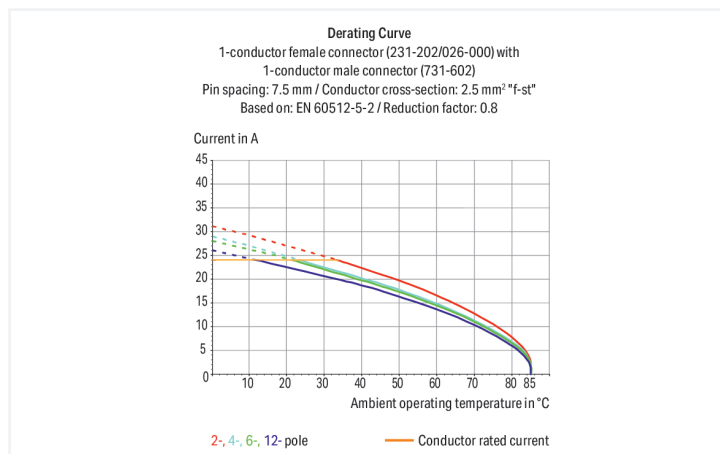
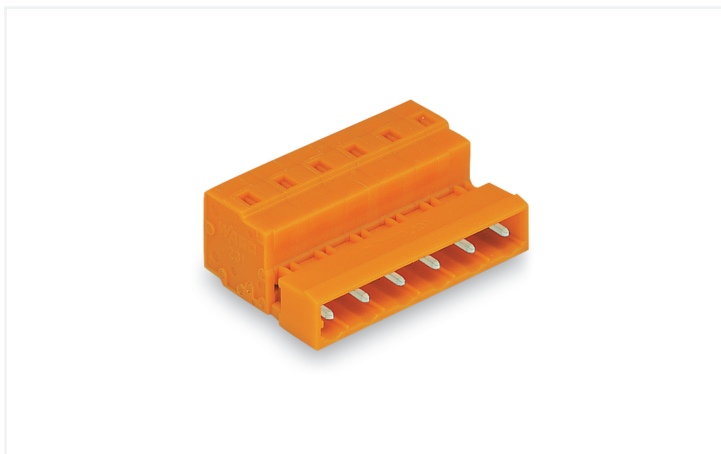


## Data Sheet | Item Number: 731-634

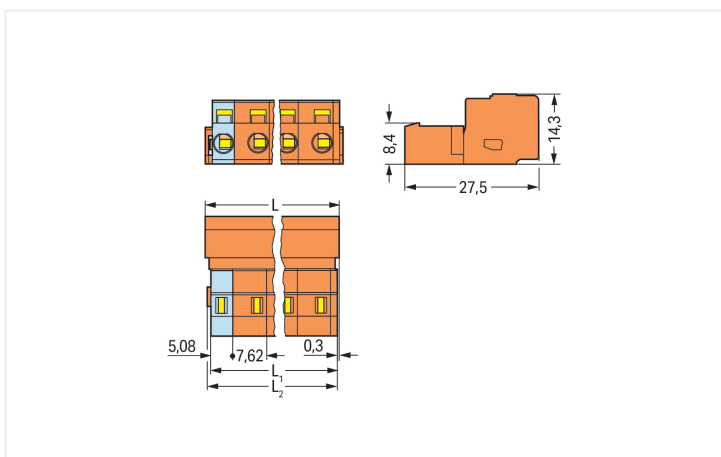
1-conductor male connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 7.62 mm; 4-pole; 2,50 mm<sup>2</sup>; orange

<https://www.wago.com/731-634>



Color: ■ orange

Similar to illustration



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$   
 $L_1 = L - 1.7 \text{ mm}$   
 $L_2 = L - 1.2 \text{ mm}$

Male connector, 731 Series, 0° conductor exit to connection direction

This male connector (item number 731-634) is designed for seamless electrical installations. Conductors can only be connected to this male connector if their strip length is between 8 and 9 mm. This product features one conductor terminal and utilizes CAGE CLAMP®. Our renowned universal connection known as CAGE CLAMP® is the industry standard when it comes to connection technology and electrical interconnections. Dimensions: (31.14 x 14.3 x 27.5) mm (width x height x depth). This male connector is suitable for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 2.5 mm<sup>2</sup>.

Tin is used for coating the contact surfaces.

## 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/>.

## Electrical data

| Ratings per                     | IEC/EN 60664-1 |       |        | Approvals per | UL 1059 |   |       |
|---------------------------------|----------------|-------|--------|---------------|---------|---|-------|
| Overvoltage category            | III            | III   | II     | Use group     | B       | C | D     |
| Pollution degree                | 3              | 2     | 2      | Rated voltage | 300 V   | - | 300 V |
| Nominal voltage                 | 500 V          | 630 V | 1000 V | Rated current | 15 A    | - | 10 A  |
| Rated impulse withstand voltage | 6 kV           | 6 kV  | 6 kV   |               |         |   |       |
| Rated current                   | 12 A           | 12 A  | 12 A   |               |         |   |       |

| Approvals per | UL 1977 | Approvals per | CSA   |   |       |
|---------------|---------|---------------|-------|---|-------|
| Rated voltage | 600 V   | Use group     | B     | C | D     |
| Rated current | 15 A    | Rated voltage | 300 V | - | 300 V |
|               |         | Rated current | 15 A  | - | 10 A  |

## Connection Data

|                            |   |   |  |
|----------------------------|---|---|--|
| Clamping units             | 4 | <b>Connection 1</b>                               |  |
| Total number of potentials | 4 | Connection technology                             | CAGE CLAMP®                                  |
| Number of connection types | 1 | Actuation type                                    | Operating tool                               |
| Number of levels           | 1 | Actuation direction 1                             | Operation parallel to conductor entry        |
|                            |   | Actuation direction 2                             | Operation perpendicular to conductor entry   |
|                            |   | Solid conductor                                   | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
|                            |   | Fine-stranded conductor                           | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
|                            |   | Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1.5 mm <sup>2</sup>                 |
|                            |   | Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm <sup>2</sup>                 |
|                            |   | Strip length                                      | 8 ... 9 mm / 0.31 ... 0.35 inches            |
|                            |   | Pole number                                       | 4  |
|                            |   | Conductor entry direction to mating direction     | 0°   |

## Physical data

|             |                         |
|-------------|-------------------------|
| Pin spacing | 7.62 mm / 0.3 inches    |
| Width       | 31.14 mm / 1.226 inches |
| Height      | 14.3 mm / 0.563 inches  |
| Depth       | 27.5 mm / 1.083 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               | No                  |

### Material data

|                                    |  |
|------------------------------------|--|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | orange   |
| 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                          | 0.15 MJ  |
| Weight                             | 7.5 g  |

### Environmental requirements

|                         |                 |
|-------------------------|-----------------|
| Limit temperature range | -60 ... +100 °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   |
| Acceleration  | 5g (highest test level used for all axes)           |




| Environmental Testing   |                   |
|---|-------------------|
| 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)              | 50 pcs                 |
| Packaging type        | Box                    |
| Country of origin     | DE                     |
| GTIN                  | 4044918267816          |
| Customs tariff number | 85366930000            |

| Product Classification |                      |
|------------------------|----------------------|
| UNSPSC                 | 39121409             |
| eCl@ss 10.0            | 27-44-03-09          |
| eCl@ss 9.0             | 27-44-03-09          |
| ETIM 9.0               | EC002638             |
| ETIM 10.0              | EC002638             |
| 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-113351        |
| KEMA/KEUR<br>DEKRA Certification B.V.  | EN 61984  | 71-130478 REV.1  |
| UR<br>Underwriters Laboratories Inc.   | UL 1977   | E45171           |
| UR<br>Underwriters Laboratories Inc.   | UL 1059   | E45172           |

| Declarations of conformity and manufacturer's declarations                          |          |                  |
|---|----------|------------------|
|  |          |                  |
| Approval  | Standard | Certificate Name |
| Railway<br>WAGO GmbH & Co. KG   | -        | Railway Ready    |

Approvals for marine applications



| Approval                                | Standard  | Certificate Name  |
|---|-----------|-------------------|
| ABS<br>American Bureau of Ship-<br>ping | -         | 24-0095975-PDA    |
| DNV<br>DNV GL SE                        | -         | TAE000016Z        |
| LR<br>Lloyds Register                   | IEC 61984 | 96/20035 (E5)     |
| PRS<br>Polski Rejestr Statków           | -         | TE/1095/880590/23 |

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product  
Compliance 731-634



Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB



CAD/CAE-Data

CAD data

2D/3D Models 731-634



CAE data

EPLAN Data Portal  
731-634



ZUKEN Portal 731-634



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



[Item No.: 732-124/026-000](#)

1-conductor female connector, angled;  
CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62  
mm; 4-pole; 2,50 mm²; orange



[Item No.: 231-704/031-000](#)

1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 7.62 mm;  
4-pole; clamping collar; orange



[Item No.: 231-704/037-000](#)

1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 7.62 mm;  
4-pole; Lateral locking levers; orange



[Item No.: 231-704/026-000](#)

1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 7.62 mm;  
4-pole; orange



[Item No.: 231-704/008-000](#)

1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 7.62 mm;  
4-pole; Snap-in mounting feet; orange



[Item No.: 2231-704/026-000](#)

1-conductor female connector; push-  
button; Push-in CAGE CLAMP®; 2.5 mm²;  
Pin spacing 7.62 mm; 4-pole; 2,50 mm²;  
orange



[Item No.: 2231-704/031-000](#)

1-conductor female connector; push-  
button; Push-in CAGE CLAMP®; 2.5 mm²;  
Pin spacing 7.62 mm; 4-pole; clamping  
collar; 2,50 mm²; orange



[Item No.: 2231-704/037-000](#)

1-conductor female connector; push-  
button; Push-in CAGE CLAMP®; 2.5 mm²; Pin  
spacing 7.62 mm; 4-pole; Lateral locking  
levers; 2,50 mm²; orange

### 1.1.1 Female connector/socket



**Item No.: 2231-704/008-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 4-pole; Snap-in mounting feet; 2,50 mm²; orange

**Item No.: 231-2704/037-000**

2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 4-pole; Lateral locking levers; orange

**Item No.: 231-2704/026-000**

2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.62 mm; 4-pole; with integrated end plate; orange

**Item No.: 232-864**

THT female header; angled; Pin spacing 7.62 mm; 4-pole; 0.6 x 1.0 mm solder pin; orange



**Item No.: 232-864/045-000**

THT female header; angled; Pin spacing 7.62 mm; 4-pole; 0.6 x 1.0 mm solder pin; orange

**Item No.: 232-864/031-000**

THT female header; angled; Pin spacing 7.62 mm; 4-pole; clamping collar; 0.6 x 1.0 mm solder pin; orange

**Item No.: 232-864/039-000**

THT female header; angled; Pin spacing 7.62 mm; 4-pole; Locking lever; 0.6 x 1.0 mm solder pin; orange

**Item No.: 232-864/047-000**

THT female header; angled; Pin spacing 7.62 mm; 4-pole; Spacer flange; 0.6 x 1.0 mm solder pin; orange



**Item No.: 232-764**

THT female header; straight; Pin spacing 7.62 mm; 4-pole; 0.6 x 1.0 mm solder pin; orange

**Item No.: 232-764/045-000**

THT female header; straight; Pin spacing 7.62 mm; 4-pole; 0.6 x 1.0 mm solder pin; orange

**Item No.: 232-764/031-000**

THT female header; straight; Pin spacing 7.62 mm; 4-pole; clamping collar; 0.6 x 1.0 mm solder pin; orange

**Item No.: 232-764/039-000**

THT female header; straight; Pin spacing 7.62 mm; 4-pole; Locking lever; 0.6 x 1.0 mm solder pin; orange



**Item No.: 232-764/047-000**

THT female header; straight; Pin spacing 7.62 mm; 4-pole; Spacer flange; 0.6 x 1.0 mm solder pin; orange

### 1.2 Optional Accessories

#### 1.2.1 Coding

##### 1.2.1.1 Coding



**Item No.: 231-130**

Coding key; snap-on type; light gray

#### 1.2.2 Cover

##### 1.2.2.1 Cover



**Item No.: 231-669**

Lockout caps; for covering unused clamping units; orange

#### 1.2.3 Ferrule

##### 1.2.3.1 Ferrule



**Item No.: 216-301**

Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

**Item No.: 216-302**

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

**Item No.: 216-201**

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white

**Item No.: 216-241**




Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white

1.2.3.1 Ferrule

|   |   |   |   |
|---|---|---|---|
|  <p><b>Item No.: 216-141</b><br/>Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>                 |  <p><b>Item No.: 216-101</b><br/>Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored</p>   |  <p><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</p> |  <p><b>Item No.: 216-262</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p> |
|  <p><b>Item No.: 216-202</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray</p>   |  <p><b>Item No.: 216-142</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>    |  <p><b>Item No.: 216-102</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored</p>  |  <p><b>Item No.: 216-243</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p>     |
|  <p><b>Item No.: 216-263</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p>                 |  <p><b>Item No.: 216-203</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red</p>   |  <p><b>Item No.: 216-103</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated</p>   |  <p><b>Item No.: 216-143</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>       |
|  <p><b>Item No.: 216-204</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black</p>   |  <p><b>Item No.: 216-244</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p> |  <p><b>Item No.: 216-264</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p> |  <p><b>Item No.: 216-284</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p> |
|  <p><b>Item No.: 216-144</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored</p> |  <p><b>Item No.: 216-104</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; silver-colored</p>   |  <p><b>Item No.: 216-106</b><br/>Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; un-insulated; electro-tin plated; silver-colored</p>   |   |



1.2.4 Insulation stop

1.2.4.1 Insulation stop

|  |  |  |
|--|--|--|
|  <p><b>Item No.: 231-673</b><br/>Insulation stop; 0.08-0.2 mm<sup>2</sup> / 0.2 mm<sup>2</sup> "s"; white</p> |  <p><b>Item No.: 231-674</b><br/>Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; light gray</p> |  <p><b>Item No.: 231-675</b><br/>Insulation stop; 0.75 - 1 mm<sup>2</sup>; dark gray</p> |
|--|--|--|

1.2.5 Marking

1.2.5.1 Marking strip

|  |  |
|--|--|
|  <p><b>Item No.: 210-331/762-202</b><br/>Marking strips; as a DIN A4 sheet; MARKED; 1-16 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white</p> |  <p><b>Item No.: 210-332/762-020</b><br/>Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white</p> |
|--|--|

## 1.2.6 Strain relief

### 1.2.6.1 Strain relief housing



**Item No.: 232-684**

Strain relief housing; for female and male connectors; 2 parts; Pin spacing 7.62 mm; 4-pole; orange

## 1.2.7 Tool

### 1.2.7.1 Operating tool



**Item No.: 210-720**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



**Item No.: 210-657**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured



**Item No.: 231-291**

Operating tool; made of insulating material; 1-way; loose; red

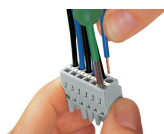


**Item No.: 231-131**

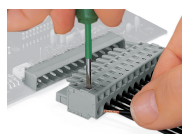
Operating tool; made of insulating material; 1-way; loose; white

## Installation Notes

### Conductor termination



Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.



Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.

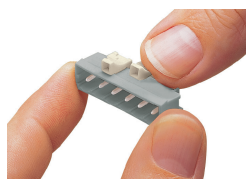


Inserting a conductor into CAGE CLAMP® unit via operating tool (231-291).



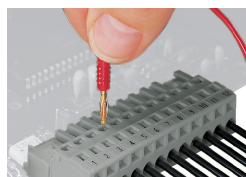
Inserting a conductor via operating tool.

## Coding



Coding a male header – fitting coding key(s).

## Testing



Testing – female connector with CAGE CLAMP®  
Integrated test ports for testing perpendicular to conductor entry via 2 or 2.3 mm Ø test plug

## Installation



Male connector with strain relief plate

Strain relief housing shown with a male connector equipped with CAGE CLAMP®

## Marking



Labeling via direct marking or self-adhesive strips.