



technology for light

SMD-
TERMINAL BLOCKS





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Status: 06.2023

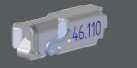
SMD-Terminal blocks

For efficient assembly of components:
SMD terminal blocks from BJB are ADS-compatible and can be wired robotically.

With a diverse range of applications, the SMD terminal blocks are used by LED PCB manufacturers in the lighting industry, home appliance manufacturer and consumer electronic sectors.

The mounting position is on the top side of a PCB.

SMD Pico



1 pole
46.110.1001.48

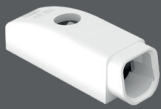
NEW

With only 2.3 x 2.7 x 8 mm (WxHxL), the Pico is the smallest and flattest in the series of our PCB terminal blocks.

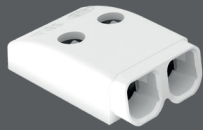
For direct insertion of solid conductors and stranded, tinned wire ends.

Finely stranded conductors can be inserted by use of contact opening function.

SMD Mini Flex



1 pole
46.131.2001.50

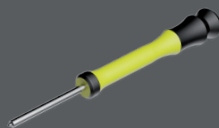


2 pole
46.132.2001.50

Compare to the Mini, the Mini Flex has a contact opening function. By using this function, besides the direct insertion of solid conductors and stranded, tinned wire end, the use of finely stranded wire ends is also possible.



46.131.-397.80



46.131.U802.89

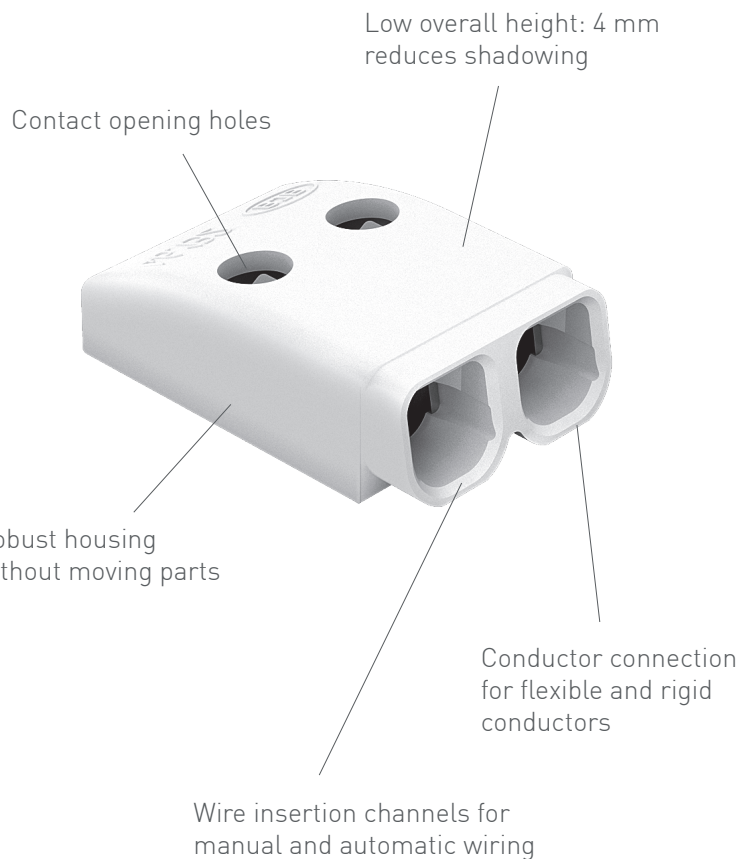
Contact opening tool

For SMD terminal blocks Mini Flex

- For opening the contacts to use of finely stranded wire ends and for release of already inserted wires
- **46.131.-398.50** with integrated stripping function by already cutted but not stripped wire ends

Material details for terminal blocks with housing

Temperature stability	-40 °C to +105 °C
Flammability category, based on UL94	V0
Insulating material group	I
Insulating material	PPA-GF



Processing notes

Soldering temperature higher 220 °C < 60s
Soldering temperature max. 260 °C < 10s

Depending on the SMD soldering process and associated parameters, a minor discoloration might occur. However, this will not influence the functionality.

SMD Nano

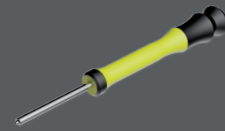


1 pole
46.131.1001.50



2 pole
46.132.1001.50

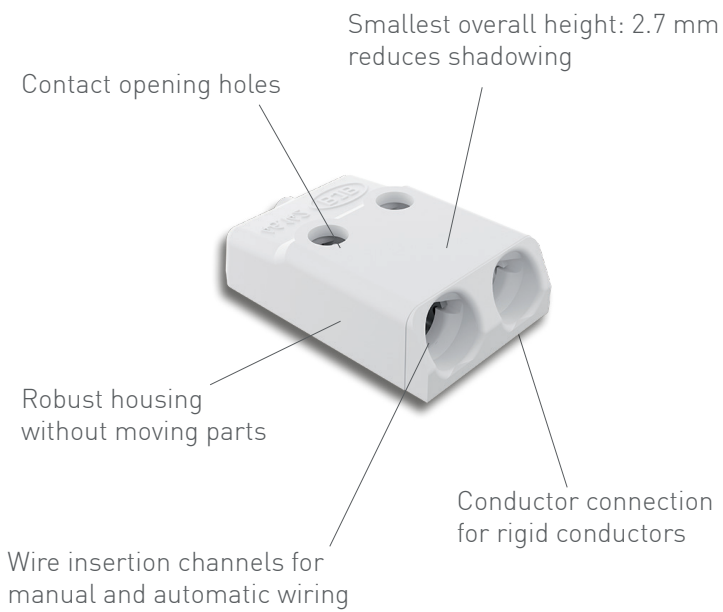
With a height of 2.7 mm, shadow formation is significantly reduced compared to the Mini and Mini Flex. The Nano is also equipped with a contact opening function and for direct insertion of solid conductors. By using this opening function, wires can easily be released.



46.141.U801.89

Contact opening tool

For SMD terminal blocks Nano.
To release already inserted wires.

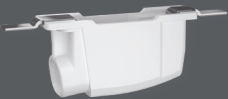


SMD Push-through terminal blocks

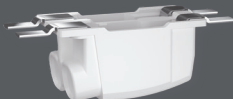
The push-through terminals are positioned on the underside of the PCB. This means e.g. for use in luminaire applications - No rotation of the luminaire during assembly, since the operating device and the wiring are on the same level.

No shadowing due to building up parts.

SMD Push-through - 150 V



1 pole
46.111.1001.50



2 pole
46.112.1001.50

For direct insertion solid conductors and stranded, tinned wire ends.

Wires can be released by twisting and pulling the wire simultaneously.

SMD Push-through - 400 V



1 pole
46.121.1002.50

For direct insertion solid conductors and stranded, tinned wire ends.

Wires can be released by twisting and pulling the wire simultaneously.

Material details for terminal blocks with housing

Temperature stability	-40 °C to +105 °C
Flammability category, based on UL94	V0
Insulating material group	I
Insulating material	PPA-GF

Protection against contact by insulation housing

Simplified assembly process -
Operating device and wiring
on one side

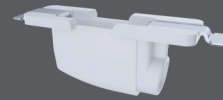


No shadowing through
building parts

Wire insertion channels
for manual and
automatic wiring

SMD Push-through terminal blocks

SMD Push-through - 500 V



1 pole

46.151.1001.50

For direct insertion solid conductors and stranded, tinned wire ends.

Wires can be released by twisting and pulling the wire simultaneously.










Additional test for 500V according to EN 60598-1. Standard requirements of 3mm for air and creepage distances at 500V are complied with.

Processing notes







Soldering temperature higher 220 °C < 60s
Soldering temperature max. 260 °C < 10s

Depending on the SMD soldering process and associated parameters, a minor discoloration might occur. However, this will not influence the functionality.



Overview SMD terminal blocks

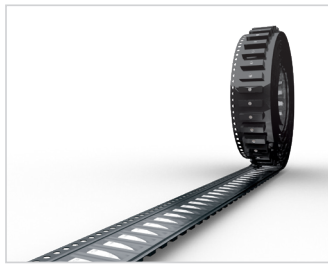
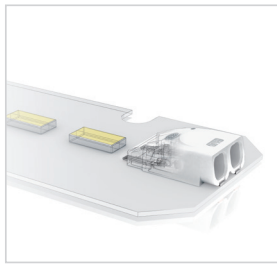
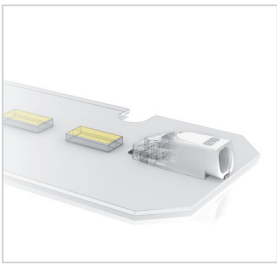
part no.		Designation	Number of poles	Packaging tape and reel	Packaging carton	Height
46.110.1001.50	 NEW	^{SMD} Pico	1	6.000 pieces	108.000 pieces 18 reels	2.7 mm
46.131.2001.50		^{SMD} Mini-Flex	1	2.650 pieces	34.450 pieces 13 reels	4 mm
46.132.2001.50		^{SMD} Mini-Flex	2	1.750 pieces	22.750 pieces 13 reels	4 mm
46.141.1001.50		^{SMD} Nano	1	4.050 pieces	72.900 pieces 18 reels	2.7 mm
46.142.1001.50		^{SMD} Nano	2	4.050 pieces	72.900 pieces 18 reels	2.7 mm
46.111.1001.50		^{SMD} Push-through 150V	1	950 pieces	9.500 pieces 10 reels	7.4 mm
46.112.1001.50		^{SMD} Push-through 150 V	2	500 pieces	5.000 pieces 10 reels	7.4 mm
46.121.1002.50		^{SMD} Push-through 400 V	1	1.400 pieces	14.000 pieces 10 reels	7.4 mm
46.151.1001.50		^{SMD} Push-through 500 V	1	1.400 pieces	11.200 pieces 7 reels	7.4 mm

Accessories: SMD-Mini-B2B-Connector - Length 26 mm

46.131.U701.00 1 pole		For use with terminal blocks 46.131.1001	
46.132.U701.00 2 pole		For use with terminal blocks 46.132.1001	
46.133.U701.00 3 pole		For use with terminal blocks 46.131.1001 and 46.132.1001	



Accessories: SMD-Mini-B2B-Connector - Length 28 mm

46.131.U702.00 1 pole		For use with terminal blocks 46.131.1001
46.132.U702.00 2 pole		For use with terminal blocks 46.132.1001









Wire compatibility				
solid wire ends	stranded, tinned wire ends	finely stranded wire ends	Assembly and wiring position	Ratings
0.20-0.75 mm ² AWG 24-18	0.20-0.50 mm ² AWG 24-20	0.20-0.75 mm ² AWG 24-18	top of the PCB	ENEC: 9A / 630V URus: 9A / 630V cUR: 9A (AWG18), 6A (AWG24)
0.20-0.75 mm ² AWG 24-18	0.20-0.50 mm ² AWG 24-20	0.20-0.75 mm ² AWG 24-18	top of the PCB	ENEC: 9A / 320V URus: 9A / 300V cUR: 3A / 300V
0.20-0.75 mm ² AWG 24-18	0.20-0.50 mm ² AWG 24-20	0.20-0.75 mm ² AWG 24-18	top of the PCB	ENEC: 9A / 320 V URus: 9A / 300V cUR: 3A / 300V
0.20-0.5 mm ² AWG 24-20	-	-	top of the PCB	ENEC: 3A / 320V URus: 3A / 320V cUR: 3A / 320V
0.20-0.5 mm ² AWG 24-20	-	-	top of the PCB	ENEC: 9A / 320V URus: 3A / 320V cUR: 3A / 320V
0.20-0.75 mm ² AWG 24-18	0.20-0.50 mm ² AWG 24-20	-	bottom of the PCB	ENEC: 9A / 320V URus: 9A / 300V cUR: 3A / 300V
0.20-0.75 mm ² AWG 24-18	0.20-0.50 mm ² AWG 24-20	-	bottom of the PCB	ENEC: 9A / 320V URus: 9A / 300V cUR: 3A / 300V
0.20-0.75 mm ² AWG 24-18	0.20-0.50 mm ² AWG 24-20	-	bottom of the PCB	ENEC: 9A/320V (EN 60947-7-4) URus: 9A / 600V (UL 1977)
0.20-0.75 mm ² AWG 24-18	0.20-0.50 mm ² AWG 24-20	-	bottom of the PCB	ENEC: 9A/500V (EN 60947-7-4) URus: 9A / 600V (UL 1977)

Accessories: SMD-Mini-B2B-Connector - Length 30 mm

46.131.U703.00 1 pole		For use with terminal blocks 46.131.1001
46.132.U703.00 2 pole		For use with terminal blocks 46.132.1001

Accessories: SMD-Nano-B2B-Connector - Length 21 mm

46.141.U701.00 1 pole		For use with terminal blocks 46.141.1001	
46.142.U701.00 2 pole		For use with terminal blocks 46.142.1001	
46.143.U701.00 3 pole		For use with terminal blocks 46.141.1001 and 46.142.1001	



DATA & FACTS

BJB was founded in 1867 by Friedrich Wilhelm Brökelmann, Franz Jäger and Gustav Busse. The business began as a factory for petroleum lamps and developed into a company which manufactured components for establishing the connection between power supply and light. Today, BJB is a lighting technology brand which supplies innovative solutions to the lighting and domestic appliance industries worldwide.

BUSINESS SECTORS

- BJB Lighting: Lighting solutions and components for luminaires
- BJB Appliance: Lighting solutions for domestic appliances
- BJB Automation: Machines and equipment for automating luminaire and domestic appliance manufacturing processes
- BJB metrology services: 3D metrology and prototyping/ laser sintering service for highest demands

EMPLOYEES

450 worldwide

BJB International

Headquarters: Arnsberg (Westphalia, Germany) Subsidiaries and sales offices in China, Spain, Italy, Japan, Hong Kong, Taiwan and the USA. Representatives in 50 other countries. Products supplied to more than 70 countries.

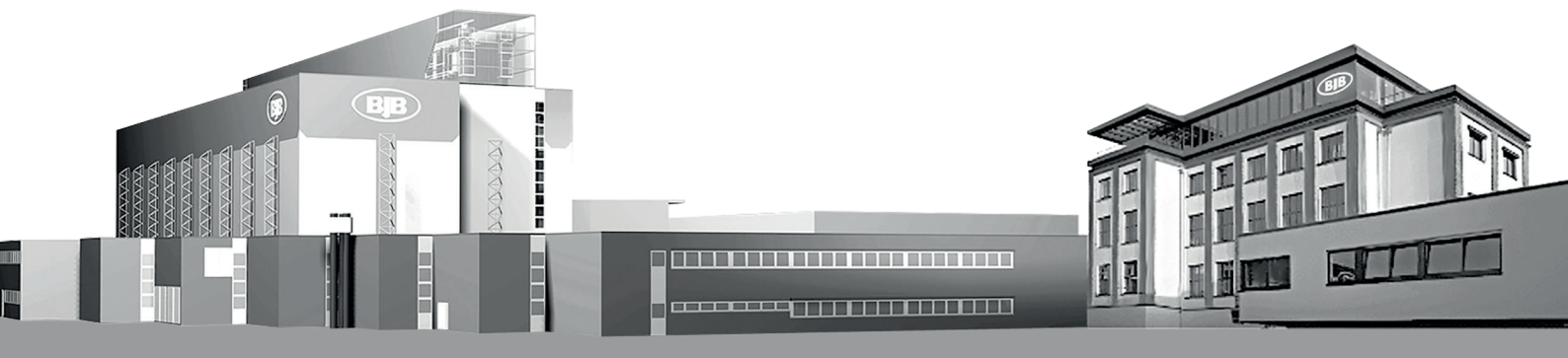
RESEARCH & DEVELOPMENT

Every year, there are numerous new developments and improvements to the 3000 different products that we sell. In an effort to achieve continuous progress, our engineers carry out detailed studies of products, markets and customer expectations. They work with the latest technical materials, devices and processes, including:

Rapid Prototyping

Laser sintering processes and 3D printers enable us to produce finished models based on design data very quickly without manual intervention.

About BJB



Computer Aided Technologies

Computer-aided design enables precise results to be obtained more quickly. Models are designed, simulated and optimised on the computer. The analysis functions, which examine components at an early stage to determine their robustness, performance and other characteristics, are particularly useful:

- Computer Aided Inspection
- Computer Aided Engineering
- Computer Aided Design

Light laboratory

For the measurement of luminous flux, light spectrum, luminous intensity, colour temperature, colour rendering, chromaticity coordinate, luminous flux curves and colour shift. The integrating sphere enables particularly precise measurements to be carried out. It has almost ideal diffuse radiation. This makes it perfect for measuring the total luminous flux of various light sources and laser and light radiation. It even creates a reference source which can be used to compare detectors.

Equipment used in the design process

In order to be able to ensure 100 per cent quality at all times, we test our materials and products with machines from Zwick, the leading manufacturer of test equipment worldwide.

PRODUCTION

From the idea to the finished product, we cover the entire value-creation chain in-house. Production, as the main process, includes:

- Plastic injection moulding incl. toolmaking
- Metalworking
- Assembly

QUALITY MANAGEMENT

International certification organisations confirm the quality of our processes and products.

Quality management: ISO 9001

LED standardisation: Zhaga

Safety & quality:

- VDE
- ENEC certificate of the VDE
- CQC (China Quality Certification)
- cULus (Underwriter Laboratories)
- JET (Japan Electrical Safety & Environment Technology Laboratories)
- X-ray computed tomography (CT) for layer, defect and wall-thickness analysis, etc.



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