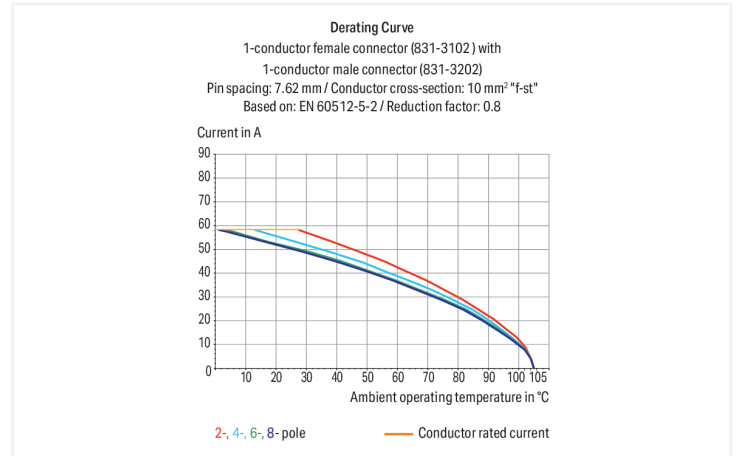
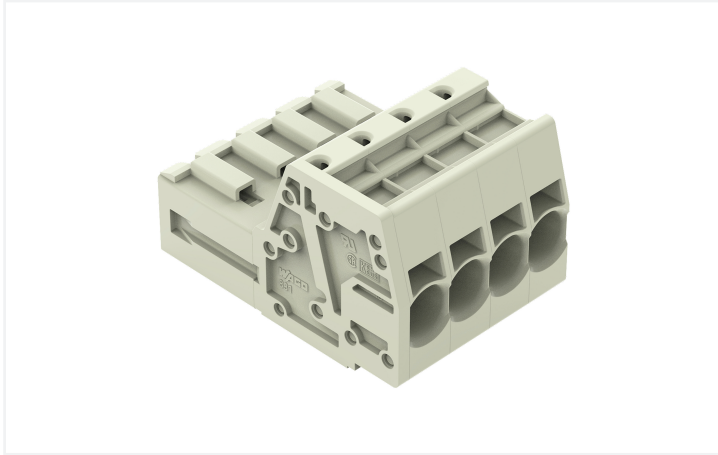


# Data Sheet | Item Number: 831-3202/133-000

1-conductor male connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 2-pole; 100% protected against mismatching; Strain relief plate; 10,00 mm²; light gray

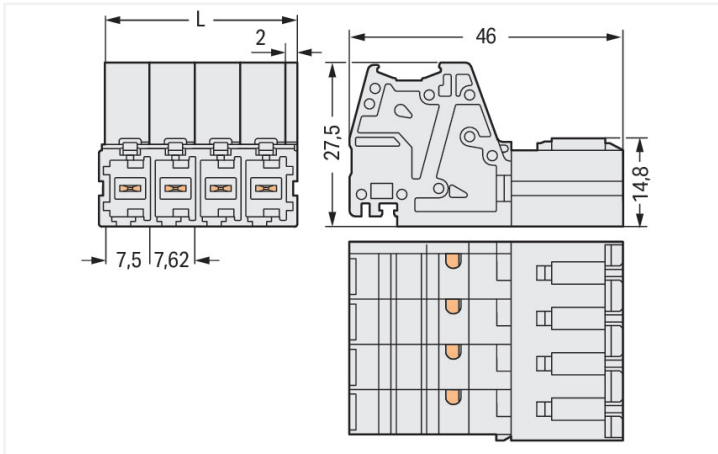


<https://www.wago.com/831-3202/133-000>

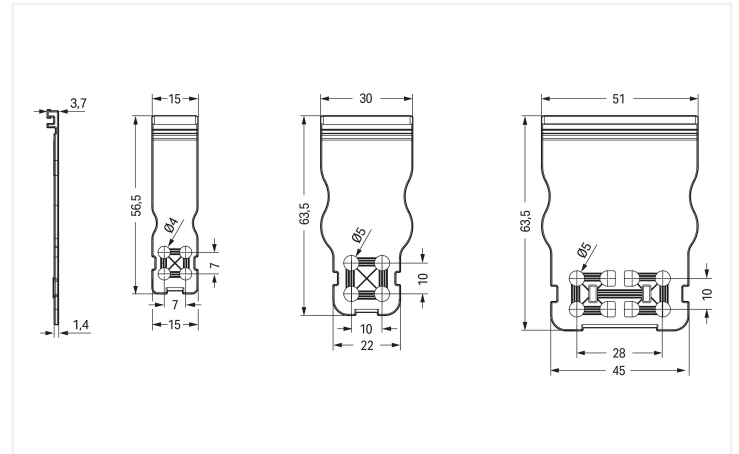


Color: ■ light gray

Similar to illustration



Dimensions in mm  
 $L = (\text{pole no.} - 1) \times \text{pin spacing} + 9.5 \text{ mm}$



Dimensions in mm  
The arrangement of the attachments for cable ties allows single conductors or multi-core cables to be secured in different ways. The width of the cable ties must correspond to the hole dimensions of the strain relief plates shown above.

## Male connector, 831 Series, operating tool

This male connector (item number 831-3202/133-000) is designed for seamless electrical installations. Conductors can only be connected to this male connector if their strip length is between 13 and 15 mm. This product incorporates one conductor terminal and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® technology provides a universal connection solution for all conductor types. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. The dimensions are (17.12 x 27.5 x 46) mm (width x height x depth). Depending on the type of conductor, this male connector is ideal for conductor cross sections ranging from 0.5 mm² to 10 mm².

The contact surface is coated with tin. You can secure connected conductors using the strain relief plate to make cables easier to handle..

## 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

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

## Electrical data

| Ratings per                     | IEC/EN 60664-1 |        |        |
|---------------------------------|----------------|--------|--------|
| Overvoltage category            | III            | III    | II     |
| Pollution degree                | 3              | 2      | 2      |
| Nominal voltage                 | 800 V          | 1000 V | 1000 V |
| Rated impulse withstand voltage | 8 kV           | 8 kV   | 8 kV   |
| Rated current                   | 41 A           | 41 A   | 41 A   |

| Approvals per | UL 1059 |       |   |
|---------------|---------|-------|---|
| Use group     | B       | C     | D |
| Rated voltage | -       | 600 V | - |
| Rated current | -       | 42 A  | - |

| Approvals per | CSA |       |   |
|---------------|-----|-------|---|
| Use group     | B   | C     | D |
| Rated voltage | -   | 600 V | - |
| Rated current | -   | 41 A  | - |

## Connection Data

|                            |   |
|----------------------------|---|
| Clamping units             | 2 |
| Total number of potentials | 2 |
| Number of connection types | 1 |
| Number of levels           | 1 |

## Connection 1

|   |   |
|---|---|
| Connection technology                             | Push-in CAGE CLAMP®                       |
| Actuation type                                    | Operating tool                            |
| Actuation direction 1                             | Operation parallel to conductor entry     |
| Solid conductor                                   | 0.5 ... 10 mm <sup>2</sup> / 20 ... 8 AWG |
| Fine-stranded conductor                           | 0.5 ... 10 mm <sup>2</sup> / 20 ... 8 AWG |
| Fine-stranded conductor; with insulated ferrule   | 0.5 ... 6 mm <sup>2</sup>                 |
| Fine-stranded conductor; with uninsulated ferrule | 0.5 ... 6 mm <sup>2</sup>                 |
| Strip length                                      | 13 ... 15 mm / 0.51 ... 0.59 inches       |
| Pole number                                       | 2   |
| Conductor entry direction to mating direction     | 0°  |

## Physical data

|             |                         |
|-------------|-------------------------|
| Pin spacing | 7.62 mm / 0.3 inches    |
| Width       | 17.12 mm / 0.674 inches |
| Height      | 27.5 mm / 1.083 inches  |
| Depth       | 46 mm / 1.811 inches    |

### Mechanical data

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

### Plug-in connection

|                                    |                     |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector (connection type)        | for conductor       |
| Mismating protection               | Yes                 |
| Strain relief                      | Strain relief plate |

### Material data

|                                    |  |
|------------------------------------|--|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | light gray   |
| Material group                     | I  |
| Insulation material (main housing) | Polyamide (PA66)   |
| Flammability class per UL94        | V0   |
| Clamping spring material           | Chrome-nickel spring steel (CrNi)  |
| Contact material                   | Electrolytic copper (E <sub>Cu</sub> )                                   |
| Contact Plating                    | Tin  |
| Fire load                          | 0.278 MJ   |
| Weight                             | 15.6 g   |

### Environmental requirements

|                         |                 |
|-------------------------|-----------------|
| Limit temperature range | -60 ... +105 °C |
| Processing temperature  | -35 ... +60 °C  |

### Environmental Testing

|   |   |
|---|---|
| Test specification:<br>Railway applications –<br>Rolling stock –<br>Electronic equipment            | DIN EN 50155 (VDE 0115-200):2022-06                 |
| Test procedure:<br>Railway applications –<br>Rolling stock equipment –<br>Vibration and shock tests | DIN EN 61373 (VDE 0115-0106):2011-04                |
| Spectrum/Mounting location  | Service life test, Category 1, Class A/B            |
| Functional test with noise-like oscillations  | Test passed according to Section 8 of the standard  |
| Frequency   | $f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$      |
| Acceleration  | 0.101g (highest test level used for all axes)       |
| Test duration per axis  | 10 min.   |
| Test directions   | X, Y and Z axes                                     |
| Monitoring of contact faults and interruptions  | Passed  |
| Voltage drop measurement before and after each axis   | Passed  |
| Simulated service life test through increased levels of noise-like oscillations                     | Test passed according to Section 9 of the standard  |
| Frequency   | $f_1 = 5 \text{ Hz}$ to $f_2 = 150 \text{ Hz}$      |
| Acceleration  | 0.572g (highest test level used for all axes)       |
| Test duration per axis  | 5 h   |
| Test directions   | X, Y and Z axes                                     |
| Extended testing: Monitoring of contact faults and interruptions                                    | Passed  |
| Extended testing: Voltage drop measurement before and after each axis                               | Passed  |
| Shock test  | Test passed according to Section 10 of the standard |
| Shock pulse form  | Half sine   |

### Environmental Testing

|   |   |
|---|---|
| Acceleration  | 5g (highest test level used for all axes) |
| Shock duration  | 30 ms                                     |
| Number of shocks (per axis)   | 3 pos. und 3 neg.                         |
| Test directions   | X, Y and Z axes                           |
| Extended testing: Monitoring of contact faults and interruptions      | Passed                                    |
| Extended testing: Voltage drop measurement before and after each axis | Passed                                    |
| Vibration and shock stress for rolling stock equipment                | Passed                                    |

### Commercial data

|                       |               |
|-----------------------|---------------|
| PU (SPU)              | 48 pcs        |
| Packaging type        | Box           |
| Country of origin     | PL            |
| GTIN                  | 4055143511339 |
| Customs tariff number | 85366930000   |

### 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 10.0   | EC001284             |
| ECCN        | NO US CLASSIFICATION |

### Environmental Product Compliance

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

### Approvals / Certificates

#### General approvals



| Approval                              | Standard  | Certificate Name |
|---------------------------------------|-----------|------------------|
| CB<br>DEKRA Certification B.V.        | IEC 61984 | NL-61360/M1      |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984  | 71-116057        |
| UL<br>Underwriters Laboratories Inc.  | UL 1059   | UL-US-2426356-0  |

#### Declarations of conformity and manufacturer's declarations



| Approval                      | Standard | Certificate Name |
|-------------------------------|----------|------------------|
| Railway<br>WAGO GmbH & Co. KG | -        | Railway Ready    |

## Downloads

### Environmental Product Compliance

| Compliance Search                                    |                   |
|--|-------------------|
| Environmental Product Compliance<br>831-3202/133-000 | <a href="#">↓</a> |

## Documentation

| Additional Information |            |                   |                   |
|------------------------|------------|-------------------|-------------------|
| Technical Section      | 03.04.2019 | pdf<br>2027.26 KB | <a href="#">↓</a> |

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Female connector/socket



**Item No.: 831-3102**  
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm<sup>2</sup>; Pin spacing 7.62 mm; 2-pole; 100% protected against mismatching; 10,00 mm<sup>2</sup>; light gray



**Item No.: 831-3522**  
THT female header; angled; Pin spacing 7.62 mm; 2-pole; 100% protected against mismatching; 1.0 x 1.2 mm solder pin; light gray



**Item No.: 831-3502**  
THT female header; straight; Pin spacing 7.62 mm; 2-pole; 100% protected against mismatching; 1.0 x 1.2 mm solder pin; light gray

## 1.2 Optional Accessories

### 1.2.1 Coding

#### 1.2.1.1 Coding



**Item No.: 831-500**  
Coding pin carrier with six coding pins; orange

## 1.2.2 Marking

### 1.2.2.1 Marker



**Item No.: 2009-145/000-006**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item No.: 2009-145/000-007**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



**Item No.: 2009-145/000-023**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item No.: 2009-145/000-012**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item No.: 2009-145/000-005**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



**Item No.: 2009-145/000-024**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet




**Item No.: 2009-145**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white











**Item No.: 2009-145/000-002**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.2.2.1 Marker

|   |   |  |  |
|---|---|--|--|
|  <p><b>Item No.: 248-501/000-006</b><br/>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue</p>  |  <p><b>Item No.: 248-501/000-007</b><br/>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray</p>  |  <p><b>Item No.: 248-501/000-023</b><br/>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green</p>   |  <p><b>Item No.: 248-501/000-017</b><br/>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green</p>  |
|  <p><b>Item No.: 248-501/000-012</b><br/>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange</p>  |  <p><b>Item No.: 248-501/000-005</b><br/>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red</p>   |  <p><b>Item No.: 248-501</b><br/>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white</p>   |  <p><b>Item No.: 248-501/000-002</b><br/>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow</p>   |
|  <p><b>Item No.: 793-5501/000-006</b><br/>WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue</p>   |  <p><b>Item No.: 793-5501/000-007</b><br/>WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray</p> |  <p><b>Item No.: 793-5501/000-023</b><br/>WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green</p>  |  <p><b>Item No.: 793-5501/000-017</b><br/>WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green</p> |
|  <p><b>Item No.: 793-5501/000-012</b><br/>WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange</p> |  <p><b>Item No.: 793-5501/000-005</b><br/>WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red</p>  |  <p><b>Item No.: 793-5501/000-024</b><br/>WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet</p> |  <p><b>Item No.: 793-5501</b><br/>WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white</p>               |
|  <p><b>Item No.: 793-5501/000-002</b><br/>WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow</p> |  <p><b>Item No.: 793-501/000-006</b><br/>WMB marking card; as card; not stretchable; plain; snap-on type; blue</p>   |  <p><b>Item No.: 793-501/000-007</b><br/>WMB marking card; as card; not stretchable; plain; snap-on type; gray</p>   |  <p><b>Item No.: 793-501/000-023</b><br/>WMB marking card; as card; not stretchable; plain; snap-on type; green</p>   |
|  <p><b>Item No.: 793-501/000-017</b><br/>WMB marking card; as card; not stretchable; plain; snap-on type; light green</p>  |  <p><b>Item No.: 793-501/000-012</b><br/>WMB marking card; as card; not stretchable; plain; snap-on type; orange</p>   |  <p><b>Item No.: 793-501/000-005</b><br/>WMB marking card; as card; not stretchable; plain; snap-on type; red</p>  |  <p><b>Item No.: 793-501/000-024</b><br/>WMB marking card; as card; not stretchable; plain; snap-on type; violet</p>  |
|  <p><b>Item No.: 793-501</b><br/>WMB marking card; as card; not stretchable; plain; snap-on type; white</p>  |  <p><b>Item No.: 793-501/000-002</b><br/>WMB marking card; as card; not stretchable; plain; snap-on type; yellow</p>   |  <p><b>Item No.: 2009-115/000-006</b><br/>WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue</p>              |  <p><b>Item No.: 2009-115/000-007</b><br/>WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray</p>                   |
|  <p><b>Item No.: 2009-115/000-023</b><br/>WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green</p>             |  <p><b>Item No.: 2009-115/000-017</b><br/>WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green</p>     |  <p><b>Item No.: 2009-115/000-012</b><br/>WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange</p>            |  <p><b>Item No.: 2009-115/000-024</b><br/>WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet</p>                 |
|  <p><b>Item No.: 2009-115</b><br/>WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white</p>                     |  <p><b>Item No.: 2009-115/000-002</b><br/>WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow</p>          |  |  |

1.2.2.2 Marking strip

|   |   |  |   |
|---|---|--|---|
|  <p><b>Item No.: 2009-110/762-852</b><br/>Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white</p> |  <p><b>Item No.: 2009-110/762-853</b><br/>Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white</p> |  <p><b>Item No.: 2009-110/762-854</b><br/>Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white</p> |  <p><b>Item No.: 2009-110/762-855</b><br/>Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white</p> |
|  <p><b>Item No.: 2009-110/762-856</b><br/>Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white</p> |  <p><b>Item No.: 2009-110/762-857</b><br/>Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white</p> |  <p><b>Item No.: 2009-110/762-858</b><br/>Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white</p> |  <p><b>Item No.: 2009-110/762-859</b><br/>Marking strips; for Smart Printer; cut to a defined length; MARKED; not stretchable; snap-on type; white</p> |

### 1.2.2.2 Marking strip



**Item No.: 2009-110**

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

### 1.2.3 Mounting adapter

#### 1.2.3.1 Mounting accessories



**Item No.: 831-137**

Mounting adapter; for DIN-35 rail/panel mounting; 3 parts; Pin spacing 7.62 mm; light gray

### 1.2.4 Test and measurement

#### 1.2.4.1 Testing accessories



**Item No.: 210-136**

Test plug; 2 mm Ø; with 500 mm cable; red

### 1.2.5 Tool

#### 1.2.5.1 Operating tool

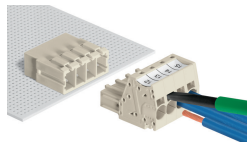


**Item No.: 210-721**

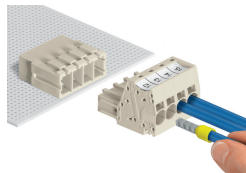
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

## Installation Notes

### Conductor termination

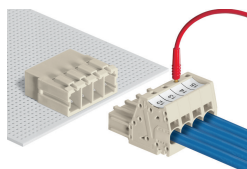


Inserting fine-stranded conductors via (5.5 x 0.8) mm screwdriver.



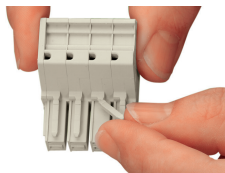
Solid and ferruled conductors are terminated by simply pushing them into unit.

## Testing

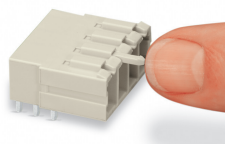


Testing with 2 mm Ø test plug.

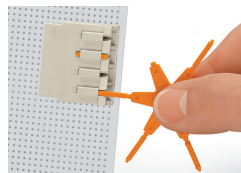
## Coding



Break or cut off coding pin from female connector.



Insert coding pin into male header (break first) until it engages.



Coding a THT male header by inserting a coding pin.

## Marking



Direct marking of female and male connectors



MCS MAXI male and female connectors can also be marked via Mini-WSB or WMB markers.