

## Data Sheet | Item Number: 831-3109/037-000

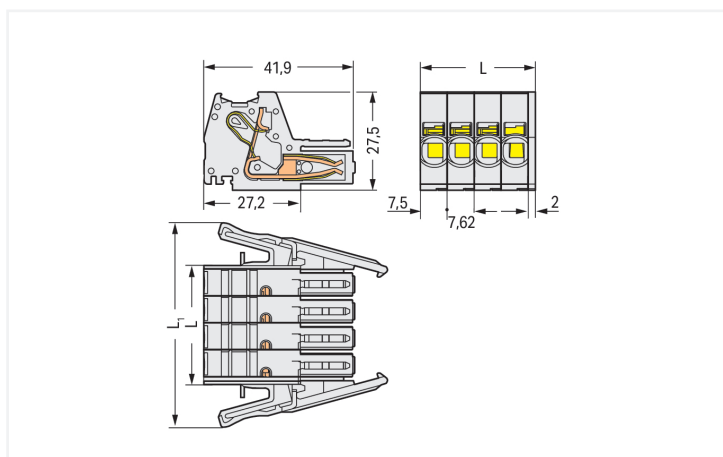
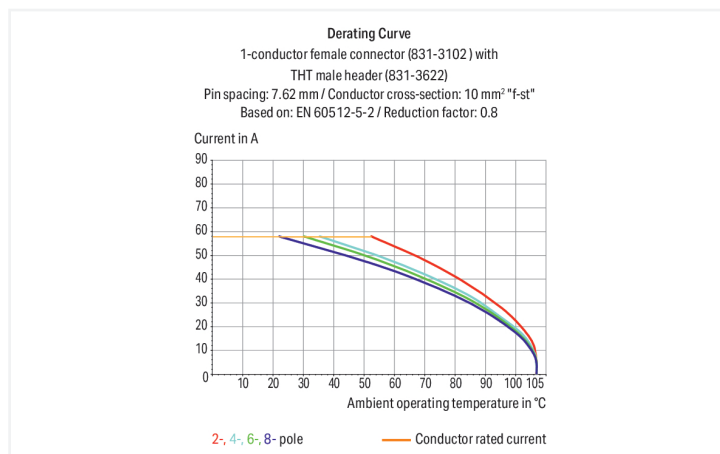
1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 9-pole; 100% protected against mismating; Lateral locking levers; 10,00 mm²; light gray

<https://www.wago.com/831-3109/037-000>



Color: ■ light gray

Similar to illustration



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 10.5 \text{ mm}$   
 $L_1 = L + 23.7 \text{ mm}$

Female connector, 831 Series, 0° conductor exit to connection direction

Enjoy seamless electrical installations with this female connector (item number 831-3109/037-000). Strip lengths must be between 13 and 15 mm when connecting conductors to this female connector. This product features one conductor terminal and utilizes Push-in CAGE CLAMP®. Push-in CAGE CLAMP® technology provides a universal connection solution for any type of conductor. It allows both solid and fine-stranded conductors with ferrules to be inserted directly into the clamping point without the need for tools. Dimensions: (95.26 x 27.6 x 42.5) mm (width x height x depth). This female connector is suitable for conductor cross sections ranging from 0.5 mm² to 10 mm².

The contact surface is coated with tin.



| 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<br>Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .                                                                                                                                                                                                                                      |

| 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                                    | 9                                     |  |
| Total number of potentials                        | 9                                     |  |
| 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 mm² / 20 ... 8 AWG         |  |
| Fine-stranded conductor                           | 0.5 ... 10 mm² / 20 ... 8 AWG         |  |
| Fine-stranded conductor; with insulated ferrule   | 0.5 ... 6 mm²                         |  |
| Fine-stranded conductor; with uninsulated ferrule | 0.5 ... 6 mm²                         |  |
| Strip length                                      | 13 ... 15 mm / 0.51 ... 0.59 inches   |  |
| Pole number                                       | 9                                     |  |
| Conductor entry direction to mating direction     | 0°                                    |  |

| Physical data |                        |
|---------------|------------------------|
| Pin spacing   | 7.62 mm / 0.3 inches   |
| Width         | 95.26 mm / 3.75 inches |
| Height        | 27.6 mm / 1.087 inches |
| Depth         | 42.5 mm / 1.673 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                     |
| Locking of plug-in connection      | Locking lever           |

**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)                                        |
| Material of the additional spring for socket contact | Chrome-nickel spring steel (CrNi)                                        |
| Contact material                                     | Electrolytic copper (E <sub>Cu</sub> )                                   |
| Contact Plating                                      | Tin                                                                      |
| Fire load                                            | 1.043 MJ                                                                 |
| Weight                                               | 69.7 g                                                                   |

**Environmental requirements**

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

**Commercial data**

|                       |               |
|-----------------------|---------------|
| PU (SPU)              | 12 pcs        |
| Packaging type        | Box           |
| Country of origin     | PL            |
| GTIN                  | 4066966854558 |
| Customs tariff number | 85366990990   |

**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        |
| UR<br>Underwriters Laboratories Inc.  | UL 1059   | UL-US-2426356-0  |

Downloads

Environmental Product Compliance

| Compliance Search                                    |  |
|------------------------------------------------------|--|
| Environmental Product Compliance<br>831-3109/037-000 |  |

Documentation

| Additional Information |            |                   |  |
|------------------------|------------|-------------------|--|
| Technical Section      | 03.04.2019 | pdf<br>2027.26 KB |  |

CAD/CAE-Data

| CAD data                         |  |
|----------------------------------|--|
| 2D/3D Models<br>831-3109/037-000 |  |

| CAE data                         |  |
|----------------------------------|--|
| ZUKEN Portal<br>831-3109/037-000 |  |

1 Compatible Products

1.1 System counterpart

1.1.1 Male connector/plug



**Item No.: 831-3209**  
1-conductor male connector; Push-in CA-GE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 9-pole; 100% protected against mis-mating; 10,00 mm²; light gray



**Item No.: 831-3629**  
THT male header; 1.0 x 1.2 mm solder pin; angled; 100% protected against mis-mating; Pin spacing 7.62 mm; 9-pole; light gray



**Item No.: 831-3649**  
THT male header; 1.0 x 1.2 mm solder pin; angled; 100% protected against mis-mating; Pin spacing 7.62 mm; 9-pole; light gray



**Item No.: 831-3609**  
THT male header; 1.0 x 1.2 mm solder pin; straight; 100% protected against mis-mating; Pin spacing 7.62 mm; 9-pole; light gray



1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 Ferrule



|                                                                                                                                                                                        |                                                                                                                                                                                       |                                                                                                                                                                                     |                                                                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Item No.: 216-284</b><br/>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p> | <p><b>Item No.: 216-286</b><br/>Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue</p> | <p><b>Item No.: 216-287</b><br/>Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p> | <p><b>Item No.: 216-288</b><br/>Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

1.2.2 Marking

1.2.2.1 Marker



|                                                                                                                                                                   |                                                                                                                                                                 |                                                                                                                                                                   |                                                                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Item No.: 2009-145/000-006</b><br/>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue</p>           | <p><b>Item No.: 2009-145/000-007</b><br/>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray</p>         | <p><b>Item No.: 2009-145/000-023</b><br/>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green</p>          | <p><b>Item No.: 2009-145/000-012</b><br/>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange</p>              |
| <p><b>Item No.: 2009-145/000-005</b><br/>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red</p>            | <p><b>Item No.: 2009-145/000-024</b><br/>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet</p>       | <p><b>Item No.: 2009-145</b><br/>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white</p>                  | <p><b>Item No.: 2009-145/000-002</b><br/>Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow</p>              |
| <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>                                                    |



1.2.2.1 Marker



**Item No.: 793-501**  
WMB marking card; as card; not stretchable; plain; snap-on type; white



**Item No.: 793-501/000-002**  
WMB marking card; as card; not stretchable; plain; snap-on type; yellow



**Item No.: 2009-115/000-006**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item No.: 2009-115/000-007**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



**Item No.: 2009-115/000-023**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item No.: 2009-115/000-017**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green



**Item No.: 2009-115/000-012**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item No.: 2009-115/000-024**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



**Item No.: 2009-115**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 2009-115/000-002**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.2.2.2 Marking strip



**Item No.: 2009-110/762-802**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; Specialty printing; not stretchable; Horizontal marking; snap-on type; white



**Item No.: 2009-110/762-803**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; Specialty printing; not stretchable; Horizontal marking; snap-on type; white



**Item No.: 2009-110/762-804**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; Specialty printing; not stretchable; Horizontal marking; snap-on type; white



**Item No.: 2009-110/762-805**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; Specialty printing; not stretchable; Horizontal marking; snap-on type; white



**Item No.: 2009-110/762-806**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; Specialty printing; not stretchable; Horizontal marking; snap-on type; white



**Item No.: 2009-110/762-807**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; Specialty printing; not stretchable; Horizontal marking; snap-on type; white



**Item No.: 2009-110/762-808**  
Marking strips; for Smart Printer; cut to a defined length; MARKED; Specialty printing; not stretchable; Horizontal marking; snap-on type; white



**Item No.: 2009-110**  
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.2.3 Strain relief

1.2.3.1 Strain relief plate



**Item No.: 831-506**  
Strain relief plate; for female and male connectors; 51 mm wide; 1 part; 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

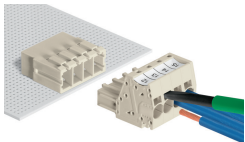
1.2.5.1 Operating tool



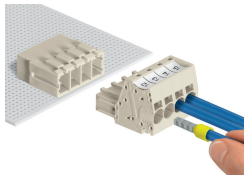
Item No.: 210-721  
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

Installation Notes

Conductor termination

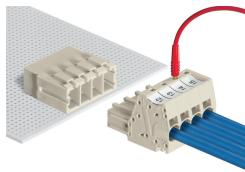


Inserting fine-stranded conductors via (5.5 x 0.8) mm screwdriver.



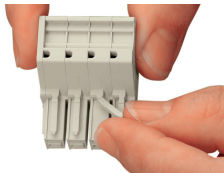
Solid and ferruled conductors are terminated by simply pushing them into unit.

Testing



Testing with 2 mm Ø test plug.

Coding



Break or cut off coding pin from female connector.

Marking



Direct marking of female and male connectors



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