

## Data sheet | Item number: 713-1106/107-000

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 12-pole; 100% protected against mismating; Screw flange; 1,50 mm<sup>2</sup>; black

[www.wago.com/713-1106/107-000](http://www.wago.com/713-1106/107-000)

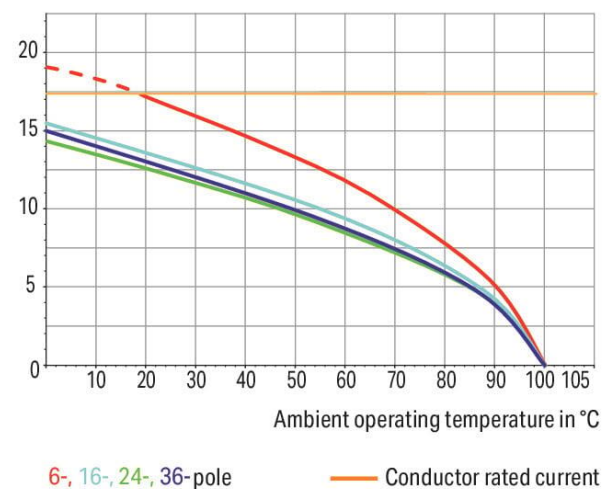


Picture differs from the item.

Color: —

**Derating Curve**  
1-conductor female connector (713-1103) with  
THT male header (713-1403)  
Pin spacing: 3.5 mm / Conductor cross-section: 1.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 0.8

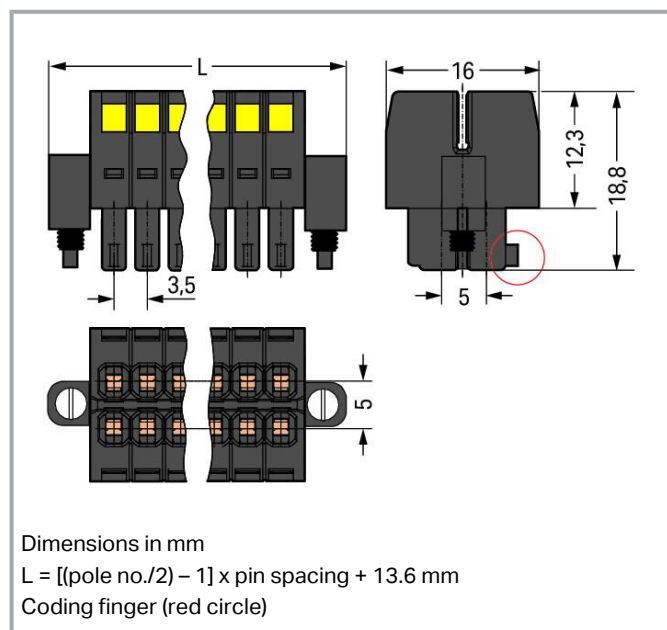
Current in A



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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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



## Item description

- Universal connection for all conductor types
- Unique, compact, double-row connector system for conductor cross-sections up to 1.5 mm<sup>2</sup>
- High-density, wire-to-board connections in very confined spaces
- Centered strain relief plate anchors conductors, while acting as convenient connection and disconnection handle. It also provides easy access to operating slots – even when wired.
- Coding fingers provide 100% protection against mismatching

## 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:

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/>.

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



## Electrical data

### Ratings per IEC/EN

| Ratings per                   | IEC/EN 60664-1                                                       |
|-------------------------------|----------------------------------------------------------------------|
| Nominal voltage (III/3)       | 80 V                                                                 |
| Rated impulse voltage (III/3) | 2.5 kV                                                               |
| Rated voltage (III/2)         | 160 V                                                                |
| Rated impulse voltage (III/2) | 2.5 kV                                                               |
| Nominal voltage (II/2)        | 250 V                                                                |
| Rated surge voltage (II/2)    | 2.5 kV                                                               |
| Rated current                 | 10 A                                                                 |
| Legend (ratings)              | (III / 2) $\triangleq$ 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) | 10 A    |
| Rated voltage UL (Use Group C) | 50 V    |
| Rated current UL (Use Group C) | 10 A    |

### Ratings per CSA

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

## Connection data

|                            |    |
|----------------------------|----|
| Connection points          | 12 |
| Total number of potentials | 12 |
| Number of connection types | 1  |
| Number of levels           | 2  |

### Connection 1

|                       |                                              |
|-----------------------|----------------------------------------------|
| Connection technology | CAGE CLAMP®                                  |
| Actuation type        | Operating tool                               |
| Actuation direction 1 | Operation perpendicular to conductor entry   |
| Solid conductor       | 0.08 ... 1.5 mm <sup>2</sup> / 28 ... 16 AWG |

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



|                                                   |                                              |
|---------------------------------------------------|----------------------------------------------|
| Fine-stranded conductor                           | 0.08 ... 1.5 mm <sup>2</sup> / 28 ... 16 AWG |
| Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1 mm <sup>2</sup>                   |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 1 mm <sup>2</sup>                   |
| Strip length                                      | 6 ... 7 mm / 0.24 ... 0.28 inches            |
| Pole number                                       | 12                                           |
| Conductor entry direction to mating direction     | 0 °                                          |

## Physical data

|             |                        |
|-------------|------------------------|
| Pin spacing | 3.5 mm / 0.138 inches  |
| Width       | 31.1 mm / 1.224 inches |
| Height      | 18.8 mm / 0.74 inches  |
| Depth       | 16 mm / 0.63 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                 | Yes                     |
| Plugging without loss of pin spacing | No                      |
| Locking of plug-in connection        | Screw flange            |

## Material data

|                             |                                                          |
|-----------------------------|----------------------------------------------------------|
| Note (material data)        | Information on material specifications can be found here |
| Color                       | black                                                    |
| Material group              | II                                                       |
| Insulation material         | Glass fiber-reinforced polyamide (PA66 GF)               |
| Flammability class per UL94 | V0                                                       |
| Clamping spring material    | Chrome-nickel spring steel (CrNi)                        |
| Contact material            | Copper alloy                                             |
| Contact plating             | Tin                                                      |
| Fire load                   | 0.101 MJ                                                 |
| Weight                      | 7 g                                                      |

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

## 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           | 27-14-11-06            |
| eCl@ss 9.0            | 27-14-11-06            |
| ETIM 8.0              | EC001284               |
| ETIM 7.0              | EC001284               |
| PU (SPU)              | 25 pcs                 |
| Packaging type        | box                    |
| Country of origin     | PL                     |
| GTIN                  | 4045454806774          |
| Customs tariff number | 85366990990            |

## Environmental Product Compliance

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

## Approvals / Certificates

### General approvals

| Logo                                                                               | Approval                             | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|--------------------------------------|--------------------------|------------------|
|  | CSA<br>CSA Group                     | C22.2                    | 2315087          |
|  | UR<br>Underwriters Laboratories Inc. | UL 1059                  | E45172           |

## Counterpart



### Item no. 713-1406/107-000

THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Threaded flange; Pin spacing 3.5 mm; 12-pole; black

[www.wago.com/713-1406/107-000](http://www.wago.com/713-1406/107-000)

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

**Item no.713-1406/117-000**

THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Threaded flange; Pin spacing 3.5 mm; 12-pole; black

[www.wago.com/713-1406/117-000](http://www.wago.com/713-1406/117-000)

**Item no.713-1406/117-000/997-406**

THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; in tape-and-reel packaging; Pin spacing 3.5 mm; 12-pole; black

[www.wago.com/713-1406/117-000/997-406](http://www.wago.com/713-1406/117-000/997-406)

**Item no.713-1426/107-000**

THT male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Threaded flange; Pin spacing 3.5 mm; 12-pole; black

[www.wago.com/713-1426/107-000](http://www.wago.com/713-1426/107-000)

**Item no.713-1426/117-000/997-406**

THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Threaded flange; in tape-and-reel packaging; Pin spacing 3.5 mm; 12-pole; black

[www.wago.com/713-1426/117-000/997-406](http://www.wago.com/713-1426/117-000/997-406)

**Item no.713-1426/117-000**

THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Threaded flange; Pin spacing 3.5 mm; 12-pole; black

[www.wago.com/713-1426/117-000](http://www.wago.com/713-1426/117-000)

**Item no.713-1466/107-000**

THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; with orientation nose; Threaded flange; Pin spacing 3.5 mm; 12-pole; black

[www.wago.com/713-1466/107-000](http://www.wago.com/713-1466/107-000)

## Optional accessories

### Tool

Operating tool

**Item no.: 210-647**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

[www.wago.com/210-647](http://www.wago.com/210-647)

**Item no.: 210-719**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

[www.wago.com/210-719](http://www.wago.com/210-719)

### Ferrule

Ferrule

**Item no.: 216-101**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored

[www.wago.com/216-101](http://www.wago.com/216-101)

**Item no.: 216-102**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored

[www.wago.com/216-102](http://www.wago.com/216-102)

**Item no.: 216-103**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated

[www.wago.com/216-103](http://www.wago.com/216-103)

**Item no.: 216-123**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored

[www.wago.com/216-123](http://www.wago.com/216-123)

**Item no.: 216-122**

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

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.



|                                                                                   |                                                                                                                                                                                            |                                                                |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
|                                                                                   | 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> |
|    | <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> |
|    | <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> |
|    | <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> |
|    | <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> |
|    | <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> |
|    | <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> |
|    | <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> |
|    | <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> |
|  | <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> |
|  | <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> |
|  | <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> |
|  | <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.: 216-243</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped;                                          | <a href="http://www.wago.com/216-243">www.wago.com/216-243</a> |

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

acc. to DIN 46228, Part 4/09.90; red

**Item no.: 216-263**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; [www.wago.com/216-263](http://www.wago.com/216-263)  
acc. to DIN 46228, Part 4/09.90; red

**Item no.: 216-262**

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 [www.wago.com/216-262](http://www.wago.com/216-262)

**Item no.: 216-301**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow [www.wago.com/216-301](http://www.wago.com/216-301)

**Item no.: 216-321**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow [www.wago.com/216-321](http://www.wago.com/216-321)

**Item no.: 216-322**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise [www.wago.com/216-322](http://www.wago.com/216-322)

**Item no.: 216-302**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise [www.wago.com/216-302](http://www.wago.com/216-302)

**Strain relief**

Strain relief plate

**Item no.: 713-130**

Strain relief plate; for female connectors; 1 part; Pin spacing 3.5 mm; black [www.wago.com/713-130](http://www.wago.com/713-130)

**Downloads****Documentation****Additional Information**

2019 Apr 3

pdf  
2.1 MB

Download

**CAD/CAE-Data****CAE data**

ZUKEN Portal 713-1106/107-000

URL

Download

**CAD data**

2D/3D Models 713-1106/107-000

URL

Download

**Asset Administration Shell**

Asset Administration Shell 713-1106/107-000

URL

Download

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

WAGO GmbH &amp; Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 713-1106/107-000

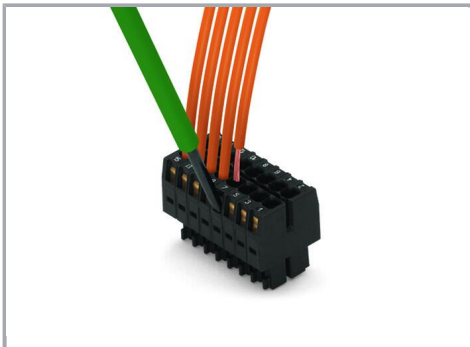
URL

Download

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm;  
12-pole; 100% protected against mismatching; Screw flange; 1,50 mm²; black

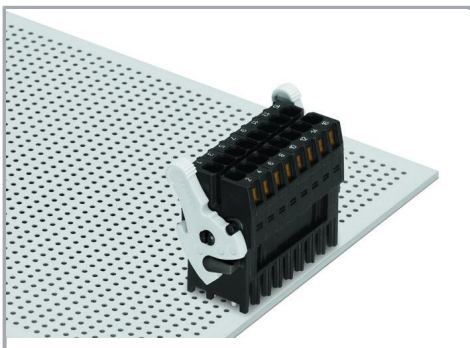
## Installation Notes

### Conductor termination

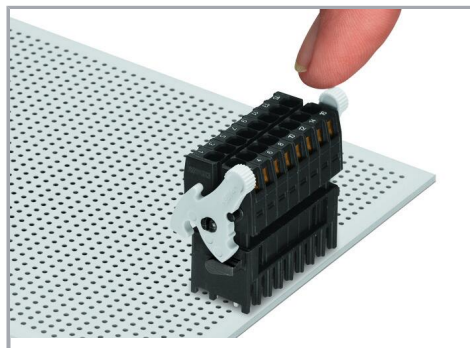


Inserting a conductor via (2.5 x 0.4) mm screwdriver.

### Locking system



Lever as a lock – when closed, female connector is locked.

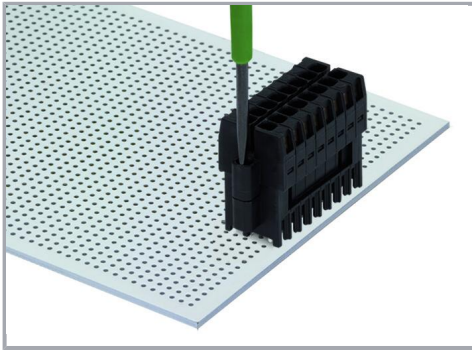


Lever as a disconnection aid – when opened, female connector is disconnected. Rotating the lever lifts the female connector out of the male header.

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

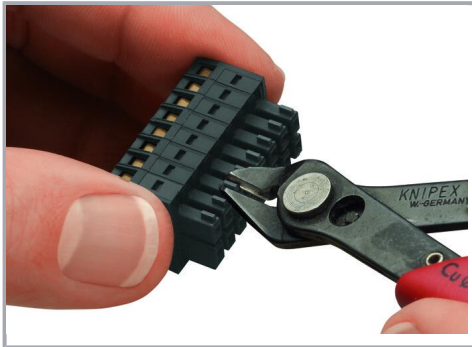
WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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



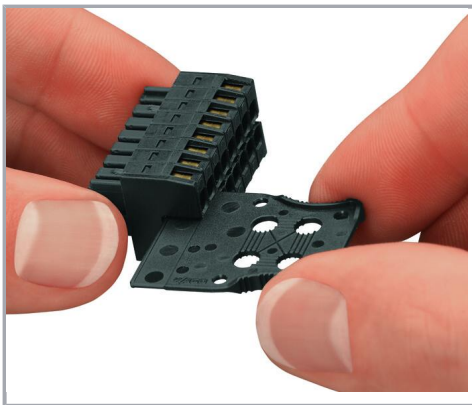
Screw interlock can only be disconnected using a tool.

### Coding

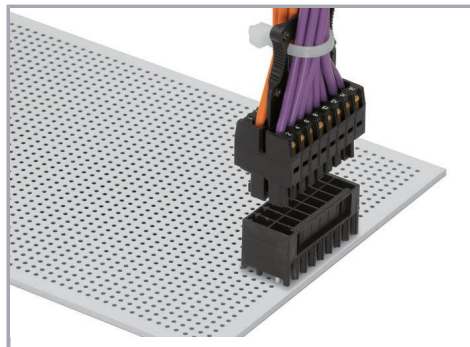


Coding a female connector by removing coding finger(s).

### Strain relief



Strain relief plate for field assembly



Centered strain relief plate anchors conductors for easy disconnection.

### Product family

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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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



**MCS MINI HD**

[Show all products from the family](#)

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

---

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.