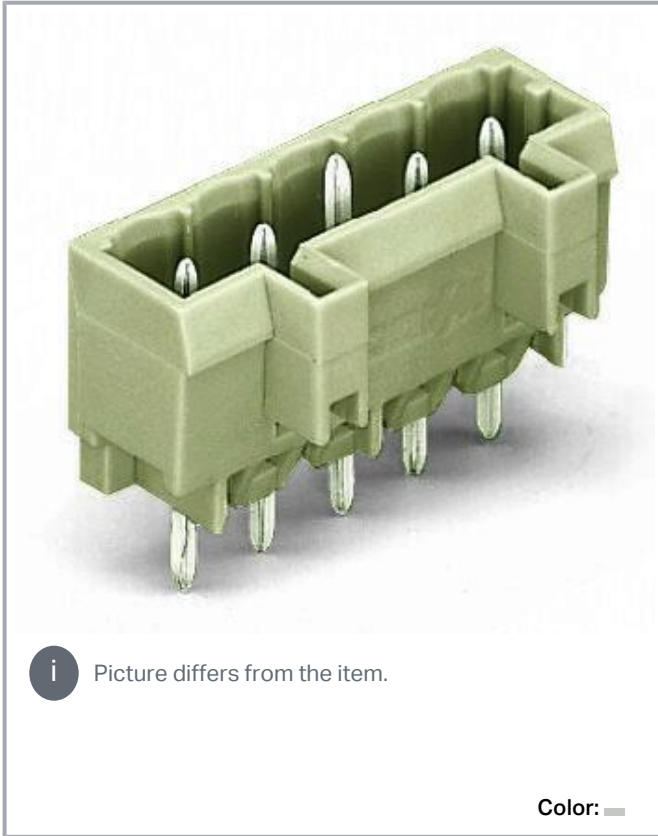


Data sheet | Item number: 721-142/001-000

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 5 mm; 12-pole; light gray



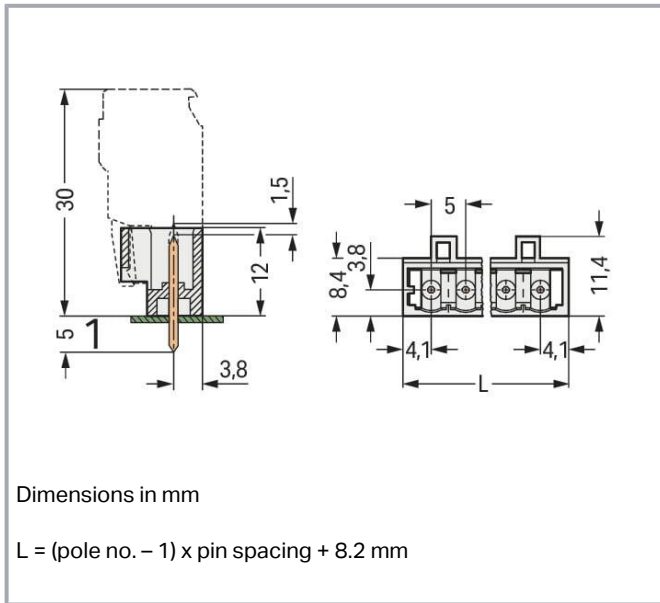
www.wago.com/721-142/001-000



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

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Item description

- Horizontal or vertical PCB mounting via straight or angled solder pins
- Pin cross-section: 1 x 1 mm
- 100 % protected against mismatching
- With coding fingers

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/>.

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) | 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 | 12 A |
| Legend (ratings) | (III / 2) $\hat{=}$ 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 UL 1977

| | |
|-------------------------|-------|
| Rated voltage (UL 1977) | 600 V |
| Rated current UL 1977 | 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 | 12 |
| Number of connection types | 1 |
| Number of levels | 1 |

Connection 1

| | |
|-------------|----|
| Pole number | 12 |
|-------------|----|

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



Physical data

| | |
|--------------------------------------|--------------------------|
| Pin spacing | 5 mm / 0.197 inches |
| Width | 63.2 mm / 2.488 inches |
| Height | 17 mm / 0.669 inches |
| Height from the surface | 12 mm / 0.472 inches |
| Depth | 11.4 mm / 0.449 inches |
| Solder pin length | 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 | THT |
| 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 | I |
| Insulation material | Polyamide (PA66) |
| Flammability class per UL94 | V0 |

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

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| | |
|------------------|--|
| Contact material | Electrolytic copper (E _{Cu}) |
| Contact plating | Tin |
| Fire load | 0.071 MJ |
| Weight | 3.9 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 | PL |
| GTIN | 4044918869072 |
| Customs tariff number | 85366990990 |

Environmental Product Compliance


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


Approvals / Certificates

General approvals


| Logo | Approval | Additional Approval Text | Certificate name |
|--|--|--------------------------|------------------|
| | CB DEKRA Certification B.V. | IEC 61984 | NL-39756 /A1 |
|  | CSA DEKRA Certification B.V. | C22.2 | 1466354 |
|  | KEMA/KEUR DEKRA Certification B.V. | EN 61984 | 71-121453 |

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




| | | | |
|--|---|---------|--------|
|  | UL Underwriters Laboratories Inc. | UL 1059 | E45172 |
|--|---|---------|--------|

| | | | |
|--|---|---------|--------|
|  | UR Underwriters Laboratories Inc. | UL 1977 | E45171 |
|--|---|---------|--------|




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 |
|  | BV Bureau Veritas S.A. | IEC 60998 | 11915/DO BV |
|  | DNV GL Det Norske Veritas, Germanischer Lloyd | - | TAE000016Z |

Counterpart

| | | |
|--|---|--|
|  | Item no.721-112/026-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 12-pole; 100% protected against mismatching; 2,50 mm²; light gray | www.wago.com/721-112/026-000 |
|  | Item no.2721-112/026-000 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 12-pole; 100% protected against mismatching; 2,50 mm²; light gray | www.wago.com/2721-112/026-000 |
|  | Item no.2721-112/037-000 | www.wago.com |

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| | | |
|--|---|--|
| | 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5 mm; 12-pole; 100% protected against mismatching; Lateral locking levers; 2,50 mm ² ; light gray | /2721-112/037-000 |
|  | Item no. 2721-112/031-000 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5 mm; 12-pole; 100% protected against mismatching; clamping collar; 2,50 mm ² ; light gray | www.wago.com/2721-112/031-000 |
|  | Item no. 721-112/027-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5 mm; 12-pole; 100% protected against mismatching; clamping collar; 2,50 mm ² ; light gray | www.wago.com/721-112/027-000 |
|  | Item no. 721-112/031-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5 mm; 12-pole; 100% protected against mismatching; clamping collar; 2,50 mm ² ; light gray | www.wago.com/721-112/031-000 |
|  | Item no. 721-112/037-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5 mm; 12-pole; 100% protected against mismatching; Lateral locking levers; 2,50 mm ² ; light gray | www.wago.com/721-112/037-000 |
|  | Item no. 721-2112/026-000 2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5 mm; 12-pole; 100% protected against mismatching; with integrated end plate; 2,50 mm ² ; light gray | www.wago.com/721-2112/026-000 |
|  | Item no. 721-312/008-000 1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5 mm; 12-pole; 100% protected against mismatching; Snap-in mounting feet; 2,50 mm ² ; light gray | www.wago.com/721-312/008-000 |
|  | Item no. 721-2112/037-000 2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5 mm; 12-pole; 100% protected against mismatching; Lateral locking levers; 2,50 mm ² ; light gray | www.wago.com/721-2112/037-000 |
|  | Item no. 721-312/031-000 1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5 mm; 12-pole; 100% protected against mismatching; clamping collar; 2,50 mm ² ; light gray | www.wago.com/721-312/031-000 |
|  | Item no. 722-112/026-000 1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5 mm; 12-pole; 100% protected against mismatching; 2,50 mm ² ; light gray | www.wago.com/722-112/026-000 |
|  | Item no. 722-212/026-000 1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5 mm; 12-pole; 100% protected against mismatching; 2,50 mm ² ; light gray | www.wago.com/722-212/026-000 |

Optional accessories

Coding

Coding



Item no.: 231-129

Coding key; snap-on type; light gray

www.wago.com/231-129

Marking accessories

Marking strip

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

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Item no.: 210-833

Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white

www.wago.com/210-833



Item no.: 210-834

Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

www.wago.com/210-834

Downloads

Documentation

Additional Information

| | | | |
|------------------------|------------|--------|----------|
| Technical Section | 2019 Apr 3 | pdf | Download |
| Technical explanations | | 2.0 MB | |

CAD/CAE-Data

CAD data

| | | |
|------------------------------|-----|----------|
| 2D/3D Models 721-142/001-000 | URL | Download |
|------------------------------|-----|----------|

CAE data

| | | |
|-----------------------------------|-----|----------|
| EPLAN Data Portal 721-142/001-000 | URL | Download |
|-----------------------------------|-----|----------|

| | | |
|------------------------------|-----|----------|
| ZUKEN Portal 721-142/001-000 | URL | Download |
|------------------------------|-----|----------|

| | | |
|-----------------------------------|-----|----------|
| EPLAN Data Portal 721-142/001-000 | URL | Download |
|-----------------------------------|-----|----------|

PCB Design

| | | |
|--------------------------------------|-----|----------|
| Symbol and Footprint 721-142/001-000 | 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

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- Mentor Graphics BoardStation
- Mentor Graphics Design Architect
- 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

Environmental Product Compliance

Compliance Search

| Environmental Product Compliance 721-142/001-000 | URL | Download |
|---|-----|----------|
| THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 5 mm; 12-pole; light gray | | |

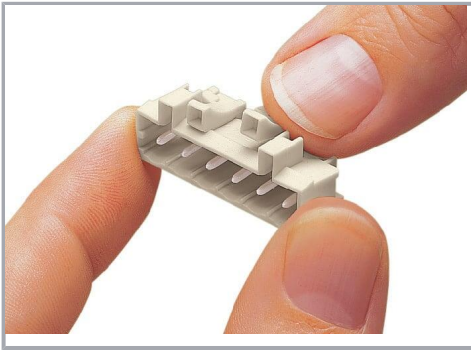
Installation Notes

Coding

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

Product family

MCS MIDI

[Show all products from the family](#)

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