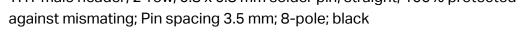
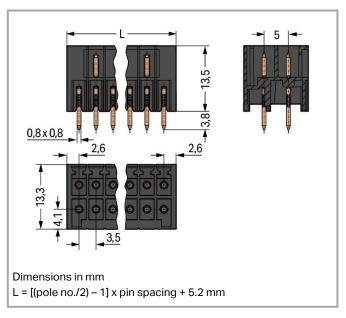
THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected

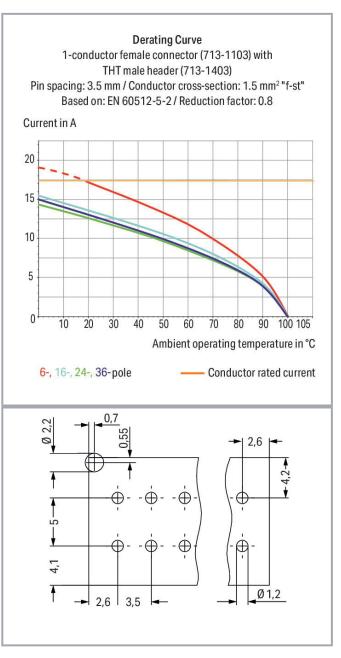


www.wago.com/713-1404









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 | Web: www.wago.com

www.wago.com/713-1404



# 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 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 Other solder pin lengths 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)	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)	250 V
Rated surge voltage (II/2)	2.5 kV
Rated current	10 A
Legend (ratings)	(III / 2) ≙ Overvoltage category III / Pollution degree 2

# Ratings per UL

Approvals per UL 1059

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 | Web: www.wago.com Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

www.wago.com/713-1404



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

# Ratings per CSA

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

## Connection data

Total number of potentials	8
Number of connection types	1
Number of levels	2

## Connection 1

Pole number 8	
---------------	--

# Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	15.5 mm / 0.61 inches
Height	17.3 mm / 0.681 inches
Height from the surface	13.5 mm / 0.531 inches
Depth	13.3 mm / 0.524 inches
Solder pin length	3.8 mm
Solder pin dimensions	0.8 x 0.8 mm
Drilled hole diameter with tolerance	1.2 <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

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 | Web: www.wago.com Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

www.wago.com/713-1404



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	ТНТ
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	black
Material group	
Insulation material	Polyphthalamide (PPA GF)
Flammability class per UL94	Vo
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	Tin
Fire load	0.05 MJ
Weight	2.3 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
ECCN	NO DATA
PU (SPU)	50 pcs
Packaging type	box
Country of origin	PL

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 | Web: www.wago.com Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.



GTIN	4045454699994
Customs tariff number	85366930000

# **Environmental Product Compliance**

**RoHS Compliance Status** Compliant, No Exemption

## Approvals / Certificates

#### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CB DEKRA Certification B.V.	IEC 61984	NL- 102427
<b>(1)</b>	CSA CSA Group	C22.2	2315087
<b>⋉</b> EMA	KEMA/KEUR DEKRA Certification B.V.	EN 61984	71- 126089



**I**\EUR

UR

Underwriters Laboratories Inc.

UL 1059

### Counterpart



#### Item no.713-1104

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 8-pole; 100% protected against mismating; 1,50 mm<sup>2</sup>; black

www.wago.com/713-1104

E45172



## Item no.713-1104/000-047

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 8-pole; 100% protected against mismating; direct marking; 1,50 mm²; black

www.wago.com/713-1104/000-047



## Item no.713-1104/000-9037

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 8-pole; 100% protected against mismating; direct marking; 1,50 mm<sup>2</sup>; black

www.wago.com/713-1104/000-9037



# Item no.713-1104/032-047

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 8-pole; 100% protected against mismating; Strain relief plate; direct marking; 1,50 mm²; black

www.wago.com/713-1104/032-047

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 | Web: www.wago.com

www.wago.com/713-1404





#### Item no.713-1104/032-9037

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 8-pole; 100% protected 1104/032-9037 against mismating; Strain relief plate; direct marking; 1,50 mm²; black

www.wago.com/713-

## Optional accessories

#### Coding

Coding



Item no.: 714-101 Coding key; orange

www.wago.com/714-101

#### **Downloads**

## **Documentation**

#### **Additional Information**

2019 年4月3日 **Technical Section** pdf Download 2.1 MB Technical explanations

## CAD/CAE-Data

### CAD data

2D/3D Models 713-1404 **URL** Download

### **PCB** Design

Symbol and Footprint via Ultra Librarian 713-1404

**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

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 | Web: www.wago.com

www.wago.com/713-1404



- 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
- Zuken eCADSTAR 2020 and 2021Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

Symbol and Footprint via SamacSys 713-1404

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

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 | Web: www.wago.com Do you have any questions about our products? We are always happy to take your call at +49 (571) 887-44222.

URL

Download

www.wago.com/713-1404



- EasyEDA
- eCADSTAR
- KiCad
- OrCAD\_Allegro16
- PADS
- Proteus
- Pulsonix
- Quadcept
- SOLIDWORKS PCB
- TARGET 3001!
- xDX Designer
- Xpedition

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

#### **CAE** data

ZUKEN Portal 713-1404	URL	Download
Asset Administration Shell		
Asset Administration Shell 713-1404	URL	Download

## **Environmental Product Compliance**

Compliance Search

Environmental Product Compliance 713-1404 THT male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismating; Pin spacing 3.5 mm; 8-pole; black URL

Download

## **Installation Notes**

Coding

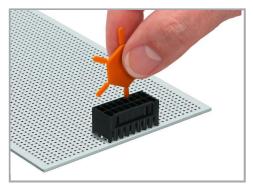
Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG Hansastr. 27 32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169 Email: info.de@wago.com | Web: www.wago.com

www.wago.com/713-1404





Coding a male header by inserting a coding pin.

# **Product family**

MCS MINI HD
Show all products from the family

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

Phone: +49571 887-0 | Fax: +49571 887-169 Email: info.de@wago.com | Web: www.wago.com