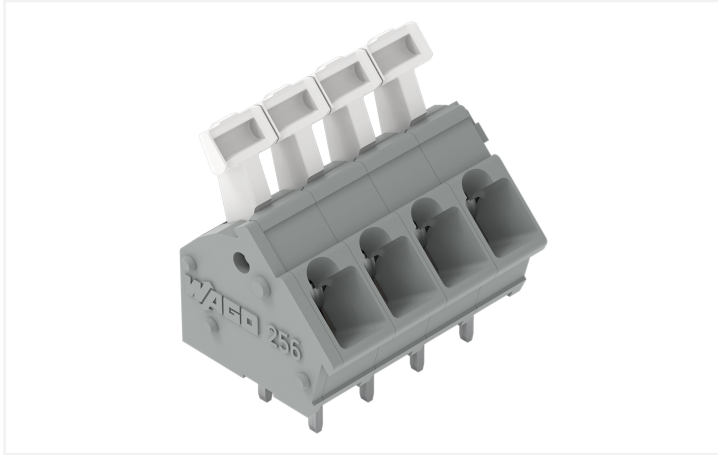


Data Sheet | Item Number: 256-403/332-009/999-950

PCB terminal block; push-button; 2.5 mm²; Pin spacing 5/5.08 mm; 3-pole; suitable for Ex-e applications; CAGE CLAMP®; commoning option; Solder pin length 5.5 mm; 2,50 mm²; light gray

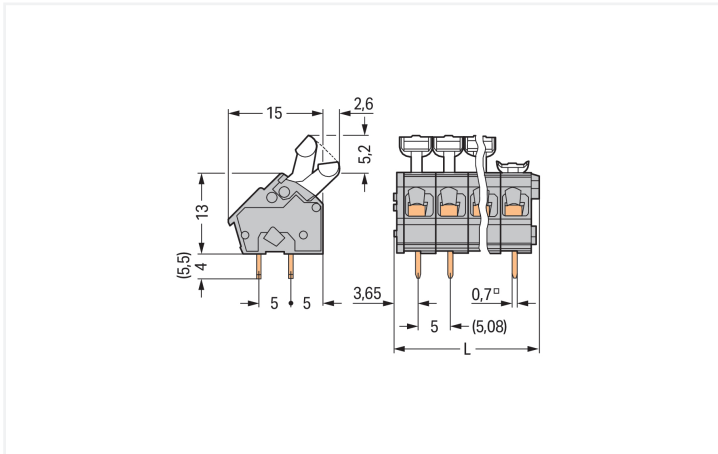
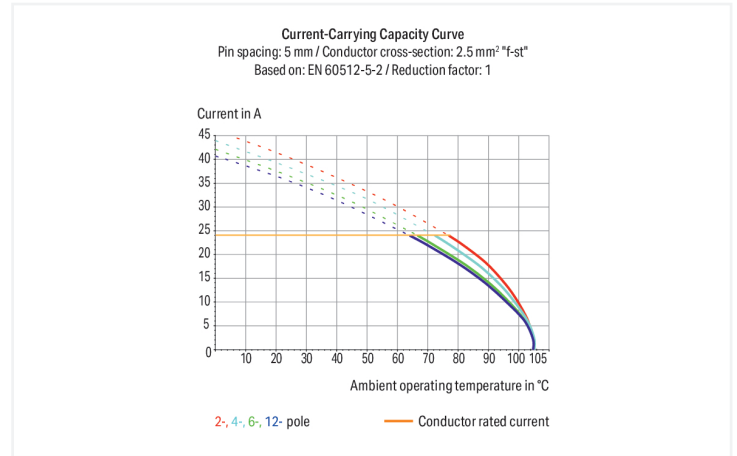


<https://www.wago.com/256-403/332-009/999-950>



Color: ■ light gray

Similar to illustration



Dimensions in mm

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

PCB terminal block, 256 Series, CAGE CLAMP®

Our PCB terminal block (item number 256-403/332-009/999-950) makes connecting wires quick and easy. You can count on tried and tested safety with these PCB terminal blocks, perfect for a host of applications when designing your devices. Conductors should only be connected to this PCB terminal block if their strip length is between 5 and 6 mm. This product incorporates one conductor terminal and utilizes CAGE CLAMP®. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. The dimensions are (17.9 x 23.7 x 17.6) mm (width x height x depth). Depending on the type of conductor, this PCB terminal block is ideal for conductor cross sections ranging from 0.08 mm² to 2.5 mm².

The contact surface is coated with tin. A push-button is used to operate this PCB terminal block. The PCB terminal block is designed for THT soldering. The conductor is designed to be inserted into the board at a 45° angle..

Electrical data

Ex information

| | |
|----------------------------|-------------------------------------------------|
| Ratings per | ATEX: PTB 06 ATEX 1061 U / IECEx: PTB 06.0042 U |
| Rated voltage EN (Ex e II) | 176 V |
| Rated current (Ex e II) | 16 A |

Connection data

| | | | |
|----------------------------|---|---------------------------------------------------|----------------------------------------------|
| Clamping units | 3 | Connection 1 | |
| Total number of potentials | 3 | Connection technology | CAGE CLAMP® |
| Number of connection types | 1 | Actuation type | Push-button |
| Number of levels | 1 | Solid conductor | 0.08 ... 2.5 mm ² / 28 ... 12 AWG |
| | | Fine-stranded conductor | 0.08 ... 2.5 mm ² / 28 ... 12 AWG |
| | | Fine-stranded conductor; with insulated ferrule | 0.25 ... 1.5 mm ² |
| | | Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 1.5 mm ² |
| | | 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 | 3 |

Physical data

| | |
|--------------------------------------|------------------------------|
| Pin spacing | 5/5.08 mm / 0.197/0.2 inches |
| Width | 17.9 mm / 0.705 inches |
| Height | 23.7 mm / 0.933 inches |
| Height from the surface | 18.2 mm / 0.717 inches |
| Depth | 17.6 mm / 0.693 inches |
| Solder pin length | 5.5 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) | Information on material specifications can be found here |
| Color | light 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 _{Cu}) |
| Contact Plating | Tin |
| Fire load | 0.053 MJ |
| Weight | 3 g |

Environmental requirements

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

Commercial data

| | |
|-----------------------|--------------------------------|
| Product Group | 4 (Printed Circuit Connectors) |
| PU (SPU) | 280 (70) pcs |
| Packaging type | Box |
| Country of origin | CH |
| GTIN | 4044918760485 |
| 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 |
|-----------------------------------------|---------------|------------------|
| CSA DEKRA Certification B.V. | C22.2 No. 158 | 70049157 |
| UL Underwriters Laboratories Inc. | UL 1059 | 20190731-E45172 |

Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|-----------------------------------------------------------|----------|------------------|
| ATEX-Attestation of Con- formity WAGO GmbH & Co. KG | - | - |

Approvals for hazardous areas



| Approval | Standard | Certificate Name |
|--------------------------------------------------------------------------------------|-------------|----------------------------------------------------|
| AEx UL International Germany GmbH c/o Physikalisch Technische Bundesanstalt | UL 60079 | E185892 (AEx eb IIC resp. Ex eb IIC) |
| CCC CNEX | GB/T 3836.3 | 2020312313000274 (Ex eb IIC Gb, Ex eb I Mb) |
| IECEX Physikalisch Technische Bundesanstalt | IEC 60079 | IECEX PTB 06.0042U (Ex eb IIC GB or Ex eb I Mb) |

Downloads

Environmental Product Compliance

Compliance Search

↓

Documentation

| Additional Information | | | |
|-------------------------------------------------|------------|-------------------|---|
| Technical Section | 03.04.2019 | pdf 2027.26 KB | ↓ |
| Gebrückte Klemmen- leisten für Leiterplatten | | pdf 303.71 KB | ↓ |

CAD/CAE-Data

CAD data

↓

CAE data

↓

↓

PCB Design

↓

↓

1 Compatible Products




















1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



| | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | |
| <p>Item No.: 216-301</p> <p>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow</p> | <p>Item No.: 216-321</p> <p>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow</p> | <p>Item No.: 216-151</p> <p>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated</p> | <p>Item No.: 216-131</p> <p>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored</p> |
| | | | |
| <p>Item No.: 216-302</p> <p>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise</p> | <p>Item No.: 216-322</p> <p>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise</p> | <p>Item No.: 216-132</p> <p>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated</p> | <p>Item No.: 216-152</p> <p>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated</p> |
| | | | |
| <p>Item No.: 216-201</p> <p>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white</p> | <p>Item No.: 216-241</p> <p>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white</p> | <p>Item No.: 216-221</p> <p>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white</p> | <p>Item No.: 216-141</p> <p>Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p> |

1.1.1.1 Ferrule

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

1.1.2 Tool

1.1.2.1 Operating tool

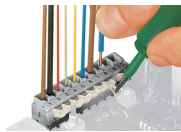
| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  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

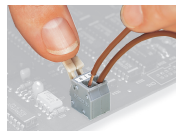
Conductor termination



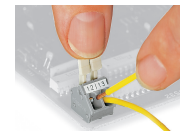
Inserting/removing a conductor – 256 Series.



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



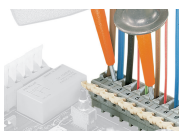
Possible conductor arrangement with terminal strips staggered (for 256 Series only).

Marking



Formation of groups using housings of different colors

Testing



Testing with test probes.



Testing with test plug modules.