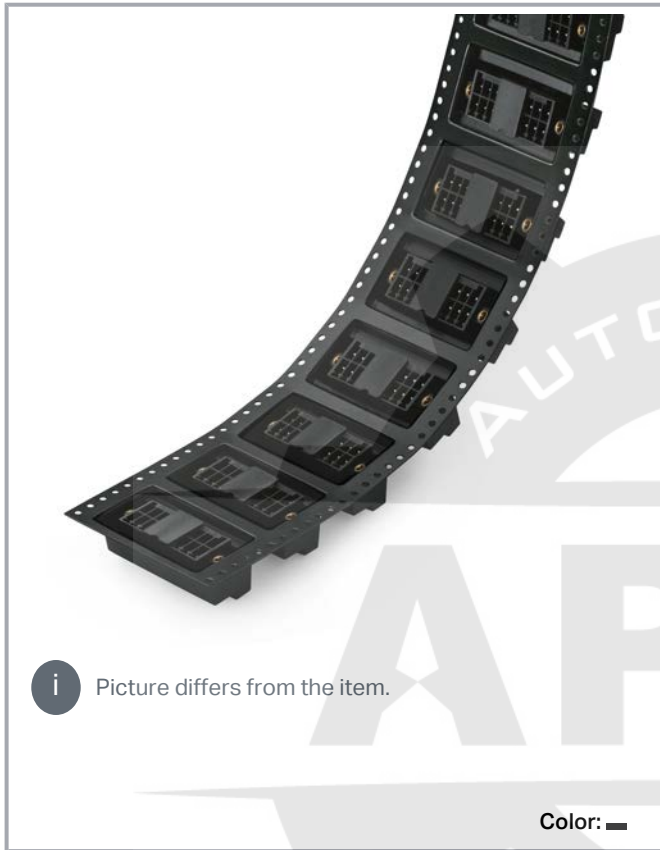


Data sheet | Item number: 713-1416/117-000/997-409

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

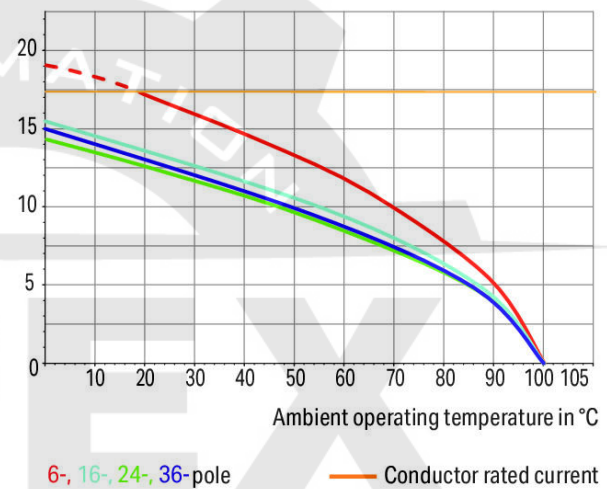
www.wago.com/713-1416_117-000_997-409



Derating Curve

1-conductor female connector (713-1103) with
THT male header (713-1403)
Pin spacing: 3.5 mm / Conductor cross-section: 1.5 mm² "f-st"
Based on: EN 60512-5-2 / Reduction factor: 0.8

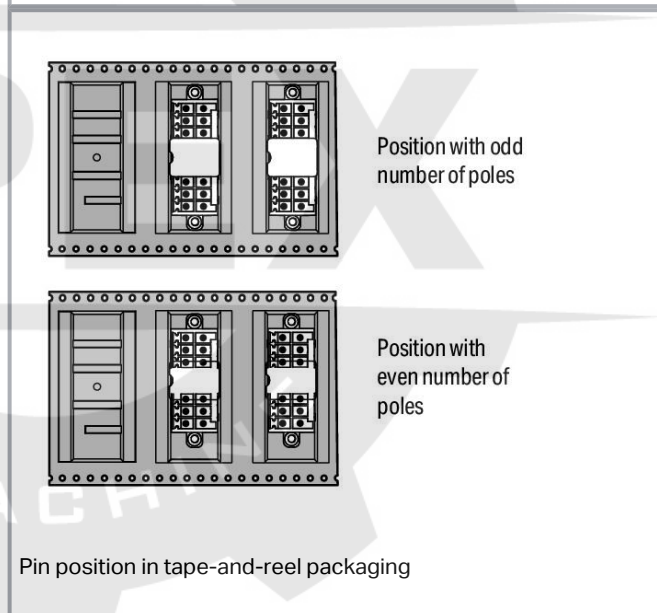
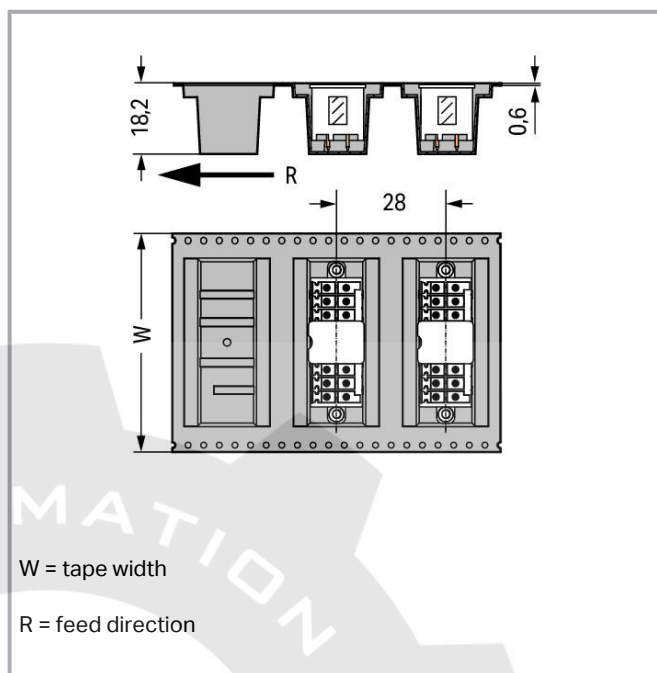
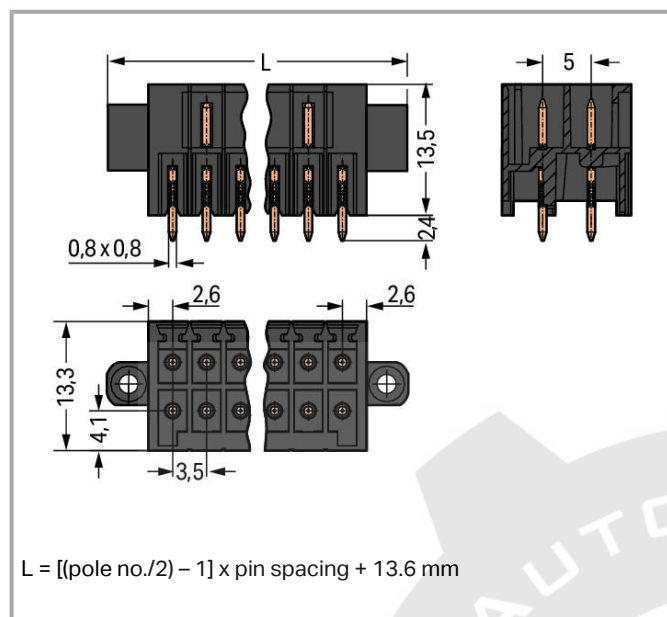
Current in A



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

WAGO Corporation
Germantown, WI 53022
Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222
Email: info.us@wago.com | Web: www.wago.us

Do you have any questions about our products?
We are always happy to take your call at (262) 255-6222 or 1 800-DIN-RAIL.



Item description

- 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

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

WAGO Corporation
Germantown, WI 53022
Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222
Email: info.us@wago.com | Web: www.wago.us

Do you have any questions about our products?
We are always happy to take your call at (262) 255-6222 or 1 800-DIN-RAIL.



- Coding option available

Safety information 1:

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. The circuit design should ensure header pins, which can be touched, are not live when unmated.

Data

Electrical data

IEC Approvals

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	80 V
Rated surge voltage (III/3)	2.5 kV
Rated voltage (III/2)	160 V
Rated surge 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

UL Approvals

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

CSA Approvals

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

Connection data

Pole No.	32
Total number of potentials	32
Number of connection types	1

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

WAGO Corporation
 Germantown, WI 53022
 Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222
 Email: info.us@wago.com | Web: www.wago.us

Do you have any questions about our products?
 We are always happy to take your call at (262) 255-6222 or 1 800-DIN-RAIL.



Number of levels	2
------------------	---

Physical data

Pin spacing	3.5 mm / 0.138 inch
Width	66.1 mm / 2.602 inch
Height	15.9 mm / 0.626 inch
Height from the surface	13.5 mm / 0.531 inch
Depth	13.3 mm / 0.524 inch
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

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	Threaded flange

PCB contact

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

Material data

Color	black
Material group	I
Insulation material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E _{Cu})
Contact plating	tin-plated
Weight	8.6 g

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

WAGO Corporation
 Germantown, WI 53022
 Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222
 Email: info.us@wago.com | Web: www.wago.us

Do you have any questions about our products?
 We are always happy to take your call at (262) 255-6222 or 1 800-DIN-RAIL.

Environmental requirements

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

Commercial data

Packaging type	bag
Country of origin	DE
GTIN	4050821308942
Customs tariff number	8536694040

Approvals / Certificates

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UR Underwriters Laboratories Inc.	UL 1059	E45172-19950922

Counterpart



Item no. 713-1116/107-000

1-conductor female connector, 2-row; 100% protected against mismatching; Screw flange; 1.5 mm²; Pin spacing 3.5 mm; 32-pole; 1,50 mm²; black

www.wago.com/713-1116/107-000

Optional accessories

Coding

	Item no.: 714-101 Coding key; orange	www.wago.com/714-101
---	---	--

Downloads

Documentation

Additional Information

Technical explanations	Apr 3, 2019	pdf 2.0 MB	Download
THR Soldering Process		pdf 548.2 kB	Download

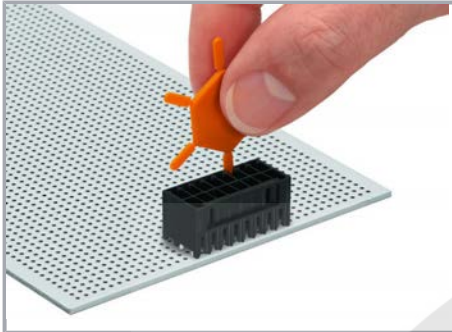
Subject to changes. Please also observe the further product documentation!

WAGO Corporation
 Germantown, WI 53022
 Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222
 Email: info.us@wago.com | Web: www.wago.us

Do you have any questions about our products?
 We are always happy to take your call at (262) 255-6222 or 1 800-DIN-RAIL.

Installation Notes

Coding



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!

WAGO Corporation
Germantown, WI 53022
Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222
Email: info.us@wago.com | Web: www.wago.us

Do you have any questions about our products?
We are always happy to take your call at (262) 255-6222 or 1 800-DIN-RAIL.