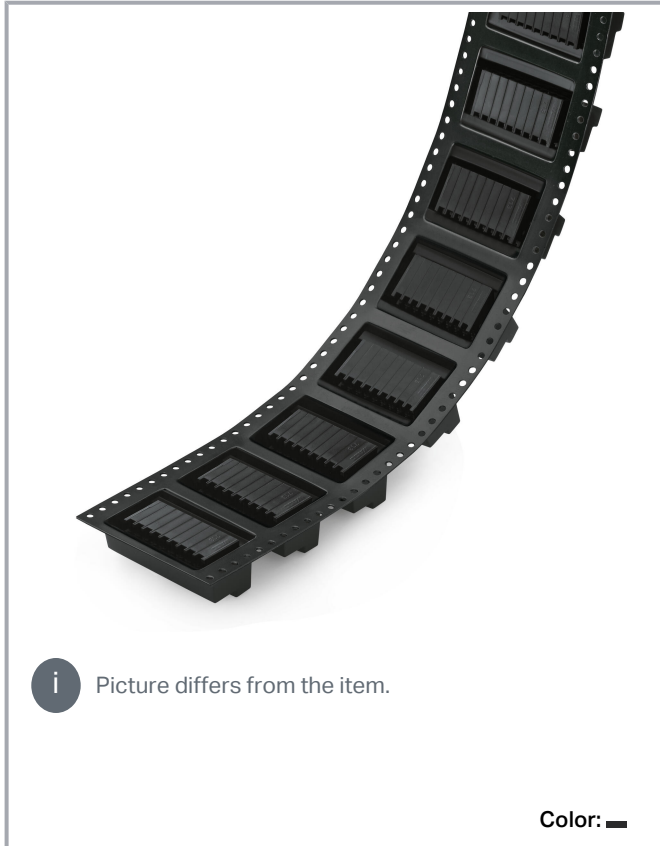


Data sheet | Item number: 713-1428/116-000/997-407

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; 16-pole; black



www.wago.com/713-1428/116-000/997-407



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

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

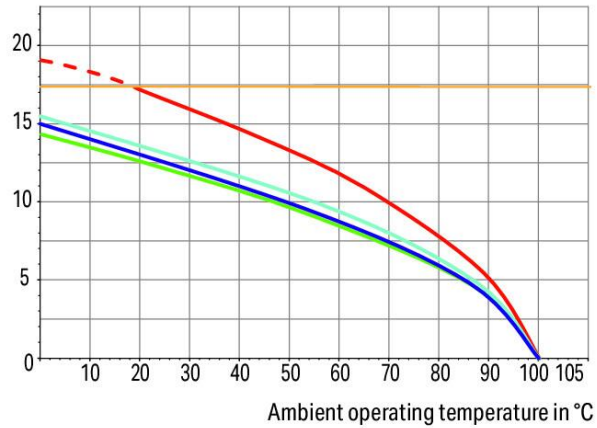
Derating Curve

1-conductor female connector (713-1103) with
THT male header (713-1403)

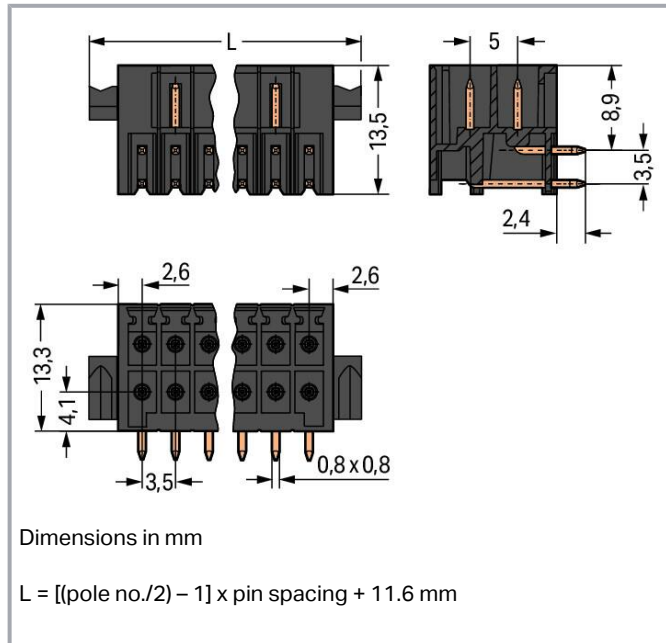
Pin spacing: 3.5 mm / Conductor cross-section: 1.5 mm² "f-st"

Based on: EN 60512-5-2 / Reduction factor: 0.8

Current in A

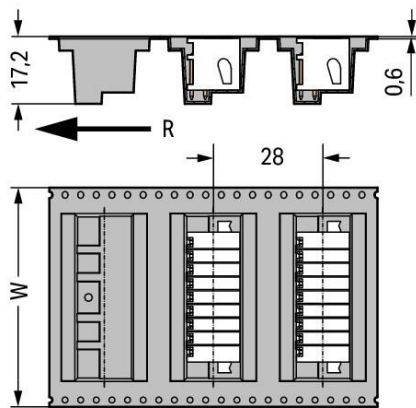


6-, 16-, 24-, 36-pole — Conductor rated current



Dimensions in mm

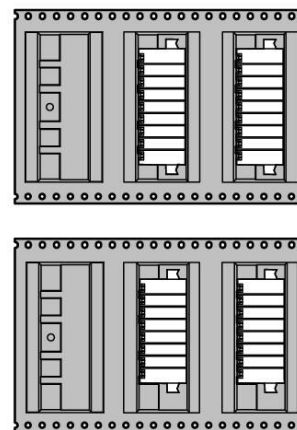
$$L = [(pole\ no./2) - 1] \times pin\ spacing + 11.6\ mm$$



Dimensions in mm

W = tape width

R = feed direction



Position with odd number of poles

Position with even number of poles

Dimensions in mm

Pin position in tape-and-reel packaging

Item description

- THR male headers for reflow soldering in SMT applications

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

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.



- 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

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 solder pin lengths
Gold-plated or partially gold-plated contact surfaces
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) | 80 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) | 250 V |
| 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 1059

| 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 |

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

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



Ratings per CSA

| | |
|---------------------------------|-------|
| 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 | 16 |
| Number of connection types | 1 |
| Number of levels | 2 |

Connection 1

| | |
|-------------|----|
| Pole number | 16 |
|-------------|----|

Physical data

| | |
|------------------------------------------|--------------------------|
| Pin spacing | 3.5 mm / 0.138 inches |
| Width | 36.1 mm / 1.421 inches |
| Height | 15.7 mm / 0.618 inches |
| Height from the surface | 13.3 mm / 0.524 inches |
| Depth | 13.5 mm / 0.531 inches |
| Solder pin length | 2.4 mm |
| Solder pin dimensions | 0.8 x 0.8 mm |
| Plated through-hole diameter (THR) | 1.3 ^(+0.1) mm |
| Reel diameter of tape-and-reel packaging | 330 mm |
| Tape width | 56 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 | Yes |
| Plugging without loss of pin spacing | No |

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



| | |
|-------------------------------|---------------|
| 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

| | |
|-----------------------------|----------------------------------------------------------|
| Note (material data) | Information on material specifications can be found here |
| Color | black |
| Material group | I |
| Insulation material | Polyphthalamide (PPA GF) |
| Flammability class per UL94 | V0 |
| Contact material | Electrolytic copper (E _{Cu}) |
| Contact plating | Tin |
| Fire load | 11.04 MJ |
| Weight | 5 g |
| MSL gemäß J-STD 020D | 1 |

Environmental requirements

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

Commercial data

| | |
|-----------------------|---------------|
| eCl@ss 10.0 | 27-44-04-02 |
| eCl@ss 9.0 | 27-44-04-02 |
| ETIM 8.0 | EC002637 |
| ETIM 7.0 | EC002637 |
| PU (SPU) | 120 pcs |
| Packaging type | bag |
| Country of origin | DE |
| GTIN | 4050821309673 |
| Customs tariff number | 85366990990 |

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

WAGO GmbH & Co. KG
 Hansastr. 27
 32423 Minden
 Phone: +49571 887-0 | Fax: +49571 887-169
 Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
 We are always happy to take your call at +49 (571) 887-44222.




Environmental Product Compliance

RoHS Compliance Status

Compliant, No Exemption

Approvals / Certificates

General approvals

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

Counterpart



Item no. 713-1108/037-000

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 16-pole; 100% protected against mismatching; Levers; 1,50 mm²; black

www.wago.com/713-1108/037-000

Optional accessories

Coding

Coding



Item no.: 714-101
Coding key; orange

www.wago.com/714-101

Downloads

Documentation

Additional Information

| | | | |
|------------------------|------------|-----------------|----------|
| Technical Section | 2019 Apr 3 | pdf 2.0 MB | Download |
| Technical explanations | | | |
| THR Soldering Process | | pdf 548.2 kB | Download |

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 713-1428/116-000/997-407

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

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: info.de@wago.com | Web: www.wago.com

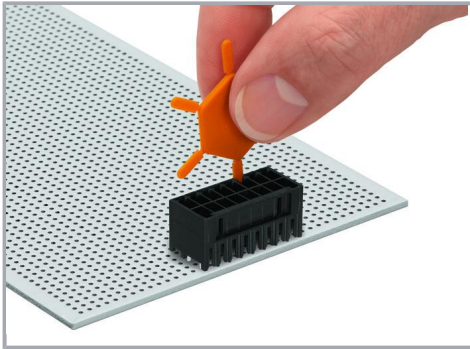
Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

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; 16-pole; black

Installation Notes

Coding



Coding a male header by inserting a coding pin.

Product family

MCS MINI HD

[Show all products from the family](#)

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

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.