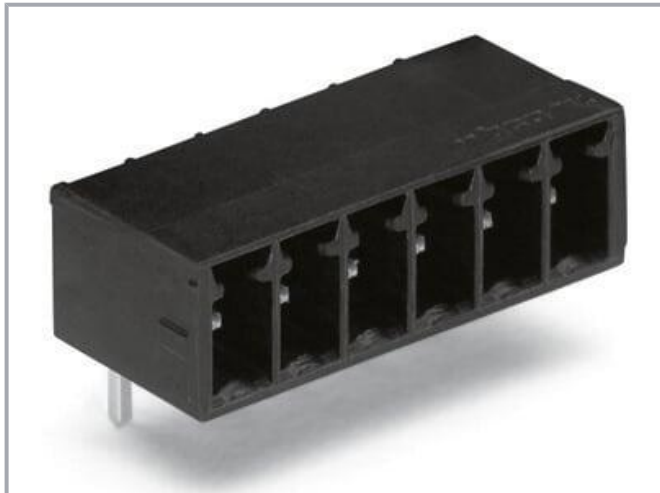


## Data sheet | Item number: 714-170

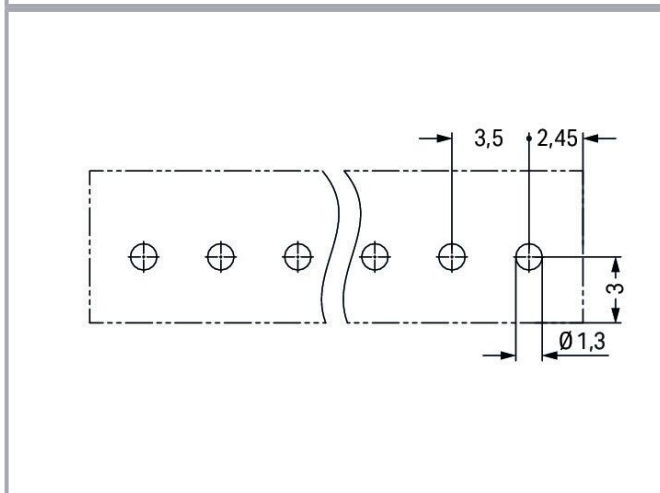
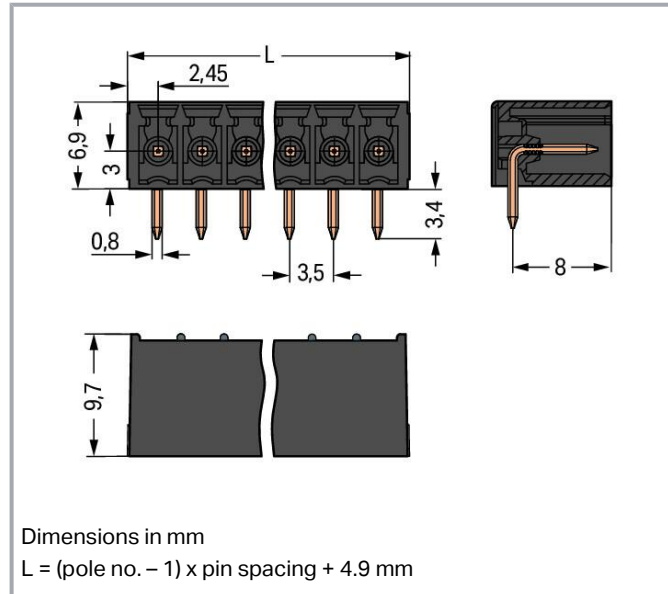
THT male header; 0.8 x 0.8 mm solder pin; angled; Pin spacing 3.5 mm; 10-pole; black

[www.wago.com/714-170](http://www.wago.com/714-170)



 Picture differs from the item.

Color: 



### Item description

- Male headers may be mounted horizontally or vertically via straight or angled solder pins

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

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- Header housing is molded of THR-compatible insulation material for lead-free Reflow soldering
- Separated pin slots prevent damage and make the headers touch-proof when unplugged
- 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

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)       | 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                 | 8 A                                                       |
| Legend (ratings)              | (III / 2) ≙ Overvoltage category III / Pollution degree 2 |

### Ratings per UL

|                                |         |
|--------------------------------|---------|
| Approvals per                  | UL 1059 |
| Rated voltage UL (Use Group B) | 150 V   |
| Rated current UL (Use Group B) | 8 A     |

### Connection data

|                            |    |
|----------------------------|----|
| Total number of potentials | 10 |
| Number of connection types | 1  |

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|                  |   |
|------------------|---|
| Number of levels | 1 |
|------------------|---|

## Connection 1

|             |    |
|-------------|----|
| Pole number | 10 |
|-------------|----|

## Physical data

|                                      |                          |
|--------------------------------------|--------------------------|
| Pin spacing                          | 3.5 mm / 0.138 inches    |
| Width                                | 36.4 mm / 1.433 inches   |
| Height                               | 10.3 mm / 0.406 inches   |
| Height from the surface              | 6.9 mm / 0.272 inches    |
| Depth                                | 9.7 mm / 0.382 inches    |
| Solder pin length                    | 3.4 mm                   |
| Solder pin dimensions                | 0.8 x 0.8 mm             |
| Drilled hole diameter with tolerance | 1.2 <sup>(+0.1)</sup> 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                 | No                  |
| Plugging without loss of pin spacing | No                  |
| 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

|                      |                                                          |
|----------------------|----------------------------------------------------------|
| Note (material data) | Information on material specifications can be found here |
| Color                | black                                                    |

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



|                             |                                        |
|-----------------------------|----------------------------------------|
| Material group              | I                                      |
| Insulation material         | Polyphthalamide (PPA GF)               |
| Flammability class per UL94 | V0                                     |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating             | Tin                                    |
| Fire load                   | 0.044 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            | 27-44-04-01            |
| ETIM 8.0              | EC002637               |
| ETIM 7.0              | EC002637               |
| PU (SPU)              | 100 pcs                |
| Packaging type        | box                    |
| Country of origin     | DE                     |
| GTIN                  | 4045454859718          |
| Customs tariff number | 85366930000            |

### Environmental Product Compliance

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

### Approvals / Certificates

#### General approvals

| Logo                                                                               | Approval                              | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|---------------------------------------|--------------------------|------------------|
|  | CCA<br>DEKRA Certification B.V.       | EN 61984                 | NTR NL-7604      |
|                                                                                    | KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984                 | 2198681.01       |

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## Counterpart



### Item no.714-110

1-conductor female connector; push-button; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 10-pole; 1,50 mm<sup>2</sup>; black

[www.wago.com/714-110](http://www.wago.com/714-110)



### Item no.714-110/000-047

1-conductor female connector; push-button; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 10-pole; direct marking; 1,50 mm<sup>2</sup>; black

[www.wago.com/714-110/000-047](http://www.wago.com/714-110/000-047)

## Optional accessories

### Coding

Coding



### Item no.: 714-101

Coding key; orange

[www.wago.com/714-101](http://www.wago.com/714-101)

## Downloads

### Documentation

#### Additional Information

2019 Apr 3

pdf  
2.1 MB

Download

## CAD/CAE-Data

### CAD data

2D/3D Models 714-170

URL

Download

### PCB Design

Symbol and Footprint via Ultra Librarian 714-170

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

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- 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 2021Zuken CR-5000 and CR-8000

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

Symbol and Footprint via SamacSys 714-170

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

—  
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- 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

CAE data

|                      |     |          |
|----------------------|-----|----------|
| ZUKEN Portal 714-170 | URL | Download |
|----------------------|-----|----------|

Asset Administration Shell

|                                    |     |          |
|------------------------------------|-----|----------|
| Asset Administration Shell 714-170 | URL | Download |
|------------------------------------|-----|----------|

Environmental Product Compliance

Compliance Search

|                                                                                      |     |          |
|--------------------------------------------------------------------------------------|-----|----------|
| Environmental Product Compliance 714-170                                             | URL | Download |
| THT male header; 0.8 x 0.8 mm solder pin; angled; Pin spacing 3.5 mm; 10-pole; black |     |          |

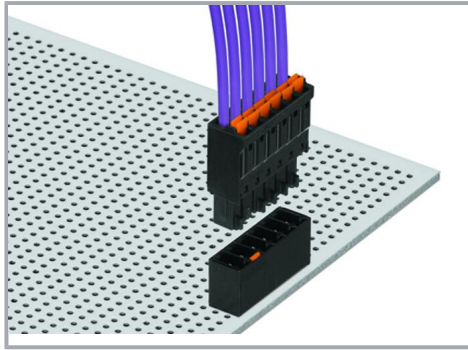
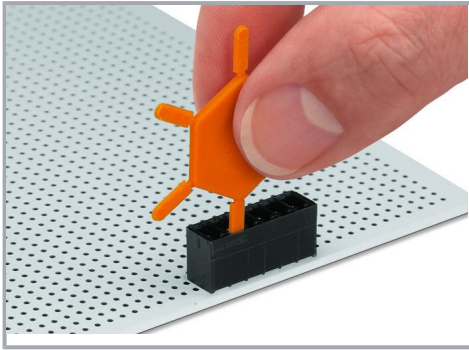
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## Installation Notes

### Coding



Coding a male header by inserting a coding pin. Coded connectors

### Product family

#### MCS MINI SL

[Show all products from the family](#)

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