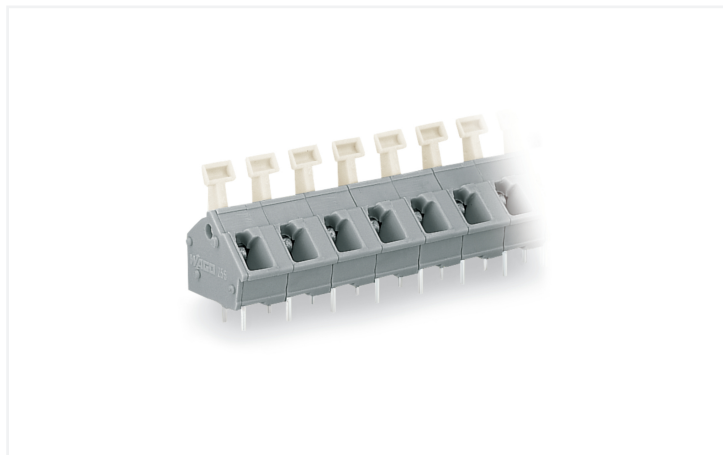


## Data Sheet | Item Number: 256-504

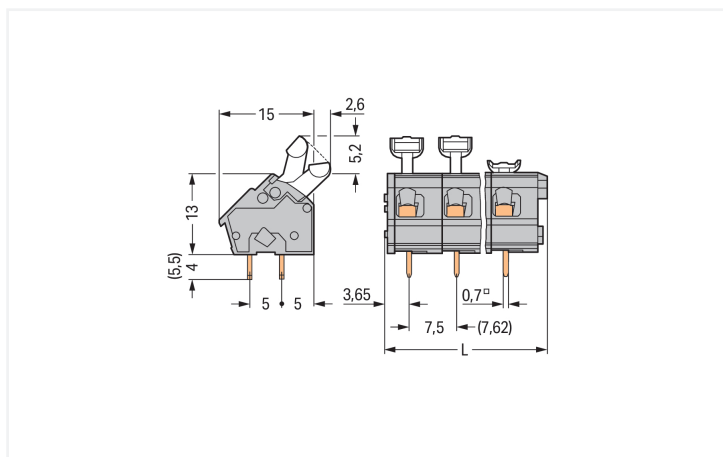
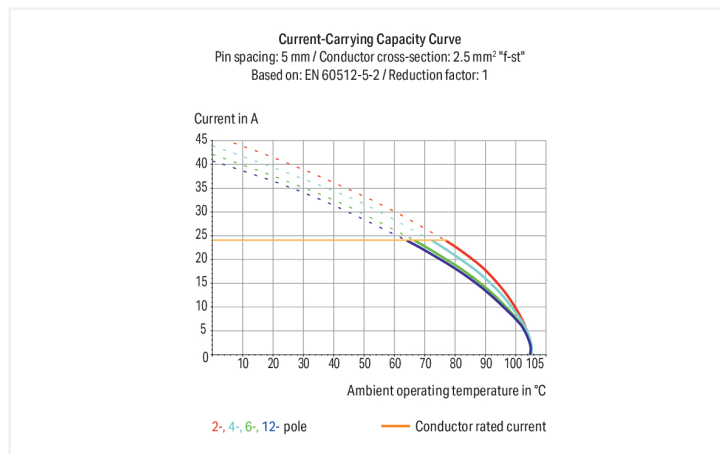
PCB terminal block; push-button; 2.5 mm<sup>2</sup>; Pin spacing 7.5/7.62 mm; 4-pole; CAGE CLAMP®; commoning option; gray

<https://www.wago.com/256-504>



Color: ■ gray

Similar to illustration



Dimensions in mm

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

PCB terminal block, 256 Series, CAGE CLAMP®

This PCB terminal block (item number 256-504) is designed to connect conductors quickly and easily. It is ideal for custom installations with different mounting types. Ensure that the strip lengths are between 5 and 6 mm when connecting conductors to this PCB terminal block. Featuring one conductor terminal along with CAGE CLAMP®, this product is highly versatile. Our proven universal connection known as CAGE CLAMP® is the industry standard for connection technology and electrical interconnections. The dimensions are (32.9 x 22.2 x 17.6) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 2.5 mm<sup>2</sup>.

The contact surface is coated with tin. This PCB terminal block is operated with a push-button. The PCB terminal block is designed for THT soldering. Insert the conductor into the board at a 45° angle..

## Notes

Variants:

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

## Electrical data

| Ratings per                     | IEC/EN 60664-1 |       |       |
|---------------------------------|----------------|-------|-------|
| Overvoltage category            | III            | III   | II    |
| Pollution degree                | 3              | 2     | 2     |
| Nominal voltage                 | 320 V          | 320 V | 630 V |
| Rated impulse withstand voltage | 4 kV           | 4 kV  | 4 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   |   |       |
|---------------|-------|---|-------|
| Use group     | B     | C | D     |
| Rated voltage | 300 V | - | 300 V |
| Rated current | 15 A  | - | 10 A  |

## Connection Data

|                            |   |
|----------------------------|---|
| Clamping units             | 4 |
| Total number of potentials | 4 |
| Number of connection types | 1 |
| Number of levels           | 1 |

| Connection 1                                      |  |
|---|--|
| Connection technology                             | CAGE CLAMP®                                  |
| Actuation type                                    | Push-button                                  |
| 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             | 45°  |
| Pole number                                       | 4  |

## Physical data

|                         |                                |
|-------------------------|--------------------------------|
| Pin spacing             | 7.5/7.62 mm / 0.295/0.3 inches |
| Width                   | 32.9 mm / 1.295 inches         |
| Height                  | 22.2 mm / 0.874 inches         |
| Height from the surface | 18.2 mm / 0.717 inches         |
| Depth                   | 17.6 mm / 0.693 inches         |
| Solder pin length       | 4 mm                           |
| Solder pin dimensions   | 0.7 x 0.7 mm                   |
| Drilled hole diameter   | 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                          | 0.08 MJ  |
| Weight                             | 4.8 g  |

### Environmental requirements

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

### Commercial data

|                       |                                |
|-----------------------|--------------------------------|
| Product Group         | 4 (Printed Circuit Connectors) |
| PU (SPU)              | 140 (35) pcs                   |
| Packaging type        | Box                            |
| Country of origin     | CH                             |
| GTIN                  | 4044918808392                  |
| Customs tariff number | 85369010000                    |

### Product Classification

|             |                      |
|-------------|----------------------|
| UNSPSC      | 39121409             |
| eCl@ss 10.0 | 27-44-04-01          |
| eCl@ss 9.0  | 27-44-04-01          |
| ETIM 9.0    | EC002643             |
| ETIM 10.0   | EC002643             |
| ECCN        | NO US CLASSIFICATION |

### 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      | 2160584.34       |
| CCA<br>DEKRA Certification B.V. | EN 60947      | NTR NL-7138      |
| CCA<br>DEKRA Certification B.V. | IEC 60947-7-4 | 71-113042        |

#### General approvals

|   |               |                 |
|---|---------------|-----------------|
| CSA<br>DEKRA Certification B.V.         | C22.2 No. 158 | 70049157        |
| UL<br>Underwriters Laboratories<br>Inc. | UL 1059       | 20190731-E45172 |

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

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

**Approvals for marine applications**



| Approval                           | Standard  | Certificate Name  |
|------------------------------------|-----------|-------------------|
| ABS<br>American Bureau of Shipping | -         | 24-0095975-PDA    |
| BV<br>Bureau Veritas S.A.          | IEC 60998 | 11915/E0 BV       |
| DNV<br>DNV GL SE                   | -         | TAE000016Z        |
| PRS<br>Polski Rejestr Statków      | -         | TE/1095/880590/23 |

**Downloads**

**Environmental Product Compliance**

| Compliance Search                        |   |
|--|---|
| Environmental Product Compliance 256-504 | ↓ |

**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 256-504 | ↓ |

| CAE data                  |   |
|---------------------------|---|
| EPLAN Data Portal 256-504 | ↓ |
| ZUKEN Portal 256-504      | ↓ |

**PCB Design**

|  |   |
|--|---|
| Symbol and Footprint via SamacSys 256-504        | ↓ |
| Symbol and Footprint via Ultra Librarian 256-504 | ↓ |

**1 Compatible Products**

**1.1 Optional Accessories**

**1.1.1 Ferrule**

**1.1.1.1 Ferrule**



**Item No.: 216-321**  
 Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

**Item No.: 216-151**  
 Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored

**Item No.: 216-322**  
 Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise

**Item No.: 216-152**  
 Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-221**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white

**Item No.: 216-121**  
 Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored

**Item No.: 216-222**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray

**Item No.: 216-122**  
 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-223**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red

**Item No.: 216-123**  
 Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored

**Item No.: 216-224**  
 Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black

**Item No.: 216-124**  
 Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated

**1.1.2 Marking**

**1.1.2.1 Marking strip**



**Item No.: 210-332/750-020**  
 Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

**Item No.: 210-332/762-020**  
 Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

**1.1.3 Test and measurement**

**1.1.3.1 Testing accessories**



**Item No.: 249-112**  
 Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 7.5 mm / 0.295 in; gray

**Item No.: 249-113**  
 Test plug adapter; suitable for 255, 256, 257 Series PCB terminal blocks; 1-pole; Pin spacing 7.62 mm / 0.3 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

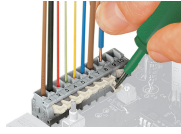
**Item No.: 210-720**  
 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

## Installation Notes

### Conductor termination



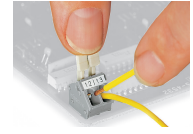
Inserting/removing a conductor – 256 Series.



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



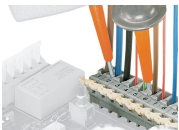
Possible conductor arrangement with terminal strips staggered (for 256 Series only).

### Marking



Formation of groups using housings of different colors

### Testing



Testing with test probes.



Testing with test plug modules.