

# Data Sheet | Item Number: 713-1431/105-000

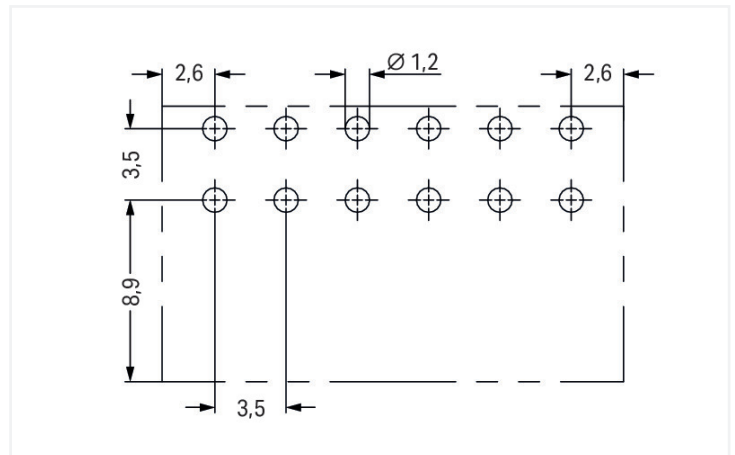
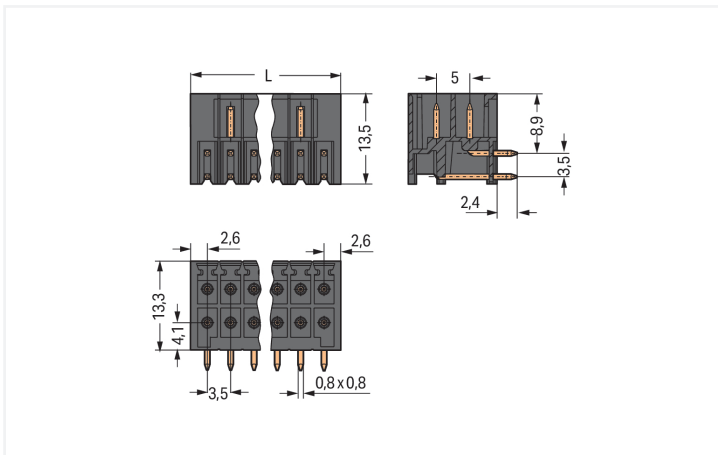
THR male header, 2-row; 0.8 x 0.8 mm solder pin; angled; 100% protected against mismatching; Pin spacing 3.5 mm; 22-pole; black

<https://www.wago.com/713-1431/105-000>



Color: ■ black

Similar to illustration



Dimensions in mm

$$L = [(pole\ no./2) - 1] \times pin\ spacing + 5.2\ mm$$

Male connector, 713 Series, with 3.5 mm pin spacing

This male connector (item number 713-1431/105-000) is designed for hassle-free electrical installations. Dimensions: (40 x 15.7 x 13.5) mm (width x height x depth).

The contact surface is coated with tin. The pcb connector is designed for THR soldering.

## 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 60664-1			Approvals per	UL 1059		
Overvoltage category	III	III	II	Use group	B	C	D
Pollution degree	3	2	2	Rated voltage	150 V	50 V	-
Nominal voltage	80 V	160 V	250 V	Rated current	10 A	10 A	-
Rated impulse withstand voltage	2.5 kV	2.5 kV	2.5 kV				
Rated current	10 A	10 A	10 A				

Approvals per	CSA		
Use group	B	C	D
Rated voltage	150 V	-	-
Rated current	12 A	-	-

## Connection Data

Total number of potentials	22	<b>Connection 1</b>	
Number of connection types	1	Pole number	22
Number of levels	2		

## Physical data

Pin spacing	3.5 mm / 0.138 inches
Width	40.2 mm / 1.583 inches
Height	15.7 mm / 0.618 inches
Height from the surface	13.3 mm / 0.524 inches
Depth	13.5 mm / 0.531 inches
Solder pin length	2.4 mm
Solder pin dimensions	0.8 x 0.8 mm
Plated through-hole diameter (THR)	1.3 <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
Mating direction to the PCB	0°

### PCB contact

PCB contact	THR
Solder pin arrangement	over the entire male connector (in-line)
Number of solder pins per potential	1

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	black
Material group	I
Insulation material (main housing)	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact Plating	Tin
Fire load	0.118 MJ
Weight	6.5 g
MSL per J-STD 020D	1

### Environmental requirements

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

### Commercial data

Product Group	3 (Multi Conn. System)
PU (SPU)	25 pcs
Packaging type	Box
Country of origin	PL
GTIN	4050821157182
Customs tariff number	85366930000

### Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-44-04-02
eCl@ss 9.0	27-44-04-02
ETIM 9.0	EC002637
ETIM 10.0	EC002637
ECCN	NO US CLASSIFICATION

**Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption
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**Approvals / Certificates**

**General approvals**



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-102427
CSA CSA Group	C22.2	2315087
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-133740

**Downloads**

**Environmental Product Compliance**

<b>Compliance Search</b>	
Environmental Product Compliance 713-1431/105-000	<a href="#">↓</a>

**Documentation**

<b>Additional Information</b>			
Technical Section	03.04.2019	pdf 2027.26 KB	<a href="#">↓</a>
		pdf 535.32 KB	<a href="#">↓</a>

**CAD/CAE-Data**

<b>CAD data</b>	
2D/3D Models 713-1431/105-000	<a href="#">↓</a>

<b>CAE data</b>	
ZUKEN Portal 713-1431/105-000	<a href="#">↓</a>

**PCB Design**

Symbol and Footprint via SamacSys 713-1431/105-000	<a href="#">↓</a>
Symbol and Footprint via Ultra Librarian 713-1431/105-000	<a href="#">↓</a>

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Female connector/socket



**Item No.:** [713-1111](#)

1-conductor female connector, 2-row; CA-GE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 22-pole; 100% protected against mismatching; black

## 1.2 Optional Accessories

### 1.2.1 Coding

#### 1.2.1.1 Coding



**Item No.:** [714-101](#)

Coding key; orange

## Installation Notes

### Coding



Coding a male header by inserting a coding pin.