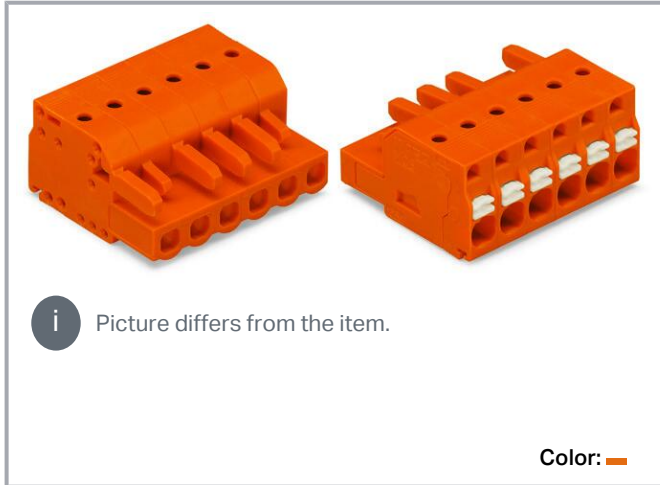


**Data sheet | Item number: 2231-308/102-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; with integrated end plate; 2,50 mm<sup>2</sup>; orange

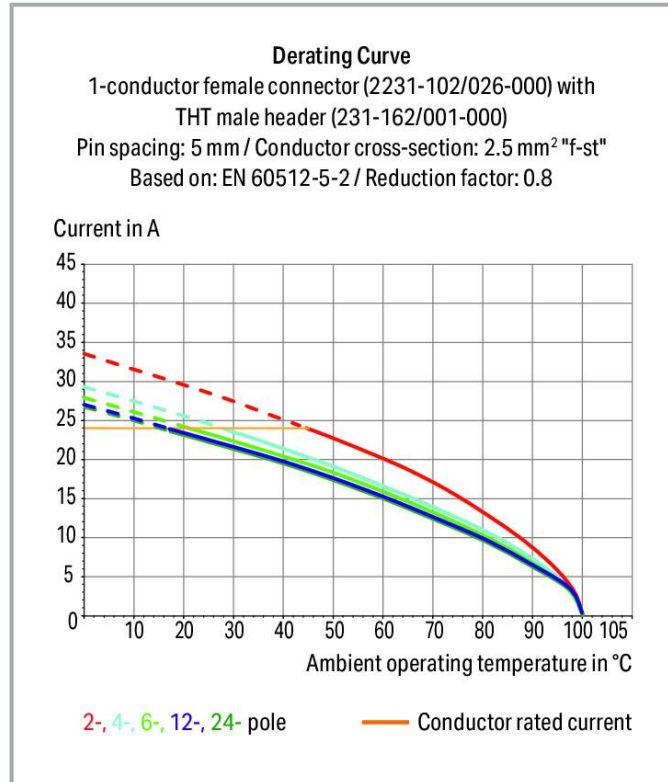


[www.wago.com/2231-308/102-000](http://www.wago.com/2231-308/102-000)



Picture differs from the item.

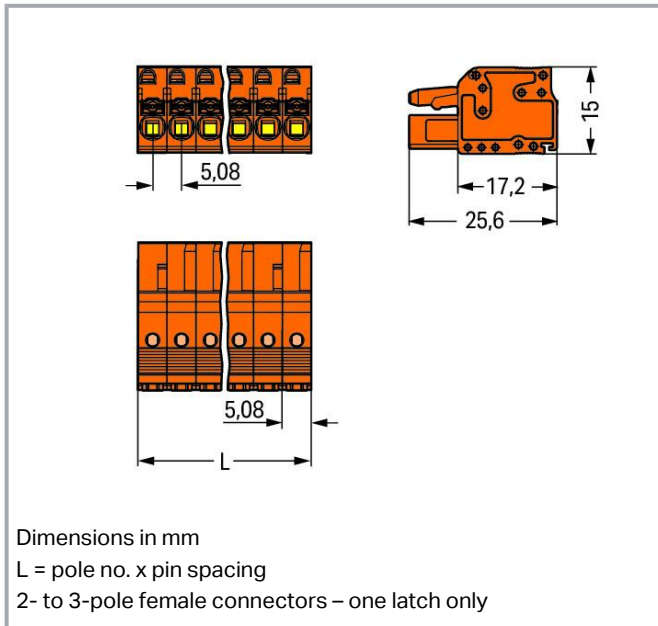
Color: 



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

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## Item description

- Universal connection for all conductor types
- Easy-to-use design does not require specialty tools
- Ability to wire while mated
- Push-in termination of solid and ferruled conductors
- Integrated test ports for testing parallel to the conductor entry
- Coding option available

## Data

### Notes

#### Safety information

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. 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:

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

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

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### Ratings per IEC/EN

|                               |   |
|-------------------------------|---|
| Ratings per                   | IEC/EN 60664-1  |
| Nominal voltage (III/3)       | 320 V   |
| Rated impulse voltage (III/3) | 4 kV  |
| Rated voltage (III/2)         | 320 V   |
| Rated impulse voltage (III/2) | 4 kV  |
| Nominal voltage (II/2)        | 630 V   |
| Rated surge voltage (II/2)    | 4 kV  |
| Rated current                 | 16 A  |
| Legend (ratings)              | (III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2 |

### Ratings per UL

|                                |         |
|--------------------------------|---------|
| 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 C) | 150 V   |
| Rated current UL (Use Group C) | 15 A    |
| Rated voltage UL (Use Group D) | 300 V   |
| Rated current UL (Use Group D) | 10 A    |

### Ratings per UL 1977

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

### Ratings per CSA

|                                 |       |
|---------------------------------|-------|
| Approvals per                   | CSA   |
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 15 A  |
| Rated voltage CSA (Use Group C) | 150 V |
| Rated current CSA (Use Group C) | 15 A  |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 10 A  |

### Connection data

|                   |   |
|-------------------|---|
| Connection points | 8 |
|-------------------|---|

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



|                            |   |
|----------------------------|---|
| Total number of potentials | 8 |
| Number of connection types | 1 |
| Number of levels           | 1 |

### Connection 1

|   |   |
|---|---|
| Connection technology                             | Push-in CAGE CLAMP®                         |
| Actuation type                                    | Push-button                                 |
| Actuation direction 1                             | Operation parallel to conductor entry       |
| Solid conductor                                   | 0.2 ... 2.5 mm <sup>2</sup> / 24 ... 12 AWG |
| Fine-stranded conductor                           | 0.2 ... 2.5 mm <sup>2</sup> / 24 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1.5 mm <sup>2</sup>                |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm <sup>2</sup>                |
| Strip length                                      | 10 ... 11 mm / 0.39 ... 0.43 inches         |
| Pole number                                       | 8   |
| Conductor entry direction to mating direction     | 0°  |

### Physical data

|             |                        |
|-------------|------------------------|
| Pin spacing | 5.08 mm / 0.2 inches   |
| Width       | 40.64 mm / 1.6 inches  |
| Height      | 15 mm / 0.591 inches   |
| Depth       | 25.6 mm / 1.008 inches |

### Mechanical Data

|                          |     |
|--------------------------|-----|
| Variable coding          | Yes |
| Anti-rotation protection | Yes |

### 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                     |
| Locking of plug-in connection        | none                    |

### Material data

Note (material data)

Information on material specifications can be found here

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



|                             |                                   |
|-----------------------------|-----------------------------------|
| Color                       | orange                            |
| Material group              | I                                 |
| Insulation material         | Polyamide (PA66)                  |
| Flammability class per UL94 | V0                                |
| Clamping spring material    | Chrome-nickel spring steel (CrNi) |
| Contact material            | Copper alloy                      |
| Contact plating             | Tin                               |
| Fire load                   | 0.254 MJ                          |
| Weight                      | 12.3 g                            |

### Environmental requirements

|                         |                 |
|-------------------------|-----------------|
| Limit temperature range | -60 ... +100 °C |
| Processing temperature  | -35 ... +60 °C  |

### Commercial data

|                       |                        |
|-----------------------|------------------------|
| Product Group         | 3 (Multi Conn. System) |
| eCl@ss 10.0           | 27-44-03-09            |
| eCl@ss 9.0            | 27-44-03-09            |
| ETIM 8.0              | EC002638               |
| ETIM 7.0              | EC002638               |
| ECCN                  | NO DATA                |
| PU (SPU)              | 50 pcs                 |
| Packaging type        | box                    |
| Country of origin     | PL                     |
| GTIN                  | 4045454907914          |
| Customs tariff number | 85366990990            |

### Environmental Product Compliance

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

### Approvals / Certificates

#### General approvals

| Logo | Approval                              | Additional Approval Text | Certificate name |
|------|---------------------------------------|--------------------------|------------------|
|      | <b>CB</b><br>DEKRA Certification B.V. | IEC 61984                | NL-39756<br>/A1  |

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

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CSA  
DEKRA Certification B.V.

C22.2 No. 158

2314554



KEMA/KEUR  
DEKRA Certification B.V.

EN 61984

71-  
121453



UL  
UL International Germany GmbH

UL 1977

E45171



UR  
Underwriters Laboratories Inc.

UL 1059

E45172

## Counterpart



Item no.231-638

1-conductor male connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 8-pole; 2,50 mm<sup>2</sup>; orange

[www.wago.com/231-638](http://www.wago.com/231-638)



Item no.231-338/001-000

THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 5.08 mm; 8-pole; orange

[www.wago.com/231-338/001-000](http://www.wago.com/231-338/001-000)



Item no.231-538/001-000



THT male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 5.08 mm; 8-pole; orange

[www.wago.com/231-538/001-000](http://www.wago.com/231-538/001-000)

## Optional accessories

### Ferrule

Ferrule











|   |   |  |
|---|---|--|
|  | <b>Item no.: 216-101</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored | <a href="http://www.wago.com/216-101">www.wago.com/216-101</a> |
|  | <b>Item no.: 216-104</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated; silver-colored | <a href="http://www.wago.com/216-104">www.wago.com/216-104</a> |
|  | <b>Item no.: 216-106</b><br>Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; uninsulated; electro-tin plated; silver-colored | <a href="http://www.wago.com/216-106">www.wago.com/216-106</a> |
|  | <b>Item no.: 216-102</b>  |  |

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



|   |   |  |
|---|---|--|
|   | Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored  | <a href="http://www.wago.com/216-102">www.wago.com/216-102</a> |
| 1 | <b>Item no.: 216-103</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated   | <a href="http://www.wago.com/216-103">www.wago.com/216-103</a> |
| 1 | <b>Item no.: 216-123</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored   | <a href="http://www.wago.com/216-123">www.wago.com/216-123</a> |
| 1 | <b>Item no.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored  | <a href="http://www.wago.com/216-122">www.wago.com/216-122</a> |
| 1 | <b>Item no.: 216-124</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated   | <a href="http://www.wago.com/216-124">www.wago.com/216-124</a> |
| 1 | <b>Item no.: 216-142</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92                | <a href="http://www.wago.com/216-142">www.wago.com/216-142</a> |
| 1 | <b>Item no.: 216-132</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated  | <a href="http://www.wago.com/216-132">www.wago.com/216-132</a> |
| 1 | <b>Item no.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored   | <a href="http://www.wago.com/216-121">www.wago.com/216-121</a> |
| 1 | <b>Item no.: 216-143</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92                   | <a href="http://www.wago.com/216-143">www.wago.com/216-143</a> |
| 1 | <b>Item no.: 216-131</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored  | <a href="http://www.wago.com/216-131">www.wago.com/216-131</a> |
| 1 | <b>Item no.: 216-141</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92                 | <a href="http://www.wago.com/216-141">www.wago.com/216-141</a> |
| 1 | <b>Item no.: 216-152</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated  | <a href="http://www.wago.com/216-152">www.wago.com/216-152</a> |
| 1 | <b>Item no.: 216-203</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red  | <a href="http://www.wago.com/216-203">www.wago.com/216-203</a> |
| 1 | <b>Item no.: 216-202</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray  | <a href="http://www.wago.com/216-202">www.wago.com/216-202</a> |
| 1 | <b>Item no.: 216-151</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated  | <a href="http://www.wago.com/216-151">www.wago.com/216-151</a> |
| 1 | <b>Item no.: 216-204</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black  | <a href="http://www.wago.com/216-204">www.wago.com/216-204</a> |
| 1 | <b>Item no.: 216-144</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored | <a href="http://www.wago.com/216-144">www.wago.com/216-144</a> |
| 1 | <b>Item no.: 216-201</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white  | <a href="http://www.wago.com/216-201">www.wago.com/216-201</a> |

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

|   |  |  |
|---|--|--|
|    | <b>Item no.: 216-223</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red   | <a href="http://www.wago.com/216-223">www.wago.com/216-223</a> |
|    | <b>Item no.: 216-241</b><br>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 | <a href="http://www.wago.com/216-241">www.wago.com/216-241</a> |
|    | <b>Item no.: 216-242</b><br>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 | <a href="http://www.wago.com/216-242">www.wago.com/216-242</a> |
|    | <b>Item no.: 216-222</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray   | <a href="http://www.wago.com/216-222">www.wago.com/216-222</a> |
|    | <b>Item no.: 216-221</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white   | <a href="http://www.wago.com/216-221">www.wago.com/216-221</a> |
|    | <b>Item no.: 216-224</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black   | <a href="http://www.wago.com/216-224">www.wago.com/216-224</a> |
|    | <b>Item no.: 216-243</b><br>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     | <a href="http://www.wago.com/216-243">www.wago.com/216-243</a> |
|    | <b>Item no.: 216-244</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black | <a href="http://www.wago.com/216-244">www.wago.com/216-244</a> |
|    | <b>Item no.: 216-263</b><br>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     | <a href="http://www.wago.com/216-263">www.wago.com/216-263</a> |
|  | <b>Item no.: 216-264</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black | <a href="http://www.wago.com/216-264">www.wago.com/216-264</a> |
|  | <b>Item no.: 216-262</b><br>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 | <a href="http://www.wago.com/216-262">www.wago.com/216-262</a> |
|  | <b>Item no.: 216-301</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow   | <a href="http://www.wago.com/216-301">www.wago.com/216-301</a> |
|  | <b>Item no.: 216-321</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow   | <a href="http://www.wago.com/216-321">www.wago.com/216-321</a> |
|  | <b>Item no.: 216-322</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise  | <a href="http://www.wago.com/216-322">www.wago.com/216-322</a> |
|  | <b>Item no.: 216-302</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise  | <a href="http://www.wago.com/216-302">www.wago.com/216-302</a> |

### Testing and measuring

Testing accessories

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

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Do you have any questions about our products?  
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**Item no.: 210-136**  
Test plug; 2 mm Ø; with 500 mm cable; red

[www.wago.com/210-136](http://www.wago.com/210-136)



**Item no.: 231-661**  
Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm<sup>2</sup>; light gray

[www.wago.com/231-661](http://www.wago.com/231-661)

#### Tool

Operating tool



**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](http://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](http://www.wago.com/210-720)

#### Insulation stop

Insulation stop



**Item no.: 231-672**  
Insulation stop; 0.75 - 1 mm<sup>2</sup>; dark gray

[www.wago.com/231-672](http://www.wago.com/231-672)



**Item no.: 231-671**  
Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; light gray

[www.wago.com/231-671](http://www.wago.com/231-671)

#### Strain relief

Strain relief plate



**Item no.: 734-226**  
Strain relief plate; for female and male connectors; 35 mm wide; 1 part; Pin spacing 3.81 mm; orange

[www.wago.com/734-226](http://www.wago.com/734-226)

#### Marking accessories

Marking strip



**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](http://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](http://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](http://www.wago.com/210-332/508-206)

**Item no.: 210-332/508-205**

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



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](http://www.wago.com/210-332/508-205)

## Downloads

### Documentation

#### Additional Information

|                        |            |        |          |
|------------------------|------------|--------|----------|
| Technical Section      | 2019 Apr 3 | pdf    | Download |
| Technical explanations |            | 2.1 MB |          |

## CAD/CAE-Data

### CAD data

|                               |     |          |
|-------------------------------|-----|----------|
| 2D/3D Models 2231-308/102-000 | URL | Download |
|-------------------------------|-----|----------|

### CAE data

|                               |     |          |
|-------------------------------|-----|----------|
| ZUKEN Portal 2231-308/102-000 | URL | Download |
|-------------------------------|-----|----------|

### Asset Administration Shell

|   |     |          |
|---|-----|----------|
| Asset Administration Shell 2231-308/102-000 | URL | Download |
|---|-----|----------|

## Environmental Product Compliance

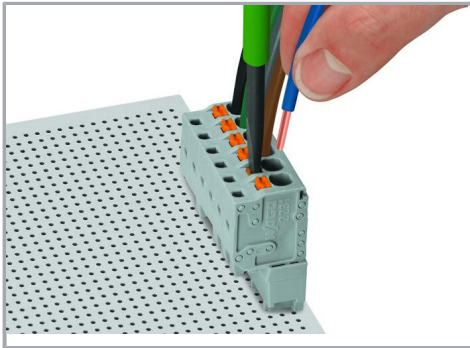
### Compliance Search

|   |     |          |
|---|-----|----------|
| Environmental Product Compliance 2231-308/102-000   | URL | Download |
| 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm <sup>2</sup> ; Pin spacing 5.08 mm; 8-pole; with integrated end plate; 2,50 mm <sup>2</sup> ; orange |     |          |

## Installation Notes

### Conductor termination

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

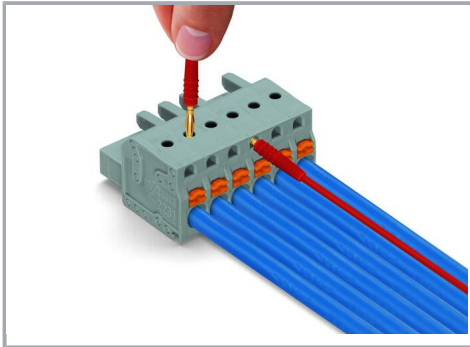


Inserting fine-stranded conductors into Push-in CAGE CLAMP® unit via push-buttons.



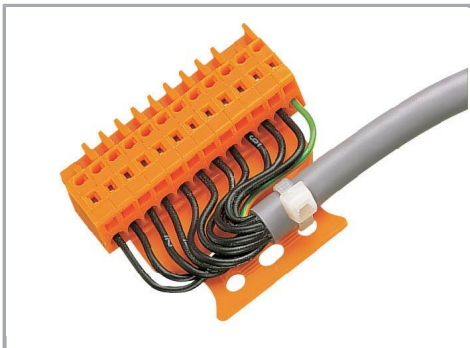
Push-in termination of solid conductors or fine-stranded conductors with ferrule

### Testing

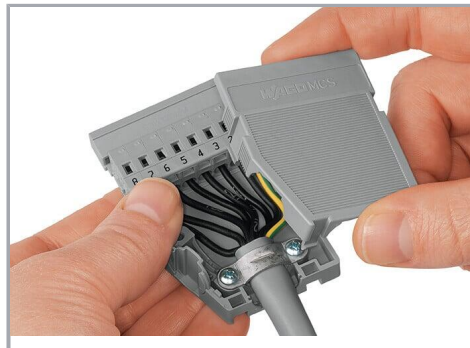


Testing parallel to conductor entry via integrated test ports – female connector with push-buttons and Push-in CAGE CLAMP® connection – touch contact perpendicular to conductor entry.

### 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!