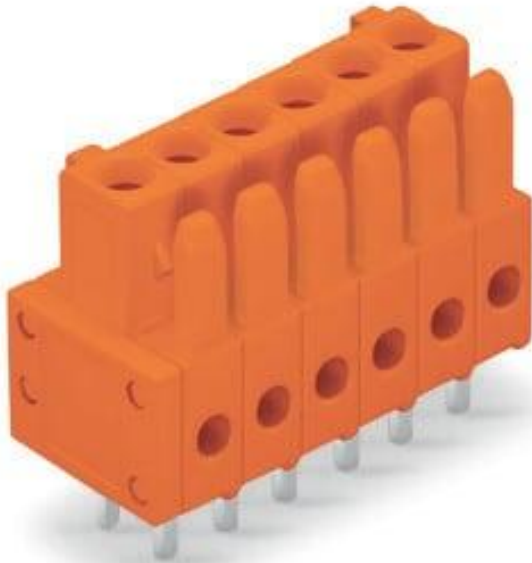


## Data sheet | Item number: 734-520

THT female header; straight; Pin spacing 3.81 mm; 20-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; orange

[www.wago.com/734-520](http://www.wago.com/734-520)



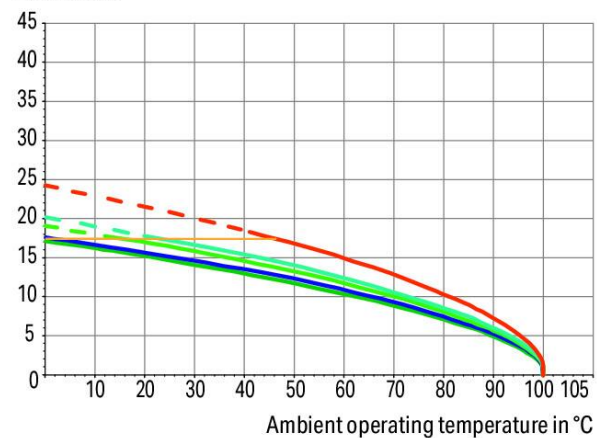
 Picture differs from the item.

Color: 

### Derating Curve

THT female header (734-532) with  
1-conductor male connector (734-302)  
Pin spacing: 3.5 mm / Conductor cross-section: 1.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 0.8

Current in A

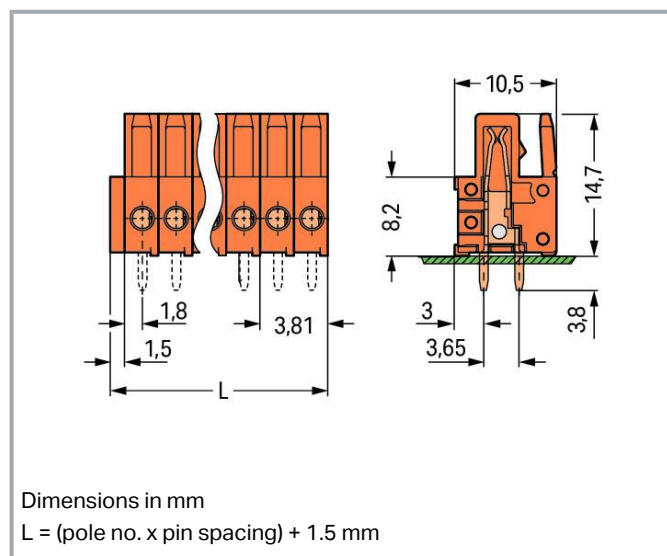


2-, 4-, 6-, 12-, 24- pole      — Conductor rated current

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

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## Item description

- Horizontal or vertical PCB mounting via straight or angled solder pins
- Integrated test ports for 2 mm Ø test plugs
- For board-to-board and board-to-wire connections
- Touch-proof PCB outputs
- Easy-to-identify inputs and outputs
- 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

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

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## 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

Connection points	20
Total number of potentials	20
Number of connection types	1
Number of levels	1

## Connection 1

Pole number	20
-------------	----

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



## Physical data

Pin spacing	3.81 mm / 0.15 inches
Width	77.7 mm / 3.059 inches
Height	18.5 mm / 0.728 inches
Height from the surface	14.7 mm / 0.579 inches
Depth	10.5 mm / 0.413 inches
Solder pin length	3.8 mm
Solder pin dimensions	0.9 x 0.9 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)	Female connector/socket
Connector (connection type)	for PCB
Mismating protection	Yes
Plugging without loss of pin spacing	No
Mating direction to the PCB	90 °
Locking of plug-in connection	none

## PCB contact

PCB contact	THT
Solder pin arrangement	over the entire female 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

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Contact material	Copper alloy
Contact plating	Tin
Fire load	0.201 MJ
Weight	11.2 g

### 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)	25 pcs
Packaging type	box
Country of origin	DE
GTIN	4045454120443
Customs tariff number	85366990990

### Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------

### 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

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UL  
Underwriters Laboratories Inc.

UL 1977

E 45171





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.734-350

1-conductor male connector; CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.81 mm; 20-pole; 100% protected against mismatching; 1,50 mm<sup>2</sup>; orange

[www.wago.com/734-350](http://www.wago.com/734-350)



#### Item no.734-350/019-000

1-conductor male connector; CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.81 mm; 20-pole; 100% protected against mismatching; clamping collar; 1,50 mm<sup>2</sup>; orange

[www.wago.com/734-350/019-000](http://www.wago.com/734-350/019-000)



#### Item no.734-250

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.81 mm; 20-pole; orange

[www.wago.com/734-250](http://www.wago.com/734-250)



#### Item no.734-250/046-000

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.81 mm; 20-pole; orange

[www.wago.com/734-250/046-000](http://www.wago.com/734-250/046-000)



#### Item no.734-280

THT male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.81 mm; 20-pole; orange

[www.wago.com/734-280](http://www.wago.com/734-280)

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**Downloads****Documentation****Additional Information**

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2.1 MB[Download](#)**CAD/CAE-Data****CAD data**

2D/3D Models 734-520

[URL](#)[Download](#)**CAE data**

EPLAN Data Portal 734-520

[URL](#)[Download](#)

ZUKEN Portal 734-520

[URL](#)[Download](#)**PCB Design**

Symbol and Footprint via Ultra Librarian 734-520

[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:**

- 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

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- 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

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Symbol and Footprint via SamacSys 734-520

URL

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- 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

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- Pulsonix
- Quadcept
- SOLIDWORKS PCB
- TARGET 3001!
- xDX Designer
- Xpedition

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

Asset Administration Shell

Asset Administration Shell 734-520	URL	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 734-520	URL	Download
THT female header; straight; Pin spacing 3.81 mm; 20-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; orange		

Installation Notes

Product family

MCS MINI  
[Show all products from the family](#)

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