

System pitch 3.50 mm (0.138 inch) SL-SMT 3.50/02/90G 3.2SN BK BX

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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.	1841630000
Part designation	SL-SMT 3.50/02/90G 3.2SN BK BX
Version	PCB plug-in connector, male header, 3.50 mm, No. of poles: 2, 90°, Solder pin length: 3.2 mm, tinned, black, Reflow solder connection, Box
GTIN (EAN)	4032248352784
Qty.	100 pc(s).
Packaging	Box

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Technical data

System parameters

Fitted to PCB	Reflow solder connection	Outgoing elbow	90°
Pitch in mm	3.5 mm	Pitch in inch	0.138 inch
No. of poles	2	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	3.5 mm
L1 in inch	0.138 inch	Insulation resistance	10 ³ 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		

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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](#)

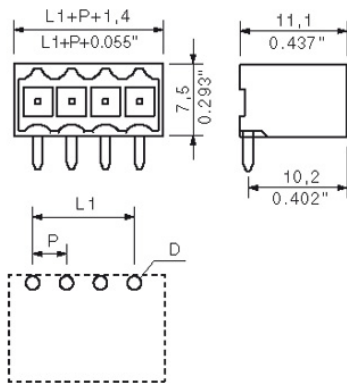
CAD Library (P-CAD Format - Standard) [SL-SMT.LIB](#)

[3D model](#)

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Drawings



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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 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
1639470000	BL 3.50/02/270 SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 270°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190277024	100 pc(s).	Box
1639700000	BL 3.50/02/270 SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 270°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190277253	100 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 mm² (IEC) / 22 - 20 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 6 A (IEC) / 7 A (UL)

General ordering data

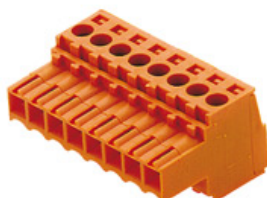
Order No.	Part designation	Version	GTIN (EAN)	Qty.	Packaging
1750790000	BLIDC 3.50/02/180 SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°/180°, IDC terminal, Clamping range, max.: 0.5 mm ² , Box	4032248146086	100 pc(s).	Box
1770940000	BLIDC 3.50/02/180 SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°/180°, IDC terminal, Clamping range, max.: 0.5 mm ² , Box	4032248146338	100 pc(s).	Box

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Counterpart

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 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
1740621001	BL 3.50/02/180 SN OR BX PRT	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190961503	100 pc(s).	Box
1606520000	BL 3.50/02/180 SN DKGX BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190170202	100 pc(s).	Box
1620450000	BL 3.50/02/180 SN GY BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190156756	100 pc(s).	Box
1597360000	BL 3.50/02/180 SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190435868	100 pc(s).	Box
1615670000	BL 3.50/02/180 SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190058890	100 pc(s).	Box

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Counterpart

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 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
1638780000	BL 3.50/02/90 SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190276324	100 pc(s).	Box
1638550000	BL 3.50/02/90 SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190276102	100 pc(s).	Box

BLIDCB 3.5



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 mm² (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
1751380000	BLIDCB 3.50/02/- SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°/270°, IDC terminal, Clamping range, max.: 0.5 mm ² , Box	4032248174201	10 pc(s).	Box
1770670000	BLIDCB 3.50/02/- SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°/270°, IDC terminal, Clamping range, max.: 0.5 mm ² , Box	4032248174454	10 pc(s).	Box

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Counterpart

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 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
1687650000	BL 3.50/02/180LH SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190853204	100 pc(s).	Box
1687880000	BL 3.50/02/180LH SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190853433	100 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 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
1639010000	BL 3.50/02/90F SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190276553	100 pc(s).	Box
1639240000	BL 3.50/02/90F SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190276782	100 pc(s).	Box

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Counterpart

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 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
1640160000	BL 3.50/02/270F SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 270°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190277727	100 pc(s).	Box
1639930000	BL 3.50/02/270F SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 270°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190277482	100 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
1740711001	BL 3.50/02/180F SN OR BX PRT	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190961695	100 pc(s).	Box
1615780000	BL 3.50/02/180F SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, max.: 1.5 mm ² , Box	4008190061272	100 pc(s).	Box
1606640000	BL 3.50/02/180F SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke	4008190187088	100 pc(s).	Box

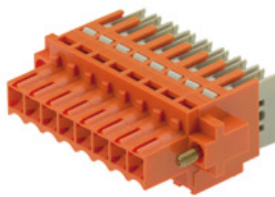
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Counterpart

connection, Clamping range,
max.: 1.5 mm², Box

BLIDCB 3.5F



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- 0.35 - 0.5 mm² (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
1751450000	BLIDCB 3.50/02-F SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°/270°, IDC terminal, Clamping range, max.: 0.5 mm ² , Box	4032248174386	10 pc(s).	Box
1770740000	BLIDCB 3.50/02-F SN BK BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°/270°, IDC terminal, Clamping range, max.: 0.5 mm ² , Box	4032248174522	10 pc(s).	Box