

**Data sheet | Item number: 734-509**

THT female header; straight; Pin spacing 3.81 mm; 9-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; orange

[www.wago.com/734-509](http://www.wago.com/734-509)



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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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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
- 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

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



## 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

### 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

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



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

### Connection data

Connection points	9
Total number of potentials	9
Number of connection types	1
Number of levels	1

### Connection 1

Pole number	9
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### Physical data

Pin spacing	3.81 mm / 0.15 inches
Width	35.79 mm / 1.409 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

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



## 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
Contact material	Copper alloy
Contact plating	Tin
Fire load	0.08 MJ
Weight	5.5 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)	50 pcs
Packaging type	box
Country of origin	DE
GTIN	4045454120337
Customs tariff number	85366990990

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## 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
	<b>UL</b> Underwriters Laboratories Inc.	UL 1977	E 45171
	<b>UR</b> Underwriters Laboratories Inc.	UL 1059	E45172

### Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAE000016Z
	<b>LR</b> Lloyds Register	IEC 61984	96/20035 (E5)

## Counterpart

<b>Item no.734-339</b> 1-conductor male connector; CAGE CLAMP®; 1.5 mm <sup>2</sup> ; Pin spacing 3.81 mm; 9-pole; 100% protected against mismatching; 1,50 mm <sup>2</sup> ; orange	<a href="http://www.wago.com/734-339">www.wago.com/734-339</a>
<b>Item no.734-339/019-000</b> 1-conductor male connector; CAGE CLAMP®; 1.5 mm <sup>2</sup> ; Pin spacing 3.81 mm; 9-pole; 100% protected against mismatching; clamping collar; 1,50 mm <sup>2</sup> ; orange	<a href="http://www.wago.com/734-339/019-000">www.wago.com/734-339/019-000</a>
<b>Item no.734-239</b> THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismatching; Pin spacing 3.81 mm; 9-pole; orange	<a href="http://www.wago.com/734-239">www.wago.com/734-239</a>
<b>Item no.734-269</b> THT male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.81 mm; 9-pole; orange	<a href="http://www.wago.com/734-269">www.wago.com/734-269</a>
<b>Item no.734-239/046-000</b>	<a href="http://www.wago.com/734-239/046-000">www.wago.com/734-239/046-000</a>

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## Downloads

### Documentation

#### Additional Information

2019 年4月3日	pdf 2.0 MB	Download
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## CAD/CAE-Data

### CAD data

2D/3D Models 734-509	URL	Download
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### CAE data

EPLAN Data Portal 734-509	URL	Download
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ZUKEN Portal 734-509	URL	Download
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## PCB Design

Symbol and Footprint 734-509	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
- 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

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- 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

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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 734-509	URL	Download
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## Installation Notes

### Product family

#### MCS MINI

[Show all products from the family](#)

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