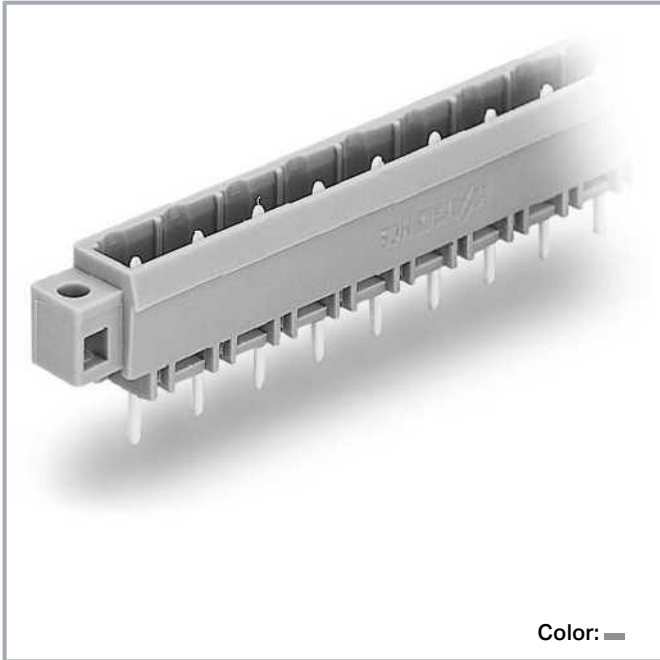


**Data sheet | Item number: 231-240/040-000**

Male header; 10-pole; THT; 1.0 x 1.0 mm solder pin; straight; mounting flange; pin spacing 7.5 mm; gray

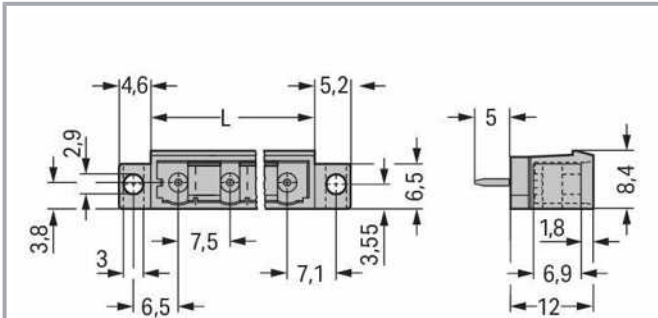
[www.wago.com/231-240\\_040-000](http://www.wago.com/231-240_040-000)



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](mailto:info.us@wago.com) | Web: [www.wago.us](http://www.wago.us)

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Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$

### Item description

- Horizontal or vertical PCB mounting via straight or angled solder pins
- Pin cross-section: 1 x 1 mm
- With coding fingers

### Data

#### Notes

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.

Variants:

Other pole numbers  
 3.8 mm pin projection for male headers with straight solder pins  
 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

#### IEC Approvals

Ratings per	IEC/EN 60664-1
Rated voltage (III / 3)	500 V

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Rated surge voltage (III/3)	6 kV
Rated voltage (III/2)	630 V
Rated surge voltage (III/2)	6 kV
Nominal voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
Rated current	12 A
Legend (ratings)	(III / 2) $\hat{=}$ Overvoltage category III / Pollution degree 2

### UL Approvals

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

### CSA Approvals

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

Total number of potentials	10
Number of connection types	1
Number of levels	1

### Connection 1

Number of poles	10
-----------------	----

### Physical data

Pin spacing	7.5 mm / 0.295 inch
-------------	---------------------

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



Width	75.7 mm / 2.98 inch
Height	17 mm / 0.669 inch
Height from the surface	12 mm / 0.472 inch
Depth	8.4 mm / 0.331 inch
Solder pin length	5 mm
Solder pin dimensions	1 x 1 mm
Drilled hole diameter with tolerance	1.4 <sup>(+0.1)</sup> mm

### Mechanical data

Mounting type	Mounting flange
Mounting type	Feed-through mounting Panel mounting

### Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismatching protection	No
Mating direction to the PCB	90°
Locking of plug-in connection	Without

### PCB contact

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

### Material data

Color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact plating	tin-plated
Fire load	0.088 MJ
Weight	4.2 g

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## Environmental requirements



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

## Commercial data



Product Group	3 (Multi Conn. System)
PU (SPU)	25 Stück
Packaging type	box
Country of origin	PL
GTIN	4044918864947
Customs tariff number	8536694040

## Approvals / Certificates

### Country specific Approvals



Logo	Approval	Additional Approval Text	Certificate name
	<b>CB</b> DEKRA Certification B.V.	IEC 61984	NL-39756
	<b>CSA</b> DEKRA Certification B.V.	C22.2	1466354
	<b>KEMA/KEUR</b> DEKRA Certification B.V.	EN 61984	2190761.01

### Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	-	19- HG1869876- PDA
	<b>BV</b> Bureau Veritas S.A.	IEC 60998	11915/DO BV
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAE000016Z

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

### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 1977	E45171
	UR Underwriters Laboratories Inc.	UL 1059	E45172

### Counterpart



Item no. 231-210/026-000

Female plug; 10-pole; 12 AWG max; pin spacing 7.5 mm; 1 conductor per pole; gray

[www.wago.com/231-210/026-000](http://www.wago.com/231-210/026-000)

### Optional accessories

#### Mounting

##### Mounting accessories



Item no.: 209-147  
Self-tapping screw

[www.wago.com/209-147](http://www.wago.com/209-147)



Item no.: 231-194  
Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø

[www.wago.com/231-194](http://www.wago.com/231-194)



Item no.: 231-195  
Screw with nut; M2x12; for fixing element

[www.wago.com/231-195](http://www.wago.com/231-195)



Item no.: 231-295  
Screw with nut

[www.wago.com/231-295](http://www.wago.com/231-295)

#### Coding

##### Intermediate plate



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

[www.wago.com/231-500](http://www.wago.com/231-500)

##### Coding



Item no.: 231-130  
Coding key; snap-on type; light gray

[www.wago.com/231-130](http://www.wago.com/231-130)



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

[www.wago.com/231-129](http://www.wago.com/231-129)

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

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## Downloads

### Documentation

#### Additional Information

Technical explanations	2019 Apr 3	pdf 2.0 MB	Download
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### CAD files

#### CAE data

EPLAN Data Portal 231-240/040-000	URL	Download
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EPLAN Data Portal 231-240/040-000	URL	Download
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#### PCB Design

Symbol and Footprint 231-240/040-000	URL	Download
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CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

#### Supported formats:

- Accel EDA 14 & 15
- Altium 6 to current version
- Cadence Allegro
- DesignSpark
- Eagle Libraries
- KiCad
- Mentor Graphics BoardStation
- Mentor Graphics Design Architect
- Mentor Graphics Design Expedition 99 and 2000
- OrCAD 9.X PCB and Capture
- PADS PowerPCB 3, 3.5, 4.X, and 5.X
- PADS PowerPCB and PowerLogic 3.0
- PCAD 2000, 2001, 2002, 2004, and 2006
- Pulsonix 8.5 or newer
- STL
- 3D STEP
- TARGET 3001!

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

- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000

PCB Component Libraries (EDA), PCB CAD Library Ultra Librarian

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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 231-240/040-000

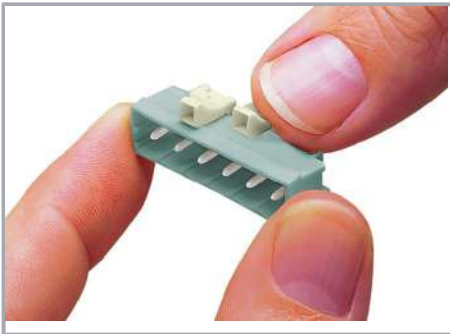
URL

Download

THT male header; 1.0 x 1.0 mm solder pin; straight; clamping collar; Pin spacing 7.5 mm; 10-pole; gray

---

## Installation Notes



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!