

**Data sheet | Item number: 254-866**

Stackable PCB terminal block; 2.5 mm<sup>2</sup>; Pin spacing 10/10.16 mm; 1-pole;  
PUSH WIRE®



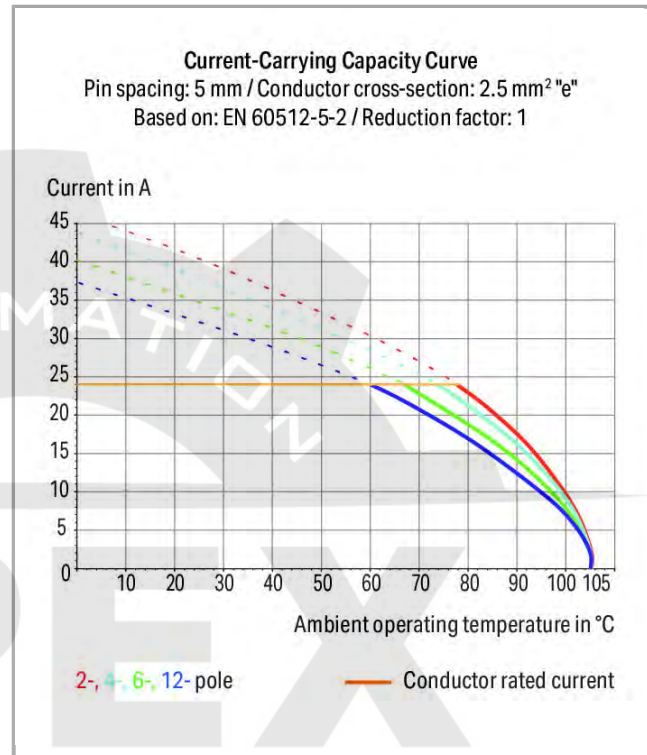
254-866

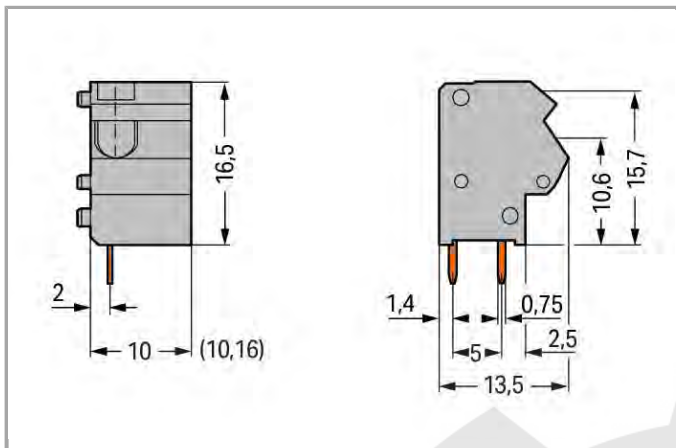


RoHS Compliant

[BOMcheck.net](https://www.bomcheck.net)

Color:





### Item description

- Modular PCB terminal blocks with PUSH WIRE® connection and screwdriver actuation for custom terminal strip assemblies
- Push-in termination of solid and ferruled conductors
- Test socket for 2 mm Ø test plug
- Save space on the PCB, just 8.9 mm deep
- Also available with 2-conductor connection

### Data

#### Electrical data

#### Ratings per IEC/EN 60664-1

|                                 |        |
|---------------------------------|--------|
| Rated voltage (III / 3)         | 630 V  |
| Rated impulse voltage (III / 3) | 8 kV   |
| Rated voltage (III / 2)         | 1000 V |
| Rated impulse voltage (III / 2) | 8 kV   |
| Rated voltage (II / 2)          | 1000 V |
| Rated impulse voltage (II / 2)  | 8 kV   |
| Rated current                   | 24 A   |

#### 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  |

#### 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

|                                                             |                                   |
|-------------------------------------------------------------|-----------------------------------|
| Connection technology                                       | PUSH WIRE®                        |
| Actuation type                                              | Operating tool                    |
| Solid conductor                                             | 0.5 ... 2.5 mm² / 20 ... 12 AWG   |
| Fine-stranded conductor with ferrule with plastic collar    | 0.5 ... 1.5 mm²                   |
| Fine-stranded conductor with ferrule without plastic collar | 0.5 ... 1.5 mm²                   |
| Strip length                                                | 10 ... 12 mm / 0.39 ... 0.47 inch |
| Conductor entry angle to the PCB                            | 45°                               |
| Note (conductor cross-section)                              | 12 AWG: THHN, THWN                |
| No. of poles                                                | 1                                 |
| Total number of connection points                           | 1                                 |
| Total number of potentials                                  | 1                                 |
| Number of connection types                                  | 1                                 |
| Number of levels                                            | 1                                 |

## Geometrical Data

|                                   |                                |
|-----------------------------------|--------------------------------|
| Pin spacing                       | 10/10.16 mm / 0.394/0.4 inch   |
| Width                             | 11.7 mm / 0.461 inch           |
| Height                            | 19.7 mm / 0.776 inch           |
| Height from the surface           | 15.7 mm / 0.618 inch           |
| Depth                             | 13.5 mm / 0.531 inch           |
| Solder pin length                 | 4 mm                           |
| Solder pin dimensions             | 0.5 x 0.75 mm                  |
| Drilled hole diameter (tolerance) | 1.1 <sup>(- ... +0.1)</sup> mm |

## PCB contact

|                                     |                                    |
|-------------------------------------|------------------------------------|
| PCB contact                         | THT                                |
| Solder pin arrangement              | within the terminal block, in line |
| Number of solder pins per potential | 2                                  |

## Material Data

|                             |                      |
|-----------------------------|----------------------|
| Color                       | orange               |
| Material group              | I                    |
| Insulating material         | Polyamide 66 (PA 66) |
| Flammability class per UL94 | V0                   |

|                          |                                        |
|--------------------------|----------------------------------------|
| Clamping spring material | Chrome nickel spring steel (CrNi)      |
| Contact material         | Electrolytic copper (E <sub>Cu</sub> ) |
| Contact plating          | tin-plated                             |
| Fire load                | 0.03 MJ                                |
| Weight                   | 1.594 g                                |

## Environmental Requirements

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

## Commercial data

|                    |                     |
|--------------------|---------------------|
| Product Group      | 4 (Printed Circuit) |
| Country of origin  | PL                  |
| GTIN               | 4044918943253       |
| Customs Tariff No. | 85369010000         |

## Approvals / Certificates

### Country specific Approvals

| Logo                                                                               | Approval                        | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|---------------------------------|--------------------------|------------------|
|  | CCA<br>DEKRA Certification B.V. | EN 60947                 | NTR NL<br>7375   |
|  | CSA<br>DEKRA Certification B.V. | C22.2                    | LR 18677-<br>38  |

### Ship Approvals

| Logo                                                                               | Approval                                         | Additional Approval Text | Certificate name         |
|------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------|--------------------------|
|  | ABS<br>American Bureau of Shipping               | -                        | 14-<br>HG1241537-<br>PDA |
|  | DNV GL<br>Det Norske Veritas, Germanischer Lloyd | -                        | TAE000016Z               |

### UL-Approvals

| Logo | Approval | Additional Approval Text | Certificate name |
|------|----------|--------------------------|------------------|
|      | UR       | UL 1059                  | E45172           |



Underwriters Laboratories Inc.

sec. 6



UR  
Underwriters Laboratories Inc.

UL 1059

E45172  
sec. 6

## Compatible products

### Marking accessories

|                                                                                                                                                                                   |            |         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------|
| <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  | / 1000-202 | 210-332 |
| <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 | / 1000-204 | 210-332 |
| <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 | / 1000-206 | 210-332 |
| <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  | / 1016-202 | 210-332 |
| <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 | / 1016-204 | 210-332 |
| <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 | / 1016-206 | 210-332 |

### ferrule

|                                                                                                                                                                                                   |         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|  <b>Item no.: 216-101</b><br>Ferrule; Sleeve for 0.5 mm <sup>2</sup> / AWG 22; uninsulated; electro-tin plated  | 216-101 |
|  <b>Item no.: 216-102</b><br>Ferrule; Sleeve for 0.75 mm <sup>2</sup> / AWG 20; uninsulated; electro-tin plated | 216-102 |
|  <b>Item no.: 216-103</b><br>Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; uninsulated; electro-tin plated    | 216-103 |
|  <b>Item no.: 216-104</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; uninsulated; electro-tin plated  | 216-104 |

|                                                                                    |                                                                                                                                                                            |         |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|    | <b>Item no.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated                                                                          | 216-121 |
|    | <b>Item no.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated                                                                         | 216-122 |
|    | <b>Item no.: 216-123</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated                                                                            | 216-123 |
|    | <b>Item no.: 216-124</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated                                                                          | 216-124 |
|    | <b>Item no.: 216-141</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92  | 216-141 |
|    | <b>Item no.: 216-142</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92 | 216-142 |
|    | <b>Item no.: 216-143</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92    | 216-143 |
|    | <b>Item no.: 216-144</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92  | 216-144 |
|    | <b>Item no.: 216-201</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated                                                                            | 216-201 |
|   | <b>Item no.: 216-202</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated                                                                           | 216-202 |
|  | <b>Item no.: 216-203</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated                                                                              | 216-203 |
|  | <b>Item no.: 216-204</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated                                                                            | 216-204 |
|  | <b>Item no.: 216-221</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated                                                                            | 216-221 |
|  | <b>Item no.: 216-222</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated                                                                           | 216-222 |
|  | <b>Item no.: 216-223</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated                                                                              | 216-223 |
|  | <b>Item no.: 216-224</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated                                                                            | 216-224 |
|  | <b>Item no.: 216-241</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90    | 216-241 |
|  | <b>Item no.: 216-242</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90   | 216-242 |
|  | <b>Item no.: 216-243</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90      | 216-243 |

|                                                                                    |                                                                                                                                                                                      |         |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|    | <b>Item no.: 216-244</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90  | 216-244 |
|    | <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 | 216-262 |
|    | <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    | 216-263 |
|    | <b>Item no.: 216-264</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90  | 216-264 |
|    | <b>Item no.: 216-284</b><br>Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90  | 216-284 |
| <b>End plate</b>                                                                   |                                                                                                                                                                                      |         |
|    | <b>Item no.: 254-100</b><br>End plate; 1 mm thick; snap-fit type                                                                                                                     | 254-100 |
|    | <b>Item no.: 254-200</b><br>End plate; 1 mm thick; snap-fit type                                                                                                                     | 254-200 |
|    | <b>Item no.: 254-300</b><br>End plate; 1 mm thick; snap-fit type                                                                                                                     | 254-300 |
|  | <b>Item no.: 254-400</b><br>End plate; 1 mm thick; snap-fit type                                                                                                                     | 254-400 |
|  | <b>Item no.: 254-600</b><br>End plate; 1 mm thick; snap-fit type                                                                                                                     | 254-600 |
|  | <b>Item no.: 254-700</b><br>End plate; 1 mm thick; snap-fit type                                                                                                                     | 254-700 |
| <b>check</b>                                                                       |                                                                                                                                                                                      |         |
|  | <b>Item no.: 210-136</b><br>Test plug; 2 mm Ø; with 500 mm cable                                                                                                                     | 210-136 |
| <b>tools</b>                                                                       |                                                                                                                                                                                      |         |
|  | <b>Item no.: 210-657</b><br>Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short                                                                               | 210-657 |
|  | <b>Item no.: 210-658</b><br>Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short; angled                                                                       | 210-658 |
|  | <b>Item no.: 210-720</b><br>Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm                                                                              | 210-720 |

## Downloads

## CAD/CAE - Smart Data

## CAD data

| 3D Download 254-866 | URL | Download |
|---------------------|-----|----------|
|---------------------|-----|----------|

**PCB libraries**

|                                                                                                               |                      |                |          |
|---------------------------------------------------------------------------------------------------------------|----------------------|----------------|----------|
| TARGET Library for WAGO PCB Terminal Blocks<br>Compatible with TARGET PCB Design Software Version 17.x        | 1.1.0<br>Oct 6, 2014 | zip<br>27.1 MB | Download |
| EAGLE Library for WAGO PCB Terminal Blocks<br>Compatible with EAGLE PCB Design Software Version 6.x or higher | 2.1<br>Oct 6, 2014   | zip<br>23.9 MB | Download |
| DesignSpark Library for WAGO PCB Terminal Blocks<br>Compatible with DesignSpark PCB Version 4.x or higher     | 2.1<br>Oct 6, 2014   | zip<br>22.5 MB | Download |



Subject to changes.

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