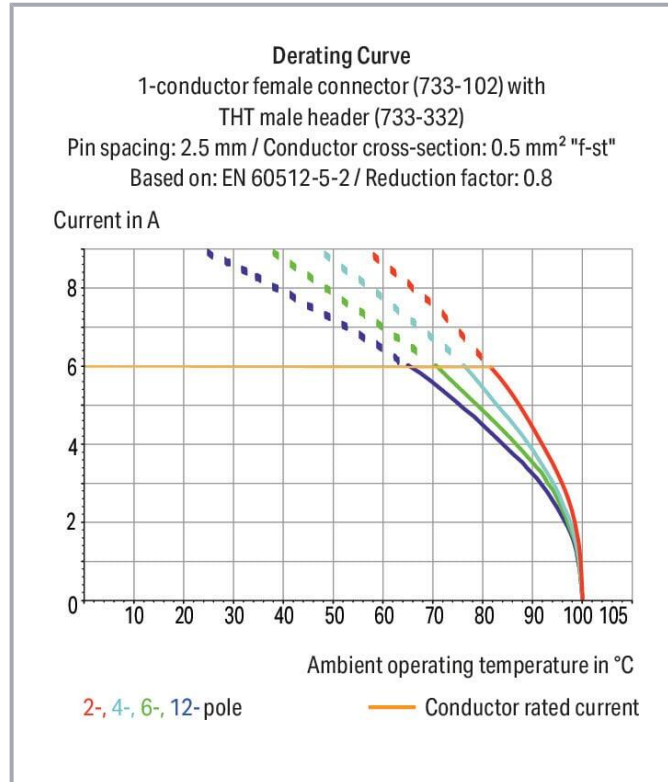
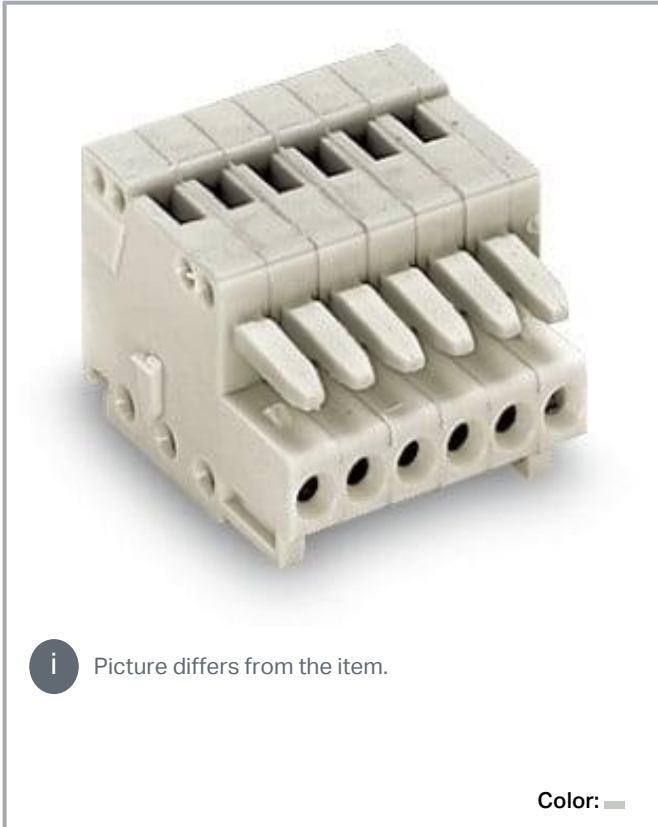


**Data sheet | Item number: 733-104**

1-conductor female connector; CAGE CLAMP®; 0.5 mm<sup>2</sup>; Pin spacing 2.5 mm; 4-pole; 100% protected against mismatching; 0,50 mm<sup>2</sup>; light gray



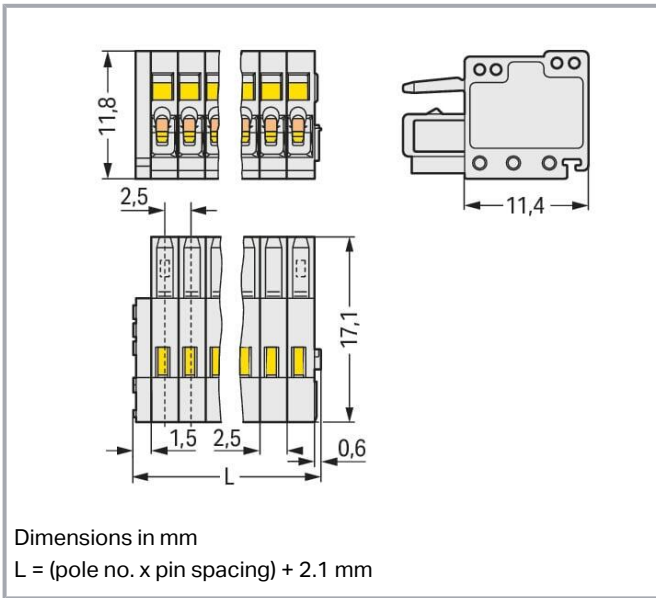
[www.wago.com/733-104](http://www.wago.com/733-104)



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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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We are always happy to take your call at +49 (571) 887-44222.



## Item description

- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- Strain relief plates for factory and field assembly
- 100% protected against mismatching
- 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:

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

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



### Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	100 V
Rated impulse voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated impulse voltage (III/2)	2.5 kV
Nominal voltage (II/2)	320 V
Rated surge voltage (II/2)	2.5 kV
Rated current	6 A
Legend (ratings)	(III / 2) ≙ Overvoltage category III / Pollution degree 2

### Ratings per UL

Approvals per	UL 1059
Rated voltage UL (Use Group B)	150 V
Rated current UL (Use Group B)	4 A

### Ratings per CSA

Approvals per	CSA
Rated voltage CSA (Use Group B)	150 V
Rated current CSA (Use Group B)	4 A

### Connection data

Connection points	4
Total number of potentials	4
Number of connection types	1
Number of levels	1

### Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Actuation direction 1	Operation parallel to conductor entry
Actuation direction 2	Operation perpendicular to conductor entry
Solid conductor	0.08 ... 0.5 mm <sup>2</sup> / 28 ... 20 AWG
Fine-stranded conductor	0.08 ... 0.5 mm <sup>2</sup> / 28 ... 20 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 0.34 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 0.34 mm <sup>2</sup>

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



Strip length	5 ... 6 mm / 0.2 ... 0.24 inches
Pole number	4
Conductor entry direction to mating direction	0°

### Physical data

Pin spacing	2.5 mm / 0.098 inches
Width	12.1 mm / 0.476 inches
Height	11.8 mm / 0.465 inches
Depth	17.1 mm / 0.673 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	Yes
Plugging without loss of pin spacing	No
Locking of plug-in connection	none

### Material data

Note (material data)	Information on material specifications can be found here
Color	light 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	0.034 MJ
Weight	1.8 g

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

## 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
ECCN	NO DATA
PU (SPU)	200 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918294003
Customs tariff number	85366990990

## Environmental Product Compliance


RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------

## Approvals / Certificates


### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 61984	2169534.01
	CCA DEKRA Certification B.V.	IEC 61984	NL-31141
	CSA DEKRA Certification B.V.	C22.2	1465035
	UL UL International Germany GmbH	UL 1977	E45171




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

	<b>UL</b> Underwriters Laboratories Inc.	UL 1059	E45172
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**Declarations of conformity and manufacturer's declarations**

Logo	Approval	Additional Approval Text	Certificate name
	<b>Railway</b> WAGO GmbH & Co. KG	-	Railway Ready

**Approvals for marine applications**

Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	-	19-HG1869876-PDA
	<b>DNV</b> DNV GL SE	-	TAE000016Z
	<b>LR</b> Lloyds Register	IEC 61984	96/20035 (E5)






**Counterpart**

	<b>Item no.733-204</b> 1-conductor male connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 4-pole; 100% protected against mismatching; 0,50 mm²; light gray	<a href="http://www.wago.com/733-204">www.wago.com/733-204</a>
	<b>Item no.733-204/032-000</b> 1-conductor male connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 4-pole; 100% protected against mismatching; Strain relief plate; 0,50 mm²; light gray	<a href="http://www.wago.com/733-204/032-000">www.wago.com/733-204/032-000</a>
	<b>Item no.733-334/105-604</b> THR male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 2.5 mm; 4-pole; black	<a href="http://www.wago.com/733-334/105-604">www.wago.com/733-334/105-604</a>

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

WAGO GmbH & Co. KG  
 Hansastr. 27  
 32423 Minden  
 Phone: +49571 887-0 | Fax: +49571 887-169  
 Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)


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	<b>Item no.733-334</b> THT male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismating; Pin spacing 2.5 mm; 4-pole; light gray	<a href="http://www.wago.com/733-334">www.wago.com/733-334</a>
	<b>Item no.733-334/105-604/997-446</b> THR male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismating; in tape-and-reel packaging; Pin spacing 2.5 mm; 4-pole; black	<a href="http://www.wago.com/733-334/105-604/997-446">www.wago.com/733-334/105-604/997-446</a>
	<b>Item no.733-364</b> THT male header; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismating; Pin spacing 2.5 mm; 4-pole; light gray	<a href="http://www.wago.com/733-364">www.wago.com/733-364</a>
	<b>Item no.733-364/105-604</b> THR male header; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismating; Pin spacing 2.5 mm; 4-pole; black	<a href="http://www.wago.com/733-364/105-604">www.wago.com/733-364/105-604</a>
	<b>Item no.733-364/105-604/997-406</b> THR male header; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismating; in tape-and-reel packaging; Pin spacing 2.5 mm; 4-pole; black	<a href="http://www.wago.com/733-364/105-604/997-406">www.wago.com/733-364/105-604/997-406</a>

## Optional accessories


### Marking accessories

#### Marking strip

	<b>Item no.: 210-331/250-207</b> Marking strips; as a DIN A4 sheet; MARKED; 1-48 (100x); 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/210-331/250-207">www.wago.com/210-331/250-207</a>
	<b>Item no.: 210-331/250-202</b> Marking strips; as a DIN A4 sheet; MARKED; 1-16 (400x); 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/210-331/250-202">www.wago.com/210-331/250-202</a>
	<b>Item no.: 210-331/250-204</b> Marking strips; as a DIN A4 sheet; MARKED; 17-32 (400x); 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/210-331/250-204">www.wago.com/210-331/250-204</a>
	<b>Item no.: 210-331/250-206</b> Marking strips; as a DIN A4 sheet; MARKED; 33-48 (400x); 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/210-331/250-206">www.wago.com/210-331/250-206</a>


### Strain relief

#### Strain relief plate

	<b>Item no.: 734-127</b> Strain relief plate; for female and male connectors; 6 mm wide; 1 part; Pin spacing 3.5 mm; light gray	<a href="http://www.wago.com/734-127">www.wago.com/734-127</a>
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### Testing and measuring

#### Testing accessories

	<b>Item no.: 735-500</b> WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm uninsulated; Test lead for soldering up to	<a href="http://www.wago.com/735-500">www.wago.com/735-500</a>
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Subject to changes. Please also observe the further product documentation!

0,5mm<sup>2</sup>

Ferrule		
Ferrule		
	<b>Item no.: 216-132</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated	<a href="http://www.wago.com/216-132">www.wago.com/216-132</a>
	<b>Item no.: 216-131</b> Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored	<a href="http://www.wago.com/216-131">www.wago.com/216-131</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.: 216-151</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.: 216-301</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.: 216-321</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; light turquoise	<a href="http://www.wago.com/216-322">www.wago.com/216-322</a>
	<b>Item no.: 216-302</b> Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise	<a href="http://www.wago.com/216-302">www.wago.com/216-302</a>
Tool		
Operating tool		
	<b>Item no.: 210-251</b> Operating tool; for MCS MICRO and MINI with CAGE CLAMP® connection; yellow	<a href="http://www.wago.com/210-251">www.wago.com/210-251</a>
	<b>Item no.: 210-719</b> Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft	<a href="http://www.wago.com/210-719">www.wago.com/210-719</a>
	<b>Item no.: 233-332</b> Operating tool; made of insulating material; white	<a href="http://www.wago.com/233-332">www.wago.com/233-332</a>
	<b>Item no.: 233-331</b> Operating tool; insulated; yellow	<a href="http://www.wago.com/233-331">www.wago.com/233-331</a>
	<b>Item no.: 233-335</b> Operating tool; green	<a href="http://www.wago.com/233-335">www.wago.com/233-335</a>
	<b>Item no.: 733-191</b> Operating tool; made of insulating material; 1-way; loose; yellow	<a href="http://www.wago.com/733-191">www.wago.com/733-191</a>

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





Item no.: 733-130

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

[www.wago.com/733-130](http://www.wago.com/733-130)

## Downloads

### Documentation

#### Additional Information

Technical Section	2019 Apr 3	pdf	Download
Technical explanations		2.1 MB	

## CAD/CAE-Data

### CAD data

2D/3D Models 733-104	URL	Download
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### CAE data

EPLAN Data Portal 733-104	URL	Download
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ZUKEN Portal 733-104	URL	Download
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### Asset Administration Shell

Asset Administration Shell 733-104	URL	Download
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## Environmental Product Compliance

### Compliance Search

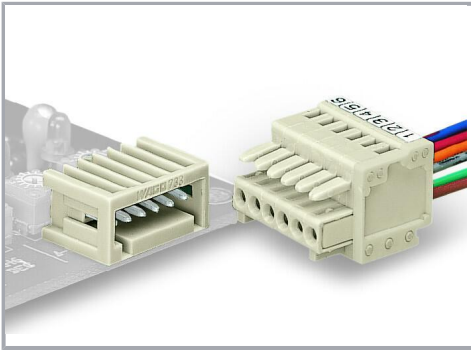
Environmental Product Compliance 733-104	URL	Download
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1-conductor female connector; CAGE CLAMP®; 0.5 mm<sup>2</sup>; Pin spacing 2.5 mm; 4-pole;  
100% protected against mismatching; 0,50 mm<sup>2</sup>; light gray

## Installation Notes

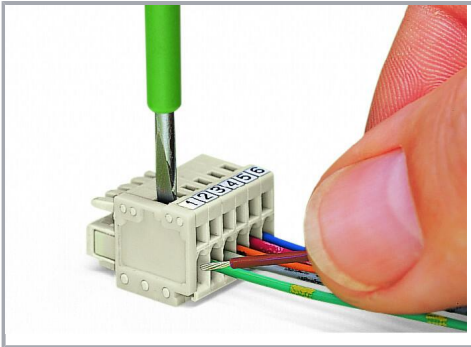
### Mismatching protection

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

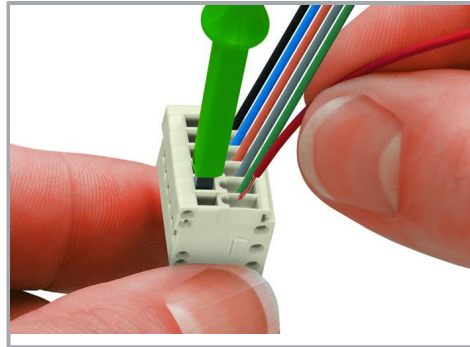


Male headers and female connectors are 100% protected against mismatching. Only mating halves with the same pole number can be connected.

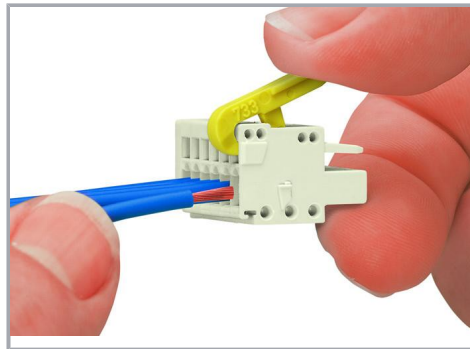
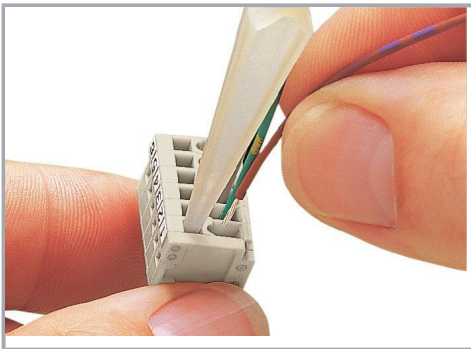
#### Conductor termination



Inserting conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.

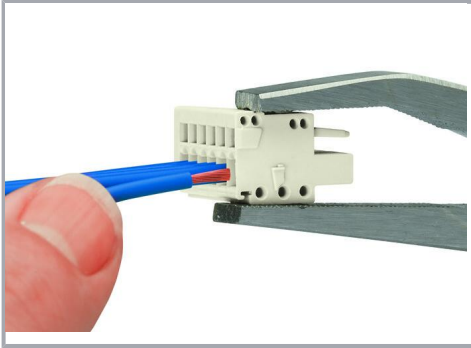


Conductor termination via screwdriver (233-335) – parallel to CAGE CLAMP® actuation



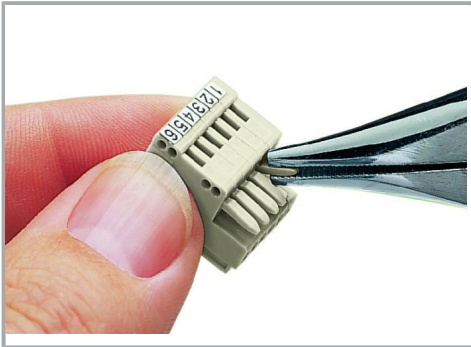
Conductor termination via operating tool (733-191)

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



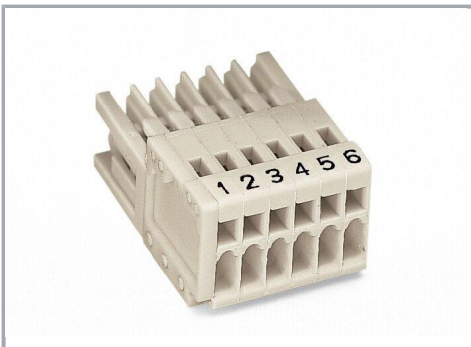
Conductor termination via operating tool (210-251)

### Coding



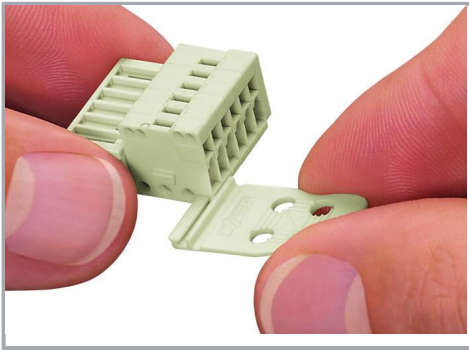
Coding a female connector – removing coding finger(s).

### Marking



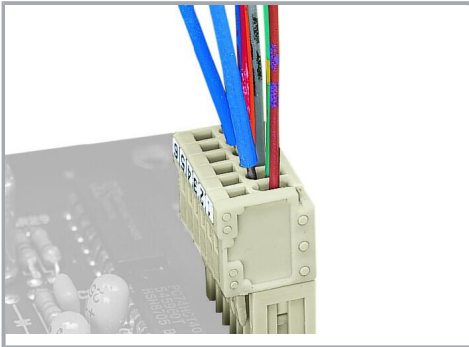
### Strain relief

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



Strain relief plates for factory or in-the-field assembly

### Testing



Testing via 1 mm Ø test pin (735-500), touch contact.

### Product family

**MCS MICRO**

[Show all products from the family](#)

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