

**Data Sheet | Item Number: 713-1416/116-000/997-409**

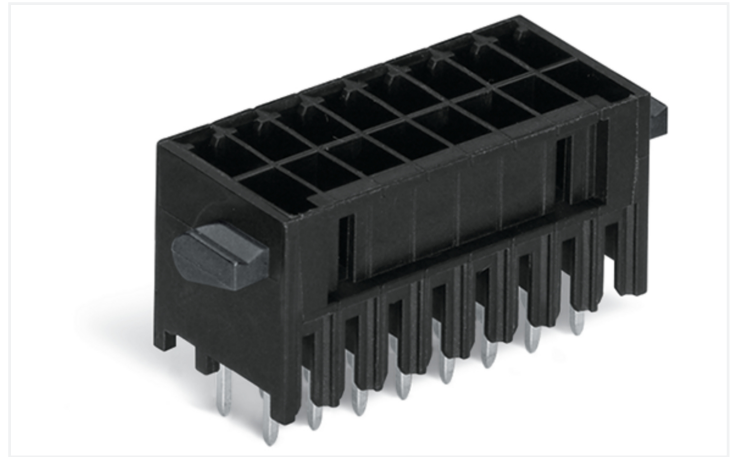
THR male header, 2-row; 0.8 x 0.8 mm solder pin; straight; 100% protected against mismatching; Levers; in tape-and-reel packaging; Pin spacing 3.5 mm; 32-pole; black

<https://www.wago.com/713-1416/116-000/997-409>

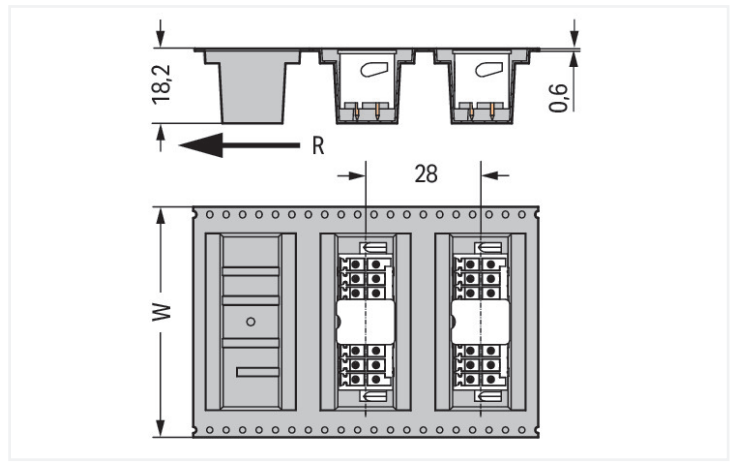
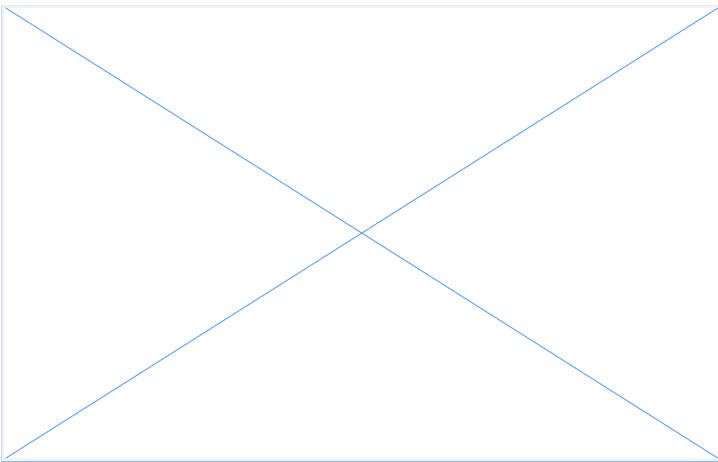


Color: ■ black

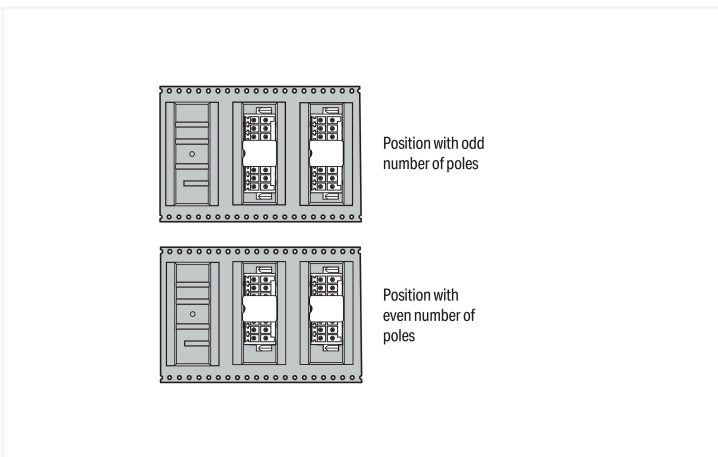
Similar to illustration



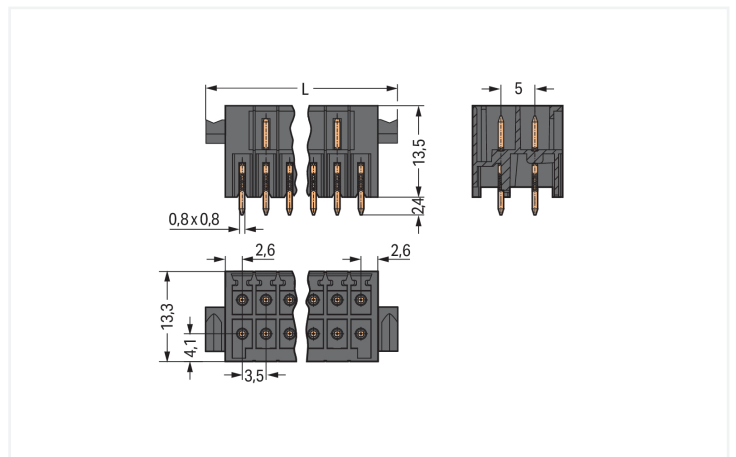
Similar to illustration



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, black

This male connector (item number 713-1416/116-000/997-409) is designed for fault-free electrical installations. The dimensions are (64.1 x 15.9 x 13.3) mm (width x height x depth).

Tin is used for coating the contact surfaces. THR is used to solder the pcb connector.

**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		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	80 V	160 V	250 V
Rated impulse withstand voltage	2.5 kV	2.5 kV	2.5 kV
Rated current	10 A	10 A	10 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	150 V	50 V	-
Rated current	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	32
Number of connection types	1
Number of levels	2

Connection 1	
Pole number	32

**Physical data**

Pin spacing	3.5 mm / 0.138 inches
Width	64.1 mm / 2.524 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
Mismatching 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	8.1 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	4050821308980
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



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	71-126089

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



Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Z00004424.000

### 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
<a href="#">↓</a>

PCB Design
<a href="#">↓</a>

<a href="#">↓</a>
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## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Female connector/socket



**Item No.: [713-1116/037-000](#)**

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 32-pole; 100% protected against mismatching; Levers; black



**Item No.: [713-1116/037-047](#)**

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 32-pole; 100% protected against mismatching; Levers; direct marking; black



**Item No.: [713-1116/037-9037](#)**

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 32-pole; 100% protected against mismatching; Levers; direct marking; black



**Item No.: [713-1116/037-047/035-000](#)**

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 32-pole; 100% protected against mismatching; Levers; Strain relief plate; direct marking; black



**Item No.: [713-1116/037-9037/035-000](#)**

1-conductor female connector, 2-row; CAGE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 32-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.