



Technology for Light

Components · Optics · Automation

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SMD-  
TERMINAL BLOCKS



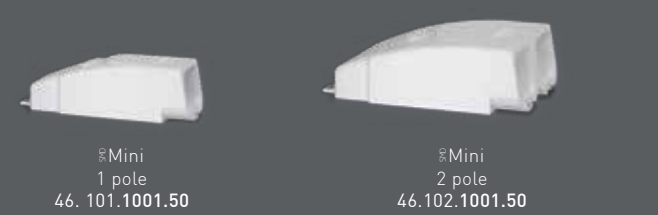
# Content

04	§§ Mini- and §§ Mini-Flex Contact opening aid
05	§§ Nano Contact opening aid Information on material and manufacture
06 - 07	§§ Push through terminal blocks
08 - 09	Product-Overview of SMD-Terminal blocks
10 - 11	About BJB
12	BJB Worldwide

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SMD-Terminal blocks

SMD Mini

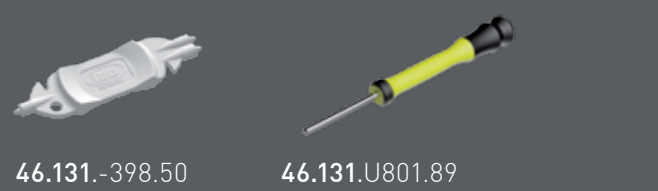


BJB SMD Minis. With a height of only 4 mm, they are extremely flat and keep any shadow formation to a minimum. For efficient assembly of components: SMD Minis from BJB are ADS-compatible and can be wired robotically.

SMD Mini Flex

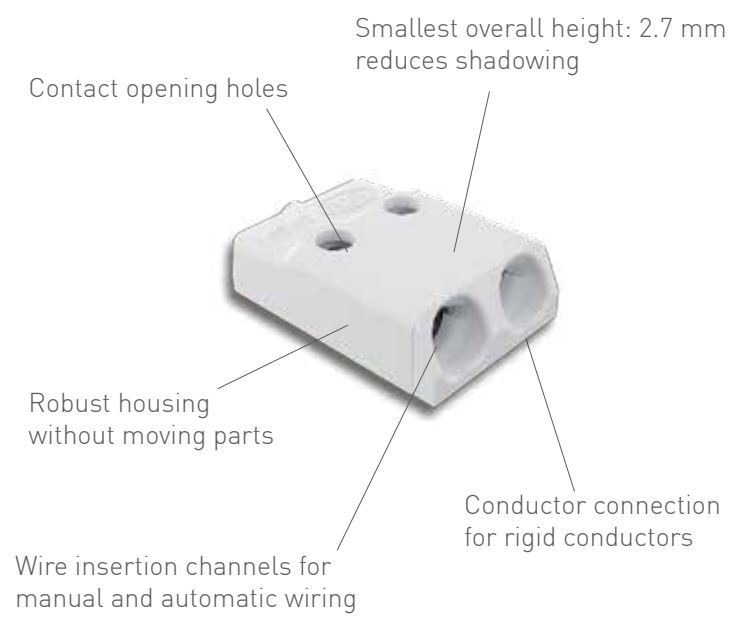
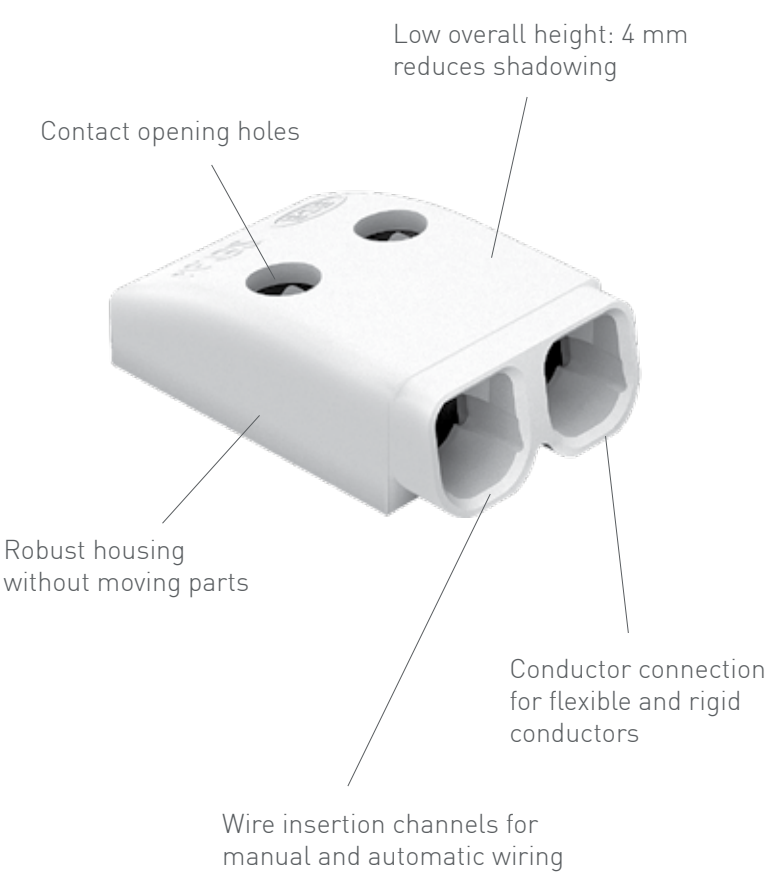


Our Mini-Flex SMD terminal block is designed to take both solid and stranded wires and has a release function. It is also suitable for automatic assembly with BJB robots. With a diverse range of applications, the SMD Mini-Flex is used by LED PCB manufacturers in the lighting industry, home appliance manufacturer and consumer electronic sectors.



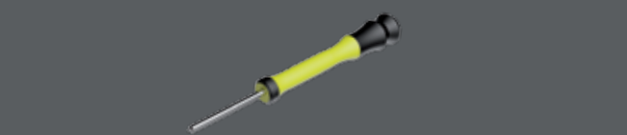
Contact opening aid 46.131.-398.50 and 46.131.U801.89 Suitable für SMD-Terminal blocks 46.131 and 46.132

- Opens the contacts for removing already inserted cables
- To open the contacts when inserting fine-stranded cables
- 46.131.-398.50 with integrated stripping function by already cutted conductor ends



SMD Nano

The new Nano is designed for solid conductors and is also equipped with a release function. It is also suitable for automatic assembly with BJB robots. With a diverse range of applications, the SMD Mini-Flex is used by LED PCB manufacturers in the lighting industry, home appliance manufacturer and consumer electronic sectors.



Contact opening aid 46.141.U801.89 Suitable for SMD terminal blocks 46.141 and 46.142

Material details

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

Important processing notes

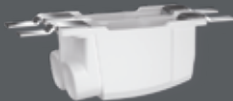
Soldering temperature higher 220 °C < 60s  
Soldering temperature max. 260 °C < 10s

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

SMD Push-through



Push-through  
1 pole  
46.111.1001.50



Push-through  
2 pole  
46.112.1001.50

There is no need to turn the luminaire during assembly as the control gear and wiring are on the same side.  
No shadow formation due to protruding components.



Push-through  
1 pole  
46.111.1001.50

Version for higher voltages 500 V

Material details

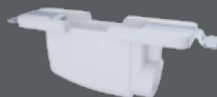
Temperature stability	-40 °C up to +105 °C
Flammability category, based on UL94	V0
Insulating material group	I
Insulating material	PPA-GF

Important processing notes

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

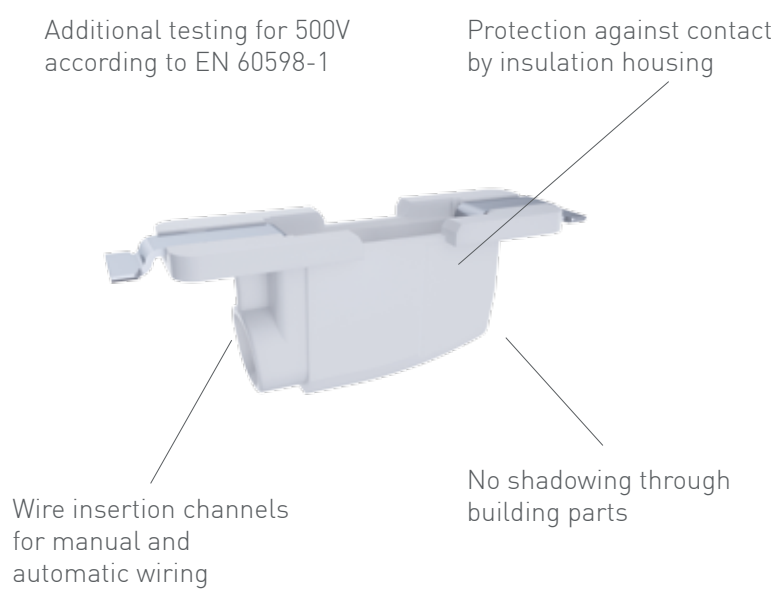
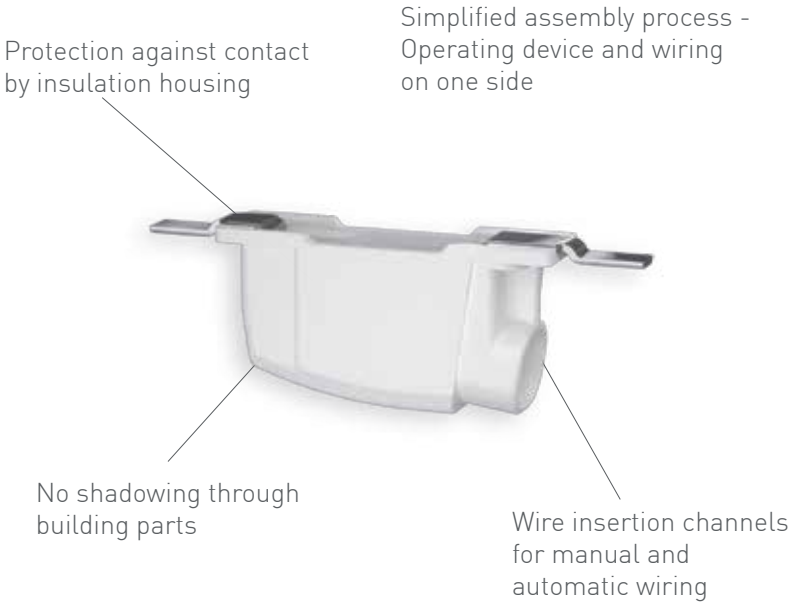
Depending on the SMD soldering process and associated parameters a minor discoloration might occur.  
However, this will not influence the functionality.

SMD Push through



Push-through  
1 pole  
46.151.1001.50

Simplified assembly process - Operating device and wiring on one side.  
Additional test for 500V according to EN 60598-1.  
Standard requirements of 3mm for air and creepage distances at 500V are complied with



Overview SMD terminal blocks



							Wire compatibility					
part no.		Designation	Number of poles	Packaging tape and reel	Packaging carton	Height	Solid conductors	Flexible conductors with treated wire ends (e.g., tined)	Finely, untreated wire ends	Cross sectional range	Wiring position	Ratings
46.101.1001.50		SMD Mini	1	1.800 pieces	23.400 pieces 13 reels	4 mm	x	x		0.34-0.75 mm <sup>2</sup> AWG 24-18	On the top of the PCB	ENEC: 9A / 320 V URus: 9A / 300V cUR: 3A / 300V
46.102.1001.50		SMD Mini	2	1.200 pieces	15.600 pieces 13 reels	4 mm	x	x		0.34-0.75 mm <sup>2</sup> AWG 24-18	On the top of the PCB	ENEC: 9A / 320 V URus: 9A / 300V cUR: 3A / 300V
46.131.1001.50		SMD Mini-Flex	1	1.800 pieces	23.400 pieces 13 reels	4 mm	x	x	x	0.20-0.75 mm <sup>2</sup> AWG 24-18	On the top of the PCB	ENEC: 9A / 320 V URus: 9A / 300V cUR: 3A / 300V
46.132.1001.50		SMD Mini-Flex	2	1.200 pieces	15.600 pieces 13 reels	4 mm	x	x	x	0.20-0.75 mm <sup>2</sup> AWG 24-18	On the top of the PCB	ENEC: 9A / 320 V URus: 9A / 300V cUR: 3A / 300V
46.141.1001.50		SMD Nano	1	2.800 pieces	50.400 pieces 18 reels	2.7 mm	x			0.20-0.5 mm <sup>2</sup> AWG 24-20	On the top of the PCB	ENEC: 3A / 320 V URus: 3A / 320V cUR: 3A / 320V
46.142.1001.50		SMD Nano	2	2.800 pieces	50.400 pieces 18 reels	2.7 mm	x			0.20-0.5 mm <sup>2</sup> AWG 24-20	On the top of the PCB	ENEC: 3A / 320 V URus: 3A / 320V cUR: 3A / 320V
46.111.1001.50		SMD Durchsteck	1	700 pieces	7.000 pieces 10 reels	7.4 mm	x	x		0.20-0.75 mm <sup>2</sup> AWG 24-18	At the bottom of the PCB	ENEC: 9A / 320 V URus: 9A / 300V cUR: 3A / 300V
46.112.1001.50		SMD Durchsteck	2	500 pieces	5.000 pieces 10 reels	7.4 mm	x	x		0.20-0.75 mm <sup>2</sup> AWG 24-18	At the bottom of the PCB	ENEC: 9A / 320 V URus: 9A / 300V cUR: 3A / 300V
46.121.1001.50		SMD Durchsteck	1	1.000 pieces	10.000 pieces 10 reels	7.4 mm	x	x		0.20-0.75 mm <sup>2</sup> AWG 24-18	At the bottom of the PCB	ENEC: 9A/320V (EN 60947-7-4) ENEC: 9A/500V (EN 60598-1) URus: 9A / 600V (UL 1977)
46.151.1001.50		SMD Durchsteck <b>NEW</b>	1	1.400 pieces	9.800 pieces 7 reels	7.4 mm	x	x		0.20-0.75 mm <sup>2</sup> AWG 24-18	At the bottom of the PCB	ENEC: 9A/320V (EN 60947-7-4) ENEC: 9A/500V (EN 60598-1) URus: 9A / 600V (UL 1977)

Accessories: SMD-Mini-B2B-Connector - Length 26 mm			
46.131.U701.00 1-polig		For use with terminal blocks 46.131.1001	
46.132.U701.00 2-polig		For use with terminal blocks 46.132.1001	
46.133.U701.00 3-polig		For use with terminal blocks 46.131.1001 and 46.132.1001	

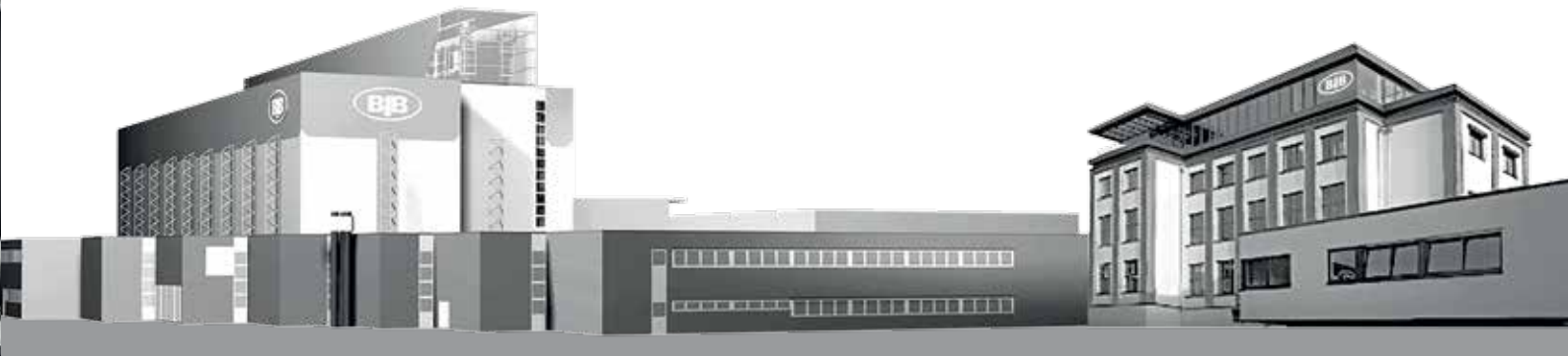
Accessories: SMD-Mini-B2B-Connector - Length 28 mm			
46.131.U702.00 1-polig		For use with terminal blocks 46.131.1001	
46.132.U702.00 2-polig		For use with terminal blocks 46.132.1001	
Accessories: SMD-Mini-B2B-Connector - Length 30 mm			
46.131.U703.00 1-polig		For use with terminal blocks 46.131.1001	
46.132.U703.00 2-polig		For use with terminal blocks 46.132.1001	

Accessories: SMD-Nano-B2B-Connector - Length 21 mm			
46.141.U701.00 1-polig		For use with terminal blocks 46.141.1001	
46.142.U701.00 2-polig		For use with terminal blocks 46.142.1001	
46.143.U701.00 3-polig		For use with terminal blocks 46.141.1001 and 46.142.1001	





## About BJB



### 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

### EMPLOYEES

560 worldwide

### BJB International

Headquarters: Arnsberg (Westphalia, Germany) Subsidiaries in China, Spain, Japan, Hong Kong and the USA. Representatives in 50 other countries. Products supplied to 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.

#### 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
- Circuit board production with automatic placement machine, screen printing system, reflow oven and testing technology

### 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.



## Technology for Light

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