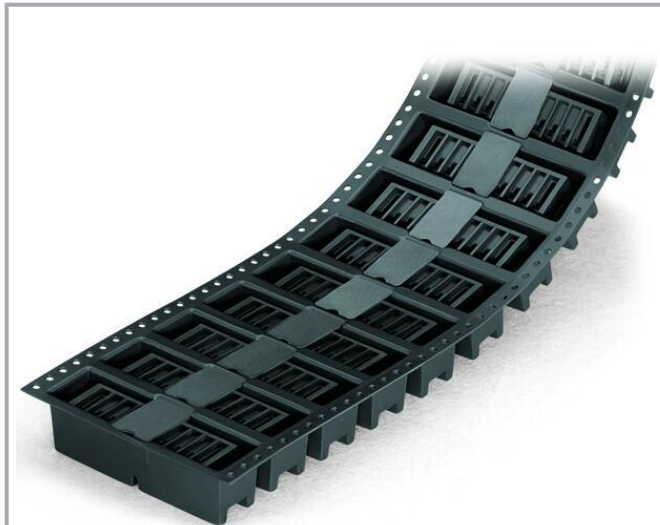


Data sheet | Item number: 734-163/105-604/997-405

THR male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; in tape-and-reel packaging; Pin spacing 3.5 mm; 3-pole; black

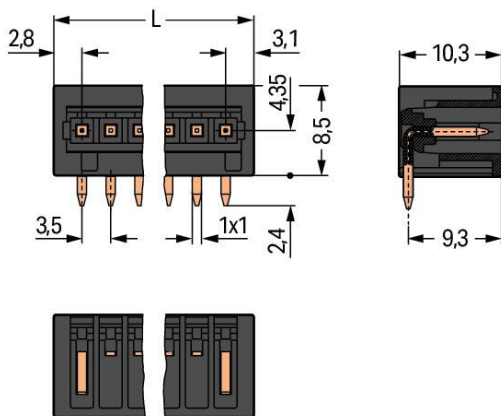
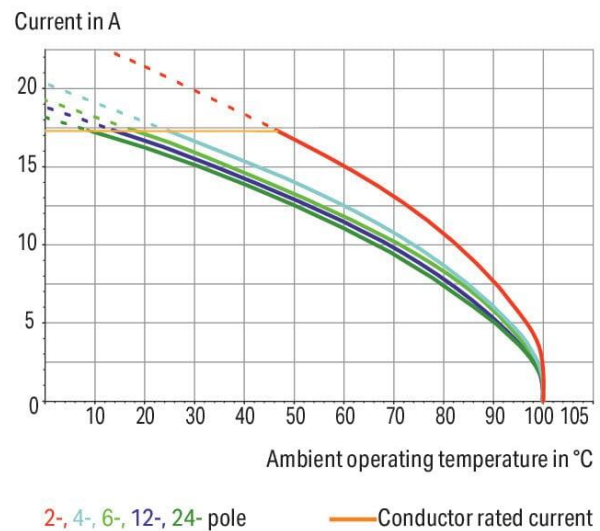
www.wago.com/734-163/105-604/997-405



 Picture differs from the item.

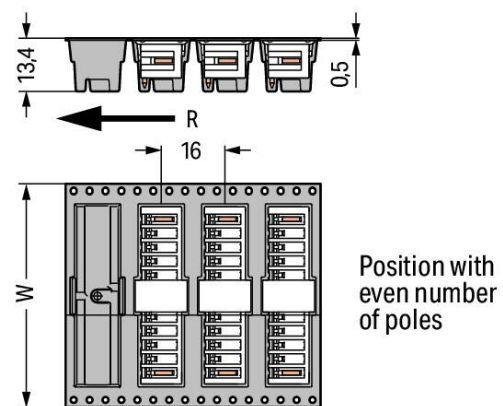
Color: 

Derating Curve
1-conductor female connector (734-102) with
THT male header (734-132)
Pin spacing: 3.5 mm / Conductor cross-section: 1.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 0.8



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 5.9 \text{ mm}$



Dimensions in mm

W = tape width

R = feed direction

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

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Hansastr. 27

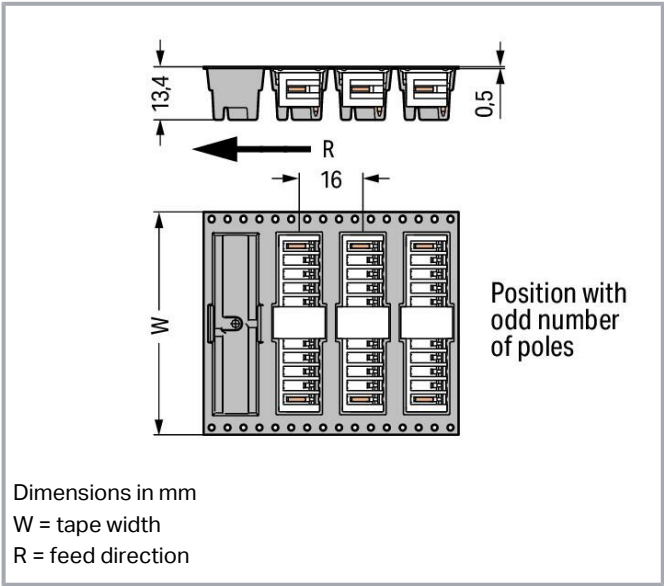
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Item description

- THR male headers for reflow soldering in SMT applications
- Available in tape-and-reel packaging for automated pick-and-place PCB assembly
- Optimal thermal penetration via pin enclosure design provides lower soldering temperatures
- 100% protected against mismatching
- Coding via coding fingers

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)	160 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)	320 V
Rated surge voltage (II/2)	2.5 kV
Rated current	10 A
Legend (ratings)	(III / 2) $\triangleq$ Overvoltage category III / Pollution degree 2

Ratings per UL

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	10 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A

Ratings per CSA

Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	10 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

Connection data

Total number of potentials	3
Number of connection types	1
Number of levels	1

Connection 1

Pole number	3
-------------	---

Physical data

Pin spacing	3.5 mm / 0.138 inches
-------------	-----------------------

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



Width	12.9 mm / 0.508 inches
Height	10.9 mm / 0.429 inches
Height from the surface	8.5 mm / 0.335 inches
Depth	10.3 mm / 0.406 inches
Solder pin length	2.4 mm
Solder pin dimensions	1 x 1 mm
Plated through-hole diameter (THR)	1.4 ^(+0.1) mm
Reel diameter of tape-and-reel packaging	330 mm
Tape width	32 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	none

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})

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

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Contact plating	Tin
Fire load	0.022 MJ
Weight	1 g
MSL per 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)	280 pcs
Packaging type	bag
Country of origin	DE
GTIN	4044918944991
Customs tariff number	85366930000

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CB DEKRA Certification B.V.	EN 61984	NL-54190
	KEMA/KEUR DEKRA Certification B.V.	EN 61984	71- 105522

Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	DNV DNV GL SE	-	TAE000016Z

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



Counterpart



Item no.734-103
1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 3-pole; 100% protected against mismatching; 1,50 mm²; light gray

www.wago.com/734-103

Optional accessories

Coding

Coding



Item no.: 734-159
Coding key; to be snapped above top level; black

www.wago.com/734-159

Downloads

Documentation

Additional Information

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

CAD/CAE-Data

CAE data

EPLAN Data Portal 734-163/105-604/997-405	URL	Download
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CAD data

2D/3D Models 734-163/105-604/997-405	URL	Download
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Asset Administration Shell

Asset Administration Shell 734-163/105-604/997-405	URL	Download
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PCB Design

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



[URL](#)

[Download](#)

Symbol and Footprint via Ultra Librarian 734-163/105-604/997-405

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 734-163/105-604/997-405

[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.

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Supported formats:

- 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 734-163/105-604/997-405	URL	Download
THR male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; in tape-and-reel packaging; Pin spacing 3.5 mm; 3-pole; black		

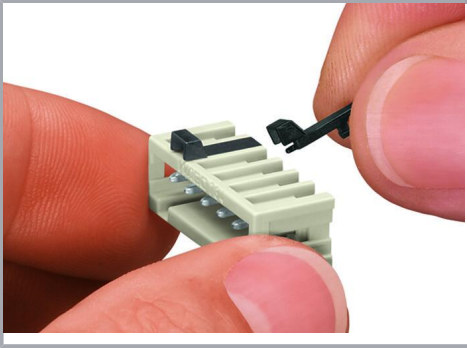
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Installation Notes

Coding



Coding a male header – fitting coding key(s).

Product family

MCS MINI

[Show all products from the family](#)

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

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