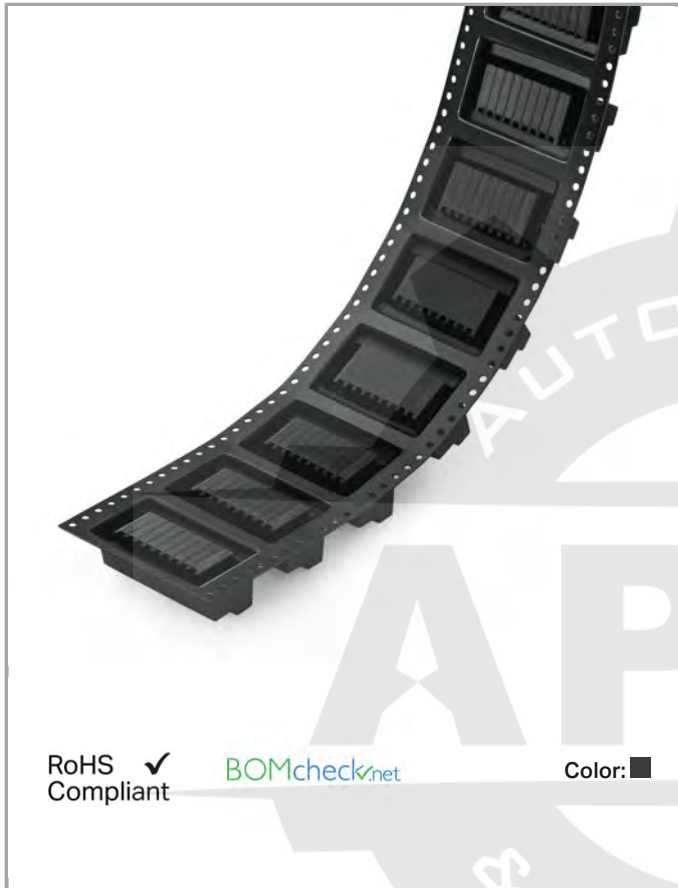


## Data sheet | Item number: 713-1430/117-000/997-408

THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; in tape-and-reel packaging; Pin spacing 3.5 mm; 2 x 10-pole; black



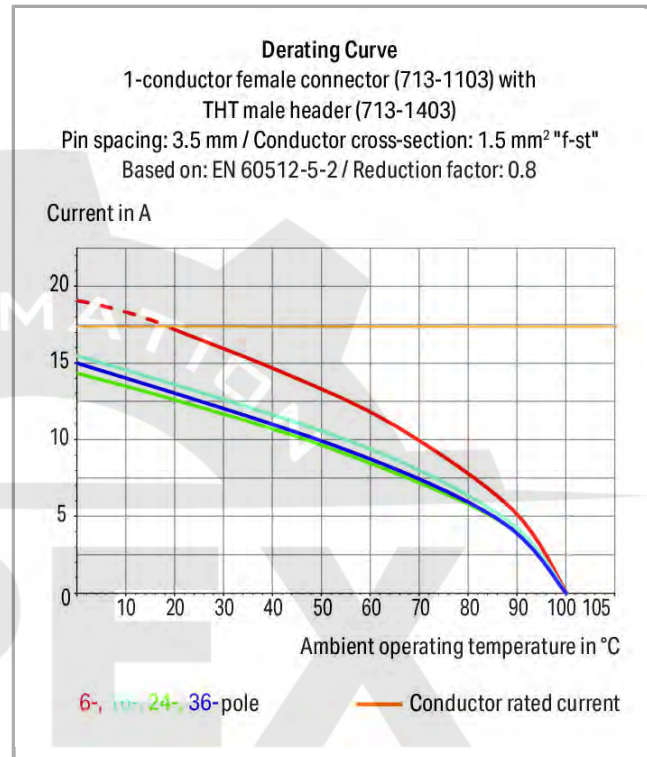
713-1430\_117-000\_997-408

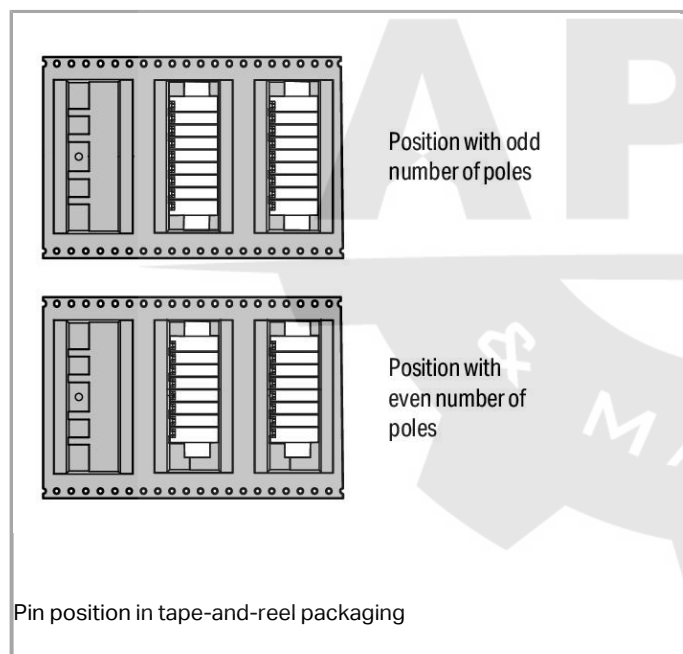
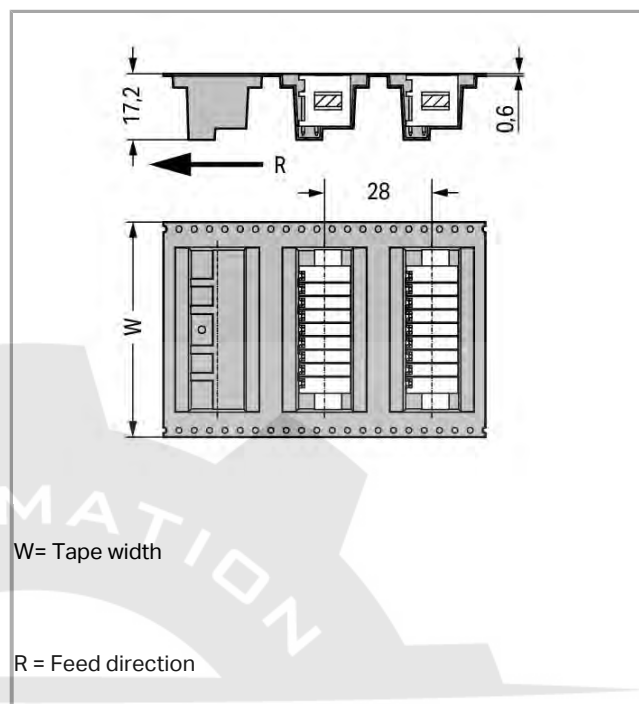
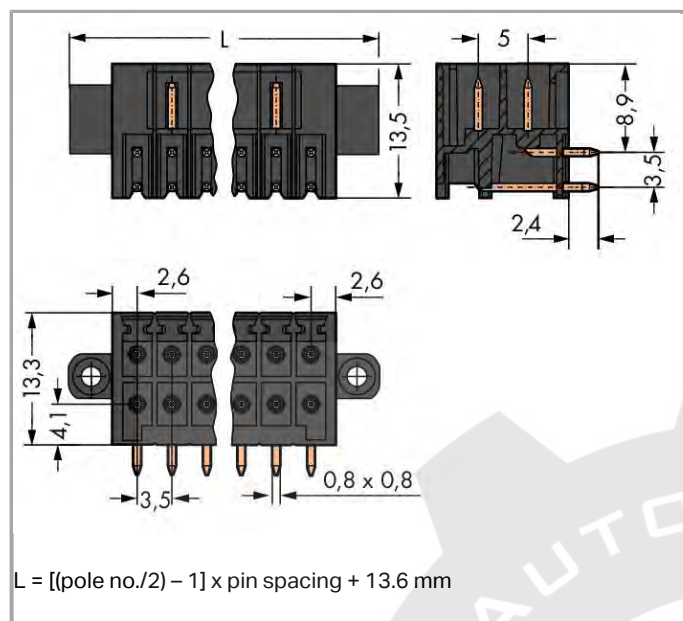


RoHS Compliant

[BOMcheck.net](https://www.bomcheck.net)

Color:





### 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

**Safety information 1:**

The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS Connectors shall 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 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   |

**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**

|                            |    |
|----------------------------|----|
| Total number of potentials | 20 |
| Number of connection types | 1  |
| Number of levels           | 2  |
| No. of poles               | 20 |

**Geometrical Data**

|                         |                      |
|-------------------------|----------------------|
| Pin spacing             | 3.5 mm / 0.138 inch  |
| Width                   | 45.1 mm / 1.776 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                   |
| Drilled hole diameter (tolerance)        | 1.3 <sup>(- ... +0.1)</sup> mm |
| Reel diameter of tape-and-reel packaging | 330 mm                         |
| Tape width                               | 72 mm                          |

## Plug connection

|                                    |                     |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector connection type          | for PCBs            |
| Mismating protection               | Yes                 |
| Mating direction to the PCB        | 0°                  |
| Locking of plug-in connection      | Threaded flange     |

## 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 (E <sub>Cu</sub> ) |
| Contact plating             | tin-plated                             |
| Weight                      | 6.54 g                                 |

## Environmental Requirements

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

## Commercial data

|                    |               |
|--------------------|---------------|
| Country of origin  | DE            |
| GTIN               | 4055143778848 |
| Customs Tariff No. | 85366990990   |

## Approvals / Certificates

### Other Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|------|----------|--------------------------|------------------|
|      |          |                          |                  |



UR  
Underwriters Laboratories Inc.

UL 1059

E45172

UL-Approvals

| Logo                                                                             | Approval                             | Additional Approval Text | Certificate name |
|----------------------------------------------------------------------------------|--------------------------------------|--------------------------|------------------|
|  | UR<br>Underwriters Laboratories Inc. | UL 1059                  | 20190122-E45172  |

Downloads  
Documentation

Additional Information  
Technical explanations

Apr 3, 2019

pdf  
3.6 MB

Download

Subject to changes.