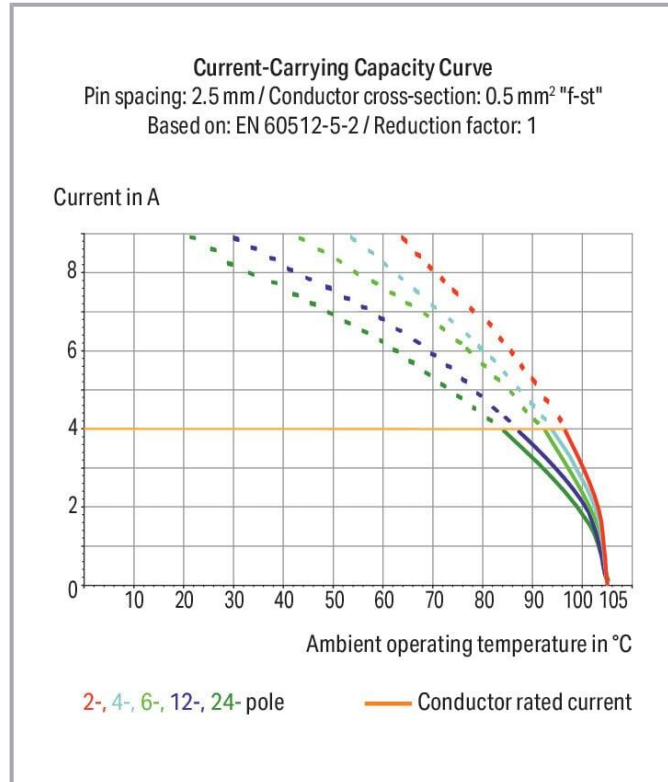
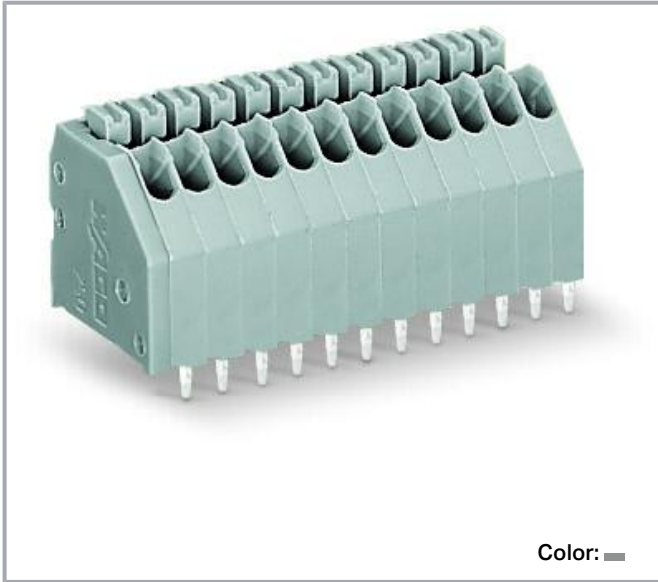


Data sheet | Item number: 250-312

PCB terminal block; push-button; 0.5 mm²; Pin spacing 2.5 mm; 12-pole;
Push-in CAGE CLAMP®; 0,50 mm²; gray



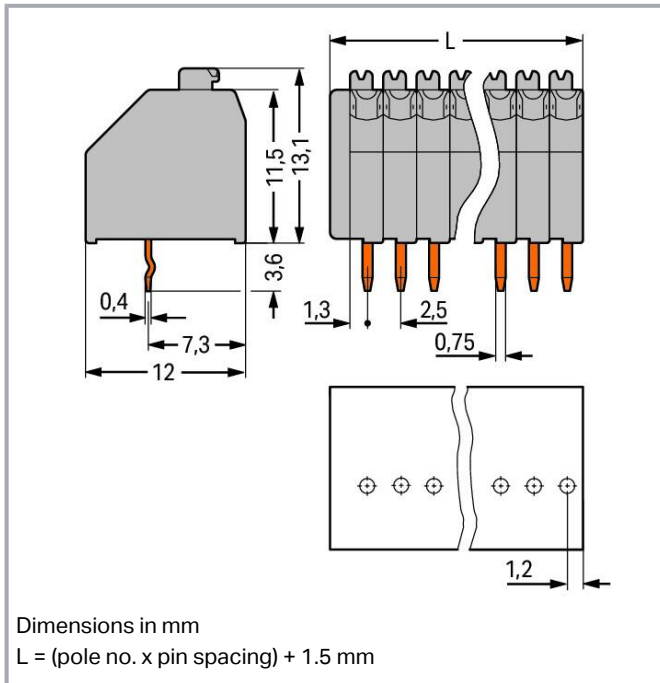
www.wago.com/250-312



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

WAGO GmbH & Co. KG
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Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
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Item description

- Compact PCB terminal strips with push-buttons
- Push-in termination of solid conductors
- Termination/removal of fine-stranded conductors via push-buttons
- 45° conductor entry angle provides easy, space-saving wiring
- Custom color combinations
- Terminal strips also available with spacers upon request

Data

Notes

Variants:

Other pole numbers

Other colors

Mixed-color PCB connector strips

Terminal strips with spacers

Direct marking

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

Electrical data

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

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Ratings per IEC/EN

| | |
|-------------------------------|---|
| Ratings per | IEC/EN 60664-1 |
| Nominal voltage (III/3) | 100 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) | 320 V |
| Rated surge voltage (II/2) | 2.5 kV |
| Rated current | 4 A |
| Legend (ratings) | (III / 2) ≙ 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) | 5 A |
| Rated voltage UL (Use Group D) | 300 V |
| Rated current UL (Use Group D) | 5 A |

Ratings per CSA

| | |
|---------------------------------|-------|
| Approvals per | CSA |
| Rated voltage CSA (Use Group B) | 300 V |
| Rated current CSA (Use Group B) | 2 A |
| Rated voltage CSA (Use Group D) | 300 V |
| Rated current CSA (Use Group D) | 2 A |

Connection data

| | |
|----------------------------|----|
| Connection points | 12 |
| Total number of potentials | 12 |
| Number of connection types | 1 |
| Number of levels | 1 |

Connection 1

| | |
|-------------------------|--|
| Connection technology | Push-in CAGE CLAMP® |
| Actuation type | Push-button |
| Solid conductor | 0.14 ... 0.5 mm ² / 24 ... 20 AWG |
| Fine-stranded conductor | 0.2 ... 0.5 mm ² / 24 ... 20 AWG |

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



| | |
|---------------------------------------|---------------------------------------|
| Conductor diameter | 0.4 ... 0.8 mm / 24 ... 20 AWG |
| Strip length | 8.5 ... 9.5 mm / 0.33 ... 0.37 inches |
| Conductor connection direction to PCB | 45 ° |
| Pole number | 12 |

Physical data

| | |
|--------------------------------------|--------------------------|
| Pin spacing | 2.5 mm / 0.098 inches |
| Width | 31.5 mm / 1.24 inches |
| Height | 16.7 mm / 0.657 inches |
| Height from the surface | 13.1 mm / 0.516 inches |
| Depth | 12 mm / 0.472 inches |
| Solder pin length | 3.6 mm |
| Solder pin dimensions | 0.4 x 0.75 mm |
| Drilled hole diameter with tolerance | 1.1 ^(+0.1) mm |

PCB contact

| | |
|-------------------------------------|--|
| PCB contact | THT |
| Solder pin arrangement | over the entire terminal strip (in-line) |
| Number of solder pins per potential | 1 |

Material data

| | |
|-----------------------------|--|
| Note (material data) | Information on material specifications can be found here |
| Color | gray |
| Material group | I |
| Insulation material | Polyamide (PA66) |
| Flammability class per UL94 | V0 |
| Clamping spring material | Copper alloy |
| Contact plating | Tin |
| Fire load | 0.102 MJ |
| Weight | 4.3 g |

Environmental requirements

| | |
|-------------------------|-----------------|
| Limit temperature range | -60 ... +105 °C |
|-------------------------|-----------------|

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

Commercial data



| | |
|-----------------------|--------------------------------|
| Product Group | 4 (Printed Circuit Connectors) |
| eCl@ss 10.0 | 27-44-04-01 |
| eCl@ss 9.0 | 27-44-04-01 |
| ETIM 8.0 | EC002643 |
| ETIM 7.0 | EC002643 |
| ECCN | NO DATA |
| PU (SPU) | 140 (35) pcs |
| Packaging type | box |
| Country of origin | CH |
| GTIN | 4050821573180 |
| Customs tariff number | 85369010000 |

Environmental Product Compliance

| | |
|------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |
|------------------------|-------------------------|


Approvals / Certificates

General approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|--|-------------------------------------|--------------------------|------------------|
|  | CSA DEKRA Certification B.V. | C22.2 No. 158 | 1132097 |
|  | UL UL International Germany GmbH | UL 1059 | E45172 |

Optional accessories

Tool

| | |
|--|---|
| Operating tool | |
|  | <p>Item no.: 210-647</p> <p>Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured</p> |
| | www.wago.com/210-647 |

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



Item no.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

www.wago.com/210-719

Marking accessories

Marking strip



Item no.: 210-331/250-207

Marking strips; as a DIN A4 sheet; MARKED; 1-48 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-331/250-207



Item no.: 210-331/250-202

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-331/250-202



Item no.: 210-331/250-204

Marking strips; as a DIN A4 sheet; MARKED; 17-32 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-331/250-204



Item no.: 210-331/250-206

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-331/250-206

Testing and measuring

Testing accessories



Item no.: 735-500

WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm uninsulated; Test lead for soldering up to 0,5mm²

www.wago.com/735-500

Downloads

Documentation

Additional Information

| | | | |
|------------------------|------------|--------|----------|
| Technical Section | 2019 Apr 3 | pdf | Download |
| Technical explanations | | 2.1 MB | |

CAD/CAE-Data

CAD data

| | | |
|----------------------|-----|----------|
| 2D/3D Models 250-312 | URL | Download |
|----------------------|-----|----------|

PCB Design

| | | |
|--|-----|----------|
| Symbol and Footprint via Ultra Librarian 250-312 | URL | Download |
|--|-----|----------|

CAX data for your PCB design, consisting of "schematic symbols and PCB footprints", allow easy integration of the WAGO component into your development environment.

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

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Supported formats:

- Accel EDA 14 & 15
- Altair
- Altium 6 to current version
- Autodesk Fusion 360
- 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!
- View Logic ViewDraw
- Quadcept
- Zuken CadStar 3 and 4
- Zuken CR-5000 and CR-8000
- Zuken eCADSTAR 2020 and 2021Zuken CR-5000 and CR-8000

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

Symbol and Footprint via SamacSys 250-312

[URL](#)

[Download](#)

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:

- 3D (stp)
- Altium

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- CADSTAR
- Capture
- CircuitStudio
- CR-5000
- CR-8000
- DEHDL
- DesignSpark PCB
- DesignSpark PCB PRO
- DipTrace
- EAGLE
- Easy-PC
- EasyEDA
- eCADSTAR
- KiCad
- OrCAD_Allegro16
- PADS
- Proteus
- Pulsonix
- Quadcept
- SOLIDWORKS PCB
- TARGET 3001!
- xDX Designer
- Xpedition

PCB Component Libraries (EDA), PCB CAD Library SamacSys Electronic Component Search Engine

CAE data

| | | |
|----------------------|---------------------|--------------------------|
| ZUKEN Portal 250-312 | URL | Download |
|----------------------|---------------------|--------------------------|

Asset Administration Shell

| | | |
|------------------------------------|---------------------|--------------------------|
| Asset Administration Shell 250-312 | URL | Download |
|------------------------------------|---------------------|--------------------------|

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 250-312

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

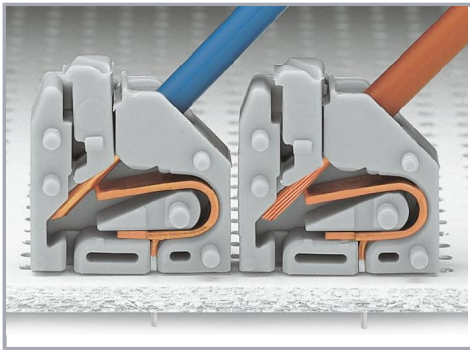
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PCB terminal block; push-button; 0.5 mm²; Pin spacing 2.5 mm; 12-pole; Push-in
CAGE CLAMP®; 0,50 mm²; gray

Installation Notes

Conductor termination



Inserting solid conductors via push-in termination.

Inserting fine-stranded conductors via push-buttons, 250 Series – 3.5 mm pin spacing.

Conductor termination



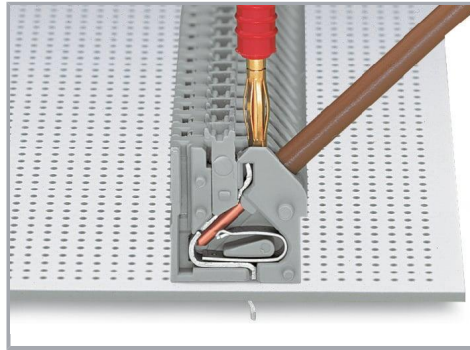
Space-saving wiring, 250 Series – 5 mm pin spacing.

Testing

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

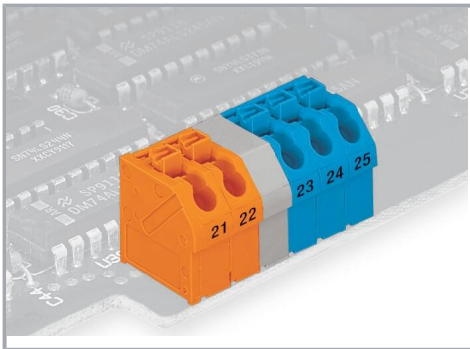


Testing with 11 mm Ø test pin, on the conductor, 250 Series – 2.5 ... 3.5 mm pin spacing.

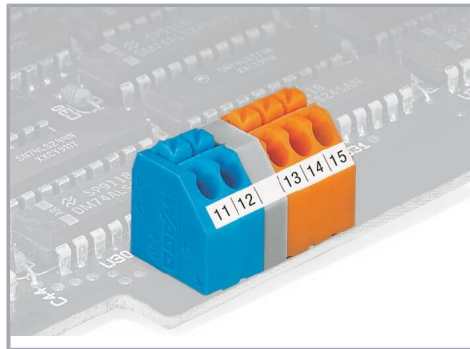


Testing with 2 mm Ø test plug, touch contact, 250 Series – 5 mm pin spacing.

Marking



Labeling via self-adhesive strips or direct marking. Mixed-color terminal strips (with or without spacer) are available upon request.



Labeling via self-adhesive strips or direct marking. Mixed-color terminal strips (with or without spacer) are available upon request.

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