

## Data sheet | Item number: 722-833

THT female header; angled; Pin spacing 7.5 mm; 3-pole; 100% protected against mismatching; 0.6 x 1.0 mm solder pin; light gray

[www.wago.com/722-833](http://www.wago.com/722-833)



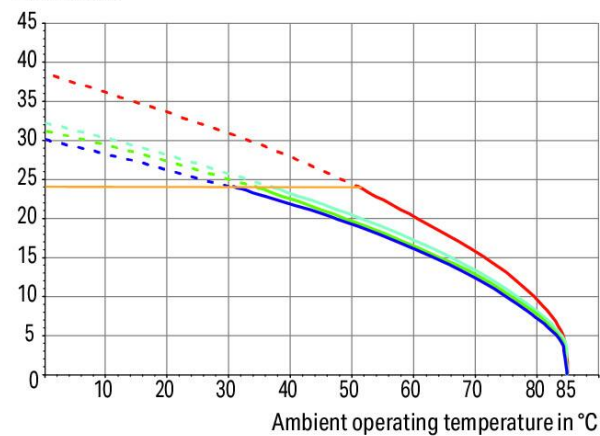
 Picture differs from the item.

Color: 

### Derating Curve

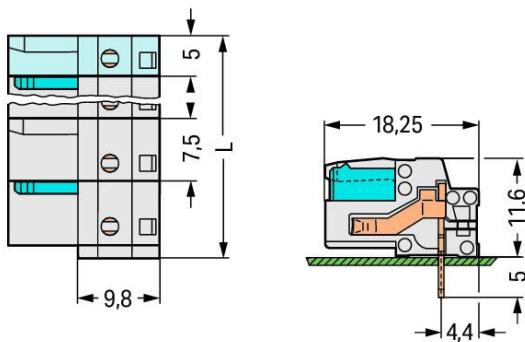
THT female header (722-832) with  
1-conductor male connector (723-602)  
Pin spacing: 7.5 mm / Conductor cross-section: 2.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 0.8

Current in A



2-, 4-, 6-, 12-pole

Conductor rated current



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5 \text{ mm} + 1.5 \text{ mm}$

2-pole female connectors – one latch only

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
- For board-to-board and board-to-wire connections
- Touch-proof PCB outputs
- Easy-to-identify PCB inputs and outputs
- 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  
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)       | 500 V                                                     |
| Rated impulse voltage (III/3) | 6 kV                                                      |
| Rated voltage (III/2)         | 630 V                                                     |
| Rated impulse voltage (III/2) | 6 kV                                                      |
| Nominal voltage (II/2)        | 1000 V                                                    |
| Rated surge voltage (II/2)    | 6 kV                                                      |
| Rated current                 | 12 A                                                      |
| Legend (ratings)              | (III / 2) ≙ Overvoltage category III / Pollution degree 2 |

### Ratings per UL

|                                |         |
|--------------------------------|---------|
| Approvals per                  | UL 1059 |
| Rated voltage UL (Use Group B) | 300 V   |

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|                                |       |
|--------------------------------|-------|
| Rated current UL (Use Group B) | 15 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   | 15 A  |

### Ratings per CSA

|                                 |       |
|---------------------------------|-------|
| 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

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

### Connection 1

|             |   |
|-------------|---|
| Pole number | 3 |
|-------------|---|

### Physical data

|                                      |                          |
|--------------------------------------|--------------------------|
| Pin spacing                          | 7.5 mm / 0.295 inches    |
| Width                                | 21.5 mm / 0.846 inches   |
| Height                               | 16.6 mm / 0.654 inches   |
| Height from the surface              | 11.6 mm / 0.457 inches   |
| Depth                                | 18.25 mm / 0.719 inches  |
| Solder pin length                    | 5 mm                     |
| Solder pin dimensions                | 0.6 x 1 mm               |
| Drilled hole diameter with tolerance | 1.3 <sup>(+0.1)</sup> mm |

### Mechanical Data

|                 |     |
|-----------------|-----|
| Variable coding | Yes |
|-----------------|-----|

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



|                          |     |
|--------------------------|-----|
| Anti-rotation protection | Yes |
|--------------------------|-----|

### Plug-in connection

|                                      |                         |
|--------------------------------------|-------------------------|
| Contact type (pluggable connector)   | Female connector/socket |
| Connector (connection type)          | for PCB                 |
| Mismating protection                 | Yes                     |
| Plugging without loss of pin spacing | No                      |
| Mating direction to the PCB          | 0 °                     |
| Locking of plug-in connection        | none                    |

### PCB contact

|                                     |                                            |
|-------------------------------------|--------------------------------------------|
| PCB contact                         | THT                                        |
| Solder pin arrangement              | over the entire female 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                                                       |
| Contact material            | Copper alloy                                             |
| Contact plating             | Tin                                                      |
| Fire load                   | 0.063 MJ                                                 |
| Weight                      | 3.3 g                                                    |

### Environmental requirements

|                         |                |
|-------------------------|----------------|
| Limit temperature range | -60 ... +85 °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               |

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|                       |               |
|-----------------------|---------------|
| ETIM 7.0              | EC002637      |
| PU (SPU)              | 100 pcs       |
| Packaging type        | box           |
| Country of origin     | DE            |
| GTIN                  | 4044918581011 |
| Customs tariff number | 85366990990   |

## Environmental Product Compliance

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

## Approvals / Certificates

### General approvals

| Logo                                                                               | Approval                                     | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|----------------------------------------------|--------------------------|------------------|
|                                                                                    | <b>CB</b><br>DEKRA Certification B.V.        | IEC 61984                | NL-39756 /A1     |
|    | <b>KEMA/KEUR</b><br>DEKRA Certification B.V. | EN 61984                 | 71-121453        |
|  | <b>UR</b><br>Underwriters Laboratories Inc.  | UL 1059                  | E45172           |
|  | <b>UR</b><br>Underwriters Laboratories Inc.  | UL 1977                  | E 45171          |

### Declarations of conformity and manufacturer's declarations

| Logo                                                                               | Approval                             | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|--------------------------------------|--------------------------|------------------|
|  | <b>Railway</b><br>WAGO GmbH & Co. KG | -                        | Railway Ready    |

### Approvals for marine applications

| Logo | Approval   | Additional Approval Text | Certificate name |
|------|------------|--------------------------|------------------|
|      | <b>ABS</b> | -                        | 19-              |

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American Bureau of Shipping

HG1869876-  
PDADNV  
DNV GL SE

TAE000016Z

LR  
Lloyds Register

IEC 61984

96/20035  
(E5)

## Counterpart



### Item no.723-603

1-conductor male connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 7.5 mm; 3-pole; 100% protected against mismatching; 2,50 mm<sup>2</sup>; light gray[www.wago.com/723-603](http://www.wago.com/723-603)

### Item no.723-603/000-042

1-conductor male connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 7.5 mm; 3-pole; Preceding ground contact; 100% protected against mismatching; direct marking; 2,50 mm<sup>2</sup>; light gray[www.wago.com/723-603/000-042](http://www.wago.com/723-603/000-042)

### Item no.723-603/019-000

1-conductor male connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 7.5 mm; 3-pole; 100% protected against mismatching; clamping collar; 2,50 mm<sup>2</sup>; light gray[www.wago.com/723-603/019-000](http://www.wago.com/723-603/019-000)

### Item no.723-603/019-042

1-conductor male connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 7.5 mm; 3-pole; Preceding ground contact; 100% protected against mismatching; clamping collar; direct marking; 2,50 mm<sup>2</sup>; light gray[www.wago.com/723-603/019-042](http://www.wago.com/723-603/019-042)

### Item no.723-603/032-000

1-conductor male connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 7.5 mm; 3-pole; 100% protected against mismatching; Strain relief plate; 2,50 mm<sup>2</sup>; light gray[www.wago.com/723-603/032-000](http://www.wago.com/723-603/032-000)

## Optional accessories

### Testing and measuring

#### Testing accessories



### Item no.: 210-136

Test plug; 2 mm Ø; with 500 mm cable; red

[www.wago.com/210-136](http://www.wago.com/210-136)

### Item no.: 231-662

Test plugs for female connectors; for 7.5 mm and 7.62 mm pin spacing; 2,50 mm<sup>2</sup>; light gray[www.wago.com/231-662](http://www.wago.com/231-662)

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## Marking accessories

### Marking strip



**Item no.: 210-833**

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

[www.wago.com/210-833](http://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](http://www.wago.com/210-834)

## Downloads

### Documentation

#### Additional Information

2019 Apr 3

pdf  
2.1 MB

Download

## CAD/CAE-Data

### CAD data

2D/3D Models 722-833

URL

Download

### PCB Design

Symbol and Footprint via Ultra Librarian 722-833

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
- Altair
- Altium 6 to current version
- Autodesk Fusion 360
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics
- BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design

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- 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
- Zuken eCADSTAR 2020 and 2021Zuken CR-5000 and CR-8000

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

---

Symbol and Footprint via SamacSys 722-833

URL

Download

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Supported formats:

- 3D (stp)
- Altium
- CADSTAR
- Capture
- CircuitStudio
- CR-5000
- CR-8000
- DEHDL
- DesignSpark PCB
- DesignSpark PCB PRO
- DipTrace
- EAGLE
- Easy-PC
- EasyEDA
- eCADSTAR
- KiCad

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



- OrCAD\_Allegro16
- PADS
- Proteus
- Pulsonix
- Quadcept
- SOLIDWORKS PCB
- TARGET 3001!
- xDX Designer
- Xpedition

PCB Component Libraries (EDA), PCB CAD Library SamacSys Electronic Component Search Engine

CAE data

|                           |     |          |
|---------------------------|-----|----------|
| ZUKEN Portal 722-833      | URL | Download |
| EPLAN Data Portal 722-833 | URL | Download |

Asset Administration Shell

|                                    |     |          |
|------------------------------------|-----|----------|
| Asset Administration Shell 722-833 | URL | Download |
|------------------------------------|-----|----------|

Environmental Product Compliance

Compliance Search

|                                                                                                                                |     |          |
|--------------------------------------------------------------------------------------------------------------------------------|-----|----------|
| Environmental Product Compliance 722-833                                                                                       | URL | Download |
| THT female header; angled; Pin spacing 7.5 mm; 3-pole; 100% protected against mismatching; 0.6 x 1.0 mm solder pin; light gray |     |          |

Installation Notes

Product family

MCS MIDI  
[Show all products from the family](#)

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