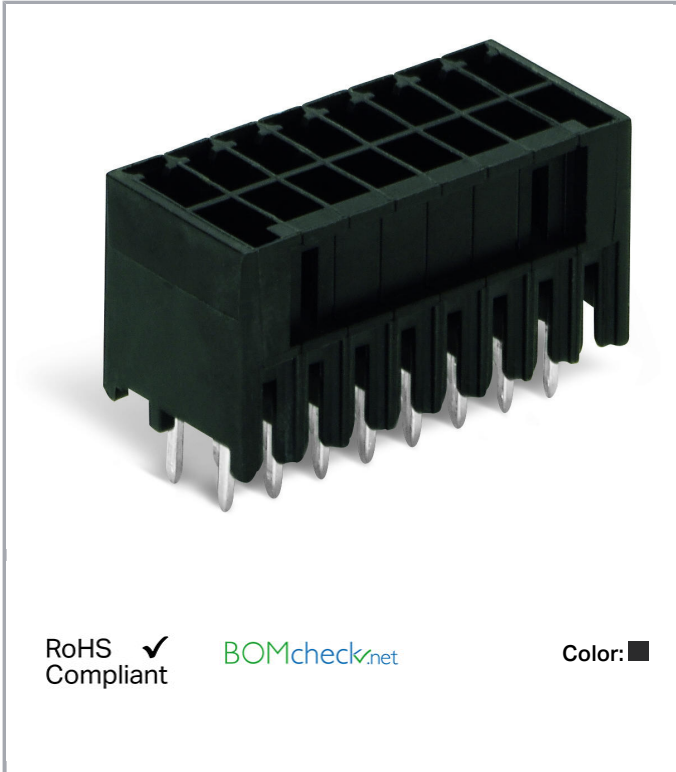


Data sheet | Item number: 713-1412/105-000

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 12-pole; black



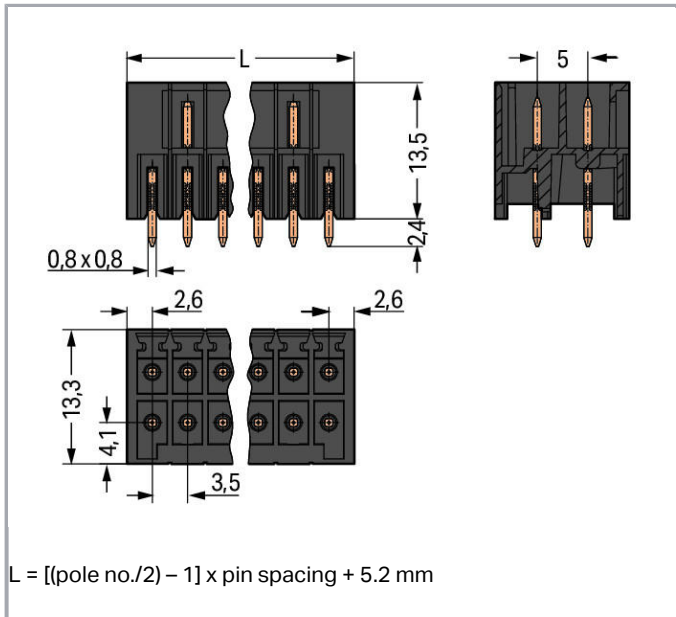
www.wago.com/713-1412/105-000



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 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

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

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Rated impulse voltage (II / 2)	2.5 kV
Rated current	10 A
Legend (ratings)	(III / 2) \triangleq 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	UL 1059

Approvals per CSA

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

Connection data

No. of poles	24
Total number of potentials	24
Number of connection types	1
Number of levels	2

Geometrical Data

Pin spacing	3.5 mm / 0.138 inch
Width	43.5 mm / 1.713 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 ^(+0.1) mm

Plug connection

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

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

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 _{Cu})
Contact plating	tin-plated
Fire load	0.127 MJ
Weight	6.1 g

Environmental Requirements


Limit temperature range	-60 ... +100 °C
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Commercial data

Product Group	3 (Multi Conn. System)
Packaging type	BOX
Country of origin	PL
GTIN	4050821155751
Customs Tariff No.	85366990990

Approvals / Certificates

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 1059	20190122- E45172

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

Counterpart



Item no.713-1112

1-conductor female plug; 100% protected against mismatching; 1.5 mm²; Pin spacing 3.5 mm; 24-pole; 1,50 mm²; blackwww.wago.com/713-1112

Compatible products

Coding

Item no.: 714-101
Coding key; orangewww.wago.com/714-101

Downloads

Documentation

Additional Information

Technical explanations	Apr 3, 2019	pdf 3.6 MB	Download
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CAD/CAE-Data

CAD data

2D/3D Models 713-1412/105-000	URL	Download
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PCB Design

Symbol and Footprint 713-1412/105-000	URL	Download
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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
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect

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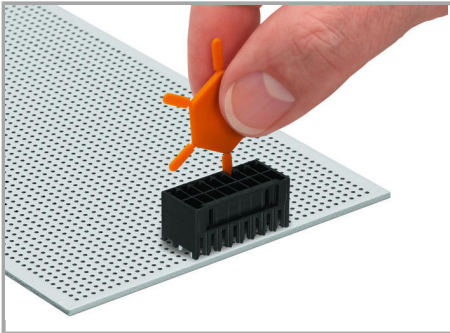
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- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

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

Installation Notes

Coding



Coding a male header by inserting a coding pin.

Product family

<i>MCS</i> MINI HD

[Learn more about the product family.](#)

[Show all products from the family](#)

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