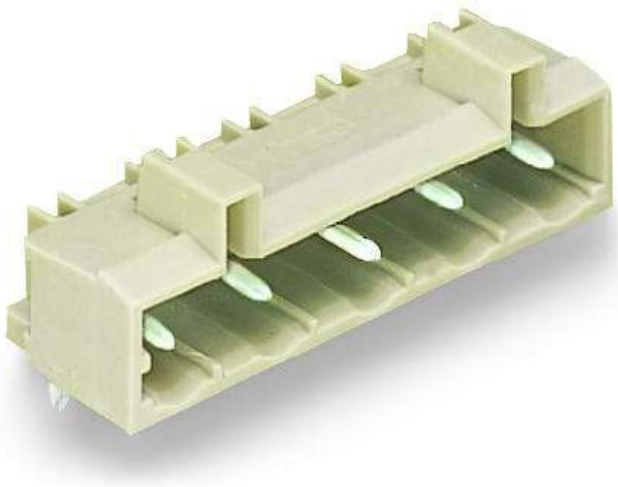
**Data sheet | Item number: 721-835/001-040**

THT male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismating; Preceding ground contact; Pin spacing 7.5 mm; 5-pole; light gray

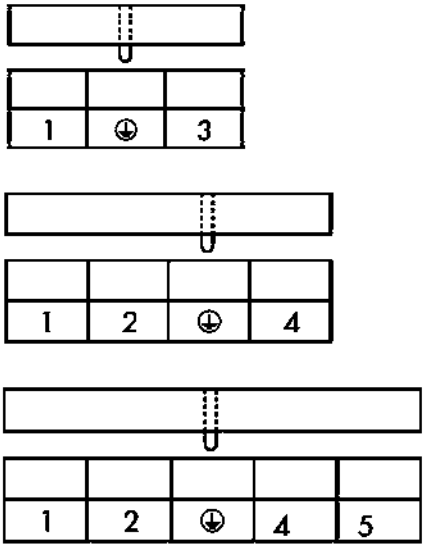
www.wago.com/721-835_001-040



RoHS ✓ Compliant

BOMcheck.net

Color:




Preceding ground contact position

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

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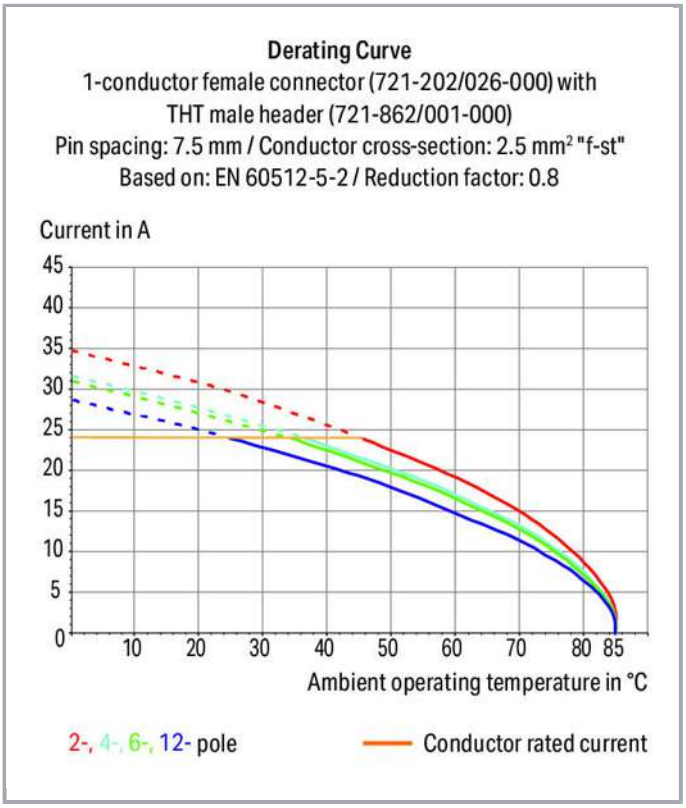


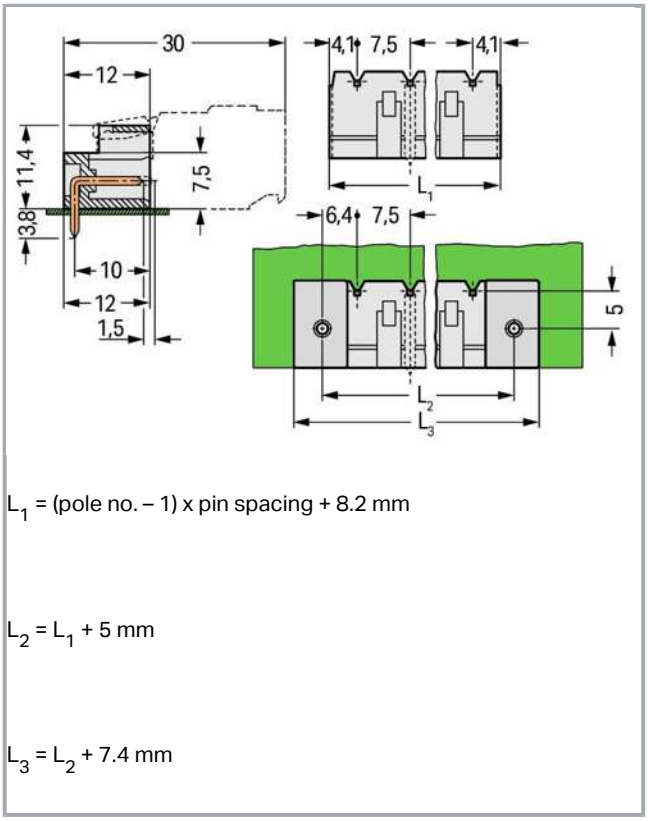


## Item description

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

**Safety information 1:**
The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS Connectors shall 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.

## Data

## Electrical data

### Ratings per IEC/EN 60664-1

| | |
|---|---|
| Ratings per | IEC/EN 60664-1 |
| Rated voltage (III / 3) | 500 V |

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

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| | |
|---|---|
| Rated impulse voltage (III / 3) | 6 kV |
| Rated voltage (III / 2) | 630 V |
| Rated impulse voltage (III / 2) | 6 kV |
| Rated voltage (II / 2) | 1000 V |
| Rated impulse voltage (II / 2) | 6 kV |
| Rated current | 12 A |
| Legend (ratings) | (III / 2) ≙ Overvoltage category III / Pollution degree 2 |

## Approvals per UL 1059

| | |
|---|---|
| Rated voltage UL (Use Group B) | 300 V |
| Rated current UL (Use Group B) | 15 A |
| Rated voltage UL (Use Group D) | 300 V |
| Rated current UL (Use Group D) | 10 A |
| Approvals per | UL 1059 |

## Approvals per UL 1977

| | |
|---|---|
| Rated voltage per UL 1977 (factory wiring only) | 600 V |
| Rated current per UL 1977 (factory wiring only) | 10 A |

## Approvals per CSA

| | |
|---|---|
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 15 A |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 10 A |

## Connection data

| | |
|---|---|
| No. of poles | 5 |
| Total number of potentials | 5 |
| Number of connection types | 1 |
| Number of levels | 1 |
| Ground function | with preceding GND contact |

## Geometrical Data

| | |
|---|---|
| Pin spacing | 7.5 mm / 0.295 inch |
| Width | 38.2 mm / 1.504 inch |
| Height | 15.2 mm / 0.598 inch |

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

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| | |
|---|---|
| Height from the surface | 11.4 mm / 0.449 inch |
| Depth | 12 mm / 0.472 inch |
| Solder pin length | 3.8 mm |
| Solder pin dimensions | 1 x 1 mm |
| Drilled hole diameter (tolerance) | 1.4 $^{(+0.1)}$ mm |

## Plug connection

| | |
|---|---|
| Contact type (pluggable connector) | Male connector/plug |
| Connector connection type | for PCBs |
| Mismating protection | Yes |
| Mating direction to the PCB | 0 ° |

## PCB contact

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

## Material Data

| | |
|---|---|
| Color | light gray |
| Material group | I |
| Insulating material | Polyamide 66 (PA 66) |
| Flammability class per UL94 | V0 |
| Contact material | Electrolytic copper ($E_{Cu}$) |
| Contact plating | tin-plated |
| Fire load | 0.044 MJ |
| Weight | 2.1 g |

## Environmental Requirements

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

## Commercial data

| | |
|---|---|
| Product Group | 3 (Multi Conn. System) |
| Packaging type | BOX |
| Country of origin | PL |
| GTIN | 4044918869980 |

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

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| | |
|---|---|
| Customs Tariff No. | 85366990990 |

## Approvals / Certificates

### Country specific Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|---|---|---|---|
| | **CB**<br>DEKRA Certification B.V. | IEC 61984 | NL-39756 |
| | **KEMA/KEUR**<br>DEKRA Certification B.V. | EN 61984 | 2190761.01 |

### Ship Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|---|---|---|---|
| | **ABS**<br>American Bureau of Shipping | - | 19-HG1869876-PDA |

### UL-Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|---|---|---|---|
| | **UR**<br>Underwriters Laboratories Inc. | UL 1059 | E45172 |
| | **UR**<br>Underwriters Laboratories Inc. | UL 1977 | 20150318-E45171 |

## Counterpart

**Item no.721-205/026-000**
1-conductor female plug; 100% protected against mismating; 2.5 mm²; Pin spacing 7.5 mm; 5-pole; 2,50 mm²; light gray

www.wago.com/721-205/026-000

## Compatible products

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

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Marking accessories

| | | |
|---|---|---|
| | Item no.: 210-833<br>Marking strips; on reel; 6 mm wide; plain; Self-adhesive; white | www.wago.com/210-833 |
| | Item no.: 210-834<br>Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white | www.wago.com/210-834 |

Coding

| | | |
|---|---|---|
| | Item no.: 231-130<br>Coding key; snap-on type; light gray | www.wago.com/231-130 |

## Downloads

### Documentation

Additional Information

| | | | |
|---|---|---|---|
| Technical explanations | Apr 3, 2019 | pdf<br>3.6 MB | Download |

## CAD/CAE-Data

CAD data

| | | |
|---|---|---|
| 2D/3D Models 721-835/001-040 | URL | Download |

CAE data

| | | |
|---|---|---|
| EPLAN Data Portal 721-835/001-040 | URL | Download |

PCB Design

| | | |
|---|---|---|
| Symbol and Footprint 721-835/001-040<br>CAx data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment. | URL | Download |

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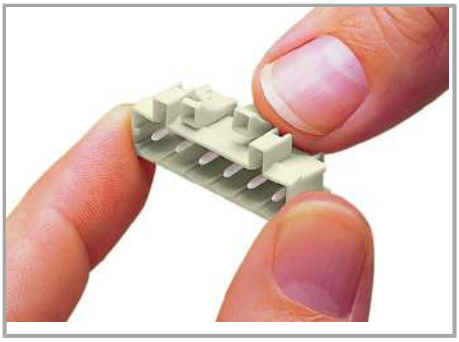
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
-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

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

## Installation Notes

**Coding**



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

## Product family

**MCS MIDI**
Show all products from the family



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