# Data Sheet | Item Number: 2059-322/998-403

## SMD PCB terminal block; 0.5 mm²; Pin spacing 3 mm; 2-pole; PUSH WIRE®; in tape-and-reel packaging; 0,50 mm²; black

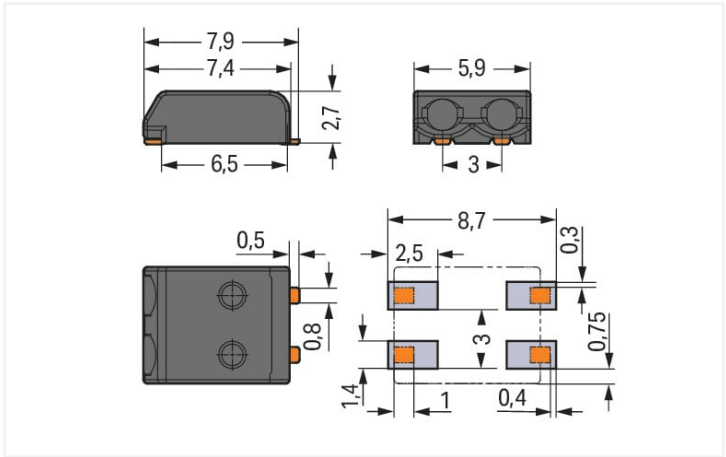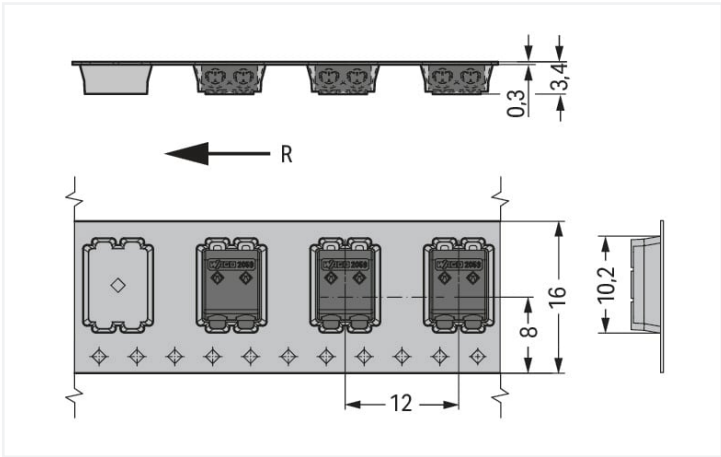https://www.wago.com/2059-322/998-403



Color: ■ black



Dimensions in mm



Dimensions in mm
R = feed direction

- SMD PCB terminal blocks with PUSH WIRE® connection technology
- Push-in termination of solid conductors
- Easy conductor removal via operating tool
- Just 2.7 mm tall
- Assemble terminal blocks without pole loss
- Available in tape-and-reel packaging for automated assembly

## Notes

| | |
|---|---|
| Note | Application notes:<br>Suitable for lead-free, reflow-soldering profiles per DIN EN 61760-1 and IEC 60068-2-58 up to max. 260°C peak temperature. Due to application-specific variables (component configuration and orientation, type of soldering machine, solder paste), trial runs are recommended to ensure product and process compatibility under actual manufacturing conditions.<br><br>Depending on reflow soldering temperatures and times, color deviations may occur. These deviations will have no impact on functionality. |
| Recommendation | Recommendation for stencil:<br>150 µm material thickness; Pattern layout identical to solder pad layout |

## Electrical data

| Ratings per | IEC/EN 60664-1 | | |
|---|---|---|---|
| Overvoltage category | III | III | II |
| Pollution degree | 3 | 2 | 2 |
| Nominal voltage | 63 V | 160 V | 320 V |
| Rated surge voltage | 2.5 kV | 2.5 kV | 2.5 kV |
| Rated current | 3 A | 3 A | 3 A |

| Approvals per | UL 1977 |
|---|---|
| Rated voltage | 250 V |
| Rated current | 3 A |

## Connection data

| Connection points | 2 |
|---|---|
| Total number of potentials | 2 |
| Number of connection types | 1 |
| Number of levels | 1 |

### Connection 1

| Connection technology | PUSH WIRE® |
|---|---|
| Actuation type | Operating tool |
| Solid conductor | 0.14 … 0.34 mm² / 26 … 22 AWG |
| Note (conductor cross-section) | For conductors (26 AWG) that are not rigid enough, the clamping unit must be opened using an operating tool. |
| Strip length | 4 … 5.5 mm / 0.16 … 0.22 inches |
| Conductor connection direction to PCB | 0 ° |
| Pole number | 2 |

### Connection 2

| Solid conductor 2 | 0.5 mm² / 20 AWG |
|---|---|
| Note (conductor cross-section) 2 | No reconnection of smaller conductor cross-sections (0.5 mm²/20 AWG) |
| Strip length 2 | 6 … 7.5 mm / 0.24 … 0.3 inches |

## Physical data

| Pin spacing | 3 mm / 0.118 inches |
|---|---|
| Width | 5.9 mm / 0.232 inches |
| Height | 2.7 mm / 0.106 inches |
| Depth | 7.9 mm / 0.311 inches |
| Reel diameter of tape-and-reel packaging | 330 mm |
| Tape width | 16 mm |

## PCB contact

| PCB contact | SMD |
|---|---|
| Solder pin arrangement | over the entire terminal strip (in-line) |
| Number of solder pins per potential | 2 |

## Material data

| Note (material data) | <a href="https://www.wago.com/us/material-specifications">Information on material specifications can be found here</a> |
|---|---|
| Color | black |
| Material group | I |
| Insulation material | Polyphthalamide (PPA GF) |
| Flammability class per UL94 | V0 |
| Contact material | Copper alloy |
| Contact plating | Tin |
| Fire load | 0.002 MJ |
| Weight | 0.2 g |

W/AGO

## Environmental requirements

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

## Commercial data

| | |
|---|---|
| eCl@ss 10.0 | 27-14-11-06 |
| eCl@ss 9.0 | 27-14-11-06 |
| ETIM 8.0 | EC001284 |
| ETIM 7.0 | EC001284 |
| PU (SPU) | 21000 (1750) pcs |
| Packaging type | Box |
| Country of origin | CH |
| GTIN | 4055143476560 |
| Customs tariff number | 85369010000 |

## Environmental Product Compliance

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

## Approvals / Certificates

### General approvals

CCA KEMA/KEUR   CCA KEMA/KEUR

| Approval | Standard | Certificate Name |
|---|---|---|
| CCA<br>DEKRA Certification B.V. | EN 60947-7-4 | NTR NL-7819 |
| CCA<br>DEKRA Certification B.V. | EN 60947-7-4 | 71-111131 |
| CCA<br>DEKRA Certification B.V. | EN 60838 | NTR NL-7720 |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 60838 | 71-106226 |

## Downloads

### Environmental Product Compliance

#### Compliance Search

| | |
|---|---|
| Environmental Product Compliance 2059-322/998-403 | ↓ |

## Documentation

### Additional Information

| Technical Section | 03.04.2019 | pdf 2010.85 KB | ↓ |

## CAD/CAE-Data

### CAD data

| 2D/3D Models 2059-322/998-403 | ↓ |

## 1 Compatible Products

### 1.1 Optional Accessories

### 1.1.1 Board-to-board link

### 1.1.1.1 Board-to-board link

**Item No.: 2059-902**
Board-to-Board Link; Pin spacing 3 mm; 2-pole; Length: 15.3 mm; white

**Item No.: 2059-902/018-000**
Board-to-Board Link; Pin spacing 3 mm; 2-pole; Length: 17.5 mm; white

**Item No.: 2059-902/021-000**
Board-to-Board Link; Pin spacing 3 mm; 2-pole; Length: 20.5 mm; white

### 1.1.2 Tool

### 1.1.2.1 Operating tool

**Item No.: 206-859**
Operating tool; for 2059 Series; multicoloured

**Item No.: 2059-189**
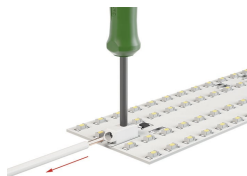Operating tool; made of insulating material; for 2059 Series

## Installation Notes

### Conductor termination

Insert solid conductors via push-in termination.

## Conductor termination



Easy conductor removal, e.g., via operating tool (Item No. 206-859) or "twist & pull" (max. 10 x, no reconnection of smaller conductors possible)