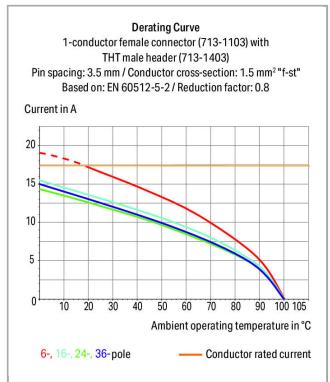
THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismating; Pin spacing 3.5 mm; 2 x 9-pole; black



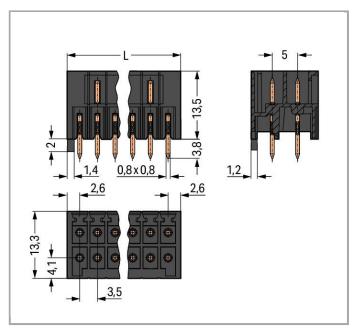
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 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 





## Item description

- Male headers may be mounted horizontally or vertically via straight or angled solder pins
- Header housing is molded of THT-compatible insulation material for lead-free reflow soldering
- Separated pin slots prevent damage and make the headers touch-proof when unplugged
- 100% protected against mismating
- Coding pins available

### Safety information 1:

The MULTI CONNECTION SYSTEM (MCS) is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS Connectors shall 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.

#### Data

#### Electrical data

### Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 60664-1
Rated 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

 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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Rated voltage (II / 2)	250 V
Rated impulse voltage (II / 2)	2.5 kV
Rated current	10 A
Legend (ratings)	(III / 2) ≙ Overvoltage category III / Pollution degree 2

# Approvals per UL 1059

Rated voltage UL (Use Group B)	150 V
Rated current UL (Use Group B)	10 A
Rated voltage UL (Use Group C)	50 V
Rated current UL (Use Group C)	10 A
Approvals per	UL 1059

# Approvals per CSA

Rated voltage CSA (Use Group B)	150 V
Rated current CSA (Use Group B)	12 A

#### Connection data

No. of poles	18
Total number of potentials	18
Number of connection types	1
Number of levels	2

### **Geometrical Data**

Pin spacing	3.5 mm / 0.138 inch
Width	33 mm / 1.299 inch
Height	17.3 mm / 0.681 inch
Height from the surface	13.5 mm / 0.531 inch
Depth	13.3 mm / 0.524 inch
Solder pin length	3.8 mm
Solder pin dimensions	0.8 x 0.8 mm
Drilled hole diameter (tolerance)	1.2 <sup>(+0.1)</sup> mm

# Plug connection

Contact type (pluggable connector)	Male connector/plug
Connector connection type	for PCBs
Mismating protection	Yes

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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Mating direction to the PCB	90°

### **PCB** contact

PCB contact	ТНТ
Solder pin arrangement	over the entire male connector, in line
Number of solder pins per potential	1

#### **Material Data**

Color	black
Material group	I
Insulating material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated
Fire load	0.098 MJ
Weight	4.7 g

### **Environmental Requirements**

Limit temperature range	-60 +100 °C	
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### Commercial data

Product Group	3 (Multi Conn. System)
Packaging type	BOX
Country of origin	PL
GTIN	4045454667412
Customs Tariff No.	85366990990

# Approvals / Certificates

# **Country specific Approvals**

			Certificate
Logo	Approval	Additional Approval Text	name
	CSA	C22.2 No. 158	2315087
(SA	DEKRA Certification B.V.		

### **UL-Approvals**

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

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LogoApprovalAdditional Approval TextCertificate nameULUL 105920190122-



Underwriters Laboratories Inc.

Counterpart



#### Item no.713-1109

1-conductor female plug; 100% protected against mismating; 1.5 mm²; Pin spacing 3.5 mm; 18-pole; 1,50 mm²; black

www.wago.com/713-1109

E45172

Compatible products

Coding

Item no.: 714-101 Coding key; orange

www.wago.com/714-101

**Downloads** 

**Documentation** 

**Additional Information** 

Technical explanations

Apr 3, 2019

pdf 3.6 MB Download

CAD/CAE-Data

**CAD** data

2D/3D Models 713-1469

URL

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**PCB** Design

Symbol and Footprint 713-1469

URL

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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

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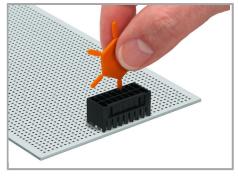


- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, 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

#### **Installation Notes**

# Coding



Coding a male header by inserting a coding pin.

# **Product family**

 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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<i>MCS</i> MINI HD Learn more about the product family.

Show all products from the family

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