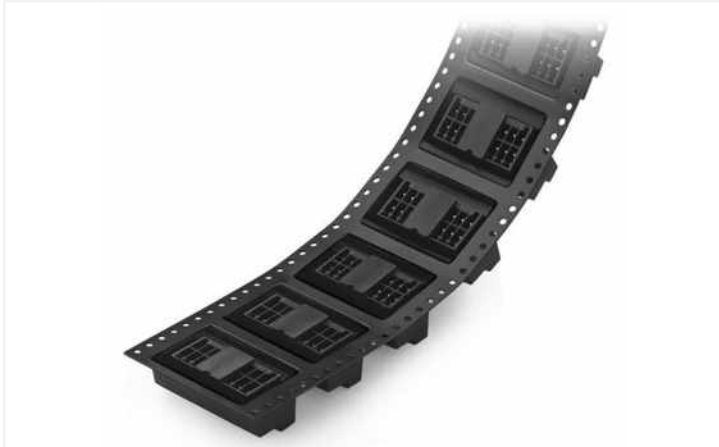


Data Sheet | Item Number: 713-1417/116-000/997-409

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>

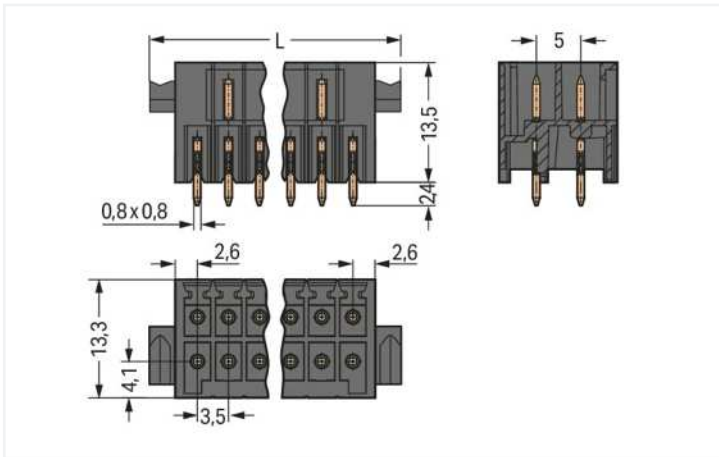


Color: ■ black

Similar to illustration

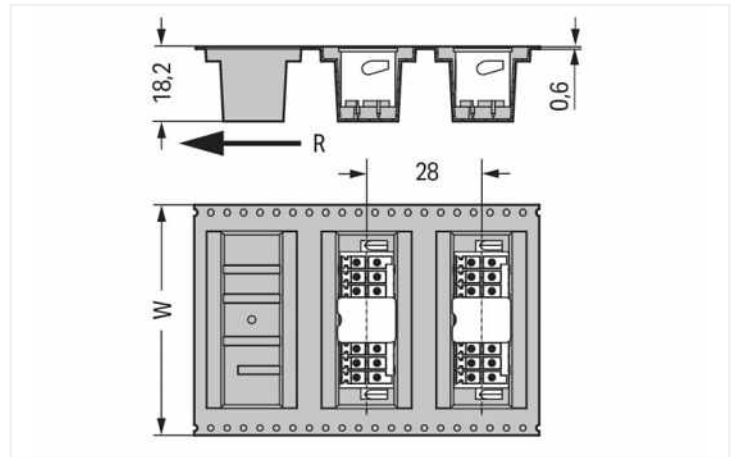


Similar to illustration



Dimensions in mm

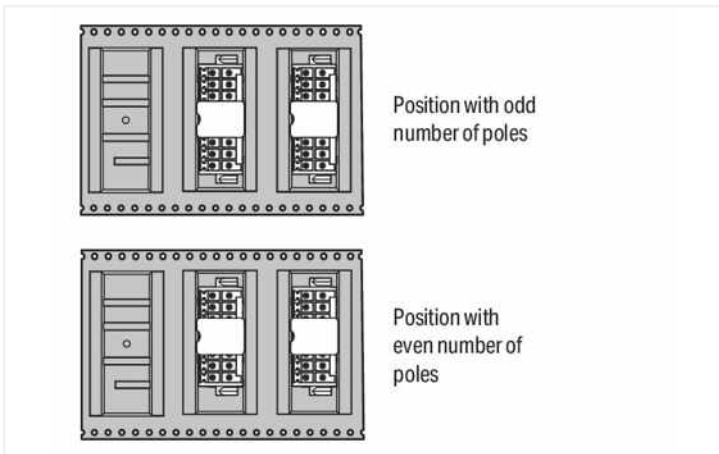
$L = [(pole\ no./2) - 1] \times pin\ spacing + 11.6\ mm$



Dimensions in mm

W = tape width

R = feed direction

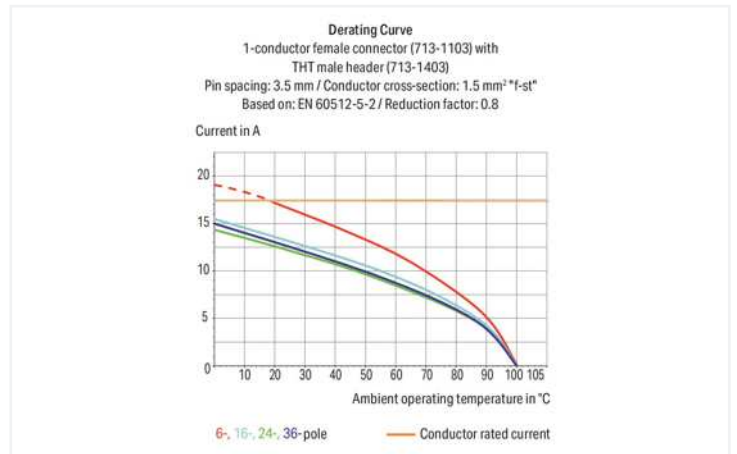


Position with odd number of poles

Position with even number of poles

Dimensions in mm

Pin position in tape-and-reel packaging



- THR male headers for reflow soldering in SMT applications
- Available in tape-and-reel packaging for automated pick-and-place PCB assembly
- Separated pin slots prevent damage and make the headers touch-proof when unplugged
- 100% protected against mismatching
- Coding option available

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) \triangleq Overvoltage category III / Pollution degree 2

Ratings per UL 1059

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

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	34
Number of connection types	1
Number of levels	2

Connection 1

Pole number	34
-------------	----

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
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)	Information on material specifications can be found here
Color	black
Material group	I
Insulation material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E _{Cu})
Contact plating	Tin
Fire load	0 MJ
Weight	8.6 g

Environmental requirements

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

Commercial data

eCl@ss 10.0	27-44-04-02
eCl@ss 9.0	27-44-04-02
ETIM 8.0	EC002637
ETIM 7.0	EC002637
PU (SPU)	120 pcs
Packaging type	Bag
Country of origin	DE
GTIN	4050821308997
Customs tariff number	85366990990

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
UR Underwriters Laboratories Inc.	UL 1059	E45172

Downloads

Environmental Product Compliance

Compliance Search

[↓](#)

Documentation

Additional Information

Technical Section	03.04.2019	pdf 1949.09 KB	↓
		pdf 535.32 KB	↓

CAD/CAE-Data

CAD data

[↓](#)

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; CA-GE CLAMP®; 1.5 mm²; Pin spacing 3.5 mm; 34-pole; 100% protected against mismatching; Levers; 1,50 mm²; black

1.2 Optional Accessories

1.2.1 Coding

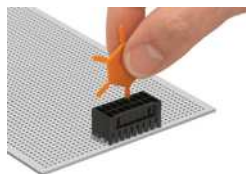
1.2.1.1 Coding



Item No.: [714-101](#)
Coding key; orange

Installation Notes

Coding



Coding a male header by inserting a coding pin.