

**Data sheet | Item number: 734-180**

THT male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 20-pole; light gray

[www.wago.com/734-180](http://www.wago.com/734-180)



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
- 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

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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

3.8 mm pin projection for male headers with straight solder pins

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) $\hat{=}$ 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

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### Connection data

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

### Connection 1

Pole number	20
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### Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	72.4 mm / 2.85 inches
Height	12.3 mm / 0.484 inches
Height from the surface	8.5 mm / 0.335 inches
Depth	10.3 mm / 0.406 inches
Solder pin length	3.8 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

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



## Material Data

Note (material data)

Information on material specifications can be found here

Color	light gray
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	0.074 MJ
Weight	5.1 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	4044918872478
Customs tariff number	85366930000

## Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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## Counterpart

### Item no.734-120

1-conductor female connector; CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 20-pole; 100% protected against mismatching; 1,50 mm<sup>2</sup>; light gray

[www.wago.com/734-120](http://www.wago.com/734-120)

### Item no.2734-120

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1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 20-pole; 100% protected against mismatching; 1,50 mm²; light gray	<a href="http://www.wago.com/2734-120">www.wago.com/2734-120</a>
<b>Item no.2734-120/027-000</b> 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 20-pole; 100% protected against mismatching; clamping collar; 1,50 mm²; light gray	<a href="http://www.wago.com/2734-120/027-000">www.wago.com/2734-120/027-000</a>
<b>Item no.2734-120/037-000</b> 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 20-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray	<a href="http://www.wago.com/2734-120/037-000">www.wago.com/2734-120/037-000</a>
<b>Item no.734-120/037-000</b> 1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 20-pole; 100% protected against mismatching; Lateral locking levers; 1,50 mm²; light gray	<a href="http://www.wago.com/734-120/037-000">www.wago.com/734-120/037-000</a>
<b>Item no.734-120/037-000/036-000</b> 1-conductor female connector; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 20-pole; 100% protected against mismatching; Lateral locking levers; Strain relief plate; 1,50 mm²; light gray	<a href="http://www.wago.com/734-120/037-000/036-000">www.wago.com/734-120/037-000/036-000</a>
<b>Item no.734-550</b> THT female header; angled; Pin spacing 3.5 mm; 20-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; light gray	<a href="http://www.wago.com/734-550">www.wago.com/734-550</a>
<b>Item no.734-480</b> THT female header; straight; Pin spacing 3.5 mm; 20-pole; 100% protected against mismatching; 0.9 x 0.9 mm solder pin; light gray	<a href="http://www.wago.com/734-480">www.wago.com/734-480</a>
<b>Item no.734-480/037-000</b> THT female header; straight; Pin spacing 3.5 mm; 20-pole; 100% protected against mismatching; Locking lever; 0.9 x 0.9 mm solder pin; light gray	<a href="http://www.wago.com/734-480/037-000">www.wago.com/734-480/037-000</a>
<b>Item no.734-550/037-000</b> THT female header; angled; Pin spacing 3.5 mm; 20-pole; 100% protected against mismatching; Locking lever; 0.9 x 0.9 mm solder pin; light gray	<a href="http://www.wago.com/734-550/037-000">www.wago.com/734-550/037-000</a>

## Optional accessories

<b>Coding</b>	
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.: 734-130</b> Coding key; to be snapped above top level; white	<a href="http://www.wago.com/734-130">www.wago.com/734-130</a>

## Downloads

### Documentation

#### Additional Information

2019 年4月3日

pdf  
2.0 MB

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## CAD/CAE-Data

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#### CAD data

2D/3D Models 734-180	<a href="#">URL</a>	<a href="#">Download</a>
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#### CAE data

EPLAN Data Portal 734-180	<a href="#">URL</a>	<a href="#">Download</a>
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ZUKEN Portal 734-180	<a href="#">URL</a>	<a href="#">Download</a>
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#### PCB Design

Symbol and Footprint 734-180	<a href="#">URL</a>	<a href="#">Download</a>
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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
- 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 734-180

URL

Download

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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](#)

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