

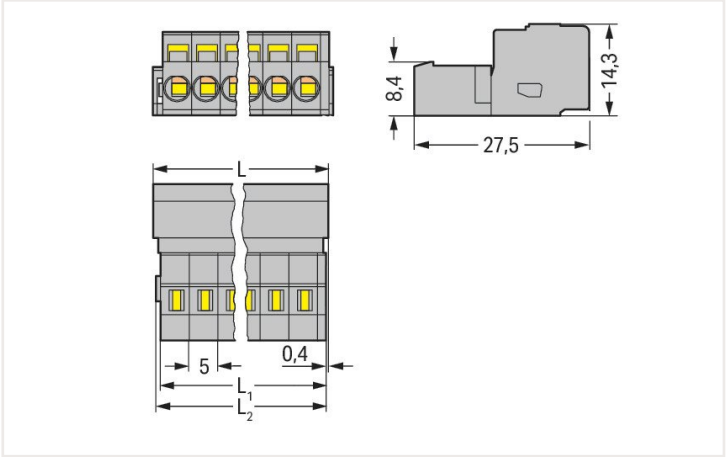
**Data sheet | Item number: 231-608**

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole;  
2,50 mm²; gray

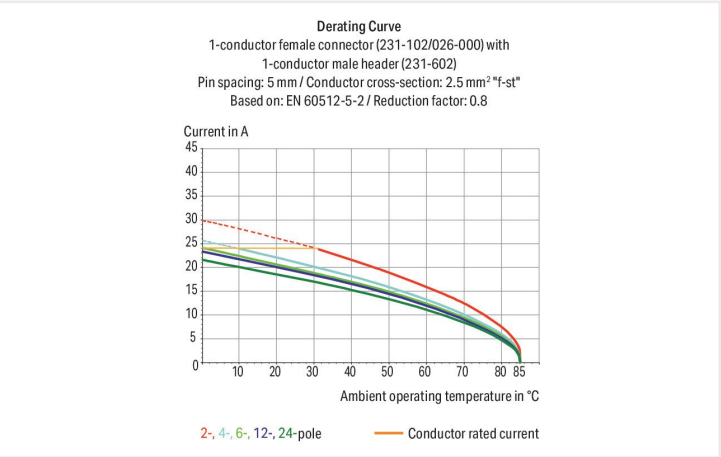
<https://www.wago.com/231-608>



Color:  gray



Dimensions in mm  
L = (pole no. – 1) x pin spacing + 8.2 mm  
L1 = L – 1.7 mm  
L2 = L – 1.2 mm



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For wire-to-wire and board-to-wire connections
- Versions available with snap-in mounting feet or flanges for panel or through-panel mounting
- With coding fingers



Notes	
Safety information 1	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 <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .

Electrical data	
Ratings per IEC/EN	
Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	320 V
Rated impulse voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated impulse voltage (III/2)	4 kV
Nominal voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
Rated current	12 A
Legend (ratings)	(III / 2) ≙ Overvoltage category III / Pollution degree 2
Ratings per UL	
Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	15 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A

Ratings per UL	
Rated voltage (UL 1977)	600 V
Rated current UL 1977	15 A

Ratings per CSA	
Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	15 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

Connection data	
Total number of connection points	8
Total number of potentials	8
Number of connection types	1
Number of levels	1
Connection 1	
Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Solid conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm²
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
Pole number	8
Conductor entry direction to mating direction	0°

### Physical data

Pin spacing	5 mm / 0.197 inch
Width	43.2 mm / 1.701 inch
Height	14.3 mm / 0.563 inch
Depth	27.5 mm / 1.083 inch

### Mechanical data

Variable coding	Yes
Direct ground contact to DIN-rail/drilled hole/housing	No

### Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for conductor
Mismating protection	No
Locking of plug-in connection	none

### Material data

Note (material data)	<a href="#">Information on material data can be found here</a>
Color	gray
Material group	I
Insulation material	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	0.213 MJ
Weight	12.4 g

### Environmental requirements

Limit temperature range	-60 ... +100 °C
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### Commercial data

Product Group	3 (Multi Conn. System)
eCl@ss 10.0	27-44-03-09
eCl@ss 9.0	27-44-03-09
ETIM 7.0	EC002638
ETIM 6.0	EC002638
PU (SPU)	50 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4044918257749
Customs tariff number VKOrg Germany	85366990990



Approvals / Certificates

Country specific Approvals



Approval	Standard	Certificate name
CB DEKRA Certification B.V.	IEC 61984	NL-39756
CSA DEKRA Certification B.V.	C22.2	LR 18677-25
KEMA/KEUR DEKRA Certification B.V.	EN 61984	2190761.01

Ship Approvals



Approval	Standard	Certificate name
ABS American Bureau of Ship- ping	-	19-HG1869876-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE000016Z
LR Lloyds Register	IEC 61984	96/20035 (E5)

UL-Approvals



Approval	Standard	Certificate name
UR Underwriters Laboratories Inc.	UL 1977	E45171

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 231-608



Documentation

Additional Information
Technical Section
03.04.2019
pdf 1949.09 KB



CAD/CAE-Data

CAD data
2D/3D Models 231-608



CAE data
EPLAN Data Portal 231-608
ZUKEN Portal 231-608



## 1 Compatible products

### 1.1 Counterpart

#### 1.1.1 Female connector/socket



**Item no.: 232-108/026-000**

1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; 2,50 mm²; gray



**Item no.: 232-208/026-000**

1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; 2,50 mm²; gray



**Item no.: 731-508/031-000**

1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; clamping collar; DIN-35 rail/ panel mounting; 2,50 mm²; gray



**Item no.: 731-508/008-000**

1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; Snap-in mounting feet; 2,50 mm²; gray



**Item no.: 231-108/026-000**

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; 2,50 mm²; gray



**Item no.: 231-108/027-000**

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; clamping collar; 2,50 mm²; gray



**Item no.: 231-108/031-000**

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; clamping collar; 2,50 mm²; gray



**Item no.: 231-108/037-000**

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; Lateral locking levers; 2,50 mm²; gray



**Item no.: 231-108/008-000**

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; Snap-in mounting feet; 2,50 mm²; gray



**Item no.: 231-108/102-000**

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; with integrated end plate; 2,50 mm²; gray



**Item no.: 2231-108/026-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; 2,50 mm²; gray



**Item no.: 2231-108/031-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; clamping collar; 2,50 mm²; gray



**Item no.: 2231-108/037-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; Lateral locking levers; 2,50 mm²; gray



**Item no.: 2231-108/008-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; Snap-in mounting feet; 2,50 mm²; gray



**Item no.: 2231-108/102-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; with integrated end plate; 2,50 mm²; gray



**Item no.: 231-2108/037-000**

2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; Lateral locking levers; 2,50 mm²; gray



**Item no.: 231-2108/026-000**

2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 8-pole; with integrated end plate; 2,50 mm²; gray



**Item no.: 232-238/005-000**

Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; Pin spacing 5 mm; 8-pole; gray



**Item no.: 232-138/005-000/039-000**

Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Locking lever; Pin spacing 5 mm; 8-pole; gray



**Item no.: 232-138/005-000**

Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; Pin spacing 5 mm; 8-pole; gray



**Item no.: 232-238**

THT female header; angled; Pin spacing 5 mm; 8-pole; 0.6 x 1.0 mm solder pin; gray



**Item no.: 232-238/031-000**

THT female header; angled; Pin spacing 5 mm; 8-pole; clamping collar; 0.6 x 1.0 mm solder pin; gray



**Item no.: 232-238/039-000**

THT female header; angled; Pin spacing 5 mm; 8-pole; Locking lever; 0.6 x 1.0 mm solder pin; gray



**Item no.: 232-238/047-000**

THT female header; angled; Pin spacing 5 mm; 8-pole; Spacer flange; 0.6 x 1.0 mm solder pin; gray



**Item no.: 232-138**

THT female header; straight; Pin spacing 5 mm; 8-pole; 0.6 x 1.0 mm solder pin; gray



**Item no.: 232-138/031-000**

THT female header; straight; Pin spacing 5 mm; 8-pole; clamping collar; 0.6 x 1.0 mm solder pin; gray



**Item no.: 232-138/039-000**

THT female header; straight; Pin spacing 5 mm; 8-pole; Locking lever; 0.6 x 1.0 mm solder pin; gray



**Item no.: 232-138/047-000**

THT female header; straight; Pin spacing 5 mm; 8-pole; Spacer flange; 0.6 x 1.0 mm solder pin; gray

## 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.: 231-668

Lockout caps; for covering unused clamping units; gray

## 1.2.3 Ferrule

### 1.2.3.1 Ferrule



#### Item no.: 216-301

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



#### Item no.: 216-321

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



#### Item no.: 216-151

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



#### Item no.: 216-131

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored



#### Item no.: 216-302

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



#### Item no.: 216-322

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



#### Item no.: 216-132

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



#### Item no.: 216-152

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



#### Item no.: 216-241

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



#### Item no.: 216-201

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white



#### Item no.: 216-221

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white



#### Item no.: 216-141

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



#### Item no.: 216-101

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored



#### Item no.: 216-121

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored



#### Item no.: 216-242

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



#### Item no.: 216-262

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



#### Item no.: 216-202

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



#### Item no.: 216-222

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



#### Item no.: 216-142

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



#### Item no.: 216-102

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored



#### Item no.: 216-122

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored



#### Item no.: 216-243

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



#### Item no.: 216-263

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



#### Item no.: 216-203

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



#### Item no.: 216-223

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



#### Item no.: 216-103

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated



#### Item no.: 216-143

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



#### Item no.: 216-123

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored



#### Item no.: 216-204

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black



#### Item no.: 216-224

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black



#### Item no.: 216-244

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



#### Item no.: 216-264

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

## 1.2.3.1 Ferrule

**Item no.: 216-284**

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

**Item no.: 216-124**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated

**Item no.: 216-144**

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

**Item no.: 216-104**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; silver-colored

**Item no.: 216-106**

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

**Item no.: 231-670**

Insulation stop; 0.08-0.2 mm<sup>2</sup> / 0.2 mm<sup>2</sup> "s"; white

**Item no.: 231-671**

Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; light gray

**Item no.: 231-672**

Insulation stop; 0.75 - 1 mm<sup>2</sup>; dark gray

## 1.2.5 Jumper

## 1.2.5.1 Jumper

**Item no.: 231-910**

Jumper; for conductor entry; 10-way; insulated; gray

**Item no.: 231-902**

Jumper; for conductor entry; 2-way; insulated; gray

**Item no.: 231-903**

Jumper; for conductor entry; 3-way; insulated; gray

**Item no.: 231-905**

Jumper; for conductor entry; 5-way; insulated; gray

**Item no.: 231-907**

Jumper; for conductor entry; 7-way; insulated; gray

## 1.2.6 Marking

## 1.2.6.1 Marking strip

**Item no.: 210-331/500-103**

Marking strips; as a DIN A4 sheet; MARKED; 1-12 (300x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

**Item no.: 210-332/500-202**

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.: 210-332/500-205**

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.: 210-331/500-104**

Marking strips; as a DIN A4 sheet; MARKED; 13-24 (300x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

**Item no.: 210-332/500-204**

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.: 210-332/500-206**

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.: 232-608  
Strain relief housing; gray

1.2.8 Tool

1.2.8.1 Operating tool



Item no.: 231-231  
Combination operating tool; red



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.: 210-250  
Operating tool; for MCS MINI & MIDI with CAGE CLAMP® connection; red



Item no.: 280-440  
Operating tool; made of insulating material; 10-way



Item no.: 209-130  
Operating tool; made of insulating material; 1-way; for 264 Series (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



Item no.: 280-434  
Operating tool; made of insulating material; 4-way



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



Item no.: 280-437  
Operating tool; made of insulating material; 7-way



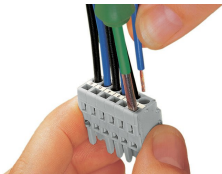
Item no.: 280-438  
Operating tool; made of insulating material; 8-way



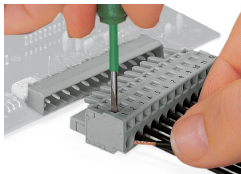
Item no.: 231-159  
Operating tool; natural

Installation notes

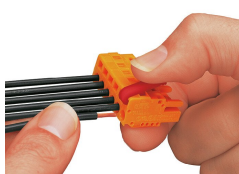
Conductor termination



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.

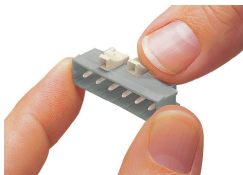


Inserting a conductor into CAGE CLAMP® unit via operating tool (231-291).



Inserting a conductor via operating tool.

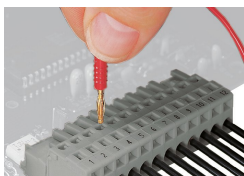
Coding



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



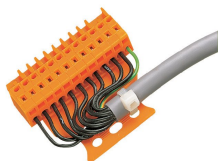
## Testing



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

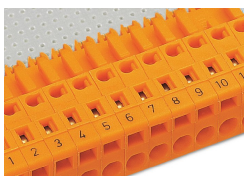


Male connector with strain relief plate



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

## Marking



Labeling via direct marking or self-adhesive strips.