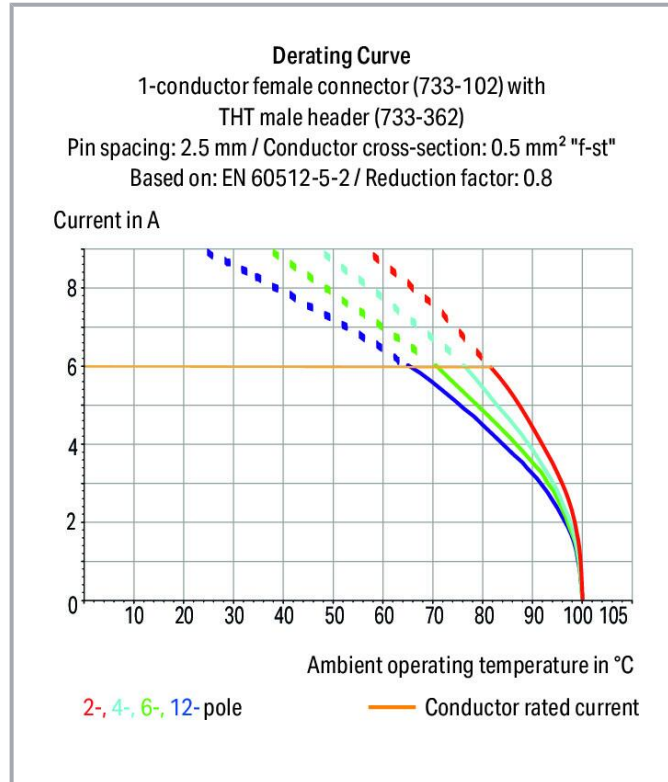
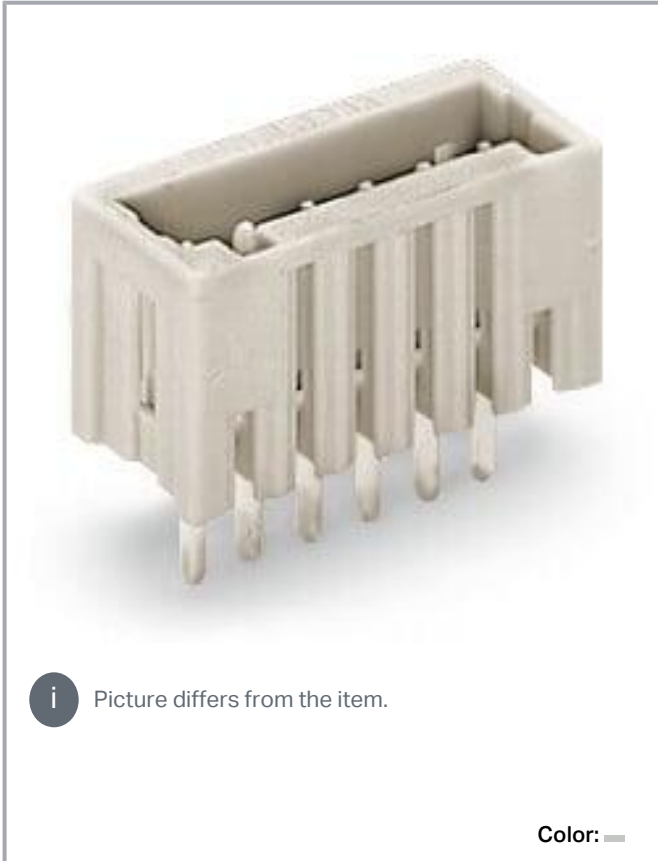


**Data sheet | Item number: 733-333**

THT male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 2.5 mm; 3-pole; light gray

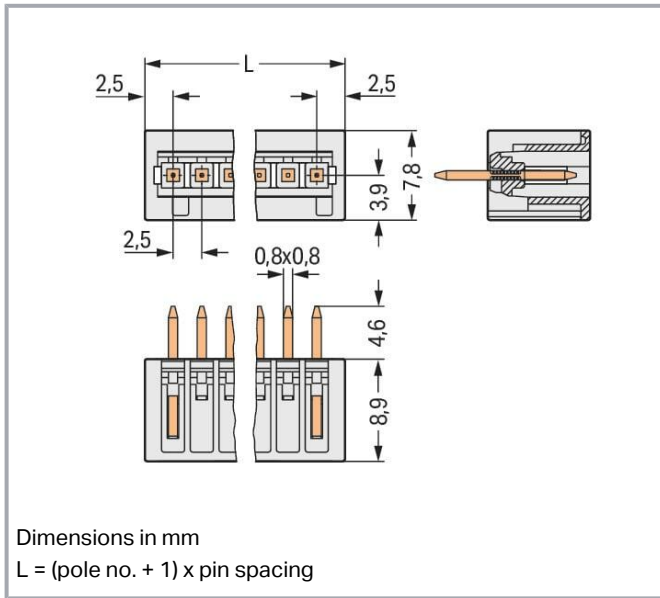
[www.wago.com/733-333](http://www.wago.com/733-333)



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

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## Item description

- 100% protected against mismatching; only mating halves with the same pole number can be connected
- 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  
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

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Nominal voltage (III/3)	80 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	6 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)	150 V
Rated current UL (Use Group B)	4 A

### Ratings per CSA

Approvals per	CSA
Rated voltage CSA (Use Group B)	150 V
Rated current CSA (Use Group B)	4 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	2.5 mm / 0.098 inches
Width	10 mm / 0.394 inches
Height	13.5 mm / 0.531 inches
Height from the surface	8.9 mm / 0.35 inches
Depth	7.8 mm / 0.307 inches
Solder pin length	4.6 mm
Solder pin dimensions	0.8 x 0.8 mm
Drilled hole diameter with tolerance	1.1 <sup>(+0.1)</sup> mm

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



## 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	90 °

## 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	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	0.009 MJ
Weight	0.5 g

## Environmental requirements

Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C

## Commercial data

Product Group	3 (Multi Conn. System)
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Subject to changes. Please also observe the further product documentation!





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)	200 pcs
Packaging type	box
Country of origin	CN
GTIN	4050821035602
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
	CCA DEKRA Certification B.V.	EN 61984	2169534.01
	CCA DEKRA Certification B.V.	IEC 61984	NL-31141
	CSA DEKRA Certification B.V.	C22.2	1465035
	UL UL International Germany GmbH	UL 1977	E45171
	UL Underwriters Laboratories Inc.	UL 1059	E45172

#### Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	Railway	-	Railway




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





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Ready



## Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	-	19- HG1869876- PDA
	<b>DNV</b> DNV GL SE	-	TAE000016Z
	<b>LR</b> Lloyds Register	IEC 61984	96/20035 (E5)

## Counterpart

	<b>Item no.733-103</b> 1-conductor female connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 3-pole; 100% protected against mismatching; 0,50 mm²; light gray	<a href="http://www.wago.com/733-103">www.wago.com/733-103</a>
	<b>Item no.733-103/037-000</b> 1-conductor female connector; CAGE CLAMP®; 0.5 mm²; Pin spacing 2.5 mm; 3-pole; 100% protected against mismatching; Lateral locking levers; 0,50 mm²; light gray	<a href="http://www.wago.com/733-103/037-000">www.wago.com/733-103/037-000</a>

## Optional accessories

Coding		
Coding		
	<b>Item no.: 733-330</b> Coding key; snap-on type; white	<a href="http://www.wago.com/733-330">www.wago.com/733-330</a>
	<b>Item no.: 733-331</b> Coding key; snap-on type; black	<a href="http://www.wago.com/733-331">www.wago.com/733-331</a>

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**Downloads**

**Documentation**

**Additional Information**

Technical Section Technical explanations	2019 Apr 3	pdf 2.1 MB	Download
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**CAD/CAE-Data**

**CAD data**

2D/3D Models 733-333	URL	Download
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**CAE data**

EPLAN Data Portal 733-333	URL	Download
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ZUKEN Portal 733-333	URL	Download
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**PCB Design**

Symbol and Footprint via Ultra Librarian 733-333	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

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



- 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

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Symbol and Footprint via SamacSys 733-333

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

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

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

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#### Asset Administration Shell

Asset Administration Shell 733-333	<a href="#">URL</a>	<a href="#">Download</a>
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#### Environmental Product Compliance

##### Compliance Search

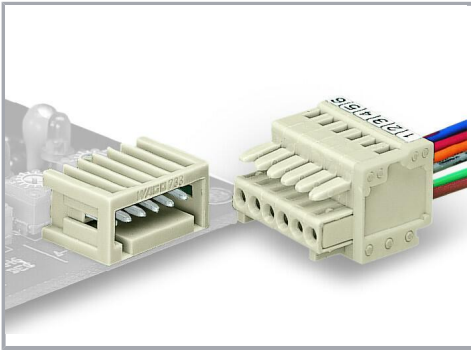
Environmental Product Compliance 733-333 THT male header; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Pin spacing 2.5 mm; 3-pole; light gray	<a href="#">URL</a>	<a href="#">Download</a>
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#### Installation Notes

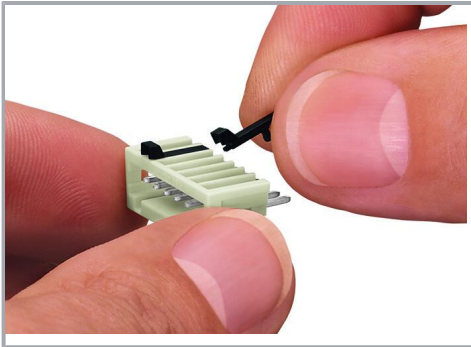
##### Mismatching protection

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



Male headers and female connectors are 100% protected against mismatching. Only mating halves with the same pole number can be connected.

### Coding



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

### Product family

**MCS MICRO**

[Show all products from the family](#)

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