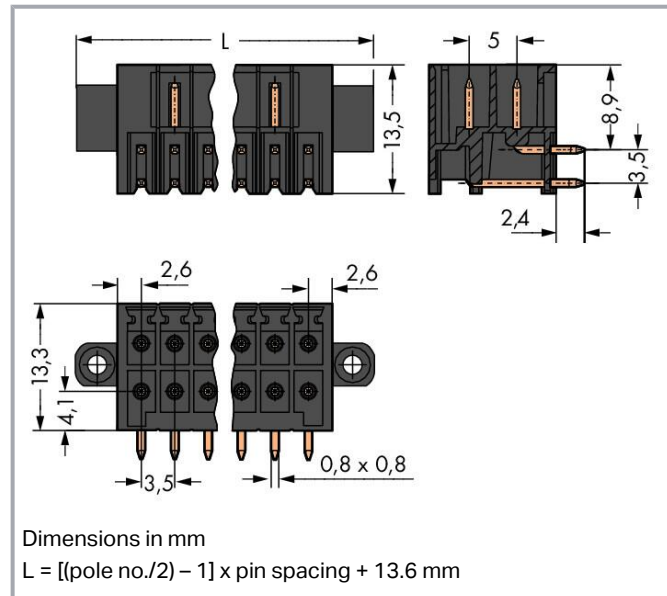
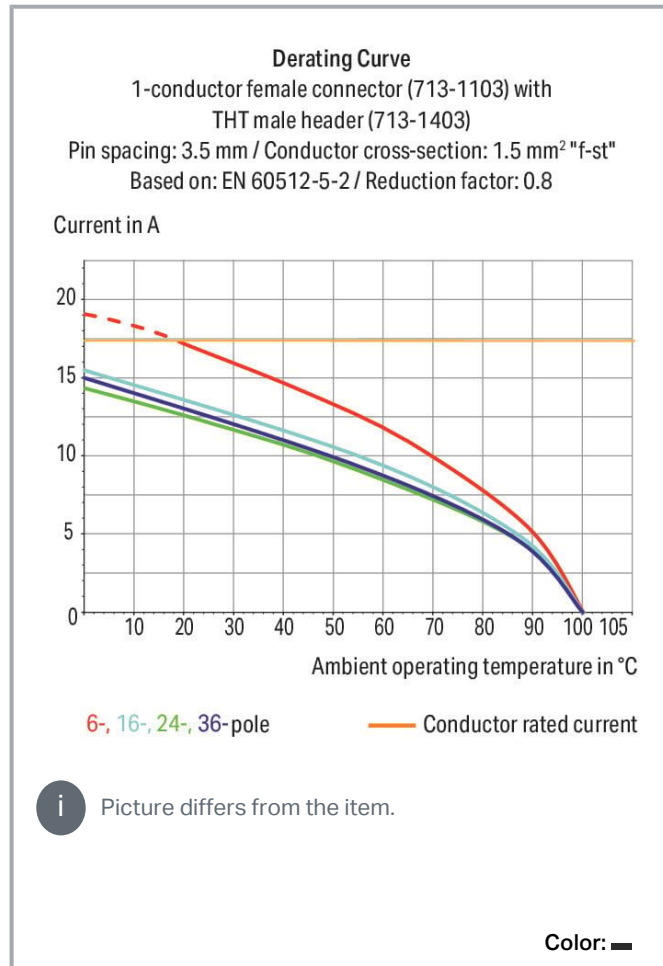


Data sheet | Item number: 713-1432/117-000/997-408

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; 24-pole; black



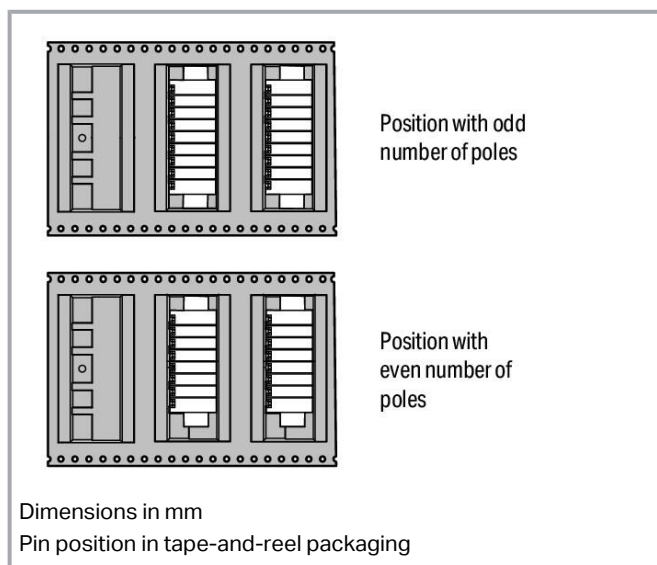
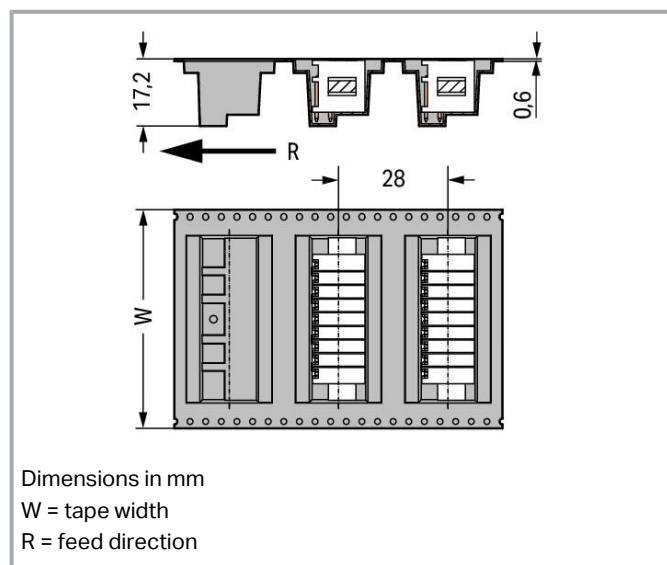
www.wago.com/713-1432/117-000/997-408



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

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

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



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

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

Total number of potentials	24
Number of connection types	1
Number of levels	2

Connection 1

Pole number	24
-------------	----

Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	52.1 mm / 2.051 inches
Height	15.7 mm / 0.618 inches
Height from the surface	13.3 mm / 0.524 inches

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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	72 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
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

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
Weight	7.7 g
MSL per J-STD 020D	1

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



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	4055143778862
Customs tariff number	85366930000

Environmental Product Compliance

CAS-No.	7439-92-1
REACH Candidate List Substance	Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c)
SCIP notification number (Austria)	663f948f-c8f9-4d43-a05e-d3f10ea2734e
SCIP notification number (Belgium)	4c0c0804-9836-4e99-abbc-0f6a213e7e86
SCIP notification number (Bulgaria)	4f4f3711-2bad-4b6d-b3c8-bff79431ec5e
SCIP notification number (Czech Republic)	d5c4d3bf-7bbe-4f80-a6c2-3fe46bcecf05
SCIP notification number (Denmark)	c199f763-cf89-42e6-bcf6-803396b8c75f
SCIP notification number (Finland)	df1d31c6-3b39-4f46-800e-4ef9758ea8da
SCIP notification number (France)	f988d5d9-1aa1-4ae0-b1d2-19a89a46c52d
SCIP notification number (Germany)	89f336fc-9022-4176-87de-35fac6098eb9
SCIP notification number (Hungary)	61ed2bf3-4d74-4eaf-a37c-20aadf8a4d6f
SCIP notification number (Italy)	f595b5ff-008f-4c87-8511-c119422c3de4
SCIP notification number (Netherlands)	cd0c6a90-c363-4036-96ea-17118ff33208
SCIP notification number (Poland)	882fc366-8b0a-4aff-8a90-b31bc891a9d7
SCIP notification number (Romania)	477cad72-5e8f-4294-9b75-d5516f4d5f98
SCIP notification number (Sweden)	f688f3ed-9132-421d-a35b-e411e5638ffb

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Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CSA CSA Group	C22.2	2315087
	UR Underwriters Laboratories Inc.	UL 1059	E45172

Counterpart



Item no. 713-1112/107-000

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 24-pole; 100% protected against mismatching; Screw flange; 1,50 mm²; blackwww.wago.com/713-1112/107-000

Downloads

Documentation

Additional Information

	2019 Apr 3	pdf 2.1 MB	Download
THR Soldering Process		pdf 548.2 kB	Download

CAD/CAE-Data

CAD data

2D/3D Models 713-1432/117-000/997-408	URL	Download
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Asset Administration Shell

Asset Administration Shell 713-1432/117-000/997-408	URL	Download
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PCB Design

Symbol and Footprint via Ultra Librarian 713-1432/117-000/997-408	URL	Download
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Subject to changes. Please also observe the further product documentation!



CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

Supported formats:

- Accel EDA 14 & 15
- Altair
- Altium 6 to current version
- Autodesk Fusion 360
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics
- BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design
- Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000
- Zuken eCADSTAR 2020 and 2021Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

Symbol and Footprint via SamacSys 713-1432/117-000/997-408

URL

Download

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Supported formats:

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



- 3D (stp)
- Altium
- CADSTAR
- Capture
- CircuitStudio
- CR-5000
- CR-8000
- DEHDL
- DesignSpark PCB
- DesignSpark PCB PRO
- DipTrace
- EAGLE
- Easy-PC
- EasyEDA
- eCADSTAR
- KiCad
- OrCAD_Allegro16
- PADS
- Proteus
- Pulsonix
- Quadcept
- SOLIDWORKS PCB
- TARGET 3001!
- xDX Designer
- Xpedition

PCB Component Libraries (EDA), PCB CAD Library SamacSys Electronic Component Search Engine

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 713-1432/117-000/997-408	URL	Download
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; 24-pole; black		

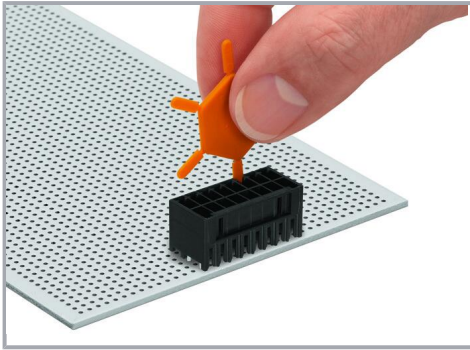
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Installation Notes

Coding



Coding a male header by inserting a coding pin.

Product family

MCS MINI HD

[Show all products from the family](#)

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