

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16 D-32758 Detmold

Germany

Fon: +49 5231 14-0 Fax: +49 5231 14-2083 www.weidmueller.com

















Angled, two-tier pin header available as closed-sided or with flange (open-sided pin headers on request). Pin headers with 3.5mm pins are designed for wave soldering and are packaged in a box. They can be screwed on to the PCB. The pin headers provide space for labelling and can be coded.

- 80 V (IEC) / 150 V (UL)
- 9 A (IEC / 8 A (UL)

Order No.	<u>1728590000</u>
Туре	S2L 3.50/30/90F 3.5SN OR BX
Version	PCB plug-in connector, male header, Flange, Solder connection, 3.50 mm, No. of poles: 30, 90°, Solder pin length (I): 3.5 mm, tinned, Orange, Box
GTIN (EAN)	4032248040056
Qty.	20 pc(s).
Product data	IEC: 250 V / 10 A UL: 150 V / 10 A
Packaging	Вох



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Technical data

Dimensions

Net weight 8

System parameters

Product family	B2L/S2L 3.50 - 2-row	Mounting onto the PCB			
•	series	· ·	Solder connection		
Outgoing elbow	90°	Pitch in mm (P)	3.5 mm		
Pitch in inches (P)	0.138 inch	No. of poles	30		
Solder pin length (I)	3.5 mm	Pin dimensions	d = 1.0 mm, Octagonal		
Can be coded	Yes	Number of rows	1		
Number of solder pins per pole	1	Solder eyelet hole diameter (D)	1.3 mm		
Solder eyelet hole diameter tolerance (I	D)+ 0,1 mm	L1 in mm	49 mm		
L1 in inches		Touch-safe protection acc. to DIN VDE			
	1.929 inch	0470	IP 10		
Touch-safe protection acc. to DIN VDE 57 106	Safe from back-of-hand touch				

Material data

Insulating material	PBT	Colour	Orange
Insulating material group	Illa	Flammability class UL 94	V-0
СТІ	≥ 200	Contact material	Copper alloy
Contact surface	tinned	Continuous operating temp., min.	-25 °C
Continuous operating temp., max.	100 °C	Max. relative humidity during storage	93 %

DIN IEC rating data

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Rated current, min. no. of poles (TU=20°C)	10 A	Rated current, max. no. of poles (Tu=20°C)	10 A
Rated current, number of poles (Tu=40°C), min	9 A	Rated current, number of poles (Tu=40°C), max.	8.5 A
Rated voltage for surge voltage class / pollution degree III/3	80 V	Rated impulse voltage for surge voltage class/ contamination degree III/3	2.5 kV
Rated voltage for surge voltage class / pollution degree III/2	125 V	Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV
Rated voltage for surge voltage class / pollution degree II/2	250 V	Rated impulse voltage for surge voltage class/ pollution degree II/2	2.5 kV
Short-time withstand current resistance	3 x 1s with 77 A		

CSA rating data

Institute (CSA)	€ P-	Rated voltage (Use group B)
		150 V
Rated current (use group B)	5 A	

UL 1059 rating data

Institute (UR)	<i>27</i> 7.	Rated voltage (use group B)		
	-		150 V	
Rated current (use group B)	10 A	Rated voltage (use group C)	50 V	
Rated current (use group C)	10 A			



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Classifications

UNSPSC	30-21-18-10	eClass 4.1	27-26-07-01
eClass 5.1	27-26-07-01	eClass 6.0	27-26-07-04
eClass 7.0	27-44-04-02		

Notes

Notes

- · Additional colours on request
- · Gold-plated contact surfaces on request
- · Spacing between rows: see hole layout
- · Rated current related to rated cross-section and min. No. of poles.
- 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)	<u>S2L-SMT.LIA</u>
CAD Library (P-CAD Format - Standard)	<u>S2L-SMT.LIB</u>
3-D model	

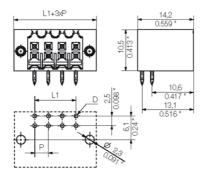


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Drawings





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Mating connector (fully pluggable)

B2L 3.50F



Component density redefined: the future standard for signal connection

Maximum connection density in the smallest of spaces - the 2-row B2L raises the bar higher for standard sensor cables up to 1mm² and bridges the gap between insufficient space and more functions.

The result is a connecting solution for standard industrial cables with 1.75 pitch - 30% smaller than an equivalent solution with 2.5 pitch and with 140% the robustness of 3.5 pitch

Dimensions: double the connection density with 3.5mm pitch size

Connection system: tried and tested maintenance-free Weidmüller tension clamp connection

- Connection data / Performance: • 0.20 - 1.0mm² (IEC) / 28 - 18 AWG (UL)
- 80 V / 10 A (IEC) / 150 V / 10 A (UL)
- No. of poles: 4 to 36

The basic application advantages:

Efficient - maximum component density on the PCB Suitable for industrial use - minimum dimensions, maximum robustness

Process-optimised - automatic configuration and reflow solders, rapid connection

User-friendly - patented release lever for the easy release of larger numbers of poles

Application-oriented: easy labelling and reliable coding despite compact dimensions

Miniaturisation is more than just a larger number of functions within a small space:

Every reduction in size decreases space requirements and the overall system costs less for the end customer. Weidmüller fulfils a growing demand in the engineering and industrial automation sectors.

Order No. Type	Version	GTIN (EAN)	Qty.	Product data	Packagi
1748290000 B2L 3.50/30/180F SN BK BX	PCB plug-in connector,	403224819858	0 20 pc(s).	IEC: 250 V / 10.3 A / 0.2 - 1 mm ²	Box
	female plug, 3.50 mm,			UL: 300 V / 10 A / AWG 28 - AWG	16
	No. of poles: 30, 180°,				
	Tension clamp connection,				
	Clamping range, rated				
	connection, max.: 1 mm ² ,				
	Box				
1748130000 B2L 3.50/30/180F SN OR BX	PCB plug-in connector,	403224819857	3 20 pc(s).	IEC: 250 V / 10.3 A / 0.2 - 1 mm ²	Box
	female plug, 3.50 mm,			UL: 300 V / 10 A / AWG 28 - AWG	16
	No. of poles: 30, 180°,				
	Tension clamp connection,				
	Clamping range, rated				
	connection, max.: 1 mm ² ,				
	Box				



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Mating connector (conditionally pluggable)

B2L 3.50LH



Female connectors with tension clamp connection system enable quick and simple wiring. These female header can be mounted side by side and therefore have a high connection density. The release lever simplifies the separation of the connection in confined spaces. The socket blocks provide space for labelling and can be coded.

- 0.20 1.0mm² (IEC) / 28 18 AWG (UL)
- 80 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

Order No.	Туре	Version	GTIN (EAN)	Qty.	Product data	Packag
<u>174861000</u>	0 B2L 3.50/30/180LH SN BK BX	PCB plug-in connector,	403224819862	7 20 pc(s).	IEC: 250 V / 10.3 A / 0.2 - 1 mm ²	Box
	female plug, 3.50 mm,			UL: 300 V / 10 A / AWG 28 - AWG	16	
		No. of poles: 30, 180°,				
		Tension clamp connection,				
		Clamping range, rated				
		connection, max.: 1 mm ² ,				
		Box				
174845000	O B2L 3.50/30/180LH SN OR BX	PCB plug-in connector,	403224819861	0 20 pc(s).	IEC: 250 V / 10.3 A / 0.2 - 1 mm ²	Box
		female plug, 3.50 mm,			UL: 300 V / 10 A / AWG 28 - AWG	16
		No. of poles: 30, 180°,				
		Tension clamp connection,				
		Clamping range, rated				
		connection, max.: 1 mm ² ,				
		Box				



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Order No.	Туре	Version	GTIN (EAN)	Qty.	Product data	Packag
174797000	D B2L 3.50/30/180 SN BK BX	PCB plug-in connector,	403224819855	9 20 pc(s).	IEC: 200 V / 10.3 A / 0.2 - 1 mm ²	Box
		female plug, 3.50 mm,			UL: 300 V / 10 A / AWG 28 - AWG 1	6
		No. of poles: 30, 180°,				
		Tension clamp connection,				
		Clamping range, rated				
		connection, max.: 1 mm ² ,				
		Box				
1747890000 B2L 3.50/30/180 SN OR B	D B2L 3.50/30/180 SN OR BX	PCB plug-in connector,	403224819854	2 20 pc(s).	IEC: 200 V / 10.3 A / 0.2 - 1 mm ²	Box
		female plug, 3.50 mm,			UL: 300 V / 10 A / AWG 28 - AWG 1	6
		No. of poles: 30, 180°,				
		Tension clamp connection,				
		Clamping range, rated				
		connection, max.: 1 mm ² ,				
		Box				



Accessories

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LED Light guides



Effective: the link between LED and front panel.

Floodlight indicators allow users to monitor the switching states without requiring a special design: optical plastic directs the light from standard LEDs around a bend into the connectors or through the front plate.

The fibre-optic elements are simply clipped behind the relevant 90° bend male connectors (90° outlet direction). Versions with different incoming light beam heights achieve maximum light efficiency for LEDs with different designs or heights.

The advantages compared to conventional solutions:

- No additional LED circuit board required behind the front panel
- No "long-legged" LEDs with separate mounting required
- Bent fibre-optic cable line for maximum light efficiency
- Uncomplicated front plate bore holes due to circular shape of outgoing light beam
- Easy to maintain correct clearance and creepage distance
- Can be partitioned for smaller pole numbers

The result: simplified manufacturing process, reduced costs and simplified design

General ordering data

Order No. Type	Version	GTIN (EAN)	Qty.	Product data
1699580000 S2L 3.5 FLA 20/10	PCB plug-in connector,	40081908913	50 100 pc(s).	
	Accessories, Flood-light			
	display, No. of poles: 10			

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

Order No. Type

Version

GTIN (EAN)

Qty.

Product data

1849730000

B2L/S2L 3.5 KO OR

PCB plug-in connector,

Accessories, Coding

element, Orange, No. of

poles: 1



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Accessories

1849740000 B2L/S2L 3.5 KO SW PCB plug-in connector,
Accessories, Coding

element, Black, No. of

poles: 1

4032248378203 100 pc(s).

