

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

THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Threaded flange; Pin spacing 3.5 mm; 20-pole; black

www.wago.com/713-1430/117-000



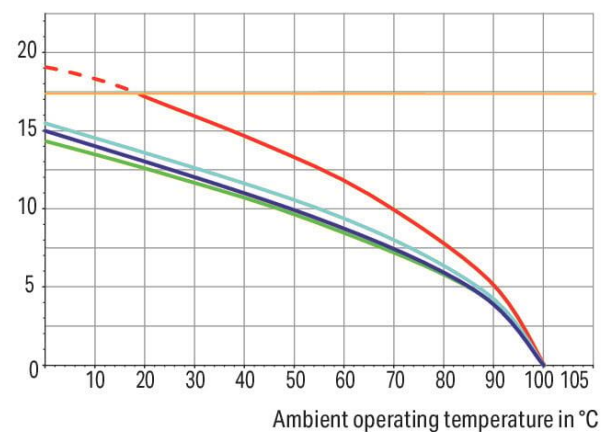
 Picture differs from the item.

Color: 

Derating Curve

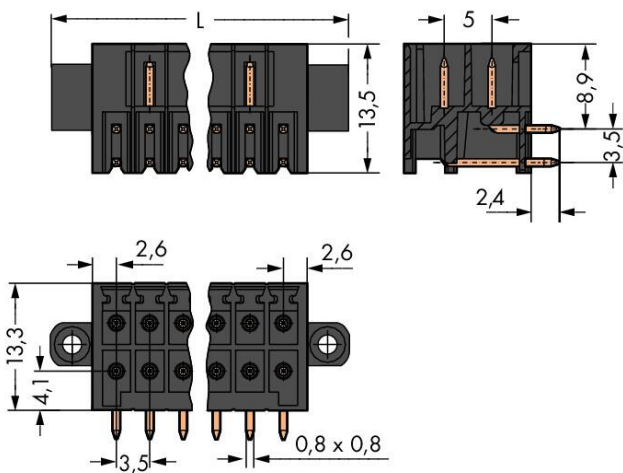
1-conductor female connector (713-1103) with
THT male header (713-1403)
Pin spacing: 3.5 mm / Conductor cross-section: 1.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 0.8

Current in A



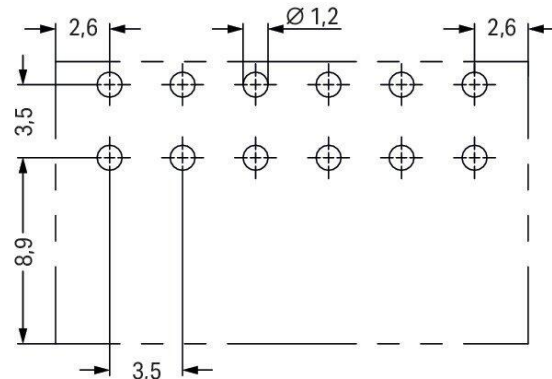
6-, 16-, 24-, 36-pole

Conductor rated current



Dimensions in mm

$L = [(pole\ no./2) - 1] \times pin\ spacing + 13.6\ mm$



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

WAGO GmbH & Co. KG

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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

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) ≙ Overvoltage category III / Pollution degree 2

Ratings per UL

Approvals per	UL 1059
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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	20
Number of connection types	1
Number of levels	2

Connection 1

Pole number	20
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Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	45.1 mm / 1.776 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

Mechanical Data

Variable coding	Yes
Anti-rotation protection	Yes

Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB

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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
Fire load	0.115 MJ
Weight	6.5 g
MSL per J-STD 020D	1

Environmental requirements

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

Commercial data

Product Group	3 (Multi Conn. System)
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)	20 pcs
Packaging type	box
Country of origin	PL

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GTIN	4050821156635
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)	33ed2c08-ffdc-4f75-a601-203a171613fc
SCIP notification number (Belgium)	f81b1862-1848-45f2-b223-d92819123623
SCIP notification number (Bulgaria)	3a5f0962-dd1f-46b1-a418-f83f28a84f31
SCIP notification number (Czech Republic)	28b60173-7df9-4a44-a2ce-a99bb2fafec9
SCIP notification number (Denmark)	46907e88-a105-4450-9579-307948e65d36
SCIP notification number (Finland)	137bf47f-041e-4689-ae12-c64c4353e074
SCIP notification number (France)	cda033d5-c965-410d-84ad-993543f373f3
SCIP notification number (Germany)	09d6300f-fa8d-40d7-b187-b49b6c569178
SCIP notification number (Hungary)	cf00f946-f829-4a59-a382-bbd5aee7b8c1
SCIP notification number (Italy)	4f882b68-8517-4b85-b760-b321727c405d
SCIP notification number (Netherlands)	ca1c81be-3a14-4776-83fc-ed3b26af4afe
SCIP notification number (Poland)	044ec710-2e7c-40ad-9f49-72e53b798991
SCIP notification number (Romania)	20fb15e5-476d-4bbb-86aa-7cb1cb980f9f
SCIP notification number (Sweden)	3be6a412-0222-406c-8633-9967913c5383

Approvals / Certificates

General approvals

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

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Counterpart



Item no. 713-1110/107-000

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 20-pole; 100% protected against mismatching; Screw flange; 1,50 mm²; black
www.wago.com/713-1110/107-000

Optional accessories

Coding

Coding



Item no.: 714-101

Coding key; orange

www.wago.com/714-101

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 713-1430/117-000	URL	Download
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PCB Design

Symbol and Footprint via Ultra Librarian 713-1430/117-000	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
- Altair
- Altium 6 to current version
- Autodesk Fusion 360
- Cadence Allegro

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- 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 713-1430/117-000

URL

Download

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:

- 3D (stp)
- Altium
- CADSTAR
- Capture
- CircuitStudio
- CR-5000
- CR-8000
- DEHDL
- DesignSpark PCB

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- 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

CAE data

ZUKEN Portal 713-1430/117-000	URL	Download
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Asset Administration Shell

Asset Administration Shell 713-1430/117-000	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 713-1430/117-000	URL	Download
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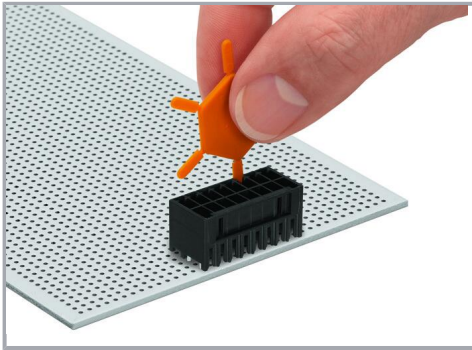
Installation Notes

Coding

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Coding a male header by inserting a coding pin.

Product family

MCS MINI HD

[Show all products from the family](#)

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