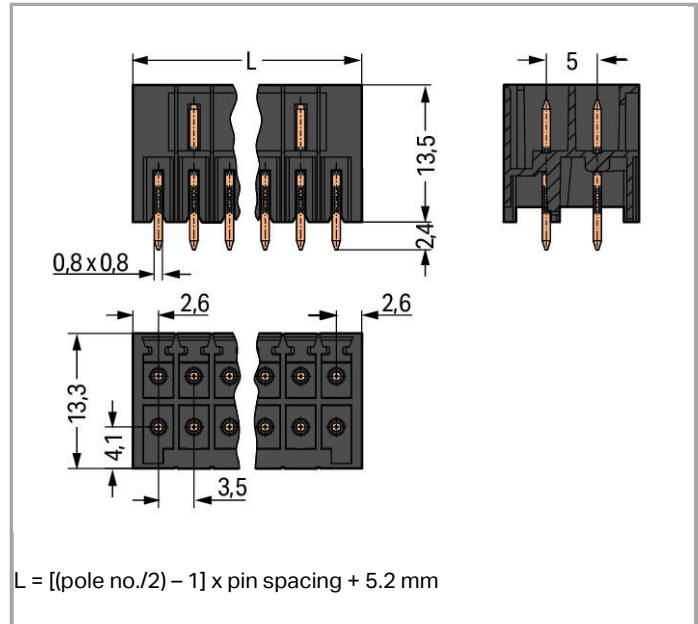


## Data sheet | Item number: 713-1411/105-000

THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.5 mm; 2 x 11-pole



[www.wago.com/713-1411/105-000](http://www.wago.com/713-1411/105-000)



### Item description

- THR male headers for reflow soldering in SMT applications
- Available in tape-and-reel packaging for automated pick-and-place PCB assembly
- Separated pin slots prevent damage and make the headers touch-proof when unplugged
- 100% protected against mismatching
- Coding pins available

Other variants can be requested via the WAGO sales department or, if necessary, configured at <https://configurator.wago.com/>: Gold-plated or partially gold-plated contact surfaces, Other pole numbers, Other solder pin lengths

### Data

#### Electrical data

#### Ratings per IEC/EN 60664-1

|                                 |        |
|---------------------------------|--------|
| Rated voltage (III / 3)         | 80 V   |
| Rated impulse voltage (III / 3) | 2.5 kV |
| Rated voltage (III / 2)         | 160 V  |



|                                 |   |
|---------------------------------|---|
| Rated impulse voltage (III / 2) | 2.5 kV  |
| Rated voltage (II / 2)          | 250 V   |
| Rated impulse voltage (II / 2)  | 2.5 kV  |
| Rated current                   | 10 A  |
| Legend (ratings)                | (III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2 |

### Approvals per UL 1059

|                                |       |
|--------------------------------|-------|
| Rated voltage UL (Use Group B) | 150 V |
| Rated current UL (Use Group B) | 10 A  |
| Rated voltage UL (Use Group C) | 50 V  |
| Rated current UL (Use Group C) | 10 A  |

### Approvals per CSA

|                                 |       |
|---------------------------------|-------|
| Rated voltage CSA (Use Group B) | 150 V |
| Rated current CSA (Use Group B) | 12 A  |

### Connection data

|                            |    |
|----------------------------|----|
| No. of poles               | 22 |
| Total number of potentials | 22 |
| Number of levels           | 2  |

### Geometrical Data

|                                    |                          |
|------------------------------------|--------------------------|
| Pin spacing                        | 3.5 mm (0.138 inch)      |
| Width                              | 40 mm / 1.575 inch       |
| Height                             | 15.9 mm / 0.626 inch     |
| Height from the surface            | 13.5 mm / 0.531 inch     |
| Depth                              | 13.3 mm / 0.524 inch     |
| Solder pin length                  | 2.4 mm                   |
| Solder pin dimensions              | 0.8 x 0.8 mm             |
| Plated through-hole diameter (THR) | 1.3 <sup>(+0.1)</sup> mm |

### Plug connection

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

### PCB contact

|             |     |
|-------------|-----|
| PCB contact | THR |
|-------------|-----|

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

### Material Data

|                             |                           |
|-----------------------------|---------------------------|
| Color                       | black                     |
| Material group              | I                         |
| Insulating material         | Polyphthalamide (PPA GF)  |
| Flammability class per UL94 | V0                        |
| Contact material            | Electrolytic copper (Ecu) |
| Contact plating             | tin-plated                |
| Fire load                   | 0.117 MJ                  |
| Weight                      | 5.582 g                   |

### Environmental Requirements

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

### Commercial data

|                    |                        |
|--------------------|------------------------|
| Country of origin  | PL                     |
| GTIN               | 4050821155744          |
| Customs Tariff No. | 85366990990            |
| Product Group      | 3 (Multi Conn. System) |

### Approvals / Certificates

#### UL-Approvals

| Logo   | Approval                             | Certificate name |
|--|--------------------------------------|------------------|
|  | UR<br>Underwriters Laboratories Inc. | E45172           |

### Compatible products

#### Coding



Item no.: 714-101  
Coding key

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

Downloads  
smartDATA

PCB libraries



|  |                      |               |          |
|--|----------------------|---------------|----------|
| EAGLE Library for WAGO Pluggable PCB Connectors (MULTI CONNECTION SYSTEM)<br>Compatible with EAGLE PCB Design Software Version 6.x or higher | 2.1<br>Nov 17, 2017  | ZIP<br>6.2 MB | Download |
| DesignSpark Library for WAGO Pluggable PCB Connectors (MULTI CONNECTION SYSTEM)<br>Compatible with DesignSpark PCB Version 4.x or higher     | 2.1<br>Oct 6, 2014   | ZIP<br>6.1 MB | Download |
| TARGET Library for WAGO Pluggable PCB Connectors (Multi-Connection System)<br>Compatible with TARGET PCB Design Software Version 17.x        | 1.1.0<br>Oct 6, 2014 | ZIP<br>7.4 MB | Download |
| <b>CAD data</b>  |                      |               |          |
| 3D Download 713-1411/105-000   |                      | URL           | Download |

Subject to changes.