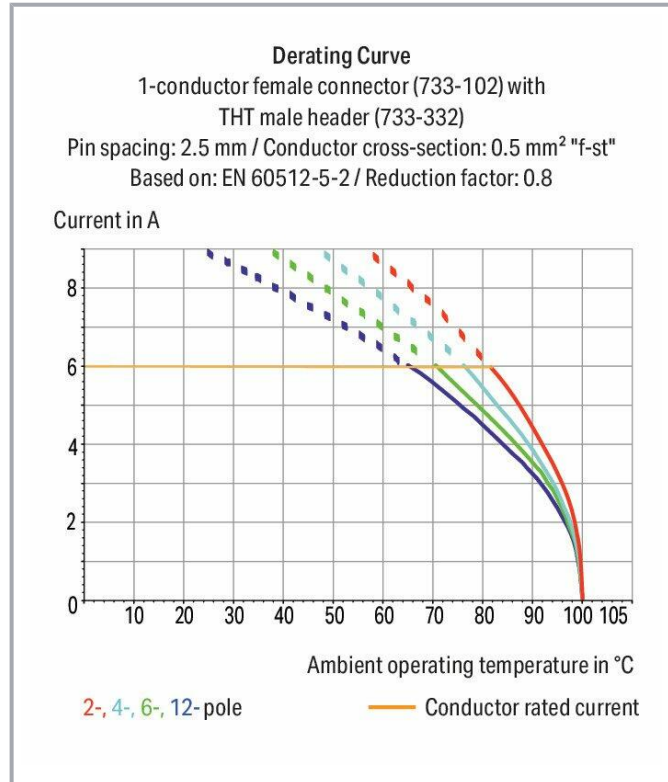
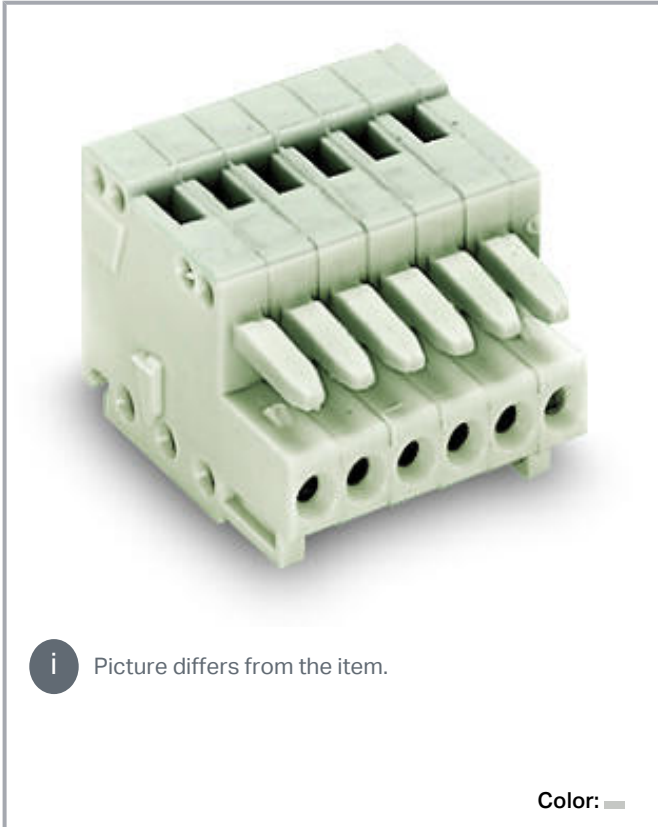


**Data sheet | Item number: 733-103**

1-conductor female connector; CAGE CLAMP®; 0.5 mm<sup>2</sup>; Pin spacing 2.5 mm; 3-pole; 100% protected against mismatching; 0,50 mm<sup>2</sup>; light gray



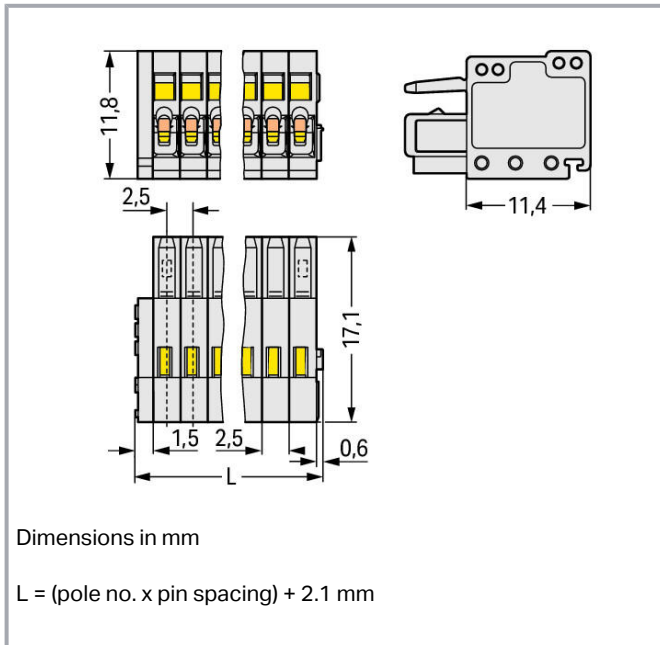
[www.wago.com/733-103](http://www.wago.com/733-103)



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

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Do you have any questions about our products?  
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 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. The circuit design should ensure header pins, which can be touched, are not live when unmated.

## Electrical data

### Ratings per IEC/EN

Ratings per

IEC/EN 60664-1

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

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|                             |  |
|-----------------------------|--|
| Nominal voltage (III/3)     | 100 V  |
| Rated surge voltage (III/3) | 2.5 kV   |
| Rated voltage (III/2)       | 160 V  |
| Rated surge 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) $\triangleq$ 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

|                                   |   |
|-----------------------------------|---|
| Total number of connection points | 3 |
| Total number of potentials        | 3 |
| Number of connection types        | 1 |
| Number of levels                  | 1 |

### Connection 1

|   |  |
|---|--|
| Connection technology                             | CAGE CLAMP®                                  |
| Actuation type                                    | Operating tool                               |
| 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>                |
| Conductor diameter                                | 28 ... 20 AWG                                |
| Strip length                                      | 5 ... 6 mm / 0.2 ... 0.24 inch               |
| Pole No.  | 3  |
| Conductor entry direction to mating direction     | 0°   |

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



## Physical data

|             |                      |
|-------------|----------------------|
| Pin spacing | 2.5 mm / 0.098 inch  |
| Width       | 9.6 mm / 0.378 inch  |
| Height      | 11.8 mm / 0.465 inch |
| Depth       | 17.1 mm / 0.673 inch |

## Plug-in connection

|                                    |                         |
|------------------------------------|-------------------------|
| Contact type (pluggable connector) | Female connector/socket |
| Connector (connection type)        | for conductor           |
| Mismating protection               | Yes                     |
| Locking of plug-in connection      | Without                 |

## Material data

|                             |                                   |
|-----------------------------|-----------------------------------|
| 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-plated                        |
| Fire load                   | 0.027 MJ                          |
| Weight                      | 1.4 g                             |

## Environmental requirements

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



## Commercial data

|                       |                        |
|-----------------------|------------------------|
| Product Group         | 3 (Multi Conn. System) |
| PU (SPU)              | 200 Stück              |
| Packaging type        | box                    |
| Country of origin     | DE                     |
| GTIN                  | 4044918293976          |
| Customs tariff number | 85366990990            |



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

## Approvals / Certificates



### Country specific Approvals

| Logo   | Approval                        | Additional Approval Text | Certificate name |
|--|---------------------------------|--------------------------|------------------|
|  | CCA<br>DEKRA Certification B.V. | EN 61984                 | 2169534.01       |
|  | CCA<br>DEKRA Certification B.V. | IEC 61984                | NL-31141         |
|  | CSA<br>DEKRA Certification B.V. | C22.2                    | 1465035          |

### Ship Approvals









| Logo  | Approval   | Additional Approval Text | Certificate name         |
|---|--|--------------------------|--------------------------|
|    | ABS<br>American Bureau of Shipping               | -                        | 19-<br>HG1869876-<br>PDA |
|   | DNV GL<br>Det Norske Veritas, Germanischer Lloyd | -                        | TAE000016Z               |
|  | LR<br>Lloyds Register                            | IEC 61984                | 96/20035<br>(E5)         |

### UL-Approvals

| Logo   | Approval                             | Additional Approval Text | Certificate name    |
|--|--------------------------------------|--------------------------|---------------------|
|  | UL<br>UL International Germany GmbH  | UL 1977                  | E45171              |
|  | UR<br>Underwriters Laboratories Inc. | UL 1059                  | E45172-<br>19950922 |

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




## Counterpart

|  |   |  |
|--|---|--|
|    | <b>Item no.733-203</b><br>1-conductor male connector; CAGE CLAMP®; 0.5 mm <sup>2</sup> ; Pin spacing 2.5 mm; 3-pole; 100% protected against mismatching; 0,50 mm <sup>2</sup> ; light gray                              | <a href="http://www.wago.com/733-203">www.wago.com/733-203</a>                                 |
|    | <b>Item no.733-203/032-000</b><br>1-conductor male connector; CAGE CLAMP®; 0.5 mm <sup>2</sup> ; Pin spacing 2.5 mm; 3-pole; 100% protected against mismatching; Strain relief plate; 0,50 mm <sup>2</sup> ; light gray | <a href="http://www.wago.com/733-203/032-000">www.wago.com/733-203/032-000</a>                 |
|     | <b>Item no.733-333</b><br>THT male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 2.5 mm; 3-pole; light gray  | <a href="http://www.wago.com/733-333">www.wago.com/733-333</a>                                 |
|    | <b>Item no.733-333/105-604</b><br>THR male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 2.5 mm; 3-pole; black   | <a href="http://www.wago.com/733-333/105-604">www.wago.com/733-333/105-604</a>                 |
|    | <b>Item no.733-363</b><br>THT male header; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Pin spacing 2.5 mm; 3-pole; light gray  | <a href="http://www.wago.com/733-363">www.wago.com/733-363</a>                                 |
|   | <b>Item no.733-333/105-604/997-446</b><br>THR male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; in tape-and-reel packaging; Pin spacing 2.5 mm; 3-pole; black                         | <a href="http://www.wago.com/733-333/105-604/997-446">www.wago.com/733-333/105-604/997-446</a> |
|  | <b>Item no.733-363/105-604</b><br>THR male header; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Pin spacing 2.5 mm; 3-pole; black   | <a href="http://www.wago.com/733-363/105-604">www.wago.com/733-363/105-604</a>                 |
|  | <b>Item no.733-363/105-604/997-406</b><br>THR male header; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; in tape-and-reel packaging; Pin spacing 2.5 mm; 3-pole; black                           | <a href="http://www.wago.com/733-363/105-604/997-406">www.wago.com/733-363/105-604/997-406</a> |


## Optional accessories

### Tool





Operating tool

|  |  |  |
|--|--|--|
|  | <b>Item no.: 210-251</b><br>Operating tool; for MCS MICRO & 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><br>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><br>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><br>Operating tool; insulated; yellow  | <a href="http://www.wago.com/233-331">www.wago.com/233-331</a> |

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

|  |   |  |
|--|---|--|
|  | <b>Item no.: 233-335</b><br>Operating tool; yellow  | <a href="http://www.wago.com/233-335">www.wago.com/233-335</a> |
|  | <b>Item no.: 733-191</b><br>Operating tool; made of insulating material; 1-way; loose; yellow | <a href="http://www.wago.com/733-191">www.wago.com/733-191</a> |
|  | <b>Item no.: 733-130</b><br>Operating tool; made of insulating material; 1-way; loose; white  | <a href="http://www.wago.com/733-130">www.wago.com/733-130</a> |



## Ferrule

|   |  |  |
|---|--|--|
|   | <b>Item no.: 216-132</b><br>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><br>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><br>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><br>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><br>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><br>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><br>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> |
|  | <b>Item no.: 216-302</b><br>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> |

## Strain relief

|  |   |  |
|--|---|--|
|  | Strain relief plate   |  |
|  | <b>Item no.: 734-127</b><br>Strain relief plate; light gray | <a href="http://www.wago.com/734-127">www.wago.com/734-127</a> |

## Marking accessories

|  |  |  |
|--|--|--|
|  | Marking strip  |  |
|  | <b>Item no.: 210-331/250-207</b><br>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><br>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> |

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



**Item no.: 210-331/250-204**

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

[www.wago.com/210-331/250-204](http://www.wago.com/210-331/250-204)



**Item no.: 210-331/250-206**

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

[www.wago.com/210-331/250-206](http://www.wago.com/210-331/250-206)

**Testing and measuring**

Testing accessories



**Item no.: 735-500**

Test pin; 1 mm Ø; with solder connection for test wire

[www.wago.com/735-500](http://www.wago.com/735-500)

**Downloads**

**Documentation**

**Additional Information**

|                        |             |               |          |
|------------------------|-------------|---------------|----------|
| Technical explanations | Apr 3, 2019 | pdf<br>2.0 MB | Download |
|------------------------|-------------|---------------|----------|

**CAD/CAE-Data**

**CAD data**

|                      |     |          |
|----------------------|-----|----------|
| 2D/3D Models 733-103 | URL | Download |
|----------------------|-----|----------|

**CAE data**

|                           |     |          |
|---------------------------|-----|----------|
| EPLAN Data Portal 733-103 | URL | Download |
|---------------------------|-----|----------|

|                      |     |          |
|----------------------|-----|----------|
| ZUKEN Portal 733-103 | URL | Download |
|----------------------|-----|----------|

**Environmental Product Compliance**

**Compliance Search**

|  |     |          |
|--|-----|----------|
| Environmental Product Compliance 733-103 | URL | Download |
|--|-----|----------|

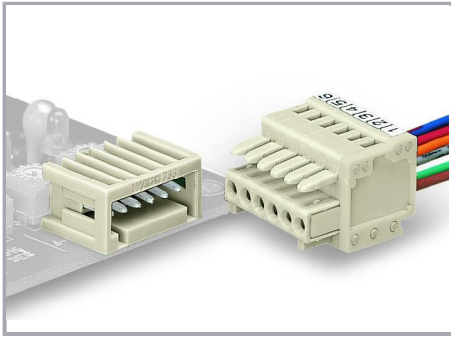
1-conductor female connector; CAGE CLAMP®; 0.5 mm<sup>2</sup>; Pin spacing 2.5 mm; 3-pole; 100% protected against mismatching; 0,50 mm<sup>2</sup>; light gray

**Installation Notes**

**Mismatching protection**

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

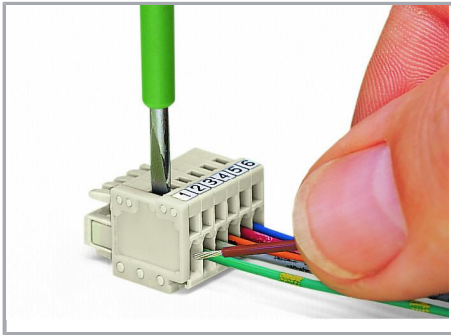




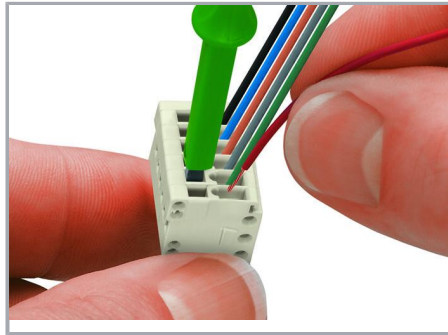
Male headers and female connectors are 100% protected against mismatching.

Only mating halves with the same pole number can be connected.

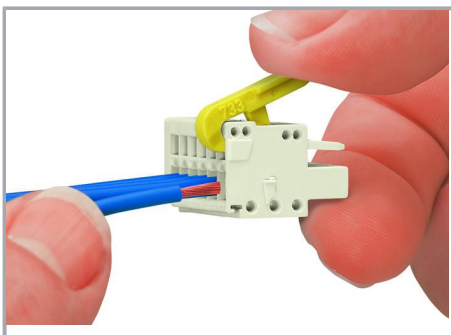
### Conductor termination



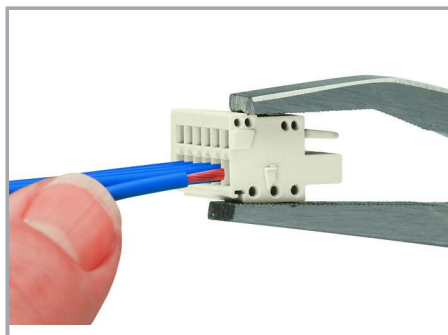
Inserting conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



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



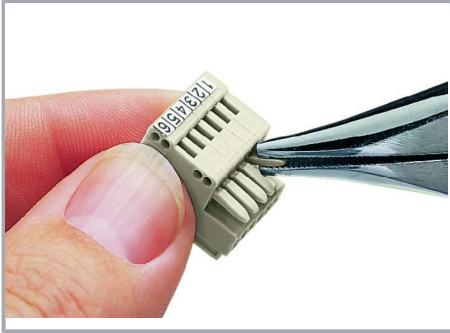
Conductor termination via operating tool (733-191)



Conductor termination via operating tool (210-251)

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

### Coding

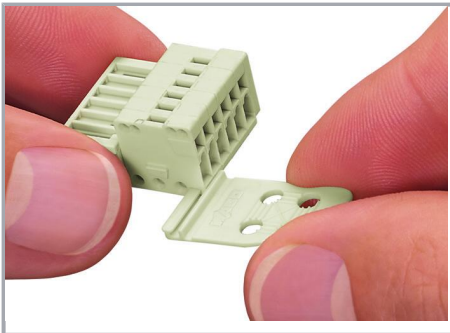


Coding a female connector – removing coding finger(s).

### Marking



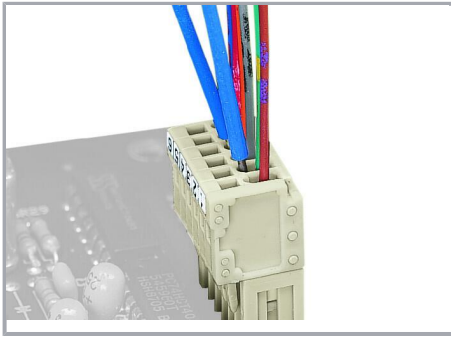
### Installation



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

### Testing

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



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!