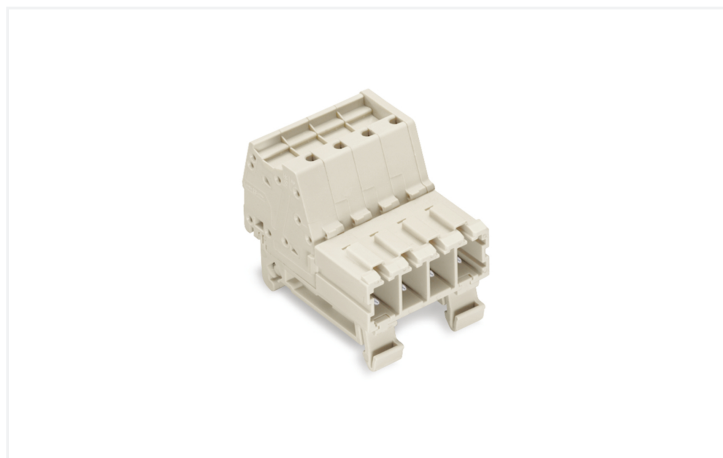


## Data Sheet | Item Number: 831-3206/007-9034

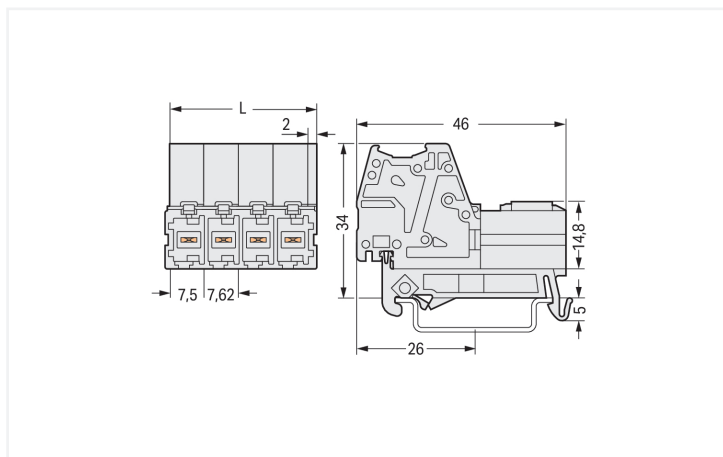
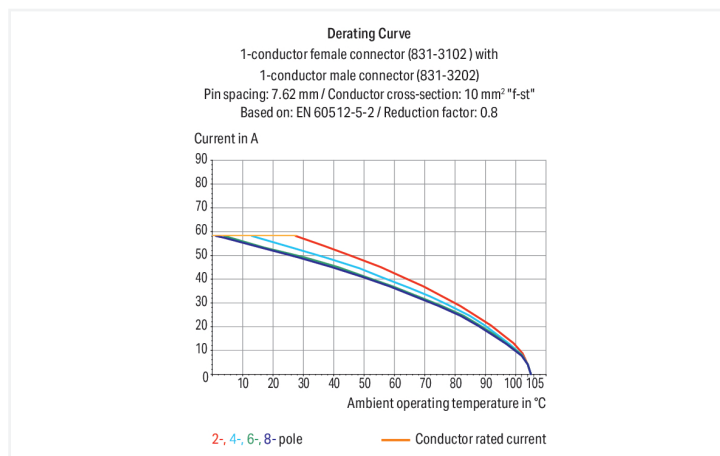
1-conductor male connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mismatching; DIN-35 rail mounting; direct marking; 10,00 mm²; light gray

<https://www.wago.com/831-3206/007-9034>



Color: ■ light gray

Similar to illustration



Dimensions in mm

L = (pole no. - 1) x pin spacing + 9.5 mm

### Male connector, 831 Series, operating tool

Our male connector (item number 831-3206/007-9034) simplifies electrical installations. Strip lengths must be between 13 and 15 mm when connecting conductors to this male connector. Featuring one conductor terminal along with Push-in CAGE CLAMP®, this connector delivers reliable performance. Our Push-in CAGE CLAMP® is a universal, maintenance-free connection solution for all conductor types, offering a key advantage: It allows direct insertion of both solid and fine-stranded conductors with ferrules without needing tools. No preparation is required; for example, crimping the conductor's ferrule is not necessary. The dimensions are (47.6 x 39 x 46) mm (width x height x depth). This male 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                                    | 6                                     |  |
| Total number of potentials                        | 6                                     |  |
| 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                                       | 6                                     |  |
| Conductor entry direction to mating direction     | 0°                                    |  |

| Physical data                      |                        |
|------------------------------------|------------------------|
| Pin spacing                        | 7.62 mm / 0.3 inches   |
| Width                              | 47.6 mm / 1.874 inches |
| Height                             | 39 mm                  |
| Height from upper-edge of DIN-rail | 34 mm / 1.339 inches   |
| Depth                              | 46 mm / 1.811 inches   |



| Mechanical data          |             |
|--------------------------|-------------|
| Variable coding          | Yes         |
| Mounting type            | DIN-35 rail |
| Anti-rotation protection | Yes         |

| Plug-in connection                 |                     |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector (connection type)        | for conductor       |
| Mismating protection               | Yes                 |

| 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                          | 0.818 MJ                                                                 |
| Weight                             | 42.8 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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 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 <sub>1</sub> = 5 Hz to f <sub>2</sub> = 150 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       |                        |
|-----------------------|------------------------|
| Product Group         | 3 (Multi Conn. System) |
| PU (SPU)              | 24 pcs                 |
| Packaging type        | Box                    |
| Country of origin     | PL                     |
| GTIN                  | 4050821241416          |
| 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                     |           |                  | Declarations of conformity and manufacturer's declarations |          |                  |
|---------------------------------------|-----------|------------------|------------------------------------------------------------|----------|------------------|
|                                       |           |                  |                                                            |          |                  |
| Approval                              | Standard  | Certificate Name | Approval                                                   | Standard | Certificate Name |
| CB<br>DEKRA Certification B.V.        | IEC 61984 | NL-61360/M1      | Railway<br>WAGO GmbH & Co. KG                              | -        | Railway Ready    |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984  | 71-116057        |                                                            |          |                  |
| UL<br>Underwriters Laboratories Inc.  | UL 1059   | UL-US-2426356-0  |                                                            |          |                  |



| Downloads                        |                   |  |  |
|----------------------------------|-------------------|--|--|
| Environmental Product Compliance |                   |  |  |
| Compliance Search                |                   |  |  |
| Environmental Product Compliance | 831-3206/007-9034 |  |  |

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

| 1 Compatible Products         |
|-------------------------------|
| 1.1 System counterpart        |
| 1.1.1 Female connector/socket |



|                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">Item No.: 831-3106</a><br>1-conductor female connector; Push-in CAGE CLAMP®; 10 mm²; Pin spacing 7.62 mm; 6-pole; 100% protected against mis-mating; 10,00 mm²; light gray |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| 1.2 Optional Accessories |
|--------------------------|
| 1.2.1 Coding             |
| 1.2.1.1 Coding           |



|                                                                                      |
|--------------------------------------------------------------------------------------|
| <a href="#">Item No.: 831-500</a><br>Coding pin carrier with six coding pins; orange |
|--------------------------------------------------------------------------------------|

| 1.2.2 Ferrule   |
|-----------------|
| 1.2.2.1 Ferrule |



|                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">Item No.: 216-284</a><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 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



|                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">Item No.: 216-286</a><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 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



|                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">Item No.: 216-287</a><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 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



|                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">Item No.: 216-288</a><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 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



1.2.3 Marking

1.2.3.1 Marker

|                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><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             | <br><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          | <br><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            | <br><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              |
| <br><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              | <br><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        | <br><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                    | <br><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              |
| <br><b>Item No.: 248-501/000-006</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue                                              | <br><b>Item No.: 248-501/000-007</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray                                           | <br><b>Item No.: 248-501/000-023</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green                                             | <br><b>Item No.: 248-501/000-017</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green                                          |
| <br><b>Item No.: 248-501/000-012</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange                                            | <br><b>Item No.: 248-501/000-005</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red                                            | <br><b>Item No.: 248-501</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white                                                     | <br><b>Item No.: 248-501/000-002</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow                                               |
| <br><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     | <br><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  | <br><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    | <br><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 |
| <br><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 | <br><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 | <br><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 | <br><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             |
| <br><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 | <br><b>Item No.: 793-501/000-006</b><br>WMB marking card; as card; not stretchable; plain; snap-on type; blue                                              | <br><b>Item No.: 793-501/000-007</b><br>WMB marking card; as card; not stretchable; plain; snap-on type; gray                                                 | <br><b>Item No.: 793-501/000-023</b><br>WMB marking card; as card; not stretchable; plain; snap-on type; green                                                   |
| <br><b>Item No.: 793-501/000-017</b><br>WMB marking card; as card; not stretchable; plain; snap-on type; light green                                          | <br><b>Item No.: 793-501/000-012</b><br>WMB marking card; as card; not stretchable; plain; snap-on type; orange                                            | <br><b>Item No.: 793-501/000-005</b><br>WMB marking card; as card; not stretchable; plain; snap-on type; red                                                  | <br><b>Item No.: 793-501/000-024</b><br>WMB marking card; as card; not stretchable; plain; snap-on type; violet                                                  |
| <br><b>Item No.: 793-501</b><br>WMB marking card; as card; not stretchable; plain; snap-on type; white                                                        | <br><b>Item No.: 793-501/000-002</b><br>WMB marking card; as card; not stretchable; plain; snap-on type; yellow                                            | <br><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                | <br><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                   |
| <br><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               | <br><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      | <br><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              | <br><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                 |
| <br><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                       | <br><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           |                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                       |



1.2.3.2 Marking strip



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

1.2.4 Strain relief

1.2.4.1 Strain relief plate



**Item No.: 831-505**  
Strain relief plate; for female and male  
connectors; 30 mm wide; 1 part; Pin spa-  
cing 7.62 mm; light gray

1.2.5 Test and measurement

1.2.5.1 Testing accessories



**Item No.: 210-136**  
Test plug; 2 mm Ø; with 500 mm cable; red

1.2.6 Tool

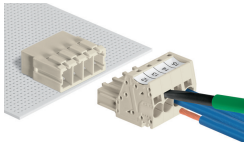
1.2.6.1 Operating tool



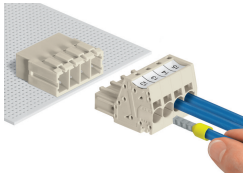
**Item No.: 210-721**  
Operating tool; Blade: 5.5 x 0.8 mm; with a  
partially insulated shaft; multicoloured

Installation Notes

Conductor termination

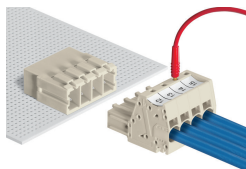


Inserting fine-stranded conductors via  
(5.5 x 0.8) mm screwdriver.



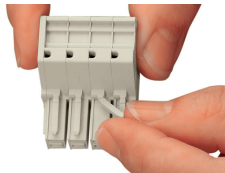
Solid and ferruled conductors are termi-  
nated by simply pushing them into unit.

## Testing

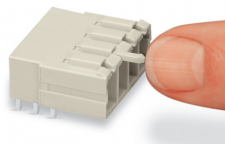


Testing with 2 mm Ø test plug.

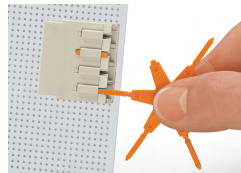
## Coding



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.

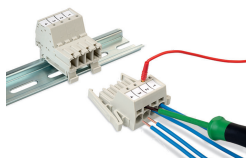
## Marking



Direct marking of female and male connectors



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



Male connector mounted on a DIN-35 rail via integrated mounting adapter