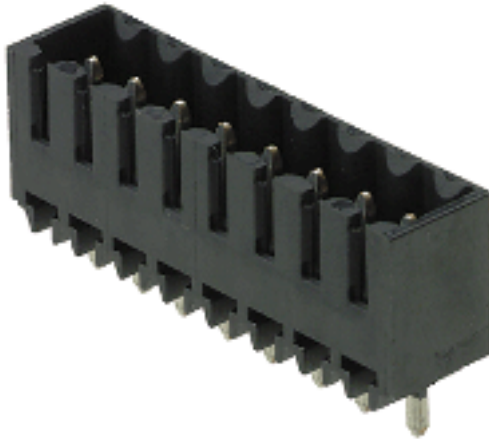


**System pitch 3.50 mm (0.138 inch)  
SL-SMT 3.50/10/180G 3.2SN BK BX**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-2083  
www.weidmueller.com



High-temperature-resistant male connector with 3.50 mm pitch for all customary soldering methods. Optimised for automatic assembly. Packed in box or tape. 3.2 mm solder pin suitable for reflow and wave soldering. These male connectors have space for labelling and can be coded.

- 250 V (IEC) / 300 V (UL)
- 15 A (IEC) / 10 A (UL)

### General ordering data

Order No.	<a href="#">1836990000</a>
Part designation	SL-SMT 3.50/10/180G 3.2SN BK BX
Version	PCB plug-in connector, male header, 3.50 mm, No. of poles: 10, 180°, Solder pin length: 3.2 mm, tinned, black, Reflow solder connection, Box
GTIN (EAN)	4032248345076
Qty.	50 pc(s).
Packaging	Box

## System pitch 3.50 mm (0.138 inch) SL-SMT 3.50/10/180G 3.2SN BK BX

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## Technical data

### System parameters

Fitted to PCB	Reflow solder connection	Outgoing elbow	180°
Pitch in mm	3.5 mm	Pitch in inch	0.138 inch
No. of poles	10	Solder pin length	3.2 mm
Can be coded	Yes	No. of rows	1
Number of solder pins per pole	1	Diameter of solder eyelet	1.4 mm
Tolerance of the diameter of the solder eyelet	+ 0,1 mm	L1 in mm	31.5 mm
L1 in inch	1.24 inch	Insulation resistance	10 <sup>3</sup> Ω
Electric shock protection to DIN VDE 0470	IP 10	Electric shock protection to DIN VDE 57 106	Safe from back-of-hand touch

### Material data

Insulating material	LCP GF	Colour	black
Insulating material group	IIIa	Flammability class UL 94	V-0
CTI	≥ 175	Temperature of glow-wire test	960 °C
Duration of glow-wire test	30 s	Contact material	CuSn
Contact surface	tinned	Highest continuous operating temperature, min.	-25 °C
Highest continuous operating temperature, max.	100 °C	Max. relative humidity during storage	80 %

### DIN IEC rating data

Rated current, min. No. of poles (Tu=20°C)	15 A	Rated current, max. No. of poles (Tu=20°C)	12 A
Rated current, no. of poles (Tu=40°C), min.	13 A	Rated current, no. of poles (Tu=40°C), max.	10 A
Rated voltage at overvoltage category/pollution degree III/3	160 V	Rated impulse withstand voltage for overvoltage class/pollution severity III/3	2.5 kV
Rated voltage for overvoltage class/pollution severity III/2	160 V	Rated impulse withstand voltage for overvoltage class/pollution severity III/2	2.5 kV
Rated voltage for overvoltage class/pollution severity II/2	320 V	Rated impulse withstand voltage for overvoltage class/pollution severity II/2	2.5 kV
Short-time withstand current resistance	3 x 1s with 100 A		

### CSA rating data

Rated voltage (Use group B)	300 V	Rated current (use group B)	10 A
Rated voltage (use group D)	300 V	Rated current (use group D)	10 A

### UL 1059 rating data

Rated voltage (use group B)	300 V	Rated current (use group B)	10 A
Rated voltage (use group D)	300 V	Rated current (use group D)	10 A

### Approvals

Approvals institutes	CSA; GOSTME25; UR; ROHS
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### Classifications

ETIM 3.0	EC001284	eClass 5.1	27-26-07-04
eClass 6.0	27-26-07-04		

## Datasheet

**System pitch 3.50 mm (0.138 inch)**  
**SL-SMT 3.50/10/180G 3.2SN BK BX**

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## Technical data

### Notes

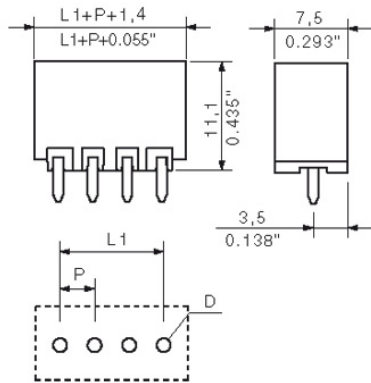
Notes

- Additional colours on request
- Gold-plated contact surfaces on request
- Rated current related to rated cross-section and min. No. of poles.
- Diameter of solder eyelet D = 1.4+0.1 mm
- Diameter of solder eyelet D = 1.5+0.1mm from 9-pole
- P on drg. = 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.

### Downloads

CAD Library (P-CAD Format - ASCII) [SL-SMT.LIA](#)

CAD Library (P-CAD Format - Standard) [SL-SMT.LIB](#)

**Datasheet****System pitch 3.50 mm (0.138 inch)  
SL-SMT 3.50/10/180G 3.2SN BK BX****Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
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Germany  
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www.weidmueller.com**Drawings**

## System pitch 3.50 mm (0.138 inch) SL-SMT 3.50/10/180G 3.2SN BK BX

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## Counterpart

### BL 3.5/270



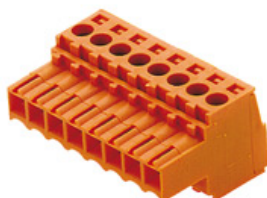
Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They include space for labelling and can be coded.

- 0.20 - 1.5 mm<sup>2</sup> (IEC) / 28 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17 A (IEC) / 10 A (UL)

### General ordering data

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1639550000</a>	BL 3.50/10/270 SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 270°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190277109	50 pc(s).	Box
<a href="#">1639780000</a>	BL 3.50/10/270 SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 270°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190277338	50 pc(s).	Box

### BL 3.5/180



Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They include space for labelling and can be coded.

- 0.20 - 1.5 mm<sup>2</sup> (IEC) / 28 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17 A (IEC) / 10 A (UL)

### General ordering data

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1606570000</a>	BL 3.50/10/180 SN DKGN BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190039851	50 pc(s).	Box
<a href="#">1597440000</a>	BL 3.50/10/180 SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190192013	50 pc(s).	Box
<a href="#">1740681001</a>	BL 3.50/10/180 SN OR BX PRT	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190961633	50 pc(s).	Box

## System pitch 3.50 mm (0.138 inch) SL-SMT 3.50/10/180G 3.2SN BK BX

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## Counterpart

		connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box			
<a href="#">1620530000</a>	BL 3.50/10/180 SN GY BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190158545	50 pc(s).	Box
<a href="#">1610200000</a>	BL 3.50/10/180 SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190126940	50 pc(s).	Box

## BLIDC 3.5 SN



Female connectors for fast wiring with IDC system for connecting conductors at 3.50 mm pitch. They include space for labelling and can be coded.

- 0.35 - 0.5 mm<sup>2</sup> (IEC) / 22 - 20 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 6 A (IEC) / 7 A (UL)

## General ordering data

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1750870000</a>	BLIDC 3.50/10/180 SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 90°/180°, IDC terminal, Clamping range, max.: 0.5 mm <sup>2</sup> , Box	4032248146178	50 pc(s).	Box

## BL-I/O 3.5/10 F PNP LED



Female connector with Push In connection as plug-in connection level for decentralised I/O electronics; used in conjunction with male connectors with 3.50 mm pitch.

- 0.20 - 1.5 mm<sup>2</sup> (IEC) / 22 - 16 AWG (UL)
- 50 V (IEC) / 50 V (UL)
- 2.2 A (IEC) / 5 A (UL)

## General ordering data

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1965940000</a>	BL-I/O 3.50/10F PNP LED SN LTGY BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, PUSH IN, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248657605	20 pc(s).	Box
<a href="#">1789080000</a>	BL-I/O 3.50/10FP PNP LED SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles:	4032248208012	20 pc(s).	Box

Creation date October 1, 2010 9:27:49 PM CEST

Last update 30.08.2010 / We reserve the right to make technical changes.

## System pitch 3.50 mm (0.138 inch) SL-SMT 3.50/10/180G 3.2SN BK BX

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## Counterpart

		10, 180°, PUSH IN, Clamping range, max.: 1.5 mm <sup>2</sup> , Box			
<a href="#">1789090000</a>	BL-I/O 3.50/10F PNP LED SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, PUSH IN, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248208029	20 pc(s).	Box
<a href="#">1965960000</a>	BL-I/O 3.50/10FP PNP LED SN LTGY BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, PUSH IN, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248657728	20 pc(s).	Box

## BL 3.5/180LH



Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They include space for labelling and can be coded.

- 0.20 - 1.5 mm<sup>2</sup> (IEC) / 28 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17 A (IEC) / 10 A (UL)

## General ordering data

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1687960000</a>	BL 3.50/10/180LH SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190853518	50 pc(s).	Box
<a href="#">1687730000</a>	BL 3.50/10/180LH SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190853280	50 pc(s).	Box

## BL-I/O 3.5/10 NPN LED



Female connector with Push In connection as plug-in connection level for decentralised I/O electronics; used in conjunction with male connectors with 3.50 mm pitch.

- 0.20 - 1.5 mm<sup>2</sup> (IEC) / 22 - 16 AWG (UL)
- 50 V (IEC) / 50 V (UL)
- 2.2 A (IEC) / 5 A (UL)

## General ordering data

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1938010000</a>	BL-I/O 3.50/10F NPN LED SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles:	4032248610228	20 pc(s).	Box

## System pitch 3.50 mm (0.138 inch) SL-SMT 3.50/10/180G 3.2SN BK BX

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## Counterpart

		10, 180°, PUSH IN, Clamping range, max.: 1.5 mm <sup>2</sup> , Box			
<a href="#">1965950000</a>	BL-I/O 3.50/10F NPN LED SN LTGY BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, PUSH IN, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4032248657711	20 pc(s).	Box

## BL 3.5/90F



Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They include space for labelling and can be coded.

- 0.20 - 1.5 mm<sup>2</sup> (IEC) / 28 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17 A (IEC) / 10 A (UL)

## General ordering data

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1639320000</a>	BL 3.50/10/90F SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 90°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190276867	50 pc(s).	Box
<a href="#">1639090000</a>	BL 3.50/10/90F SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 90°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190276638	50 pc(s).	Box

## BLZF 3.5/180



Female connectors with tension clamp system for connecting conductors at 3.50 mm pitch. They include space for labelling and can be coded.

- 0.20 - 1.5 mm<sup>2</sup> (IEC) / 26 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 14.5 A (IEC) / 10 A (UL)

## General ordering data

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1690270000</a>	BLZF 3.50/10/180 SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190328764	50 pc(s).	Box
<a href="#">1690500000</a>	BLZF 3.50/10/180 SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles:	4008190329013	50 pc(s).	Box



## System pitch 3.50 mm (0.138 inch) SL-SMT 3.50/10/180G 3.2SN BK BX

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## Counterpart

		10, 180°, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box			
<a href="#">1690730000</a>	BLZF 3.50/10/180 SN DKG BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, Tension clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190329242	50 pc(s).	Box

## BL 3.5/270F



Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They include space for labelling and can be coded.

- 0.20 - 1.5 mm<sup>2</sup> (IEC) / 28 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17 A (IEC) / 10 A (UL)

### General ordering data

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1640240000</a>	BL 3.50/10/270F SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 270°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190277819	50 pc(s).	Box
<a href="#">1640010000</a>	BL 3.50/10/270F SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 270°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190277567	50 pc(s).	Box

## BL 3.5/90



Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They include space for labelling and can be coded.

- 0.20 - 1.5 mm<sup>2</sup> (IEC) / 28 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17 A (IEC) / 10 A (UL)

### General ordering data

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1638860000</a>	BL 3.50/10/90 SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 90°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> , Box	4008190276409	50 pc(s).	Box

## System pitch 3.50 mm (0.138 inch) SL-SMT 3.50/10/180G 3.2SN BK BX

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## Counterpart

<a href="#">1638630000</a>	BL 3.50/10/90 SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 90°, Clamping yoke connection, Clamping range, max.: 1.5 mm², Box	4008190276171	50 pc(s).	Box
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## BL-I/O 3.5/10



Female connector with Push In connection as plug-in connection level for decentralised I/O electronics; used in conjunction with male connectors with 3.50 mm pitch.

- 0.20 - 1.5 mm² (IEC) / 22 - 16 AWG (UL)
- 50 V (IEC) / 50 V (UL)
- 2.2 A (IEC) / 5 A (UL)

## General ordering data

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1779880000</a>	BL-I/O 3.50/10F SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, PUSH IN, Clamping range, max.: 1.5 mm², Box	4032248165209	20 pc(s).	Box
<a href="#">1965890000</a>	BL-I/O 3.50/10FP SN LTGY BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, PUSH IN, Clamping range, max.: 1.5 mm², Box	4032248657551	20 pc(s).	Box
<a href="#">1779870000</a>	BL-I/O 3.50/10FP SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, PUSH IN, Clamping range, max.: 1.5 mm², Box	4032248165193	20 pc(s).	Box
<a href="#">1871690000</a>	BL-I/O 3.50/10F SN LTGY BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, PUSH IN, Clamping range, max.: 1.5 mm², Box	4032248451197	20 pc(s).	Box

## BL 3.5/180F



Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They include space for labelling and can be coded.

- 0.20 - 1.5 mm² (IEC) / 28 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17 A (IEC) / 10 A (UL)

## General ordering data

Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
<a href="#">1606720000</a>	BL 3.50/10/180F SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles:	4008190062422	50 pc(s).	Box

**Datasheet**

**System pitch 3.50 mm (0.138 inch)  
SL-SMT 3.50/10/180G 3.2SN BK BX**

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**Counterpart**

		10, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm², Box			
<a href="#">1701730000</a>	BL 3.50/10/180F SN OR BX PRT	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm², Box	4008190908058	50 pc(s).	Box
<a href="#">1615860000</a>	BL 3.50/10/180F SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 10, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm², Box	4008190063269	50 pc(s).	Box