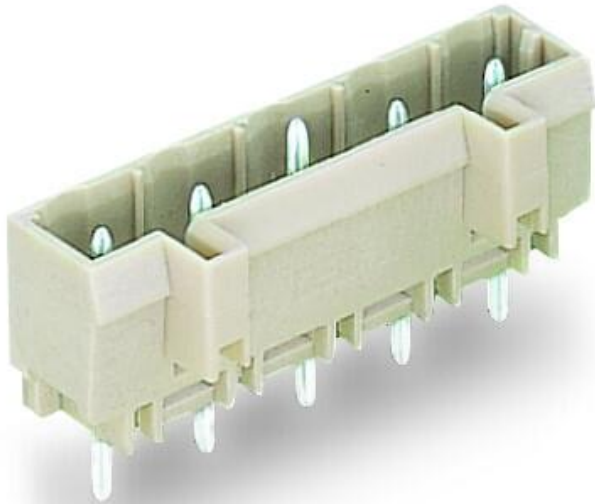


## Data sheet | Item number: 721-239/001-000

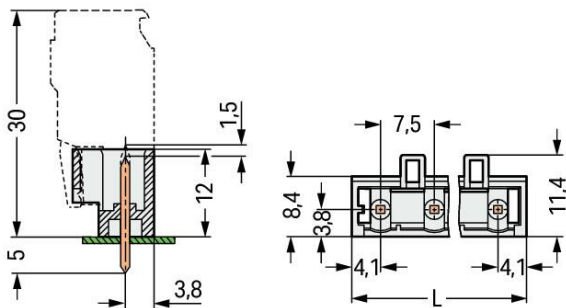
THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 7.5 mm; 9-pole; light gray

[www.wago.com/721-239/001-000](http://www.wago.com/721-239/001-000)



 Picture differs from the item.

Color: 



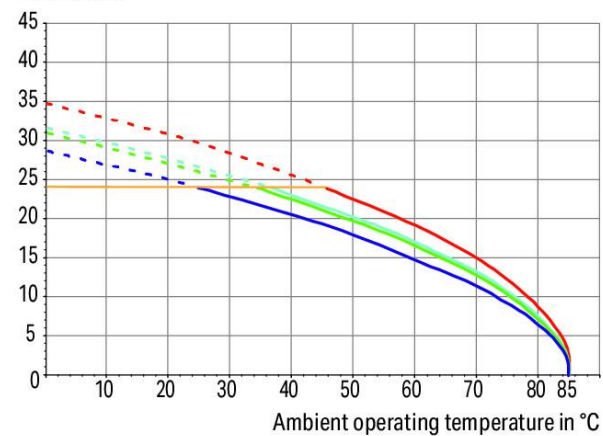
Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$

### Derating Curve

1-conductor female connector (721-202/026-000) with  
THT male header (721-862/001-000)  
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

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

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.



## 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

### 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   |

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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



|                                |       |
|--------------------------------|-------|
| 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   | 10 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 | 9 |
| Number of connection types | 1 |
| Number of levels           | 1 |

#### Connection 1

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

#### Physical data

|                                      |                          |
|--------------------------------------|--------------------------|
| Pin spacing                          | 7.5 mm / 0.295 inches    |
| Width                                | 68 mm / 2.677 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 <sup>(+0.1)</sup> mm |

#### Mechanical Data

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

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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



|                          |     |
|--------------------------|-----|
| 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                                                       |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> )                   |
| Contact plating             | Tin                                                      |
| Fire load                   | 0.073 MJ                                                 |
| Weight                      | 3.6 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            |

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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



|                       |               |
|-----------------------|---------------|
| ETIM 8.0              | EC002637      |
| ETIM 7.0              | EC002637      |
| PU (SPU)              | 50 pcs        |
| Packaging type        | box           |
| Country of origin     | PL            |
| GTIN                  | 4044918869409 |
| Customs tariff number | 85366930000   |

## 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>CSA</b><br>DEKRA Certification B.V.       | C22.2                    | 1466354          |
|  | <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    |

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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.

## Approvals for marine applications

| Logo                                                                              | Approval                                  | Additional Approval Text | Certificate name         |
|-----------------------------------------------------------------------------------|-------------------------------------------|--------------------------|--------------------------|
|   | <b>ABS</b><br>American Bureau of Shipping | -                        | 19-<br>HG1869876-<br>PDA |
|  | <b>BV</b><br>Bureau Veritas S.A.          | IEC 60998                | 11915/D0<br>BV           |
|   | <b>DNV</b><br>DNV GL SE                   | -                        | TAE000016Z               |

## Counterpart

**Item no.721-209/026-000**

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 9-pole; 100% protected against mismatching; 2,50 mm²; light gray

[www.wago.com/721-209/026-000](http://www.wago.com/721-209/026-000)

**Item no.2721-209/026-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 9-pole; 100% protected against mismatching; 2,50 mm²; light gray

[www.wago.com/2721-209/026-000](http://www.wago.com/2721-209/026-000)

**Item no.2721-209/031-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 9-pole; 100% protected against mismatching; clamping collar; 2,50 mm²; light gray

[www.wago.com/2721-209/031-000](http://www.wago.com/2721-209/031-000)

**Item no.2721-209/037-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 9-pole; 100% protected against mismatching; Lateral locking levers; 2,50 mm²; light gray

[www.wago.com/2721-209/037-000](http://www.wago.com/2721-209/037-000)

**Item no.721-209/027-000**

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 9-pole; 100% protected against mismatching; clamping collar; 2,50 mm²; light gray

[www.wago.com/721-209/027-000](http://www.wago.com/721-209/027-000)

**Item no.721-209/031-000**

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 9-pole; 100% protected against mismatching; clamping collar; 2,50 mm²; light gray

[www.wago.com/721-209/031-000](http://www.wago.com/721-209/031-000)

**Item no.721-209/037-000/035-000**

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 9-pole; 100% protected against mismatching; Lateral locking levers; Strain relief plate; 2,50 mm²; light gray

[www.wago.com/721-209/037-000/035-000](http://www.wago.com/721-209/037-000/035-000)

**Item no.721-209/037-000**

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

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.



1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 9-pole; 100% protected against mismatching; Lateral locking levers; 2,50 mm²; light gray

[www.wago.com/721-209/037-000](http://www.wago.com/721-209/037-000)



**Item no. 721-2209/026-000**

2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 9-pole; 100% protected against mismatching; with integrated end plate; 2,50 mm²; light gray

[www.wago.com/721-2209/026-000](http://www.wago.com/721-2209/026-000)



**Item no. 721-339/008-000**

1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 9-pole; 100% protected against mismatching; Snap-in mounting feet; 2,50 mm²; light gray

[www.wago.com/721-339/008-000](http://www.wago.com/721-339/008-000)



**Item no. 721-2209/037-000**

2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 9-pole; 100% protected against mismatching; Lateral locking levers; 2,50 mm²; light gray

[www.wago.com/721-2209/037-000](http://www.wago.com/721-2209/037-000)



**Item no. 721-339/031-000**

1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 9-pole; 100% protected against mismatching; clamping collar; 2,50 mm²; light gray

[www.wago.com/721-339/031-000](http://www.wago.com/721-339/031-000)

## Optional accessories

### Coding

#### Coding



**Item no.: 231-130**

Coding key; snap-on type; light gray

[www.wago.com/231-130](http://www.wago.com/231-130)

### 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

### CAE data

EPLAN Data Portal 721-239/001-000

URL

Download

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

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.



|                                   |     |          |
|-----------------------------------|-----|----------|
| ZUKEN Portal 721-239/001-000      | URL | Download |
| EPLAN Data Portal 721-239/001-000 | URL | Download |

### PCB Design

Symbol and Footprint via Ultra Librarian 721-239/001-000 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
- 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
- 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 2021 Zuken CR-5000 and CR-8000

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

WAGO GmbH & Co. KG  
 Hansastr. 27  
 32423 Minden  
 Phone: +49571 887-0 | Fax: +49571 887-169  
 Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
 We are always happy to take your call at +49 (571) 887-44222.



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

---

Symbol and Footprint via SamacSys 721-239/001-000

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:

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

---

CAD data

2D/3D Models 721-239/001-000

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

---

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.

|  |                     |                          |
|--|---------------------|--------------------------|
|  | <a href="#">URL</a> | <a href="#">Download</a> |
|--|---------------------|--------------------------|

Asset Administration Shell

|                                            |                     |                          |
|--------------------------------------------|---------------------|--------------------------|
| Asset Administration Shell 721-239/001-000 | <a href="#">URL</a> | <a href="#">Download</a> |
|--------------------------------------------|---------------------|--------------------------|

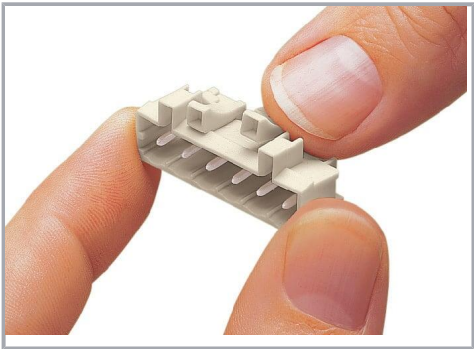
Environmental Product Compliance

Compliance Search

|                                                                                                                                |                     |                          |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------|
| Environmental Product Compliance 721-239/001-000                                                                               | <a href="#">URL</a> | <a href="#">Download</a> |
| THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 7.5 mm; 9-pole; light gray |                     |                          |

Installation Notes

Coding



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!