

## SL 5.00/19/180B 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**

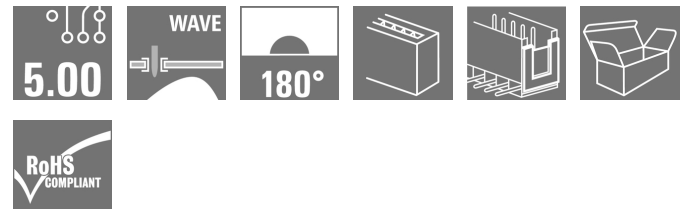
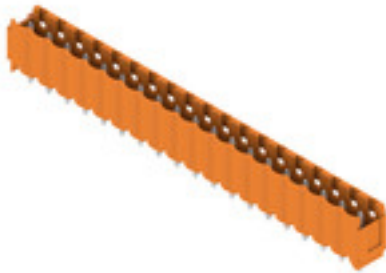
Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

### Product image



Male connectors with straight outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

### General ordering data

Version	PCB plug-in connector, male header, Dovetails for fixing blocks, THT solder connection, 5.00 mm, Number of poles: 19, 180°, Solder pin length (l): 3.2 mm, tinned, orange, Box
Order No.	<a href="#">1581950000</a>
Type	SL 5.00/19/180B 3.2SN OR BX
GTIN (EAN)	4008 190107062
Qty.	20 pc(s).
Product data	IEC: 400 V / 18 A UL: 300 V / 15 A
Packaging	Box

Creation date January 26, 2022 11:18:23 AM CET

## SL 5.00/19/180B 3.2SN OR BX

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Dimensions and weights

Depth	8.4 mm	Depth (inches)	0.331 inch
Height	15.2 mm	Height (inches)	0.598 inch
Height of lowest version	12 mm	Width	97 mm
Width (inches)	3.819 inch	Net weight	7.3 g

## System specifications

Product family	OMNIMATE Signal - series BL/SL 5.00	Type of connection	Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	5 mm
Pitch in inches (P)	0.197 inch	Outgoing elbow	180°
Number of poles	19	Number of solder pins per pole	1
Solder pin length (l)	3.2 mm	Solder pin length tolerance	+0.1 / -0.2 mm
Solder pin dimensions	d = 1.2 mm, Octagonal	Solder pin dimensions = d tolerance	0 / -0,03 mm
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (D)+	0,1 mm
L1 in mm	90 mm	L1 in inches	3.543 inch
Number of rows	1	Pin series quantity	1
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch, plugged	Touch-safe protection acc. to DIN VDE 0470	IP20 plugged
Protection degree	IP20	Volume resistance	≤5 mΩ
Can be coded	Yes	Plugging force/pole, max.	10 N
Pulling force/pole, max.	8 N		

## Material data

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	CuSn	Contact surface	tinned
Layer structure of solder connection	1...3 μm Ni / 2...4 μm Sn matt	Layer structure of plug contact	1...3 μm Ni / 2...4 μm Sn matt
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	100 °C

## Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	18 A
Rated current, max. number of poles (Tu=20°C)	14.5 A	Rated current, min. number of poles (Tu=40°C)	15 A
Rated current, max. number of poles (Tu=40°C)	12 A	Rated voltage for surge voltage class / pollution degree II/2	400 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	250 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV	Short-time withstand current resistance	3 x 1s with 120 A

## SL 5.00/19/180B 3.2SN OR BX

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Rated data acc. to CSA

Institute (CSA)



Certificate No. (CSA)

200039-1121690

Rated voltage (Use group B / CSA) 300 V

Rated voltage (Use group D / CSA) 300 V

Rated current (Use group B / CSA) 15 A

Rated current (Use group D / CSA) 10 A

Reference to approval values

Specifications are maximum values, details - see approval certificate.

## Rated data acc. to UL 1059

Institute (UR)



Certificate No. (UR)

E60693

Rated voltage (Use group B / UL 1059) 300 V

Rated voltage (Use group D / UL 1059) 300 V

Rated current (Use group B / UL 1059) 15 A

Rated current (Use group D / UL 1059) 10 A

Reference to approval values

Specifications are maximum values, details - see approval certificate.

## Packing

Packaging	Box	VPE length	45 mm
VPE width	60 mm	VPE height	220 mm

## Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ECLASS 9.0	27-44-04-02
ECLASS 9.1	27-44-04-02	ECLASS 10.0	27-44-04-02
ECLASS 11.0	27-46-02-01		

## Important note

IPC conformity

Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

Notes

- Additional colours on request
- Gold-plated contact surfaces on request
- Rated current related to rated cross-section & min. No. of poles.
- P on drawing = pitch
- Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.

**Data sheet**

**SL 5.00/19/180B 3.2SN OR BX**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

www.weidmueller.com

**Technical data**

**Approvals**

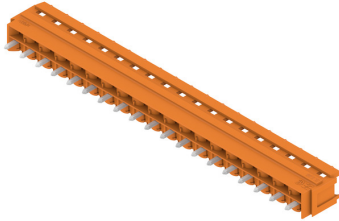
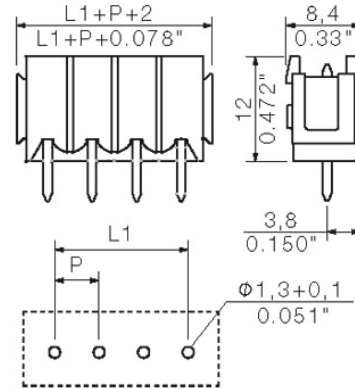
Approvals



ROHS	Conform
UL File Number Search	E60693

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">FL BUILDING SAFETY EN</a> <a href="#">FL APPL LED LIGHTING EN</a> <a href="#">FLIndustr.CONTROLS EN</a> <a href="#">FL MACHINE SAFETY EN</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL INVERTER EN</a> <a href="#">FL_BASE_STATION_EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a> <a href="#">PO OMNIMATE EN</a>

**Data sheet****SL 5.00/19/180B 3.2SN OR BX****Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany[www.weidmueller.com](http://www.weidmueller.com)**Drawings****Product image****Dimensional drawing**

## SL 5.00/19/180B 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

www.weidmueller.com

# Accessories

## Coding elements



**Only connects what is supposed to be connected: the right connection at the right place.**

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

### General ordering data

Type	BLZ/SL KO OR BX	Version	Product data	Packaging
Order No.	<a href="#">1573010000</a>	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			
Type	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	<a href="#">1545710000</a>	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 pc(s).			

## Blocks for PCB mounting



**Minor component, major effect:**

Clip-on attachment elements increase the mechanical resilience of the whole plug connection by

- securing the male connectors to the circuit board
- providing a vibration-proof connection between the sockets and the male connectors

Clip-on or pre-assembled - always the right solution:

- Hard-wearing, precise fitting dovetail joint
- Hard-wearing metal threaded inserts
- Suitable for all outlet directions

Maximum stability, minimum effort:

- Extremely resilient for frequent fastening operations
- Complete set for easy selection

The result: soldering points, contacts and overall module are more resilient against mechanical stress such as vibrations and tensile loads.

### General ordering data

Type	SLA BB11R SW	Version	Product data	Packaging
Order No.	<a href="#">1692340000</a>	PCB plug-in connector, Accessories, Mounting block, black, Number of		Box
GTIN (EAN)	4008190864965	poles: 1		
Qty.	20 pc(s).			

## SL 5.00/19/180B 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

www.weidmueller.com

## Accessories

Type	SLA BB5R OR	Version	Product data	Packaging
Order No.	<a href="#">1723460000</a>		PCB plug-in connector, Accessories, Mounting block, orange, Number	Box
GTIN (EAN)	4008190366018		of poles: 1	
Qty.	20 pc(s).			
Type	SLA BB11R OR	Version	Product data	Packaging
Order No.	<a href="#">1604120000</a>		PCB plug-in connector, Accessories, Mounting block, orange, Number	Box
GTIN (EAN)	4008190182977		of poles: 1	
Qty.	20 pc(s).			
Type	SLA BB1R SW	Version	Product data	Packaging
Order No.	<a href="#">1723480000</a>		PCB plug-in connector, Accessories, Mounting block, black, Number of	Box
GTIN (EAN)	4008190366032		poles: 1	
Qty.	20 pc(s).			
Type	SLA BB5R SW	Version	Product data	Packaging
Order No.	<a href="#">1723510000</a>		PCB plug-in connector, Accessories, Mounting block, black, Number of	Box
GTIN (EAN)	4008190366063		poles: 1	
Qty.	20 pc(s).			
Type	SLA BB12R SW	Version	Product data	Packaging
Order No.	<a href="#">1626880000</a>		PCB plug-in connector, Accessories, Mounting block, black, Number of	Box
GTIN (EAN)	4008190198213		poles: 1	
Qty.	100 pc(s).			
Type	SLA BB2R OR	Version	Product data	Packaging
Order No.	<a href="#">1723440000</a>		PCB plug-in connector, Accessories, Mounting block, orange, Number	Box
GTIN (EAN)	4008190365998		of poles: 1	
Qty.	20 pc(s).			
Type	SLA BB2R SW	Version	Product data	Packaging
Order No.	<a href="#">1723490000</a>		PCB plug-in connector, Accessories, Mounting block, black, Number of	Box
GTIN (EAN)	4008190366049		poles: 1	
Qty.	20 pc(s).			
Type	SLA BB1R OR	Version	Product data	Packaging
Order No.	<a href="#">1723430000</a>		PCB plug-in connector, Accessories, Mounting block, orange, Number	Box
GTIN (EAN)	4008190365981		of poles: 1	
Qty.	20 pc(s).			
Type	SLA BB6R OR	Version	Product data	Packaging
Order No.	<a href="#">1723470000</a>		PCB plug-in connector, Accessories, Mounting block, orange, Number	Box
GTIN (EAN)	4008190366025		of poles: 1	
Qty.	20 pc(s).			
Type	SLA BB6R SW	Version	Product data	Packaging
Order No.	<a href="#">1723520000</a>		PCB plug-in connector, Accessories, Mounting block, black, Number of	Box
GTIN (EAN)	4008190366070		poles: 1	
Qty.	20 pc(s).			
Type	SLA BB12R OR	Version	Product data	Packaging
Order No.	<a href="#">1593450000</a>		PCB plug-in connector, Accessories, Mounting block, orange, Number	Box
GTIN (EAN)	4008190122164		of poles: 1	
Qty.	100 pc(s).			

## SL 5.00/19/180B 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

www.weidmueller.com

## Accessories

## Additional accessories



**No task is too small when creating the perfect solution.** br />

Connections form just one part of the overall process. Small details are often the key to the perfect solution in applications where potentials are tested, grouped or even isolated.

A system is not a system without small but useful details:

- Test plugs - ensure reliable pick-up from diagnostic sockets
- Cross-connectors - ensure a stable electrical distribution contact directly at the connection
- Compartment partition elements - divide a large number of male connectors into several separate socket connector channels
- Locks and clips - optional vibration-resistant clip-on connection or mounting for male and female connectors

In tandem with the manufacturing process and application - more accessories = smaller workload

## General ordering data

Type	SL AT OR	Version	Product data	Packaging
Order No.	<a href="#">1598300000</a>	PCB plug-in connector, Accessories, Spacer, orange, Number of poles:		Box
GTIN (EAN)	4008190189266	1		
Qty.	100 pc(s).			
Type	SL RH4R OR	Version	Product data	Packaging
Order No.	<a href="#">1338860000</a>	PCB plug-in connector, Accessories, Latches, orange, Number of poles:		Box
GTIN (EAN)	4008190126681	1		
Qty.	100 pc(s).			
Type	SL AT SW	Version	Product data	Packaging
Order No.	<a href="#">1770240000</a>	PCB plug-in connector, Accessories, Spacer, black, Number of poles: 1		Box
GTIN (EAN)	4032248117710			
Qty.	100 pc(s).			
Type	SL RH4L OR	Version	Product data	Packaging
Order No.	<a href="#">1338760000</a>	PCB plug-in connector, Accessories, Latches, orange, Number of poles:		Box
GTIN (EAN)	4008190170073	1		
Qty.	100 pc(s).			



## Recommended wave soldering profiles

**Weidmüller Interface GmbH & Co. KG**  
 Klängenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
 www.weidmueller.com

### Single Wave:



### Double Wave:



### Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Weidmuller:](#)

[1581950000](#)