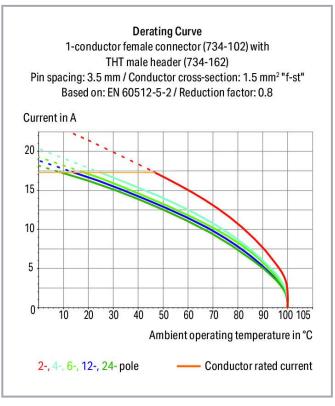
THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismating; Pin spacing 3.5 mm; 9-pole; light gray



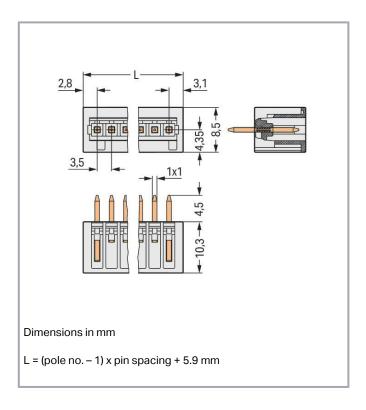
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 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$





Item description

- Horizontal or vertical PCB mounting via straight or angled solder pins
- 100% protected against mismating; only mating halves with the same number of poles can be connected together
- 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 3.8 mm pin projection for male headers with straight solder pins 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/. |

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$

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Electrical data

Ratings per IEC/EN

| Ratings per | IEC/EN 60664-1 |
|-------------------------------|---|
| Nominal voltage (III/3) | 160 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 | 10 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) | 10 A |
| Rated voltage UL (Use Group D) | 300 V |
| Rated current UL (Use Group D) | 10 A |

Ratings per CSA

| Approvals per | CSA |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 10 A |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 10 A |

Connection data

| Total number of potentials | 9 |
|----------------------------|---|
| Number of connection types | 1 |
| Number of levels | 1 |

Connection 1

| Pole number | 9 |
|-------------|---|
|-------------|---|

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Physical data

| Pin spacing | 3.5 mm / 0.138 inches |
|--------------------------------------|--------------------------|
| Width | 26.9 mm / 1.059 inches |
| Height | 14.8 mm / 0.583 inches |
| Height from the surface | 10.3 mm / 0.406 inches |
| Depth | 8.5 mm / 0.335 inches |
| Solder pin length | 4.5 mm |
| Solder pin dimensions | 1 x 1 mm |
| Drilled hole diameter with tolerance | 1.4 ^(+0.1) mm |

Mechanical Data

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

Plug-in connection

| Contact type (pluggable connector) | Male connector/plug |
|--------------------------------------|---------------------|
| Connector (connection type) | for PCB |
| Mismating protection | Yes |
| Plugging without loss of pin spacing | No |
| Mating direction to the PCB | 90 ° |
| Locking of plug-in connection | none |

PCB contact

| PCB contact | ТНТ |
|-------------------------------------|--|
| Solder pin arrangement | over the entire male connector (in-line) |
| Number of solder pins per potential | 1 |

Material Data

Note (material data)

Information on material specifications can be found here

| Color | light gray |
|-----------------------------|------------------|
| Material group | 1 |
| Insulation material | Polyamide (PA66) |
| Flammability class per UL94 | V0 |

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| Contact material | Electrolytic copper (E _{Cu}) |
|------------------|--|
| Contact plating | Tin |
| Fire load | 0.032 MJ |
| Weight | 2.2 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 | 27-44-04-02 |
| eCl@ss 9.0 | 27-44-04-02 |
| ETIM 8.0 | EC002637 |
| ETIM 7.0 | EC002637 |
| PU (SPU) | 100 pcs |
| Packaging type | box |
| Country of origin | DE |
| GTIN | 4044918847667 |
| Customs tariff number | 85366990990 |

Environmental Product Compliance

Approvals / Certificates

General approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|------|------------------------------|--------------------------|------------------|
| | CCA DEKRA Certification B.V. | EN 61984 | nl-54190 |
| KEMA | CCA DEKRA Certification B.V. | EN 61984 | 2169534.02 |

C22.2



CSADEKRA Certification B.V.

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ULUL International Germany GmbH

UL 1977

E45171



URUnderwriters Laboratories Inc.

UL 1059

E45172

Certificate

Cartificata

Declarations of conformity and manufacturer's declarations

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

Approvals for marine applications

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

Counterpart



Item no.734-109

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 9-pole; 100% protected against mismating; 1,50 mm²; light gray

www.wago.com/734-109



Item no.2734-109

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 9-pole; 100% protected against mismating; 1,50 mm²; light gray

www.wago.com /2734-109



Item no.2734-109/031-000

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1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 9-pole; 100% protected against mismating; clamping collar; 1,50 mm²; light gray

/2734-109/031-000



Item no.2734-109/037-000

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 9-pole; 100% protected against mismating; Lateral locking levers; 1,50 mm²; light gray

www.wago.com /2734-109/037-000



Item no.734-109/037-000

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 9-pole; 100% protected against mismating; Lateral locking levers; 1,50 mm²; light gray

www.wago.com/734-109/037-000

Optional accessories

Coding

Coding



Item no.: 734-159

Coding key; to be snapped above top level; black

www.wago.com/734-159

Downloads

Documentation

Additional Information

Technical Section 2019 Apr 3 pdf Download Technical explanations 2.0 MB

CAD/CAE-Data

PCB Design

Symbol and Footprint 734-139

URL

Download

CAx data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

Supported formats:

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect

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- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- **TARGET 3001!**
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

CAE data

| ZUKEN Portal 734-139 | URL | Download |
|---------------------------|-----|----------|
| EPLAN Data Portal 734-139 | URL | Download |
| CAD data | | |
| 2D/3D Models 734-139 | URL | Download |

Environmental Product Compliance

mismating; Pin spacing 3.5 mm; 9-pole; light gray

Compliance Search

Environmental Product Compliance 734-139 URL THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against

Download

Installation Notes

Coding

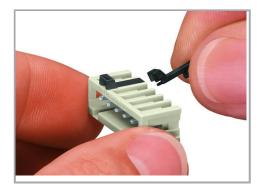
Subject to changes. Please also observe the further product documentation!

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

Product family

MCS MINI
Show all products from the family

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$