

### Item description

- THR male headers for reflow soldering in SMT applications
- Available in tape-and-reel packaging for automated pick-and-place PCB assembly
- Also available in bulk packaging for manual placement
- Male headers may be mounted horizontally or vertically
- With coding fingers

Other variants can be requested via the WAGO sales department or, if necessary, configured at <https://configurator.wago.com/>: Gold-plated or partially gold-plated contact surfaces, Other pole numbers

### Data

#### Electrical data

#### Ratings per IEC/EN 60664-1

Rated voltage (III / 3)	320 V
Rated impulse voltage (III / 3)	4 kV
Rated voltage (III / 2)	320 V
Rated impulse voltage (III / 2)	4 kV



Rated voltage (II / 2)	630 V
Rated impulse voltage (II / 2)	4 kV
Rated current	12 A
Legend (ratings)	(III / 2) $\triangleq$ Overvoltage category III / Pollution degree 2

### 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

### Approvals per CSA

Rated voltage CSA (Use Group B)	300 V
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

No. of poles	10
Total number of potentials	10
Number of levels	1

### Geometrical Data

Pin spacing	5 mm (0.197 inch)
Width	53.2 mm / 2.094 inch
Height	10.8 mm / 0.425 inch
Height from the surface	8.4 mm / 0.331 inch
Depth	12 mm / 0.472 inch
Solder pin length	2.4 mm
Solder pin dimensions	1 x 1 mm
Plated through-hole diameter (THR)	1.4 (+0.1) mm

### Plug connection

Contact type (pluggable connector)	Male connector/plug
Connector connection type	for PCBs
Mismating protection	No
Mating direction to the PCB	0°

## 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
Insulating material	Polyphthalamide (PPA GF)
Flammability class per UL94	V0
Contact material	Electrolytic copper (Ecu)
Contact plating	tin-plated
Fire load	0.071 MJ
Weight	3.66 g

## Environmental Requirements



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

Country of origin	PL
GTIN	4017332745970
Customs Tariff No.	85366990990
Product Group	3 (Multi Conn. System)

## Approvals / Certificates

### Country specific Approvals

Logo	Approval	Certificate name
	CB DEKRA Certification B.V.	NL-39756
	CSA DEKRA Certification B.V.	1466354
	CSA DEKRA Certification B.V.	1466354

### Ship Approvals

Logo	Approval	Certificate name
	ABS	14-HG1241537-PDA

American Bureau of Shipping



# ABS

## UL-Approvals

Logo	Approval	Certificate name
	UL UL International Germany GmbH	E45172
	UR UL International Germany GmbH	E45171
	UR UL International Germany GmbH	E45171

## Compatible products

### Coding

	Item no.: 231-129 Coding key; snap-on type	<a href="http://www.wago.com/231-129">www.wago.com/231-129</a>
	Item no.: 231-500 Spacer; for formation of groups	<a href="http://www.wago.com/231-500">www.wago.com/231-500</a>

### Marking accessories

	Item no.: 210-833 Marking strips; on reel; 6 mm wide; plain; Self-adhesive	<a href="http://www.wago.com/210-833">www.wago.com/210-833</a>
	Item no.: 210-834 Marking strips; on reel; 5 mm wide; plain; Self-adhesive	<a href="http://www.wago.com/210-834">www.wago.com/210-834</a>

## Downloads

### smartDATA

#### PCB libraries

TARGET Library for WAGO Pluggable PCB Connectors (Multi-Connection System) Compatible with TARGET PCB Design Software Version 17.x	1.1.0 Oct 6, 2014	ZIP 7.4 MB	Download
EAGLE Library for WAGO Pluggable PCB Connectors (MULTI CONNECTION SYSTEM) Compatible with EAGLE PCB Design Software Version 6.x or higher	2.1 Nov 17, 2017	ZIP 6.2 MB	Download



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DesignSpark Library for WAGO Pluggable PCB Connectors (MULTI CONNECTION SYSTEM) Compatible with DesignSpark PCB Version 4.x or higher	2.1 Oct 6, 2014	ZIP 6.1 MB	Download
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**CAD data**

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3D Download 231-440/001-000/105-604	URL	Download
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Subject to changes.