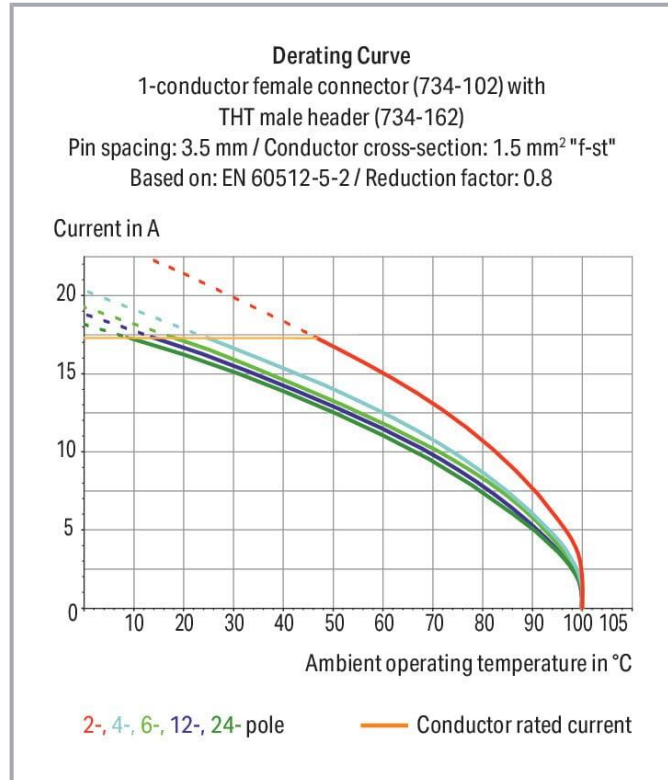


**Data sheet | Item number: 734-439**

THT double-deck male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.81 mm; 18-pole; orange

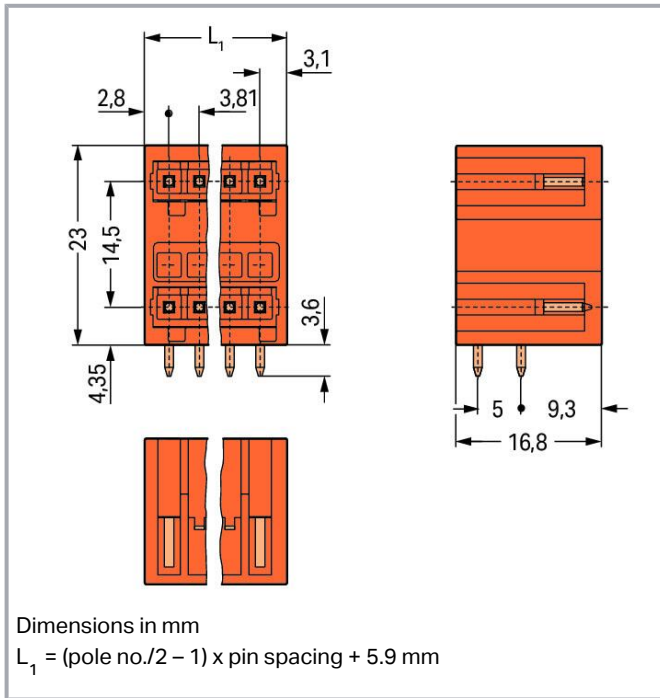
[www.wago.com/734-439](http://www.wago.com/734-439)



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

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



## Item description

- Horizontal or vertical PCB mounting via straight or angled solder pins
- 100% protected against mismatching; only mating halves with the same number of poles can be connected together
- 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  
 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) ≙ 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	18
Number of connection types	1
Number of levels	2

### Connection 1

Pole number	18
-------------	----

### Physical data

Pin spacing	3.81 mm / 0.15 inches
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Subject to changes. Please also observe the further product documentation!



Width	36.38 mm / 1.432 inches
Height	26.6 mm / 1.047 inches
Height from the surface	23 mm / 0.906 inches
Depth	16.8 mm / 0.661 inches
Solder pin length	3.6 mm
Solder pin dimensions	1 x 1 mm
Drilled hole diameter with tolerance	1.4 <sup>(+0.1)</sup> 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	THT
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	orange
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	Tin
Fire load	0.196 MJ

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

Weight	10.7 g
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### 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
ECCN	NO DATA
PU (SPU)	50 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918873314
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
	<b>CB</b> DEKRA Certification B.V.	EN 61984	NL-54190
	<b>CSA</b> DEKRA Certification B.V.	C22.2	1465035
	<b>KEMA/KEUR</b> DEKRA Certification B.V.	EN 61984	71- 105522
	<b>UL</b> Underwriters Laboratories Inc.	UL 1977	E 45171

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





UR  
Underwriters Laboratories Inc.

UL 1059

E45172



Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	<b>DNV</b> DNV GL SE	-	TAE000016Z
	<b>LR</b> Lloyds Register	IEC 61984	96/20035 (E5)

Counterpart






Item no. 734-209

1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.81 mm; 9-pole; 100% protected against mismatching; 1,50 mm²; orange

[www.wago.com/734-209](http://www.wago.com/734-209)

Optional accessories

Coding		
	<b>Item no.: 734-159</b> Coding key; to be snapped above top level; black	<a href="http://www.wago.com/734-159">www.wago.com/734-159</a>
	<b>Item no.: 734-400</b> Coding key; to be snapped above bottom level; light gray	<a href="http://www.wago.com/734-400">www.wago.com/734-400</a>
	<b>Item no.: 734-130</b> Coding key; to be snapped above top level; white	<a href="http://www.wago.com/734-130">www.wago.com/734-130</a>

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



## Downloads

### Documentation

#### Additional Information

Technical Section	2019 Apr 3	pdf	Download
Technical explanations		2.1 MB	

## CAD/CAE-Data

### CAD data

2D/3D Models 734-439	URL	Download
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### PCB Design

Symbol and Footprint via Ultra Librarian 734-439	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
- 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

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



- STL
- 3D STEP
- TARGET 3001!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000
- Zuken eCADSTAR 2020 and 2021 Zuken CR-5000 and CR-8000

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

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Symbol and Footprint via SamacSys 734-439

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
- DesignSpark PCB PRO
- DipTrace
- EAGLE
- Easy-PC
- EasyEDA
- eCADSTAR
- KiCad
- OrCAD\_Allegro16
- PADS
- Proteus
- Pulsonix
- Quadcept
- SOLIDWORKS PCB

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



- TARGET 3001!
- xDX Designer
- Xpedition

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

#### CAE data

ZUKEN Portal 734-439	<a href="#">URL</a>	<a href="#">Download</a>
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EPLAN Data Portal 734-439	<a href="#">URL</a>	<a href="#">Download</a>
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#### Asset Administration Shell

Asset Administration Shell 734-439	<a href="#">URL</a>	<a href="#">Download</a>
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### Environmental Product Compliance

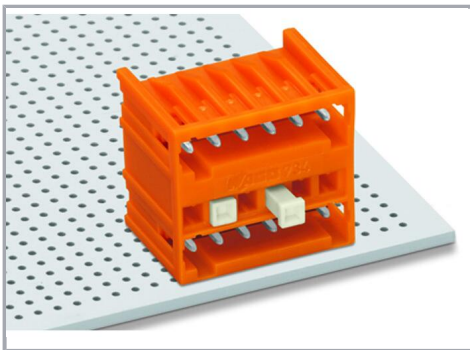
#### Compliance Search

Environmental Product Compliance 734-439	<a href="#">URL</a>	<a href="#">Download</a>
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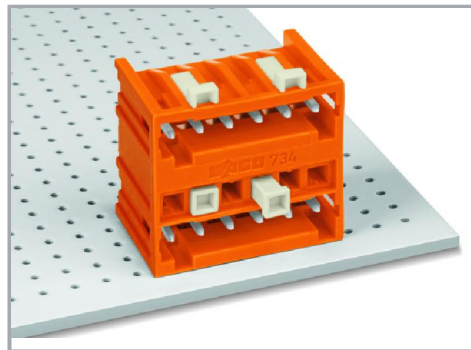
THT double-deck male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.81 mm; 18-pole; orange

### Installation Notes

#### Coding



Coding a THT double-deck male header – lower level.



Coding a THT double-deck male header.

### Product family

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



**MCS MINI**

[Show all products from the family](#)

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

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