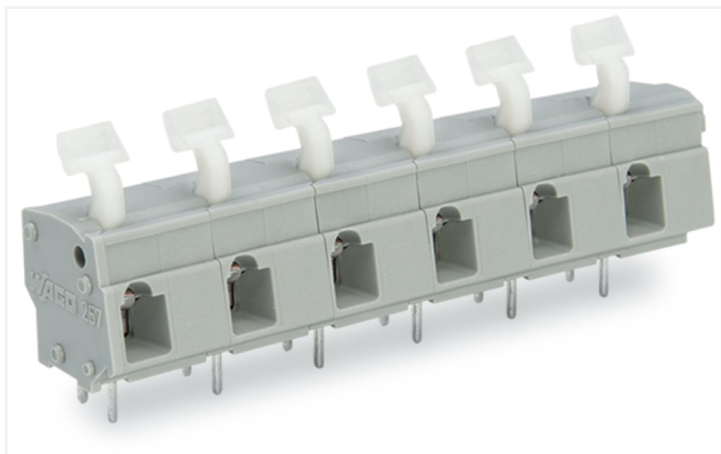


# Data Sheet | Item Number: 257-652

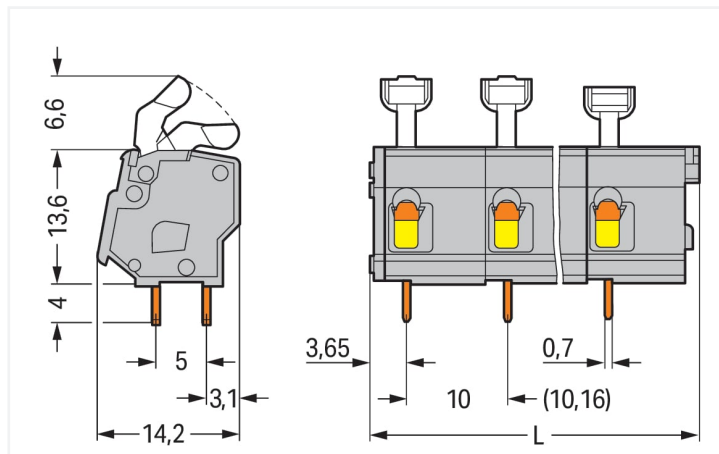
PCB terminal block; push-button; 2.5 mm<sup>2</sup>; Pin spacing 10/10.16 mm; 2-pole; CAGE CLAMP®; commoning option; 2,50 mm<sup>2</sup>; gray

<https://www.wago.com/257-652>

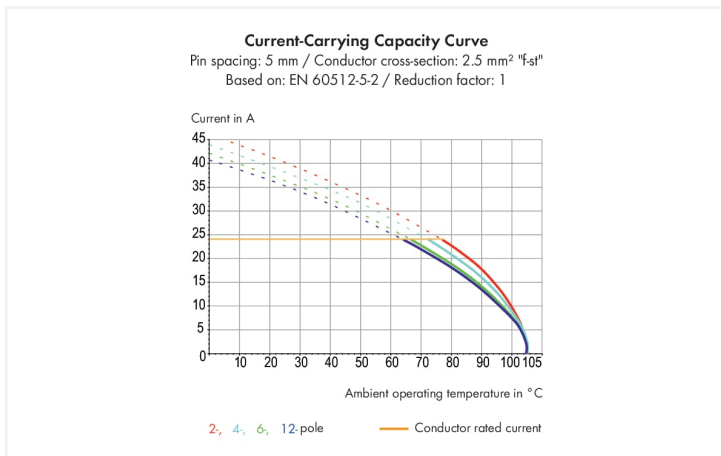


Color: ■ gray

Similar to illustration



Dimensions in mm  
L = (pole no. x pin spacing) + 2.9 mm



- PCB terminal blocks with push-buttons and CAGE CLAMP® connection
- Versions with Ex approval
- Set to metric or inch pin spacing by compressing PCB terminal strips or pulling them apart
- Ideal for in-the-field wiring thanks to simplified push-button actuation
- Convenient, tool-free operation

## Notes

Variants:

Mixed-color PCB connector strips  
Direct marking  
Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.  
Other pole numbers  
Versions for Ex e II and Ex i  
Other colors

## Electrical data

| Ratings per          | IEC/EN 60664-1 |        |        |
|----------------------|----------------|--------|--------|
| Overtoltage category | III            | III    | II     |
| Pollution degree     | 3              | 2      | 2      |
| Nominal voltage      | 630 V          | 1000 V | 1000 V |
| Rated surge voltage  | 8 kV           | 8 kV   | 8 kV   |
| Rated current        | 24 A           | 24 A   | 24 A   |

| Approvals per | UL 1059 |   |       |
|---------------|---------|---|-------|
| Use group     | B       | C | D     |
| Rated voltage | 300 V   | - | 300 V |
| Rated current | 15 A    | - | 10 A  |

| Approvals per | CSA   |   |       |
|---------------|-------|---|-------|
|               | B     | C | D     |
| Use group     | B     | C | D     |
| Rated voltage | 300 V | - | 300 V |
| Rated current | 15 A  | - | 10 A  |

### Connection data

|                            |   |
|----------------------------|---|
| Clamping units             | 2 |
| Total number of potentials | 2 |
| Number of connection types | 1 |
| Number of levels           | 1 |

### Connection 1

|   |  |
|---|--|
| Connection technology                             | CAGE CLAMP®                                  |
| Actuation type                                    | Push-button (angled)                         |
| Solid conductor                                   | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor                           | 0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG |
| Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1.5 mm <sup>2</sup>                 |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 1.5 mm <sup>2</sup>                 |
| Note (conductor cross-section)                    | 12 AWG: THHN, THWN                           |
| Strip length                                      | 5 ... 6 mm / 0.2 ... 0.24 inches             |
| Conductor connection direction to PCB             | 0°   |
| Pole number                                       | 2  |

### Physical data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Pin spacing                          | 10/10.16 mm / 0.394/0.4 inches |
| Width                                | 22.9 mm / 0.902 inches         |
| Height                               | 24.2 mm / 0.953 inches         |
| Height from the surface              | 20.2 mm / 0.795 inches         |
| Depth                                | 14.2 mm / 0.559 inches         |
| Solder pin length                    | 4 mm                           |
| Solder pin dimensions                | 0.7 x 0.7 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 | 2  |

### Material data

|                                    |  |
|------------------------------------|--|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | gray   |
| Material group                     | I  |
| Insulation material (main housing) | Polyamide (PA66)   |
| Flammability class per UL94        | V0   |
| Clamping spring material           | Chrome-nickel spring steel (CrNi)  |
| Contact material                   | Electrolytic copper (E <sub>Cu</sub> )                                   |
| Contact Plating                    | Tin  |
| Fire load                          | 0.077 MJ   |
| Weight                             | 3.5 g  |

### Environmental requirements

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

### 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 9.0              | EC002643                       |
| ETIM 8.0              | EC002643                       |
| PU (SPU)              | 220 (55) pcs                   |
| Packaging type        | Box                            |
| Country of origin     | PL                             |
| GTIN                  | 4044918677448                  |
| Customs tariff number | 85369010000                    |

### Environmental Product Compliance

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

### Approvals / Certificates

#### General approvals



| Approval                                | Standard      | Certificate Name |
|---|---------------|------------------|
| CCA<br>DEKRA Certification B.V.         | EN 60947      | 2160584.28       |
| CCA<br>DEKRA Certification B.V.         | EN 60947      | NTR NL-7128      |
| CCA<br>DEKRA Certification B.V.         | EN 60947-7-4  | 71-113014        |
| CCA<br>DEKRA Certification B.V.         | EN 60947-7-4  | NTR NL-7821      |
| CSA<br>DEKRA Certification B.V.         | C22.2 No. 158 | 70049157         |
| UR<br>Underwriters Laboratories<br>Inc. | UL 1059       | E45172           |

#### Declarations of conformity and manufacturer's declarations

| Approval  | Standard | Certificate Name |
|---|----------|------------------|
| EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |
| UK-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |

### Approvals for marine applications



| Approval                                | Standard  | Certificate Name |
|---|-----------|------------------|
| ABS<br>American Bureau of Ship-<br>ping | -         | 19-HG1869876-PDA |
| BV<br>Bureau Veritas S.A.               | IEC 60998 | 11915/D0 BV      |
| DNV<br>DNV GL SE                        | -         | TAE000016Z       |

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 257-652



Documentation

Additional Information

|  |            |                   |  |
|--|------------|-------------------|--|
| Technical Section                          | 03.04.2019 | pdf<br>2027.26 KB |  |
| Gebrückte Klemmenleisten für Leiterplatten |            | pdf<br>303.71 KB  |  |

CAD/CAE-Data

|                      |  |
|----------------------|--|
| CAD data             |  |
| 2D/3D Models 257-652 |  |

|                           |  |
|---------------------------|--|
| CAE data                  |  |
| EPLAN Data Portal 257-652 |  |
| ZUKEN Portal 257-652      |  |

PCB Design

|  |  |
|--|--|
| Symbol and Footprint via SamacSys 257-652        |  |
| Symbol and Footprint via Ultra Librarian 257-652 |  |

1 Compatible Products


















1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule







|  |   |  |   |
|--|---|--|---|
| <br><b>Item No.: 216-301</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow   | <br><b>Item No.: 216-321</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow          | <br><b>Item No.: 216-151</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated     | <br><b>Item No.: 216-131</b><br>Ferrule; Sleeve for 0.25 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored  |
| <br><b>Item No.: 216-302</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise  | <br><b>Item No.: 216-322</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise | <br><b>Item No.: 216-132</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated     | <br><b>Item No.: 216-152</b><br>Ferrule; Sleeve for 0.34 mm <sup>2</sup> / AWG 24; uninsulated; electro-tin plated  |
| <br><b>Item No.: 216-241</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white | <br><b>Item No.: 216-201</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white            | <br><b>Item No.: 216-221</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; white | <br><b>Item No.: 216-141</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 |

1.1.1.1 Ferrule

|  |   |   |  |
|--|---|---|--|
|  <p><b>Item No.: 216-101</b><br/>Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored</p>  |  <p><b>Item No.: 216-121</b><br/>Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; un-insulated; electro-tin plated; silver-colored</p>   |  <p><b>Item No.: 216-242</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p>               |  <p><b>Item No.: 216-262</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p>    |
|  <p><b>Item No.: 216-202</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; un-insulated; electro-tin plated; gray</p>   |  <p><b>Item No.: 216-222</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; un-insulated; electro-tin plated; gray</p>  |  <p><b>Item No.: 216-142</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>                  |  <p><b>Item No.: 216-102</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored</p>   |
|  <p><b>Item No.: 216-122</b><br/>Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; un-insulated; electro-tin plated; silver-colored</p>   |  <p><b>Item No.: 216-243</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p> |  <p><b>Item No.: 216-263</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p>                   |  <p><b>Item No.: 216-203</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red</p>  |
|  <p><b>Item No.: 216-223</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated; red</p>   |  <p><b>Item No.: 216-103</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated</p>   |  <p><b>Item No.: 216-143</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>                     |  <p><b>Item No.: 216-123</b><br/>Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; un-insulated; electro-tin plated; silver-colored</p>  |
|  <p><b>Item No.: 216-204</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; black</p>   |  <p><b>Item No.: 216-224</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; black</p>  |  <p><b>Item No.: 216-244</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p>            |  <p><b>Item No.: 216-264</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p> |
|  <p><b>Item No.: 216-284</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p> |  <p><b>Item No.: 216-124</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated</p>   |  <p><b>Item No.: 216-144</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored</p> |  <p><b>Item No.: 216-104</b><br/>Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; un-insulated; electro-tin plated; silver-colored</p>  |

1.1.2 Marking

1.1.2.1 Marking strip

|  |  |   |  |
|--|--|---|--|
|  <p><b>Item No.: 210-332/1000-202</b><br/>Marking strips; as a DIN A4 sheet; MARKED; 1-16 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white</p>  |  <p><b>Item No.: 210-332/1016-202</b><br/>Marking strips; as a DIN A4 sheet; MARKED; 1-16 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white</p>  |  <p><b>Item No.: 210-332/1000-204</b><br/>Marking strips; as a DIN A4 sheet; MARKED; 17-31 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white</p> |  <p><b>Item No.: 210-332/1016-204</b><br/>Marking strips; as a DIN A4 sheet; MARKED; 17-31 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white</p> |
|  <p><b>Item No.: 210-332/1000-206</b><br/>Marking strips; as a DIN A4 sheet; MARKED; 33-48 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white</p> |  <p><b>Item No.: 210-332/1016-206</b><br/>Marking strips; as a DIN A4 sheet; MARKED; 33-48 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white</p> |   |  |

### 1.1.3 Test and measurement

#### 1.1.3.1 Testing accessories



**Item No.: 249-114**

Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 10 mm / 0.394 in; gray

**Item No.: 249-115**

Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 10.16 mm / 0.4 in; orange

### 1.1.4 Tool

#### 1.1.4.1 Operating tool



**Item No.: 210-658**

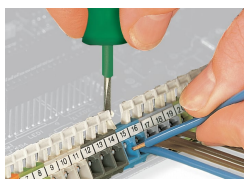
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured

**Item No.: 210-720**

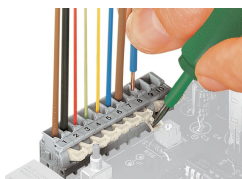
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

### Installation Notes

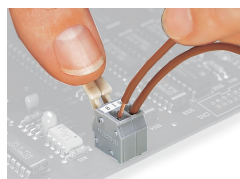
#### Conductor termination



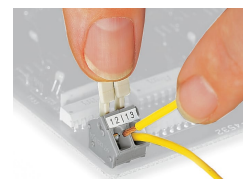
Inserting/removing a conductor – 256 Series.



Inserting/removing a conductor (255 Series)

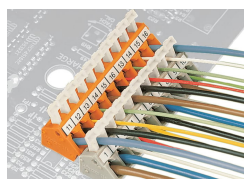


Inserting/removing a conductor via finger-operated lever – 255 Series.



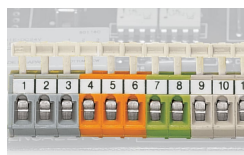
Inserting/removing a conductor via finger-operated lever – 256 Series.

### Installation



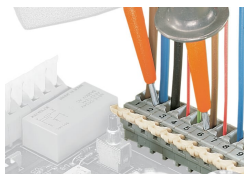
Possible conductor arrangement with terminal strips staggered (for 256 Series only).

### Marking



Formation of groups using housings of different colors

Testing



Testing with test probes.



Testing with test plug modules.