

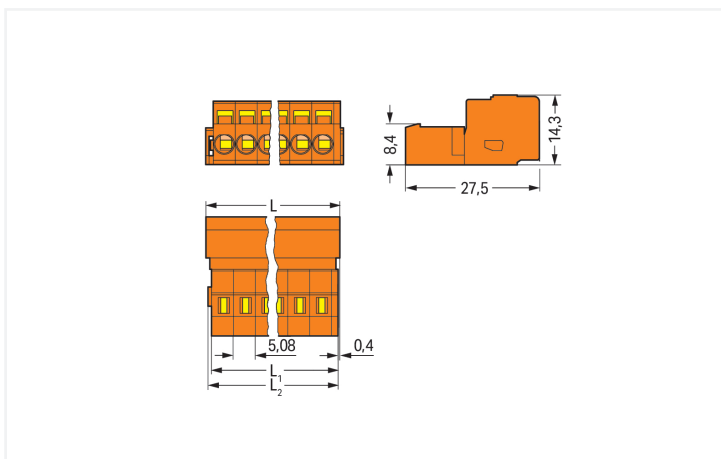
## Data Sheet | Item Number: 231-640

1-conductor male connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 10-pole; orange

<https://www.wago.com/231-640>



Color: ■ orange



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, 231 Series, CAGE CLAMP®

This male connector (item number 231-640) is designed for fault-free electrical installations. Strip lengths must be between 8 and 9 mm when connecting conductors to this male connector. This product features one conductor terminal and utilizes CAGE CLAMP®. Our CAGE CLAMP® connection offers a safe and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. Dimensions: (53.4 x 14.3 x 27.5) mm (width x height x depth). Depending on the type of conductor, this male connector is designed 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                 |  | 320 V          | 320 V | 630 V | Rated current | 15 A  | -       | 10 A  |  |
| Rated impulse withstand voltage |  | 4 kV           | 4 kV  | 4 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             | 10 | <b>Connection 1</b>                               |  |
| Total number of potentials | 10 | 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                                       | 10   |
|                            |    | Conductor entry direction to mating direction     | 0°   |

## Physical data

|             |                        |
|-------------|------------------------|
| Pin spacing | 5.08 mm / 0.2 inches   |
| Width       | 53.4 mm / 2.102 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                          | 0.246 MJ   |
| Weight                             | 15.4 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                  | 4044918260558          |
| 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        |
| CSA<br>DEKRA Certification B.V.       | C22.2     | 1466354          |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984  | 71-130478 REV.1  |
| UL<br>UL International Germany GmbH   | 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 231-640



Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB



CAD/CAE-Data

CAD data

2D/3D Models 231-640



CAE data

EPLAN Data Portal  
231-640



ZUKEN Portal 231-640



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



[Item No.: 232-310/026-000](#)

1-conductor female connector, angled;  
CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08  
mm; 10-pole; 2,50 mm²; orange



[Item No.: 232-410/026-000](#)

1-conductor female connector, angled;  
CAGE CLAMP®; 2.5 mm²; Pin spacing  
5.08 mm; 10-pole; 2,50 mm²; orange



[Item No.: 231-310/027-000](#)

1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 5.08 mm;  
10-pole; clamping collar; orange



[Item No.: 231-310/031-000](#)

1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 5.08 mm;  
10-pole; clamping collar; orange



[Item No.: 231-310/037-000](#)

1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 5.08 mm;  
10-pole; Lateral locking levers; orange



[Item No.: 231-310/026-000](#)

1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 5.08 mm;  
10-pole; orange



[Item No.: 231-310/008-000](#)

1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 5.08 mm;  
10-pole; Snap-in mounting feet; orange



[Item No.: 231-310/102-000](#)

1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 5.08 mm;  
10-pole; with integrated end plate; orange

1.1.1 Female connector/socket



**Item No.: 2231-310/026-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 10-pole; 2,50 mm²; orange



**Item No.: 2231-310/031-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 10-pole; clamping collar; 2,50 mm²; orange



**Item No.: 2231-310/037-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 10-pole; Lateral locking levers; 2,50 mm²; orange



**Item No.: 2231-310/008-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 10-pole; Snap-in mounting feet; 2,50 mm²; orange



**Item No.: 2231-310/102-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 10-pole; with integrated end plate; 2,50 mm²; orange



**Item No.: 231-2310/037-000**

2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 10-pole; Lateral locking levers; orange



**Item No.: 231-2310/026-000**

2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 10-pole; with integrated end plate; orange



**Item No.: 232-270**

THT female header; angled; Pin spacing 5.08 mm; 10-pole; 0.6 x 1.0 mm solder pin; orange



**Item No.: 232-270/031-000**

THT female header; angled; Pin spacing 5.08 mm; 10-pole; clamping collar; 0.6 x 1.0 mm solder pin; orange



**Item No.: 232-270/039-000**

THT female header; angled; Pin spacing 5.08 mm; 10-pole; Locking lever; 0.6 x 1.0 mm solder pin; orange



**Item No.: 232-270/047-000**

THT female header; angled; Pin spacing 5.08 mm; 10-pole; Spacer flange; 0.6 x 1.0 mm solder pin; orange



**Item No.: 232-170**

THT female header; straight; Pin spacing 5.08 mm; 10-pole; 0.6 x 1.0 mm solder pin; orange



**Item No.: 232-170/031-000**

THT female header; straight; Pin spacing 5.08 mm; 10-pole; clamping collar; 0.6 x 1.0 mm solder pin; orange



**Item No.: 232-170/039-000**

THT female header; straight; Pin spacing 5.08 mm; 10-pole; Locking lever; 0.6 x 1.0 mm solder pin; orange



**Item No.: 232-170/047-000**

THT female header; straight; Pin spacing 5.08 mm; 10-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.: 231-129**

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

|   |   |   |   |
|---|---|---|---|
| <br><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                 | <br><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   | <br><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 | <br><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 |
| <br><b>Item No.: 216-202</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray   | <br><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    | <br><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  | <br><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     |
| <br><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                 | <br><b>Item No.: 216-203</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red   | <br><b>Item No.: 216-103</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; un-insulated; electro-tin plated   | <br><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       |
| <br><b>Item No.: 216-204</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black   | <br><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 | <br><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 | <br><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 |
| <br><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 | <br><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   | <br><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   |   |






1.2.4 Insulation stop

1.2.4.1 Insulation stop

|   |   |   |
|---|---|---|
| <br><b>Item No.: 231-670</b><br>Insulation stop; 0.08-0.2 mm <sup>2</sup> / 0.2 mm <sup>2</sup> "s"; white | <br><b>Item No.: 231-671</b><br>Insulation stop; 0.25 - 0.5 mm <sup>2</sup> ; light gray | <br><b>Item No.: 231-672</b><br>Insulation stop; 0.75 - 1 mm <sup>2</sup> ; dark gray |
|---|---|---|

1.2.5 Jumper

1.2.5.1 Jumper

|   |  |   |  |
|---|--|---|--|
| <br><b>Item No.: 231-910</b><br>Jumper; for conductor entry; 10-way; insulated; gray | <br><b>Item No.: 231-902</b><br>Jumper; for conductor entry; 2-way; insulated; gray | <br><b>Item No.: 231-903</b><br>Jumper; for conductor entry; 3-way; insulated; gray | <br><b>Item No.: 231-905</b><br>Jumper; for conductor entry; 5-way; insulated; gray |
| <br><b>Item No.: 231-907</b><br>Jumper; for conductor entry; 7-way; insulated; gray  |  |   |  |

## 1.2.6 Marking

### 1.2.6.1 Marking strip



**Item No.: 210-331/508-103**

Marking strips; as a DIN A4 sheet; MARKED; 1-12 (200x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/508-202**

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/508-205**

Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-331/508-104**

Marking strips; as a DIN A4 sheet; MARKED; 13-24 (200x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/508-204**

Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/508-206**

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

## 1.2.7 Strain relief

### 1.2.7.1 Strain relief housing



**Item No.: 232-640**

Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5.08 mm; 10-pole; orange

## 1.2.8 Tool

### 1.2.8.1 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.: 209-132**

Operating tool; for connecting comb-style jumper bar; made of insulating material; 2-way; natural



**Item No.: 280-440**

Operating tool; made of insulating material; 10-way; white



**Item No.: 209-130**

Operating tool; made of insulating material; 1-way; for 264 Series (1-1/2-way), 280, 281 Series (up to 3-way); natural



**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



**Item No.: 280-432**

Operating tool; made of insulating material; 2-way; white



**Item No.: 280-433**

Operating tool; made of insulating material; 3-way; white



**Item No.: 280-434**

Operating tool; made of insulating material; 4-way; white



**Item No.: 280-435**

Operating tool; made of insulating material; 5-way; gray



**Item No.: 280-436**

Operating tool; made of insulating material; 6-way; white



**Item No.: 280-437**

Operating tool; made of insulating material; 7-way; white

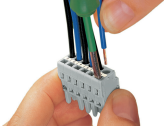


**Item No.: 280-438**

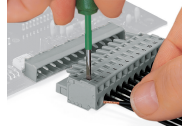
Operating tool; made of insulating material; 8-way; white

## Installation Notes

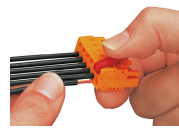
### Conductor termination



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.

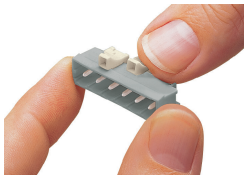


Inserting a conductor into CAGE CLAMP® unit via operating tool (231-291).



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.