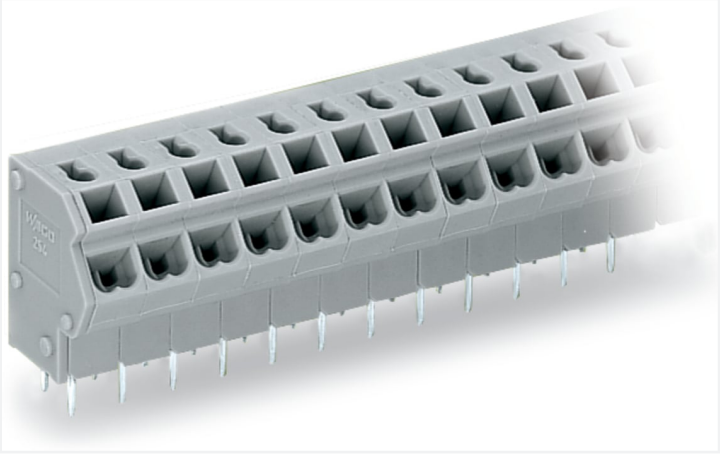
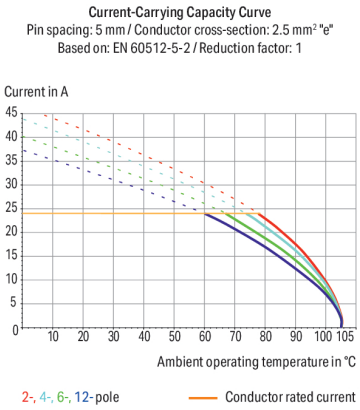
# Data Sheet | Item Number: 254-198

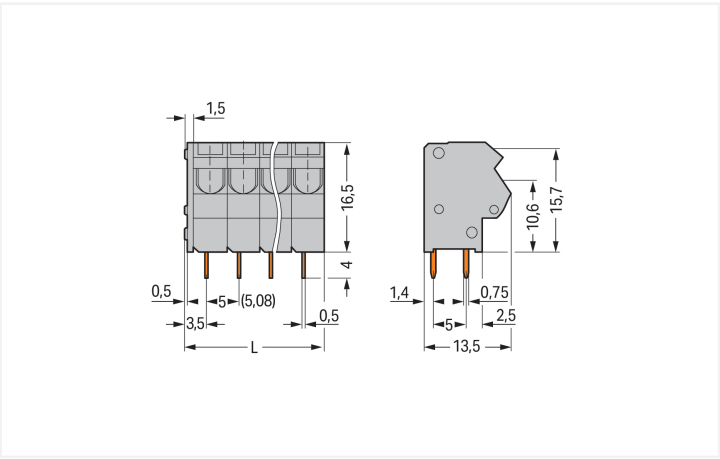
2-conductor PCB terminal block; 0.75 mm²; Pin spacing 5/5.08 mm; 48-pole; PUSH WIRE®; gray

https://www.wago.com/254-198






Color: gray




Dimensions in mm
L = (pole no. x pin spacing) + 1.5 mm

PCB terminal block, 254 Series, solder pin dimensions 0.5 x 0.75 mm

Our PCB terminal block (item number 254-198) makes connecting wires quick and easy. It is a universal connector that can be used almost anywhere, for example, as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Conductors can only be connected to this PCB terminal block if their strip length is between 10 and 12 mm . This product features one conductor terminal and utilizes PUSH WIRE®. Our tried-and-tested PUSH WIRE® connection offers the fastest method for clamping conductors. It utilizes the conductor's stiffness to overcome the clamping spring's contact force. The item's dimensions are (241.5 x 20.5 x 13.5) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.25 mm² to 0.75 mm².

The contact surface is coated with tin. This PCB terminal block is operated with an operating tool. THT is used to assemble the PCB terminal block. Insert the conductor at a 45° angle..

## 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 | 10 A | 10 A | 10 A |

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

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

## Connection Data

| | |
|---|---|
| Clamping units | 96 |
| Total number of potentials | 48 |
| Number of connection types | 1 |
| Number of levels | 1 |

### Connection 1

| | |
|---|---|
| Connection technology | PUSH WIRE® |
| Actuation type | Operating tool |
| Solid conductor | 0.25 … 0.75 mm² / 22 … 18 AWG |
| Strip length | 10 … 12 mm / 0.39 … 0.47 inches |
| Conductor connection direction to PCB | 45 ° |
| Pole number | 48 |

## Physical data

| | |
|---|---|
| Pin spacing | 5/5.08 mm / 0.197/0.2 inches |
| Width | 241.5 mm / 9.508 inches |
| Height | 20.5 mm / 0.807 inches |
| Height from the surface | 16.5 mm / 0.65 inches |
| Depth | 13.5 mm / 0.531 inches |
| Solder pin length | 4 mm |
| Solder pin dimensions | 0.5 x 0.75 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) | Information on material specifications can be found here |
| 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 ($E_{Cu}$) |
| Contact Plating | Tin |
| Fire load | 0.869 MJ |
| Weight | 54.9 g |


Continued on next page

## Environmental requirements

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

## Commercial data

| | |
|---|---|
| Product Group | 4 (Printed Circuit Connectors) |
| PU (SPU) | 20 (5) pcs |
| Packaging type | Box |
| Country of origin | PL |
| GTIN | 4044918941310 |
| 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 | NTR NL-7770 |
| CSA<br>DEKRA Certification B.V. | C22.2 | 70154033 |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947 | 71-109997 |
| UR<br>Underwriters Laboratories Inc. | UL 1059 | E45172 |

### 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 254-198


Continued on next page

## Documentation

### Additional Information

| | | |
|---|---|---|
| Technical Section | 03.04.2019 | pdf 2027.26 KB |

## CAD/CAE-Data

### CAE data

EPLAN Data Portal 254-198

### PCB Design

Symbol and Footprint via SamacSys 254-198

Symbol and Footprint via Ultra Librarian 254-198

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Ferrule

##### 1.1.1.1 Ferrule



Item No.: 216-241
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



Item No.: 216-141
Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-242
Ferrule; Sleeve for 0.75 mm² / 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 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



Item No.: 216-142
Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-243
Ferrule; Sleeve for 1 mm² / 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 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



Item No.: 216-143
Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



Item No.: 216-244
Ferrule; Sleeve for 1.5 mm² / AWG 16; 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 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



Item No.: 216-144
Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored

#### 1.1.2 Test and measurement

##### 1.1.2.1 Testing accessories

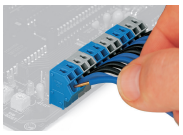


Item No.: 210-136
Test plug; 2 mm Ø; with 500 mm cable; red

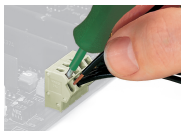

Continued on next page

## Installation Notes

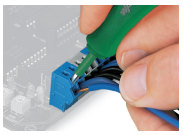
### Conductor termination



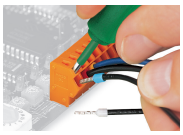
Insert solid conductors via push-in termination.



Inserting a tip-bonded conductor via screwdriver.

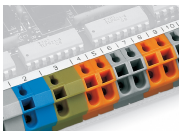


Removing a solid conductor.



Inserting/removing a ferruled conductor.

### Marking

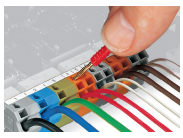


Labeling via self-adhesive marking strips.



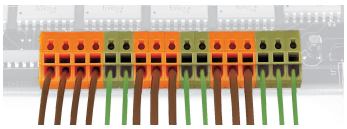
Labeling via factory direct marking.

### Testing

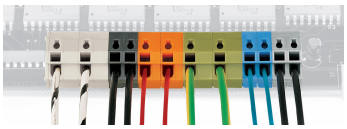


Testing with 2 mm Ø test plug.

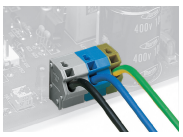
### Application



Mixed terminal strips can be assembled using different housing colors for the formation of groups.



Mixed terminal strips can be assembled using different pin spacing and housing colors for the formation of groups.



Application example: field-wiring terminal strip