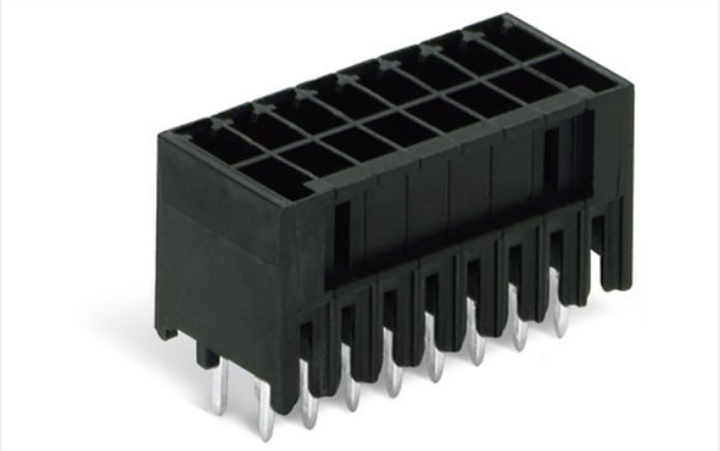
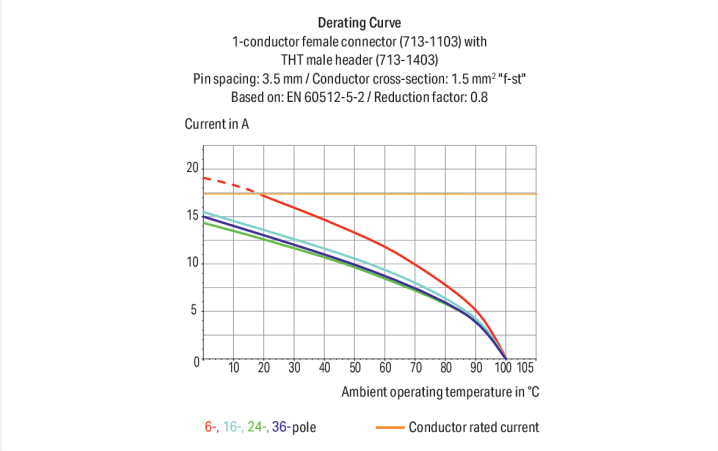
# Data Sheet | Item Number: 713-1414

THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mis-mating; Pin spacing 3.5 mm; 28-pole; black

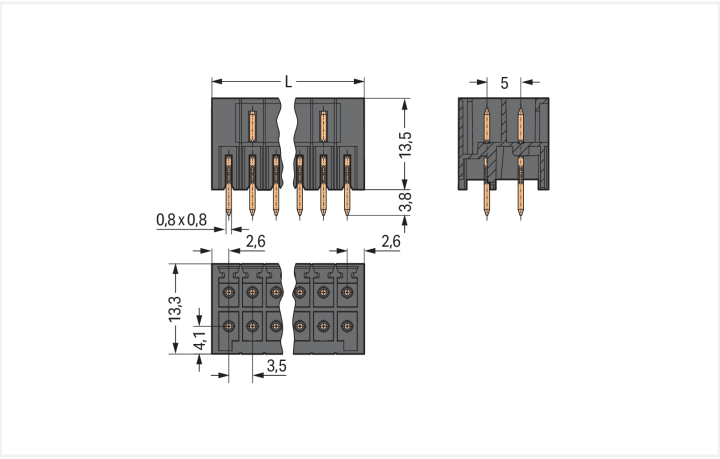
https://www.wago.com/713-1414

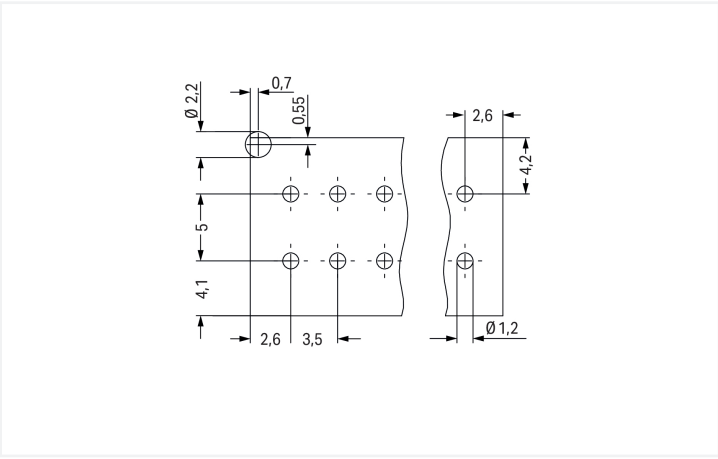





Color: ■ black

Similar to illustration




Dimensions in mm
L = [(pole no./2) – 1] x pin spacing + 5.2 mm

Male connector, 713 Series, with 3.5 mm pin spacing

This male connector (item number 713-1414) provides hassle-free electrical installations. Dimensions: (50.5 x 17.3 x 13.3) mm (width x height x depth).

Tin is used for coating the contact surfaces. THT is used to solder the pcb connector.

## 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<br>Other solder pin lengths<br>Gold-plated or partially gold-plated contact surfaces<br>Other versions (or variants) can be requested from WAGO Sales or configured at https://configurator.wago.com/. |

## Electrical data

| Ratings per | IEC/EN 60664-1 | | |
|---|---|---|---|
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | 80 V | 160 V | 250 V |
| Rated impulse withstand voltage | 2.5 kV | 2.5 kV | 2.5 kV |
| Rated current | 10 A | 10 A | 10 A |

| Approvals per | UL 1059 | | |
|---|---|---|---|
| Use group | B | C | D |
| Rated voltage | 150 V | 50 V | - |
| Rated current | 10 A | 10 A | - |

| Approvals per | CSA | | |
|---|---|---|---|
| Use group | B | C | D |
| Rated voltage | 150 V | - | - |
| Rated current | 12 A | - | - |

## Connection Data

| | |
|---|---|
| Total number of potentials | 28 |
| Number of connection types | 1 |
| Number of levels | 2 |

### Connection 1

| | |
|---|---|
| Pole number | 28 |

## Physical data

| | |
|---|---|
| Pin spacing | 3.5 mm / 0.138 inches |
| Width | 50.5 mm / 1.988 inches |
| Height | 17.3 mm / 0.681 inches |
| Height from the surface | 13.5 mm / 0.531 inches |
| Depth | 13.3 mm / 0.524 inches |
| Solder pin length | 3.8 mm |
| Solder pin dimensions | 0.8 x 0.8 mm |
| Drilled hole diameter | $1.2^{(+0.1)}$ mm |

## Mechanical data

| | |
|---|---|
| Variable coding | Yes |
| Anti-rotation protection | Yes |


Continued on next page

## Plug-in connection

| | |
|---|---|
| Contact type (pluggable connector) | Male connector/plug |
| Connector (connection type) | for PCB |
| Mismating protection | Yes |
| Mating direction to the PCB | 90 ° |

## 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 |
| Material group | I |
| Insulation material (main housing) | Polyphthalamide (PPA GF) |
| Flammability class per UL94 | V0 |
| Contact material | Electrolytic copper ($E_{Cu}$) |
| Contact Plating | Tin |
| Fire load | 0.069 MJ |
| Weight | 7.2 g |

## Environmental requirements

| | |
|---|---|
| Limit temperature range | -60 … +100 °C |
| Processing temperature | -35 … +60 °C |

## Commercial data

| | |
|---|---|
| Product Group | 3 (Multi Conn. System) |
| PU (SPU) | 20 pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4045454700096 |
| Customs tariff number | 85366930000 |

## Product Classification

| | |
|---|---|
| UNSPSC | 39121409 |
| eCl@ss 10.0 | 27-44-04-02 |
| eCl@ss 9.0 | 27-44-04-02 |
| ETIM 9.0 | EC002637 |
| ETIM 10.0 | EC002637 |
| ECCN | NO US CLASSIFICATION |


Continued on next page

## Environmental Product Compliance

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

## Approvals / Certificates

### General approvals

| Approval | Standard | Certificate Name |
|---|---|---|
| CB<br>DEKRA Certification B.V. | IEC 61984 | NL-102427 |
| CSA<br>CSA Group | C22.2 | 2315087 |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984 | 71-126089 |

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 713-1414

### Documentation

**Additional Information**

| | | |
|---|---|---|
| Technical Section | 03.04.2019 | pdf<br>2027.26 KB |

### CAD/CAE-Data

**CAD data**

2D/3D Models 713-1414

**CAE data**

ZUKEN Portal 713-1414

**PCB Design**

Symbol and Footprint via SamacSys 713-1414

Symbol and Footprint via Ultra Librarian 713-1414

# 1 Compatible Products

## 1.1 System counterpart

### 1.1.1 Female connector/socket



Item No.: 713-1114
1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 28-pole; 100% protected against mismating; black



Item No.: 713-1114/000-047
1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 28-pole; 100% protected against mismating; direct marking; black



Item No.: 713-1114/000-9037
1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 28-pole; 100% protected against mismating; direct marking; black



Item No.: 713-1114/034-047
1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 28-pole; 100% protected against mismating; Strain relief plate; direct marking; black



Item No.: 713-1114/034-9037
1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 28-pole; 100% protected against mismating; Strain relief plate; direct marking; black

## 1.2 Optional Accessories

### 1.2.1 Coding

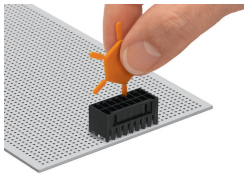
#### 1.2.1.1 Coding



Item No.: 714-101
Coding key; orange

# Installation Notes

## Coding



Coding a male header by inserting a coding pin.