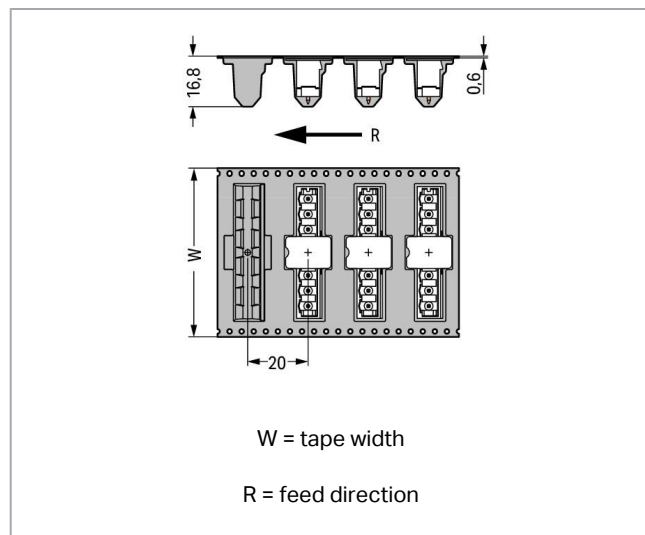
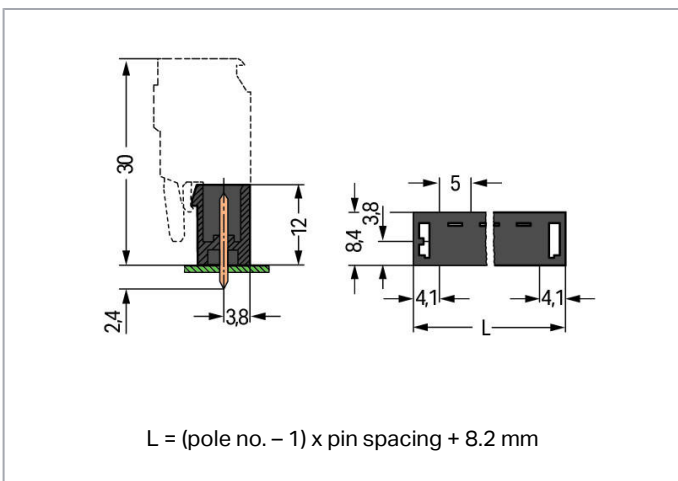
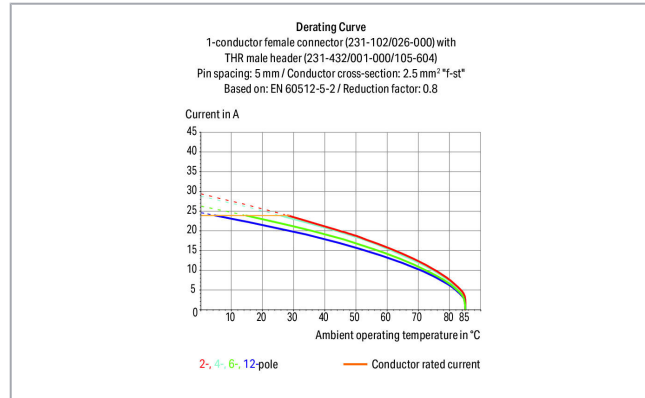
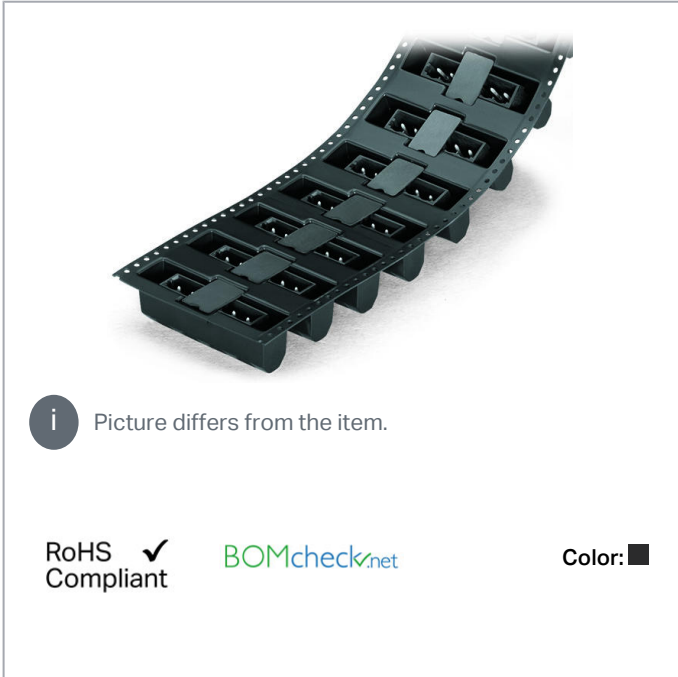


Data sheet | Item number: 231-139/001-000/105-604/997-409

THR male header; 1.0 x 1.0 mm solder pin; straight; in tape-and-reel packaging; Pin spacing 5 mm; 9-pole; black



www.wago.com/231-139/001-000/105-604/997-409



Item description

- THR male headers for reflow soldering in SMT applications
- Available in tape-and-reel packaging for automated pick-and-place PCB assembly

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

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Do you have any questions about our products?
 We are always happy to take your call at +49 (571) 887-44222.



- Also available in bulk packaging for manual placement
- Male headers may be mounted horizontally or vertically
- With coding fingers

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****Ratings per IEC/EN**

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Nominal voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
Rated current	12 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

Ratings per UL

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	10 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A

Ratings per UL

Rated voltage UL 1977	600 V
Rated current UL 1977	10 A

Ratings per CSA

Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V

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



Rated current CSA (Use Group B)	10 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

Connection data

Pole No.	9
Total number of potentials	9
Number of connection types	1
Number of levels	1

Physical data

Pin spacing	5 mm / 0.197 inch
Width	48.2 mm / 1.898 inch
Height	14.4 mm / 0.567 inch
Height from the surface	12 mm / 0.472 inch
Depth	8.4 mm / 0.331 inch
Solder pin length	2.4 mm
Solder pin dimensions	1 x 1 mm
Plated through-hole diameter (THR)	1.4 ^(+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	No
Mating direction to the PCB	90°

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

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

Insulation material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E _{Cu})
Contact plating	tin-plated
Weight	1.8 g

Environmental requirements


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

Packaging type	BOX
Country of origin	DE
GTIN	4055143697958
Customs tariff number	85366990990

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CSA DEKRA Certification B.V.	C22.2	1466354

Counterpart



Item no. 231-109/026-000
1-conductor female plug; 2.5 mm²; Pin spacing 5 mm; 9-pole; 2,50 mm²; gray

www.wago.com/231-109/026-000

Compatible products

Coding



Item no.: 231-129
Coding key; snap-on type; light gray

www.wago.com/231-129



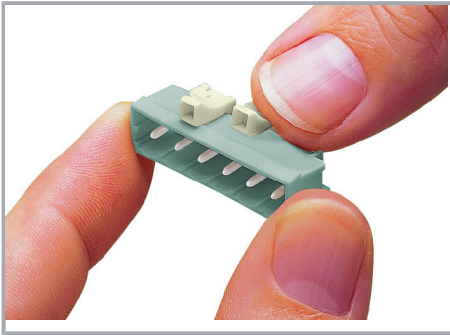
Item no.: 231-500
Spacer; for formation of groups; light gray

www.wago.com/231-500

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

Installation Notes

Coding



Coding a male header – fitting coding key(s).

Product family

MCS MIDI Classic

[Show all products from the family](#)

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