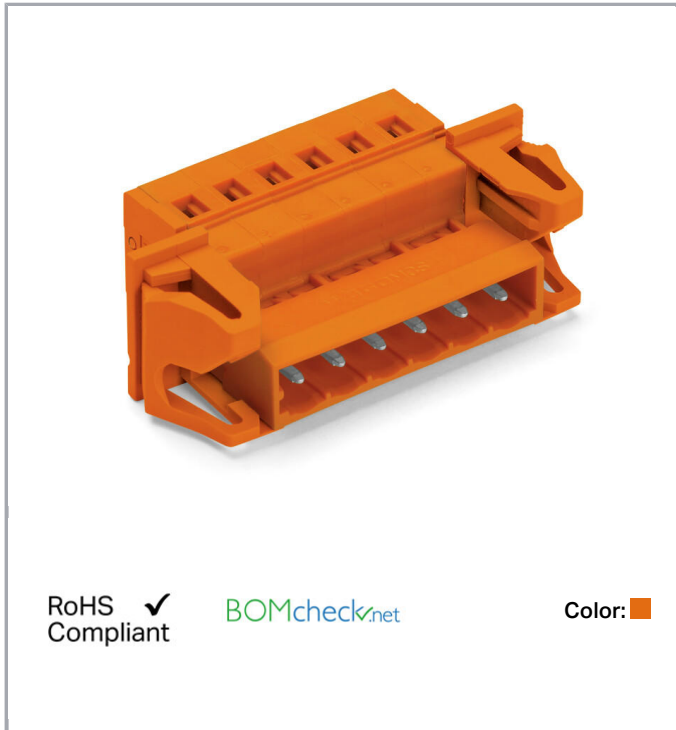


**Data sheet | Item number: 231-653/114-000**

1-conductor male connector; Snap-in flange; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm;  
23-pole; 2,50 mm<sup>2</sup>; orange

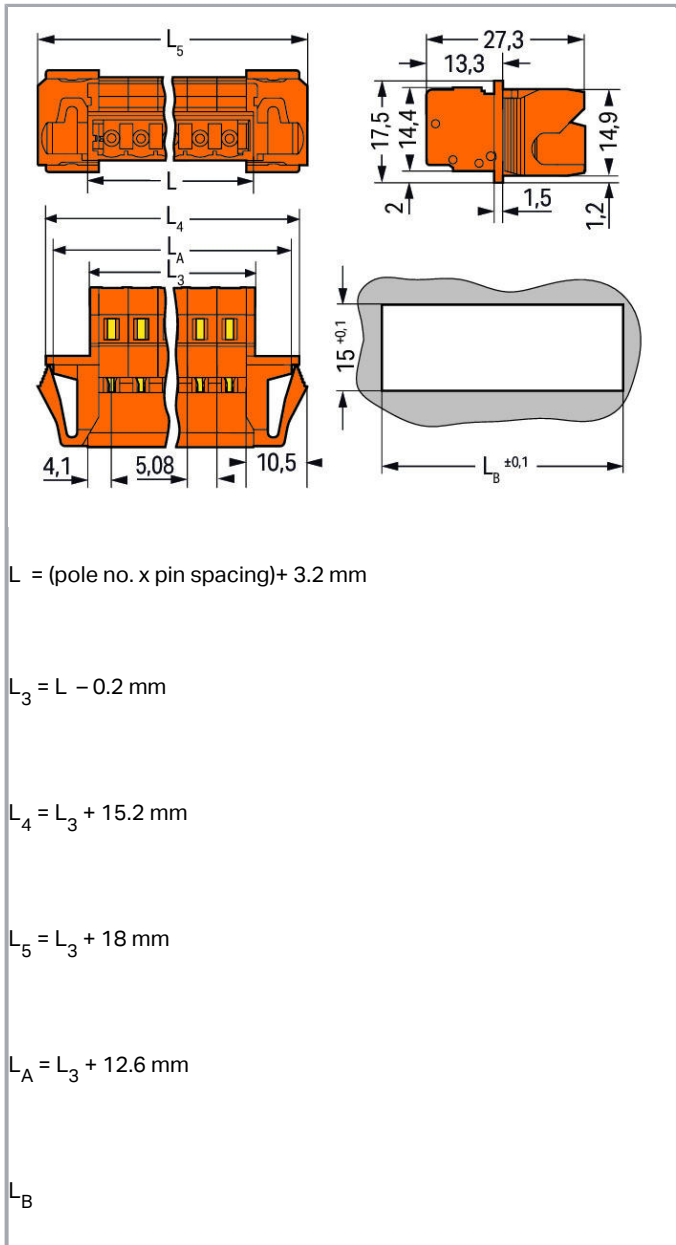
[www.wago.com/231-653/114-000](http://www.wago.com/231-653/114-000)



Subject to changes. Please also observe the further product documentation!

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## Item description

- 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

Subject to changes. Please also observe the further product documentation!

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**Safety information 1:**

The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS Connectors shall 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.

**Data****Electrical data****Ratings per IEC/EN 60664-1**

Ratings per	IEC/EN 60664-1
Rated 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
Rated voltage (II / 2)	630 V
Rated impulse voltage (II / 2)	4 kV
Rated current	12 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

**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
Approvals per	UL 1059

**Approvals per UL 1977**

Rated voltage per UL 1977 (factory wiring only)	600 V
Rated current per UL 1977 (factory wiring only)	15 A

**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

Subject to changes. Please also observe the further product documentation!



## Connection data

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
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 ferrule with plastic collar	0.25 ... 1.5 mm <sup>2</sup>
Fine-stranded conductor with ferrule without plastic collar	0.25 ... 2.5 mm <sup>2</sup>
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
No. of poles	23
Total number of connection points	23
Total number of potentials	23
Number of connection types	1
Number of levels	1
Conductor entry direction to mating direction	0°

## Geometrical Data

Pin spacing	5.08 mm / 0.2 inch
Width	137.84 mm / 5.427 inch
Height	17.5 mm / 0.689 inch
Depth	27.5 mm / 1.083 inch

## Mechanical data

Gehäuseblechstärke	0.5 ... 2.5 mm / 0.02 ... 0.098 inch
Mounting type	Snap-in
Type of mounting	Feed-through mounting

## Plug connection

Contact type (pluggable connector)	Male connector/plug
Connector connection type	for conductors
Mismating protection	No

## Material Data

Color	orange
Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL94	V0

Subject to changes. Please also observe the further product documentation!

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Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated
Fire load	0.637 MJ
Weight	37.5 g

### Environmental Requirements



Limit temperature range	-60 ... +100 °C
-------------------------	-----------------

### Commercial data


Product Group	3 (Multi Conn. System)
Packaging type	BOX
Country of origin	DE
GTIN	4050821279952
Customs Tariff No.	85366990990

### Approvals / Certificates

#### Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>CB</b> DEKRA Certification B.V.	IEC 61984	NL-39756
	<b>CSA</b> DEKRA Certification B.V.	C22.2	1466354
	<b>KEMA/KEUR</b> DEKRA Certification B.V.	EN 61984	2190761.01

#### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>UR</b> Underwriters Laboratories Inc.	UL 1059	E45172
	<b>UR</b> Underwriters Laboratories Inc.	UL 1977	E45171 sec. 5

Subject to changes. Please also observe the further product documentation!



## Counterpart



Item no. 231-323/026-000

1-conductor female plug; 2.5 mm<sup>2</sup>; Pin spacing 5.08 mm; 23-pole; 2,50 mm<sup>2</sup>; orange

[www.wago.com/231-323/026-000](http://www.wago.com/231-323/026-000)

## Compatible products

### tools

Item no.: 209-130

Operating tool; suitable for 264, 280 and 281 Series; 1-way; of insulating material

[www.wago.com/209-130](http://www.wago.com/209-130)



Item no.: 209-132

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

[www.wago.com/209-132](http://www.wago.com/209-132)

Item no.: 210-657

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

[www.wago.com/210-657](http://www.wago.com/210-657)



Item no.: 210-720

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

[www.wago.com/210-720](http://www.wago.com/210-720)

Item no.: 231-131

Push-button; loose

[www.wago.com/231-131](http://www.wago.com/231-131)

Item no.: 231-291

Operating tool; loose; red

[www.wago.com/231-291](http://www.wago.com/231-291)

Item no.: 280-432

Operating tool; made of insulating material; 2-way

[www.wago.com/280-432](http://www.wago.com/280-432)

Item no.: 280-433

Operating tool; made of insulating material; 3-way

[www.wago.com/280-433](http://www.wago.com/280-433)



Item no.: 280-434

Operating tool; made of insulating material; 4-way

[www.wago.com/280-434](http://www.wago.com/280-434)

Item no.: 280-435

Subject to changes. Please also observe the further product documentation!

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

[www.wago.com/280-435](http://www.wago.com/280-435)**Item no.: 280-436**

Operating tool; made of insulating material; 6-way

[www.wago.com/280-436](http://www.wago.com/280-436)**Item no.: 280-437**

Operating tool; made of insulating material; 7-way

[www.wago.com/280-437](http://www.wago.com/280-437)**Item no.: 280-438**

Operating tool; made of insulating material; 8-way

[www.wago.com/280-438](http://www.wago.com/280-438)**Item no.: 280-440**

Operating tool; made of insulating material; 10-way

[www.wago.com/280-440](http://www.wago.com/280-440)**ferrule****Item no.: 216-101**Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated[www.wago.com/216-101](http://www.wago.com/216-101)**Item no.: 216-102**Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated[www.wago.com/216-102](http://www.wago.com/216-102)**Item no.: 216-103**Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated[www.wago.com/216-103](http://www.wago.com/216-103)**Item no.: 216-104**Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated[www.wago.com/216-104](http://www.wago.com/216-104)**Item no.: 216-106**Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; uninsulated; electro-tin plated[www.wago.com/216-106](http://www.wago.com/216-106)**Item no.: 216-121**Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated[www.wago.com/216-121](http://www.wago.com/216-121)**Item no.: 216-122**Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated[www.wago.com/216-122](http://www.wago.com/216-122)**Item no.: 216-123**Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated[www.wago.com/216-123](http://www.wago.com/216-123)**Item no.: 216-124**Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated[www.wago.com/216-124](http://www.wago.com/216-124)**Item no.: 216-131**Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated[www.wago.com/216-131](http://www.wago.com/216-131)**Item no.: 216-132**Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated[www.wago.com/216-132](http://www.wago.com/216-132)**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[www.wago.com/216-141](http://www.wago.com/216-141)**Item no.: 216-142**Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight[www.wago.com/216-142](http://www.wago.com/216-142)

Subject to changes. Please also observe the further product documentation!

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crimped; acc. to DIN 46228, Part 1/08.92

	<b>Item no.: 216-143</b> 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	<a href="http://www.wago.com/216-143">www.wago.com/216-143</a>
	<b>Item no.: 216-144</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	<a href="http://www.wago.com/216-144">www.wago.com/216-144</a>
	<b>Item no.: 216-151</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-151">www.wago.com/216-151</a>
	<b>Item no.: 216-152</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-152">www.wago.com/216-152</a>
	<b>Item no.: 216-201</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white	<a href="http://www.wago.com/216-201">www.wago.com/216-201</a>
	<b>Item no.: 216-202</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	<a href="http://www.wago.com/216-202">www.wago.com/216-202</a>
	<b>Item no.: 216-203</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red	<a href="http://www.wago.com/216-203">www.wago.com/216-203</a>
	<b>Item no.: 216-204</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	<a href="http://www.wago.com/216-204">www.wago.com/216-204</a>
	<b>Item no.: 216-221</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white	<a href="http://www.wago.com/216-221">www.wago.com/216-221</a>
	<b>Item no.: 216-222</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray	<a href="http://www.wago.com/216-222">www.wago.com/216-222</a>
	<b>Item no.: 216-223</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; red	<a href="http://www.wago.com/216-223">www.wago.com/216-223</a>
	<b>Item no.: 216-224</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; black	<a href="http://www.wago.com/216-224">www.wago.com/216-224</a>
	<b>Item no.: 216-241</b> 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	<a href="http://www.wago.com/216-241">www.wago.com/216-241</a>
	<b>Item no.: 216-242</b> 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	<a href="http://www.wago.com/216-242">www.wago.com/216-242</a>
	<b>Item no.: 216-243</b> 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	<a href="http://www.wago.com/216-243">www.wago.com/216-243</a>
	<b>Item no.: 216-244</b> 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	<a href="http://www.wago.com/216-244">www.wago.com/216-244</a>
	<b>Item no.: 216-262</b>	

Subject to changes. Please also observe the further product documentation!



	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	<a href="http://www.wago.com/216-262">www.wago.com/216-262</a>
	<b>Item no.: 216-263</b> 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	<a href="http://www.wago.com/216-263">www.wago.com/216-263</a>
	<b>Item no.: 216-264</b> 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	<a href="http://www.wago.com/216-264">www.wago.com/216-264</a>
	<b>Item no.: 216-284</b> 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	<a href="http://www.wago.com/216-284">www.wago.com/216-284</a>
	<b>Item no.: 216-301</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	<a href="http://www.wago.com/216-301">www.wago.com/216-301</a>
	<b>Item no.: 216-302</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; green	<a href="http://www.wago.com/216-302">www.wago.com/216-302</a>
	<b>Item no.: 216-321</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow	<a href="http://www.wago.com/216-321">www.wago.com/216-321</a>
	<b>Item no.: 216-322</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; green	<a href="http://www.wago.com/216-322">www.wago.com/216-322</a>

**Marking accessories**

	<b>Item no.: 210-331/508-103</b> 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	<a href="http://www.wago.com/210-331/508-103">www.wago.com/210-331/508-103</a>
	<b>Item no.: 210-331/508-104</b> 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	<a href="http://www.wago.com/210-331/508-104">www.wago.com/210-331/508-104</a>
	<b>Item no.: 210-332/508-202</b> 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	<a href="http://www.wago.com/210-332/508-202">www.wago.com/210-332/508-202</a>
	<b>Item no.: 210-332/508-204</b> 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	<a href="http://www.wago.com/210-332/508-204">www.wago.com/210-332/508-204</a>
	<b>Item no.: 210-332/508-205</b> 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	<a href="http://www.wago.com/210-332/508-205">www.wago.com/210-332/508-205</a>
	<b>Item no.: 210-332/508-206</b> 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	<a href="http://www.wago.com/210-332/508-206">www.wago.com/210-332/508-206</a>
	<b>Item no.: 210-833</b> Marking strips; on reel; 6 mm wide; plain; Self-adhesive; white	<a href="http://www.wago.com/210-833">www.wago.com/210-833</a>

Subject to changes. Please also observe the further product documentation!

**Item no.: 210-834**  
 Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

[www.wago.com/210-834](http://www.wago.com/210-834)

**Jumper**

**Item no.: 231-902**  
 Comb-style jumper bar; for 5 mm and 5.08 mm pin spacing; reduces conductor size to 1.5 mm; gray [www.wago.com/231-902](http://www.wago.com/231-902)

**Item no.: 231-903**  
 Comb-style jumper bar; 3-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated; gray [www.wago.com/231-903](http://www.wago.com/231-903)



**Item no.: 231-905**  
 Comb-style jumper bar; 5-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated; gray [www.wago.com/231-905](http://www.wago.com/231-905)

**Item no.: 231-907**  
 Comb-style jumper bar; 7-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated; gray [www.wago.com/231-907](http://www.wago.com/231-907)

**Item no.: 231-910**  
 Comb-style jumper bar; 10-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated; gray [www.wago.com/231-910](http://www.wago.com/231-910)

**General accessories**



**Item no.: 231-669**  
 Lockout caps; for covering unused clamping units; orange [www.wago.com/231-669](http://www.wago.com/231-669)

**Insulation stop**



**Item no.: 231-670**  
 Insulation stop; 0.08-0.2 mm<sup>2</sup> / 0.2 mm<sup>2</sup> "s"; white [www.wago.com/231-670](http://www.wago.com/231-670)



**Item no.: 231-671**  
 Insulation stop; 0.25 - 0.5 mm<sup>2</sup>; light gray [www.wago.com/231-671](http://www.wago.com/231-671)

**Item no.: 231-672**  
 Insulation stop; 0.75 - 1 mm<sup>2</sup>; dark gray [www.wago.com/231-672](http://www.wago.com/231-672)

**Coding**

**Item no.: 231-129**  
 Coding key; snap-on type; light gray [www.wago.com/231-129](http://www.wago.com/231-129)

**Downloads**

**Documentation**

**Additional Information**

Technical explanations	Apr 3, 2019	pdf 3.6 MB	Download
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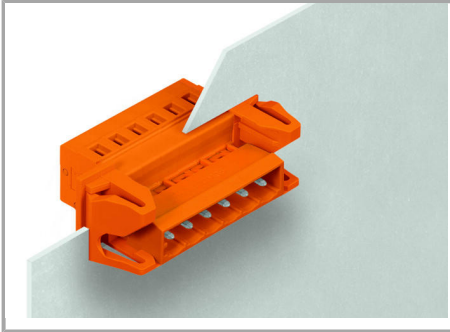
**CAD/CAE-Data**

**CAD data**

Subject to changes. Please also observe the further product documentation!

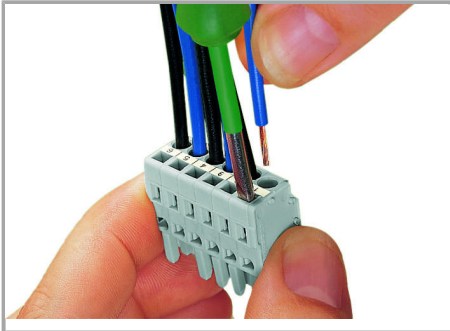
## Installation Notes

### Application

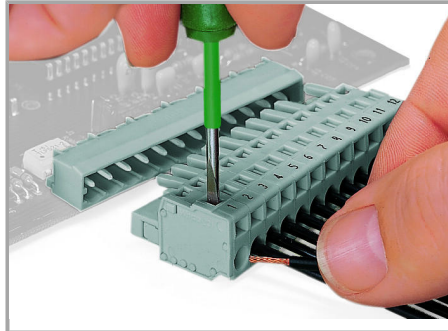


Male connector, with snap-in flanges for feedthrough applications, for 0.5 ... 2.5 mm plate thickness

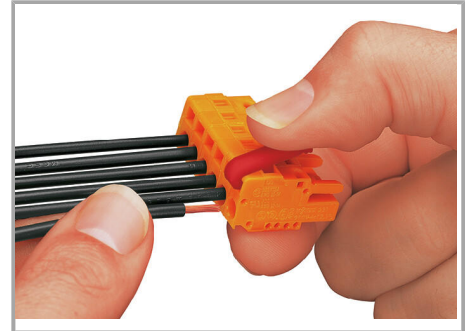
### Inserting a conductor



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

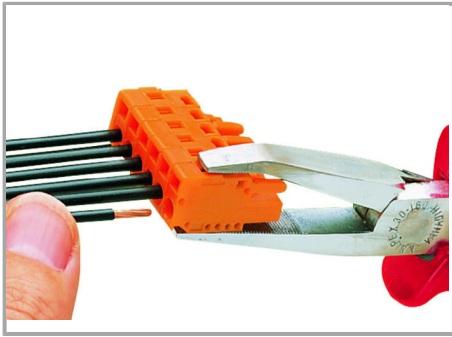


Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



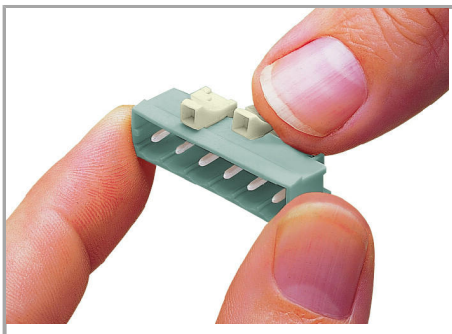
Inserting a conductor into CAGE CLAMP® unit via operating lever (231-291).

Subject to changes. Please also observe the further product documentation!



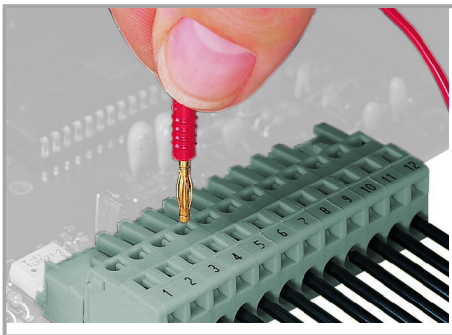
Inserting a conductor via operating tool.

### Coding



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

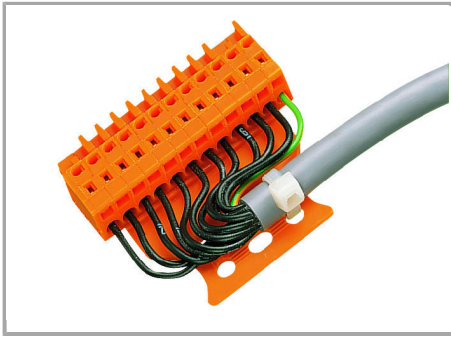
### Testing



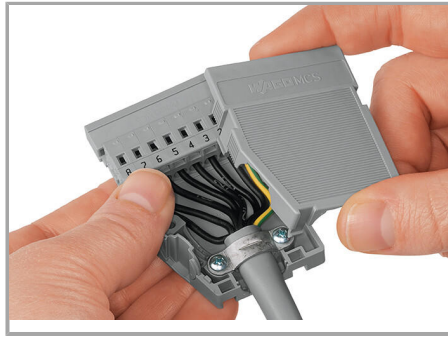
Testing perpendicular to conductor entry via 2 or 2.3 mm Ø test plug – female connector with CAGE CLAMP®.

### Assembly

Subject to changes. Please also observe the further product documentation!

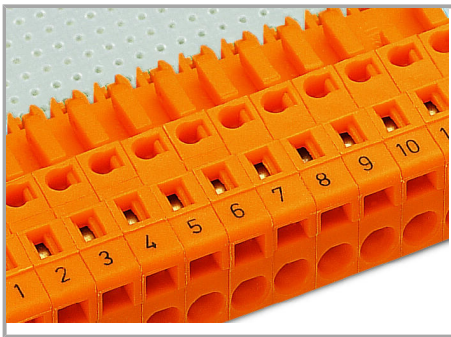


Male connector with strain relief plate



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

### Marking



Labeling via direct marking or self-adhesive strips.

### Product family

*MCS* MIDI Classic

[Learn more about the product family.](#)

[Show all products from the family](#)

Subject to changes. Please also observe the further product documentation!