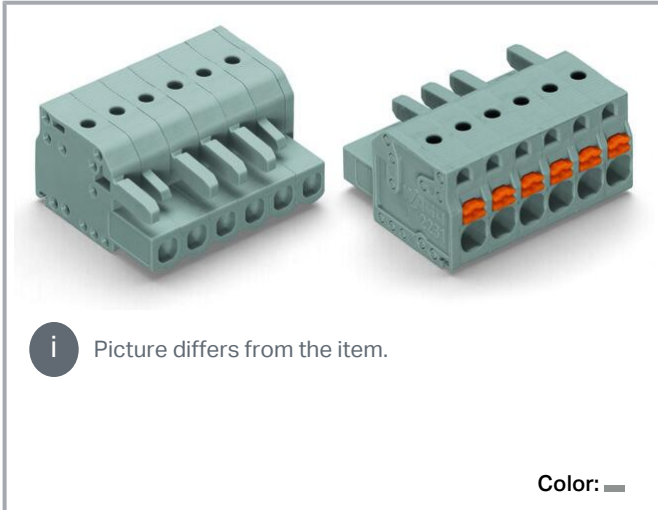


Data sheet | Item number: 2231-112/102-000

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 12-pole; with integrated end plate; 2,50 mm²; gray

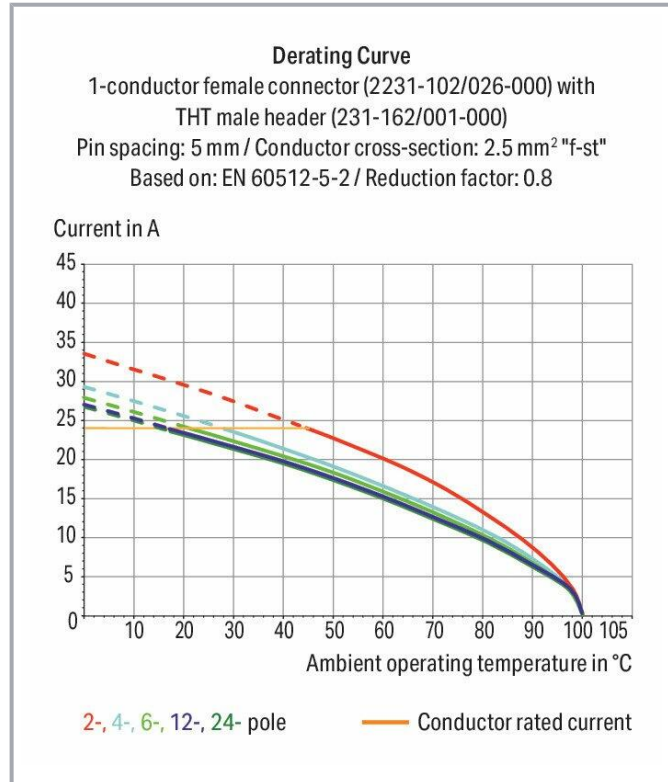


www.wago.com/2231-112/102-000



i Picture differs from the item.

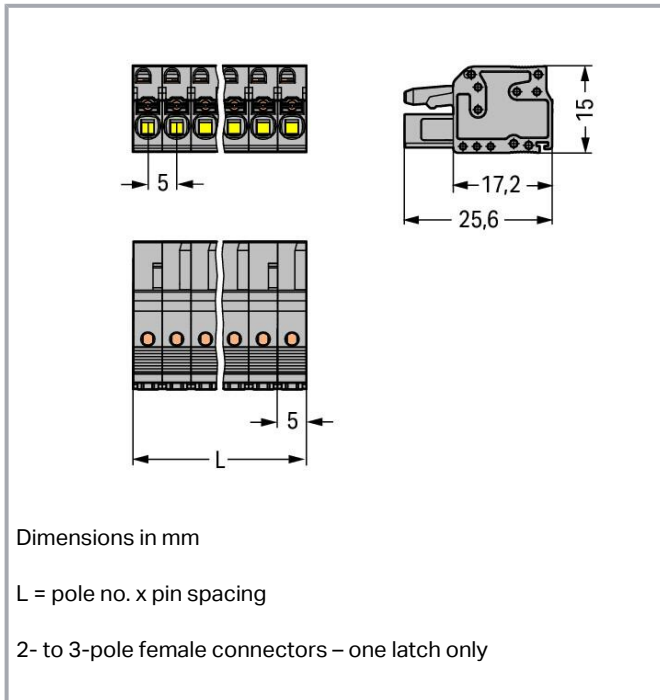
Color:



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

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Item description

- Universal connection for all conductor types
- Easy-to-use design does not require specialty tools
- Ability to wire while mated
- Push-in termination of solid and ferruled conductors
- Integrated test ports for testing parallel to the conductor entry
- Coding option available

Data

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:

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/>.

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

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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	16 A
Legend (ratings)	(III / 2) ≙ Overvoltage category III / Pollution degree 2

Ratings per UL 1059

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 C)	150 V
Rated current UL (Use Group C)	15 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A

Ratings per UL 1977

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 C)	150 V
Rated current CSA (Use Group C)	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 points	12
Total number of potentials	12
Number of connection types	1
Number of levels	1

Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Push-button
Actuation direction 1	Operation parallel to conductor entry
Solid conductor	0.2 ... 2.5 mm ² / 24 ... 12 AWG
Fine-stranded conductor	0.2 ... 2.5 mm ² / 24 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ²
Strip length	10 ... 11 mm / 0.39 ... 0.43 inches
Pole number	12
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	5 mm / 0.197 inches
Width	60 mm / 2.362 inches
Height	15 mm / 0.591 inches
Depth	25.6 mm / 1.008 inches

Mechanical Data

Variable coding	Yes
Anti-rotation protection	Yes

Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductor
Mismating protection	No
Plugging without loss of pin spacing	Yes
Locking of plug-in connection	none

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



Material Data

Note (material data)

Information on material specifications can be found here

Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	Tin
Fire load	0.469 MJ
Weight	18.7 g

Environmental requirements

Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C

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 8.0	EC002638
ETIM 7.0	EC002638
PU (SPU)	25 pcs
Packaging type	box
Country of origin	PL
GTIN	4045454907723
Customs tariff number	85366990990

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
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Subject to changes. Please also observe the further product documentation!

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	CB DEKRA Certification B.V.	IEC 61984	NL-39756 /A1
	CSA DEKRA Certification B.V.	C22.2 No. 158	2314554
	KEMA/KEUR DEKRA Certification B.V.	EN 61984	71- 121453
	UL Underwriters Laboratories Inc.	UL 1059	E45172
	UR Underwriters Laboratories Inc.	UL 1977	E45171

Counterpart

	Item no.231-612 1-conductor male connector; CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5 mm; 12-pole; 2,50 mm ² ; gray	www.wago.com/231-612
	Item no.231-142/001-000 THT male header; 1.0 x 1.0 mm solder pin; straight; Pin spacing 5 mm; 12-pole; gray	www.wago.com/231-142/001-000
	Item no.231-442/001-000 THT male header; 1.0 x 1.0 mm solder pin; angled; Pin spacing 5 mm; 12-pole; gray	www.wago.com/231-442/001-000

Optional accessories

Ferrule		
Ferrule		
	Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-101
	Item no.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-104

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



	Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-106
	Item no.: 216-102 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-102
	Item no.: 216-103 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated	www.wago.com/216-103
	Item no.: 216-123 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-123
	Item no.: 216-122 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-122
	Item no.: 216-124 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated	www.wago.com/216-124
	Item no.: 216-142 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-142
	Item no.: 216-132 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-132
	Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-121
	Item no.: 216-143 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-143
	Item no.: 216-131 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-131
	Item no.: 216-141 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	www.wago.com/216-141
	Item no.: 216-152 Ferrule; Sleeve for 0.34 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-152
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-151
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	Item no.: 216-144 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored	www.wago.com/216-144

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

	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	www.wago.com/216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-242
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-222
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-221
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-224
	Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-243
	Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-244
	Item no.: 216-263 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	www.wago.com/216-263
	Item no.: 216-264 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-264
	Item no.: 216-284 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	www.wago.com/216-284
	Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-262
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-301
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; light turquoise	www.wago.com/216-322
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; light turquoise	www.wago.com/216-302

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

Tool

Operating tool



Item no.: 210-657

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

www.wago.com/210-657



Item no.: 210-720

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

www.wago.com/210-720

Marking accessories

Marking strip



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

www.wago.com/210-332/500-202



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

www.wago.com/210-332/500-206



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

www.wago.com/210-332/500-205



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

www.wago.com/210-332/500-204

Testing and measuring

Testing accessories



Item no.: 210-136

Test plug; 2 mm Ø; with 500 mm cable; red

www.wago.com/210-136



Item no.: 231-661

Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm²; light gray

www.wago.com/231-661

Strain relief

Strain relief plate



Item no.: 734-430

Strain relief plate; for female and male connectors; 1 part; gray

www.wago.com/734-430

Insulation stop

Insulation stop



Item no.: 231-672

Insulation stop; 0.75 - 1 mm²; dark gray

www.wago.com/231-672

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

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Item no.: 231-671

Insulation stop; 0.25 - 0.5 mm²; light gray

www.wago.com/231-671

Downloads

Documentation

Additional Information

Technical Section	2019 Apr 3	pdf	Download
Technical explanations		2.0 MB	

CAD/CAE-Data

CAE data

ZUKEN Portal 2231-112/102-000	URL	Download
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CAD data

2D/3D Models 2231-112/102-000	URL	Download
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Environmental Product Compliance

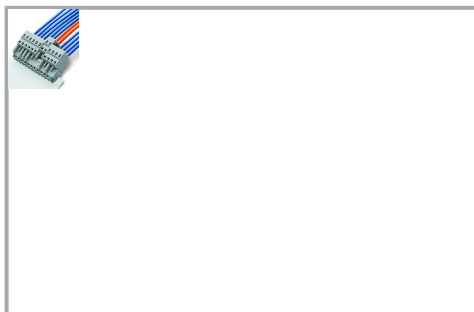
Compliance Search

Environmental Product Compliance 2231-112/102-000	URL	Download
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5 mm; 12-pole; with integrated end plate; 2,50 mm ² ; gray		

Installation Notes

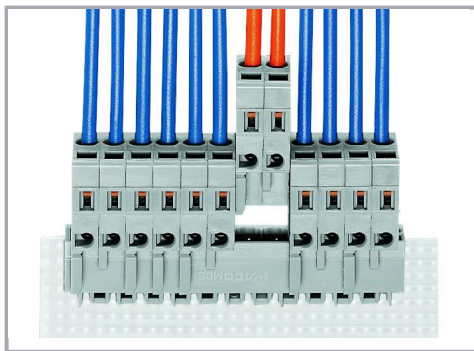
Application

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



Total pole number for female connectors
= pole number for male header

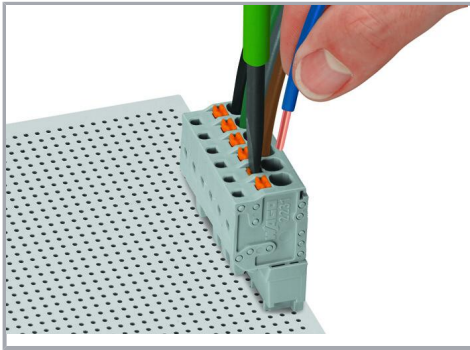
Application



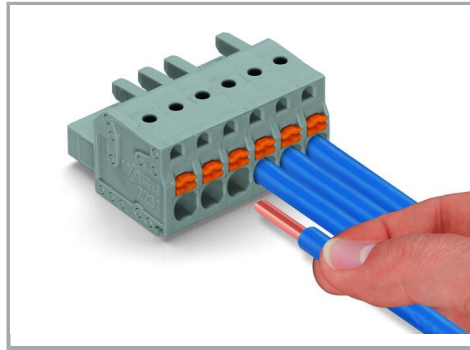
Female connectors with a built-in end plate require no extra space, while maintaining the nominal cross-section. This means: Total length of female connectors is reduced to "pole no. x pin spacing"!

Conductor termination

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

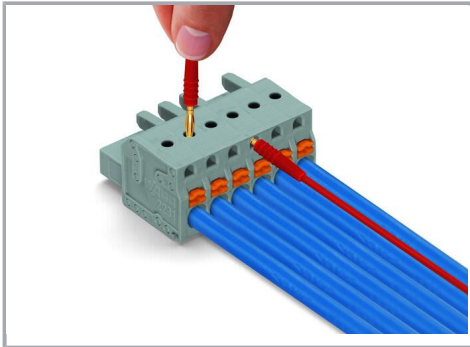


Inserting fine-stranded conductors into Push-in CAGE CLAMP® unit via push-buttons.



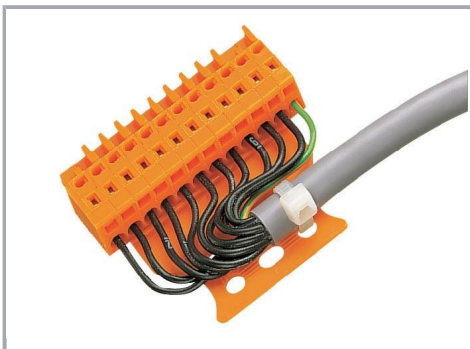
Push-in termination of solid conductors or fine-stranded conductors with ferrule

Testing



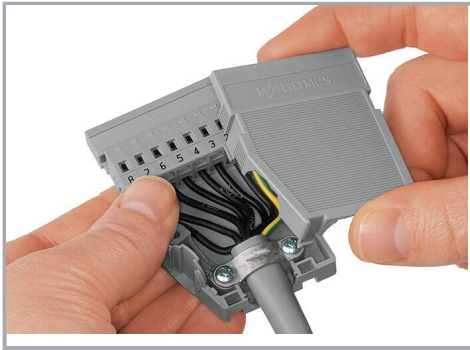
Testing parallel to conductor entry via integrated test ports – female connector with push-buttons and Push-in CAGE CLAMP® connection – touch contact perpendicular to conductor entry.

Installation



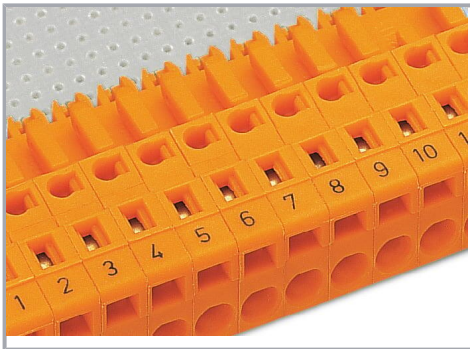
Male connector with strain relief plate

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



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

[Show all products from the family](#)

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