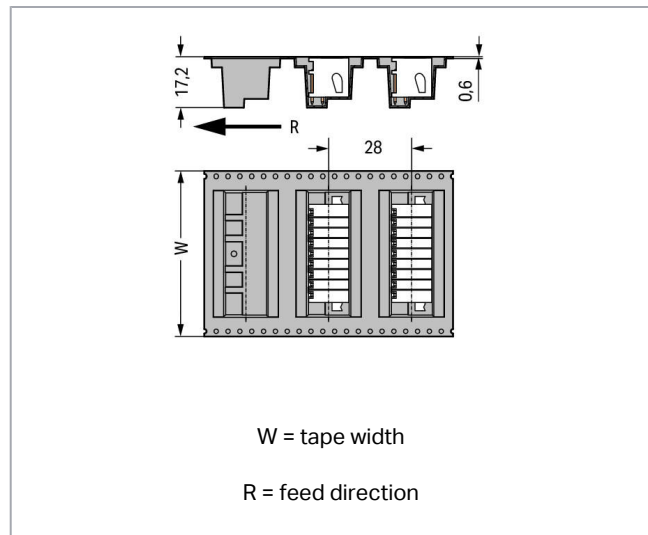
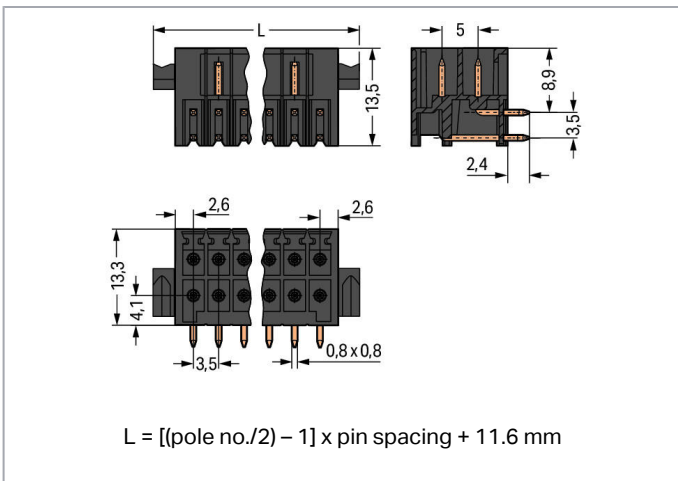
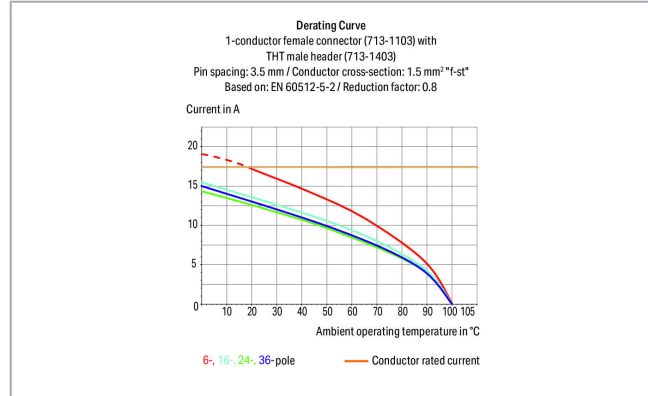
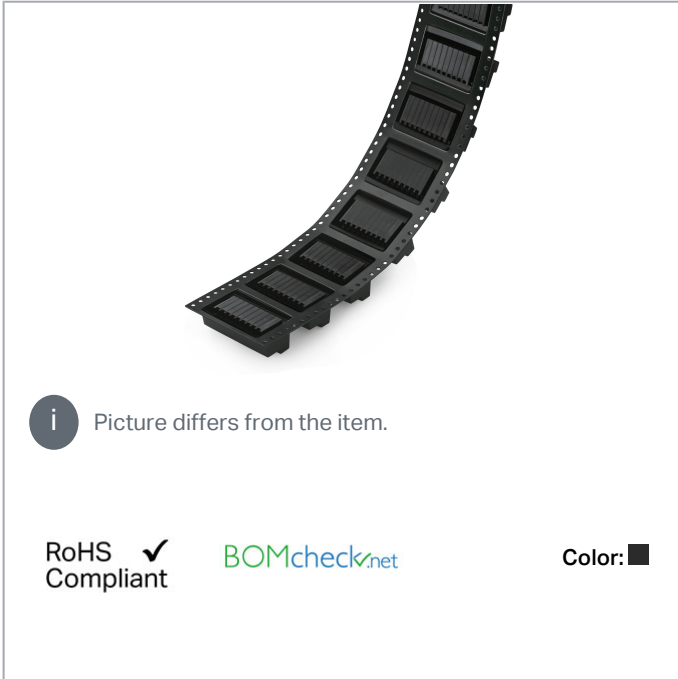


Data sheet | Item number: 713-1437/116-000/997-409



THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Levers; in tape-and-reel packaging; Pin spacing 3.5 mm; 34-pole; black

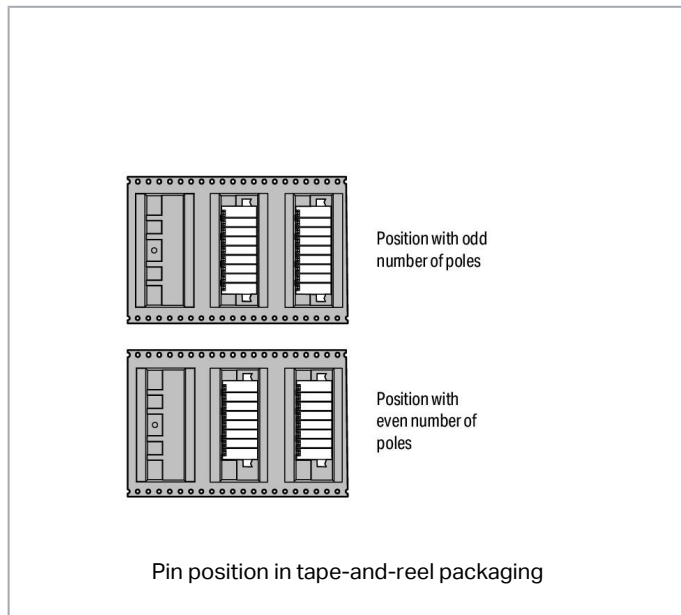
[www.wago.com/713-1437/116-000/997-409](http://www.wago.com/713-1437/116-000/997-409)



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

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## 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 option available

## Safety information 1:

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. The circuit design should ensure header pins, which can be touched, are not live when unmated.

## Data

### Electrical data

### Ratings per IEC/EN

| Ratings per                 | IEC/EN 60664-1 |
|-----------------------------|----------------|
| Nominal voltage (III/3)     | 80 V           |
| Rated surge voltage (III/3) | 2.5 kV         |
| Rated voltage (III/2)       | 160 V          |
| Rated surge voltage (III/2) | 2.5 kV         |
| Nominal voltage (II/2)      | 250 V          |

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|                            |   |
|----------------------------|---|
| Rated surge voltage (II/2) | 2.5 kV  |
| Rated current              | 10 A  |
| Legend (ratings)           | (III / 2) $\hat{=}$ 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) | 10 A    |
| Rated voltage UL (Use Group C) | 50 V    |
| Rated current UL (Use Group C) | 10 A    |

### Ratings per CSA

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

### Connection data

|                            |    |
|----------------------------|----|
| Pole No.                   | 34 |
| Total number of potentials | 34 |
| Number of connection types | 1  |
| Number of levels           | 2  |

### Physical data

|  |                          |
|--|--------------------------|
| Pin spacing                              | 3.5 mm / 0.138 inch      |
| Width                                    | 67.6 mm / 2.661 inch     |
| Height                                   | 15.7 mm / 0.618 inch     |
| Height from the surface                  | 13.3 mm / 0.524 inch     |
| Depth                                    | 13.5 mm / 0.531 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 |
| Reel diameter of tape-and-reel packaging | 330 mm                   |
| Tape width                               | 88 mm                    |

### Plug-in connection

|                                    |                     |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
|------------------------------------|---------------------|

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

|                               |               |
|-------------------------------|---------------|
| Connector (connection type)   | for PCB       |
| Mismating protection          | Yes           |
| Mating direction to the PCB   | 0°            |
| Locking of plug-in connection | Locking lever |

### 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                                      |
| Insulation material         | Polyphthalamide (PPA GF)               |
| Flammability class per UL94 | V0                                     |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating             | tin-plated                             |
| Weight                      | 10 g                                   |

### Environmental requirements


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

### Commercial data

|                       |               |
|-----------------------|---------------|
| Packaging type        | bag           |
| Country of origin     | DE            |
| GTIN                  | 4055143778657 |
| Customs tariff number | 85366990990   |

### Approvals / Certificates

#### UL-Approvals

| Logo   | Approval                             | Additional Approval Text | Certificate name    |
|--|--------------------------------------|--------------------------|---------------------|
|  | UR<br>Underwriters Laboratories Inc. | UL 1059                  | E45172-<br>19950922 |

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

## Counterpart



Item no.713-1117/037-000

1-conductor female connector, 2-row; 100% protected against mismatching; Levers; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 34-pole; 1,50 mm<sup>2</sup>; black

[www.wago.com/713-1117/037-000](http://www.wago.com/713-1117/037-000)

## Downloads

### Documentation

#### Additional Information

Technical explanations

3. 4. 2019

pdf  
2.0 MB

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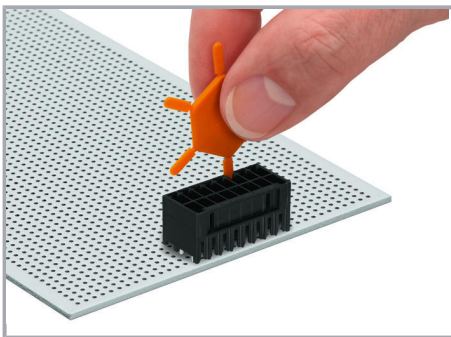
THR Soldering Process

pdf  
548.2 kB

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## Installation Notes

### Coding



Coding a male header by inserting a coding pin.

## Product family

<i>MCS</i> MINI HD

[Show all products from the family](#)

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