-000 1-conductor male connector; CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5.08 mm; 13-pole; Snap-in flange; 2,50 mm ² ; orange | URL | Download |
|--|-----|----------|

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

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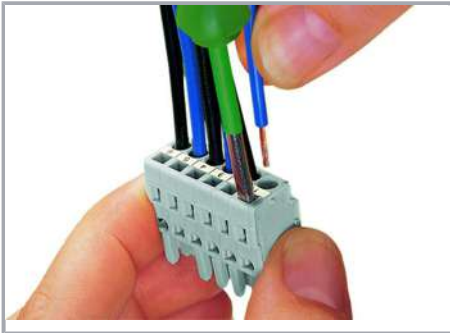
Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

Installation Notes

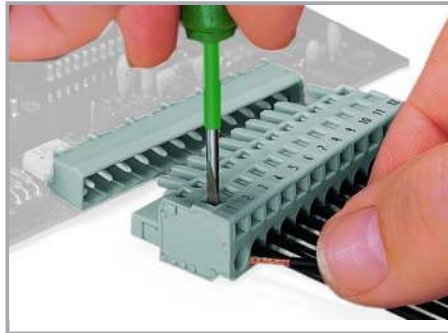
Application



Male connector, with snap-in flanges, for feedthrough applications, for 0.5 ... 2.5 mm plate thickness



Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.



Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



Inserting a conductor into CAGE CLAMP® unit via operating lever (231-291).



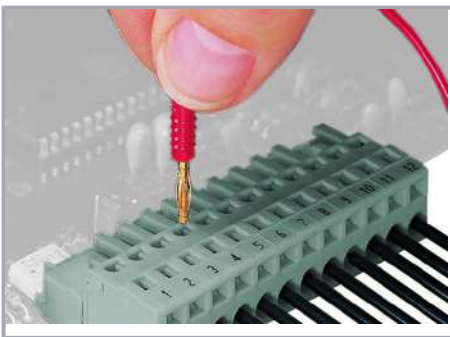
Inserting a conductor via operating tool.

Coding

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



Coding a male header – fitting coding key(s).



Testing – female connector with CAGE CLAMP®

Integrated test ports for testing perpendicular to conductor entry via 2 or 2.3 mm Ø test plug

Installation



Male connector with strain relief plate



Strain relief housing shown with a male connector equipped with CAGE CLAMP®

Marking

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



Labeling via direct marking or self-adhesive strips.

Product family

MCS MIDI Classic

[Show all products from the family](#)

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

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