

Data sheet | Item number: 733-209

1-conductor male connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm;
9-pole; 100% protected against mismatching; 0,50 mm²; light gray

www.wago.com/733-209



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 connections
- 100% protected against mismatching
- Coding option available

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



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

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) $\hat{=}$ 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 |

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



Connection data

| | |
|----------------------------|---|
| Connection points | 9 |
| Total number of potentials | 9 |
| 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 ² / 28 ... 20 AWG |
| Fine-stranded conductor | 0.08 ... 0.5 mm ² / 28 ... 20 AWG |
| Fine-stranded conductor; with insulated ferrule | 0.25 ... 0.34 mm ² |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 0.34 mm ² |
| Strip length | 5 ... 6 mm / 0.2 ... 0.24 inches |
| Pole number | 9 |
| Conductor entry direction to mating direction | 0° |

Physical data

| | |
|-------------|------------------------|
| Pin spacing | 2.5 mm / 0.098 inches |
| Width | 25 mm / 0.984 inches |
| Height | 11.8 mm / 0.465 inches |
| Depth | 20.3 mm / 0.799 inches |

Mechanical Data

| | |
|--------------------------|-----|
| Variable coding | Yes |
| Anti-rotation protection | Yes |

Plug-in connection

| | |
|--------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector (connection type) | for conductor |
| Mismating protection | Yes |
| Plugging without loss of pin spacing | No |
| 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 | light 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 _{Cu}) |
| Contact plating | Tin |
| Fire load | 0.088 MJ |
| Weight | 4.4 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) | 100 pcs |
| Packaging type | box |
| Country of origin | PL |
| GTIN | 4050821079019 |
| Customs tariff number | 85366930000 |

Environmental Product Compliance

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

Approvals / Certificates

General approvals

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



| Logo | Approval | Additional Approval Text | Certificate name |
|------|---|--------------------------|------------------|
| | CCA DEKRA Certification B.V. | IEC 61984 | NL-31141 |
| | CCA DEKRA Certification B.V. | EN 61984 | 2169534.01 |
| | CSA DEKRA Certification B.V. | C22.2 | 1465035 |
| | UL UL International Germany GmbH | UL 1977 | E45171 |
| | UR Underwriters Laboratories Inc. | UL 1059 | E45172 |

Declarations of conformity and manufacturer's declarations

| Logo | Approval | Additional Approval Text | Certificate name |
|------|--------------------------------------|--------------------------|------------------|
| | Railway WAGO GmbH & Co. KG | - | Railway Ready |

Approvals for marine applications

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

Counterpart

| | |
|--|--|
| Item no.733-109 1-conductor female connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 9-pole; 100% protected against mismatching; 0,50 mm²; light gray | www.wago.com/733-109 |
| Item no.733-109/037-000 1-conductor female connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 9-pole; 100% protected against mismatching; Lateral locking levers; 0,50 mm²; light gray | www.wago.com/733-109/037-000 |

Optional accessories

Tool

| |
|--------------------------|
| Operating tool |
| Item no.: 210-251 |

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Operating tool; for MCS MICRO and MINI with CAGE CLAMP® connection; yellow

www.wago.com/210-251**Item no.: 210-719**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

www.wago.com/210-719**Item no.: 233-332**

Operating tool; made of insulating material; white

www.wago.com/233-332**Item no.: 233-331**

Operating tool; insulated; yellow

www.wago.com/233-331**Item no.: 233-335**

Operating tool; green

www.wago.com/233-335**Item no.: 733-191**

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

www.wago.com/733-191**Item no.: 733-130**

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

www.wago.com/733-130**Ferrule**

Ferrule

Item no.: 216-132Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin platedwww.wago.com/216-132**Item no.: 216-131**Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-coloredwww.wago.com/216-131**Item no.: 216-152**Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin platedwww.wago.com/216-152**Item no.: 216-151**Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin platedwww.wago.com/216-151**Item no.: 216-301**Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellowwww.wago.com/216-301**Item no.: 216-321**Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellowwww.wago.com/216-321**Item no.: 216-322**Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoisewww.wago.com/216-322**Item no.: 216-302**Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoisewww.wago.com/216-302**Coding**

Coding

Item no.: 733-330

Coding key; snap-on type; white

www.wago.com/733-330**Item no.: 733-331**

Coding key; snap-on type; black

www.wago.com/733-331

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Strain relief

Strain relief plate

Item no.: 734-128

Strain relief plate; for female and male connectors; 12.5 mm wide; 1 part; Pin spacing 3.5 mm; light gray

www.wago.com/734-128

Testing and measuring

Testing accessories

Item no.: 735-500

WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm uninsulated; Test lead for soldering up to 0,5mm²

www.wago.com/735-500

Downloads

Documentation

Additional Information

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1-conductor male connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 9-pole; 100% protected against mismatching; 0,50 mm²; light gray

Installation Notes

Mismatching protection

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

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

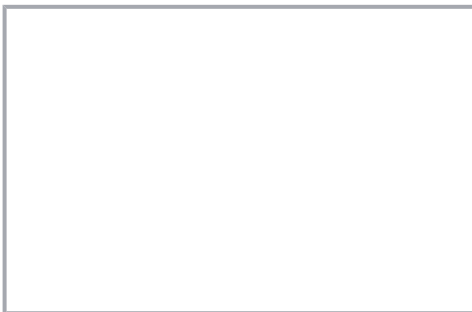
Conductor termination



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 male header – fitting coding key(s).

Marking



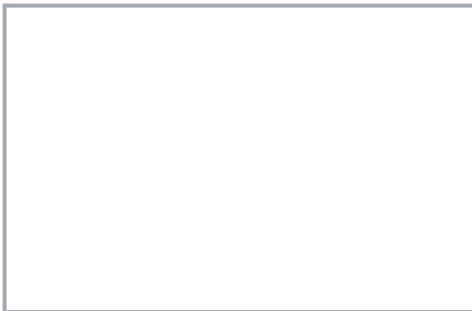
Installation

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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](#)

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