

**Data Sheet | Item Number: 713-1417/116-000/997-409**

THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Levers; in tape-and-reel packaging; Pin spacing 3.5 mm; 34-pole; black

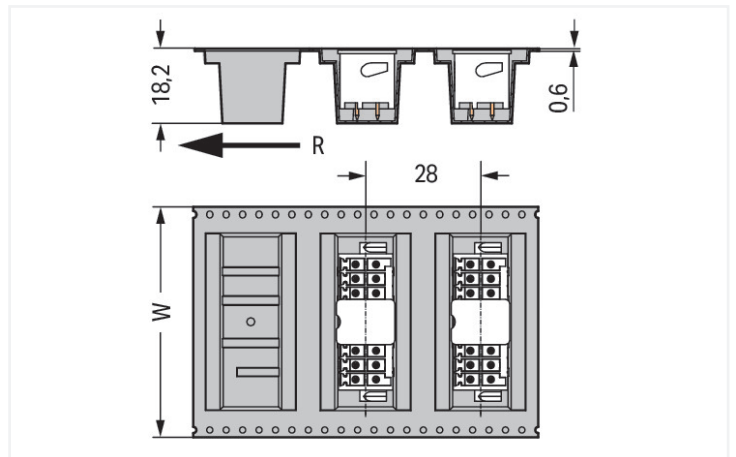
<https://www.wago.com/713-1417/116-000/997-409>



Color: ■ black

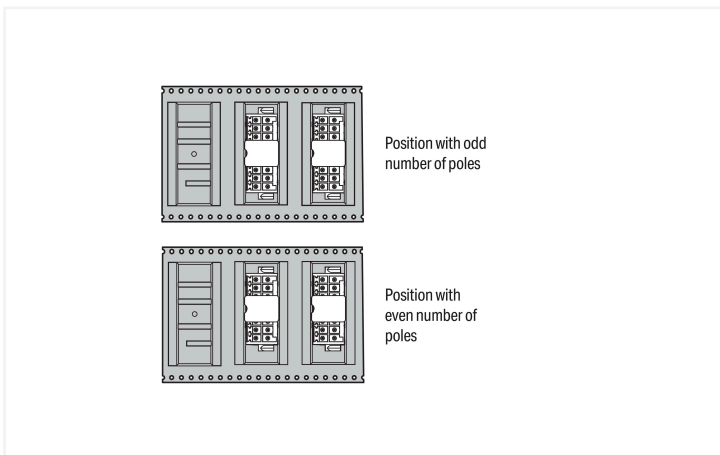
Similar to illustration

Similar to illustration



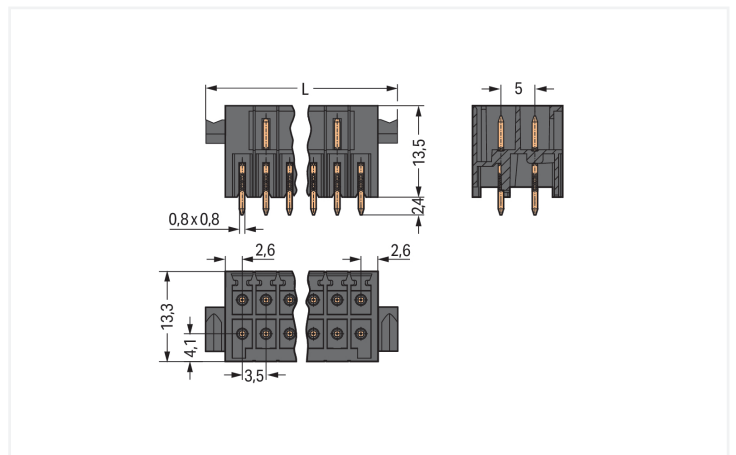
Dimensions in mm

W = tape width R = feed direction



Dimensions in mm

Pin position in tape-and-reel packaging



Dimensions in mm

$L = [(pole\ no./2) - 1] \times pin\ spacing + 11.6\ mm$

Male connector, 713 Series, solder pin dimensions 0.8 x 0.8 mm

This male connector (item number 713-1417/116-000/997-409) simplifies electrical installations. Dimensions: (67.6 x 15.9 x 13.3) 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 <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .

**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	34	<b>Connection 1</b>	
Number of connection types	1	Pole number	34
Number of levels	2		

**Physical data**

Pin spacing	3.5 mm / 0.138 inches
Width	67.6 mm / 2.661 inches
Height	15.9 mm / 0.626 inches
Height from the surface	13.5 mm / 0.531 inches
Depth	13.3 mm / 0.524 inches
Solder pin length	2.4 mm
Solder pin dimensions	0.8 x 0.8 mm
Plated through-hole diameter (THR)	1.3 (+0.1) mm
Reel diameter of tape-and-reel packaging	330 mm
Tape width	88 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	90 °
Locking of plug-in connection	Locking lever

### 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 MJ
Weight	8.6 g
MSL per J-STD 020D	1

### Environmental requirements

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

### Commercial data

PU (SPU)	120 pcs
Packaging type	Bag
Country of origin	DE
GTIN	4050821308997
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

### Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-102427	Railway WAGO GmbH & Co. KG	-	Z00004424.000
CSA CSA Group	C22.2	2315087			
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-126089			

### Downloads

Environmental Product Compliance	
Compliance Search	<a href="#">↓</a>

### Documentation

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

### CAD/CAE-Data

CAD data	PCB Design
<a href="#">↓</a>	<a href="#">↓</a>
	<a href="#">↓</a>

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Female connector/socket



**Item No.: [713-1117/037-000](#)**

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 34-pole; 100% protected against mismatching; Levers; black



**Item No.: [713-1117/037-047](#)**

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 34-pole; 100% protected against mismatching; Levers; direct marking; black



**Item No.: [713-1117/037-9037](#)**

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 34-pole; 100% protected against mismatching; Levers; direct marking; black



**Item No.: [713-1117/037-047/035-000](#)**

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 34-pole; 100% protected against mismatching; Levers; Strain relief plate; direct marking; black



**Item No.: [713-1117/037-9037/035-000](#)**

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 34-pole; 100% protected against mismatching; Levers; Strain relief plate; direct marking; 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.