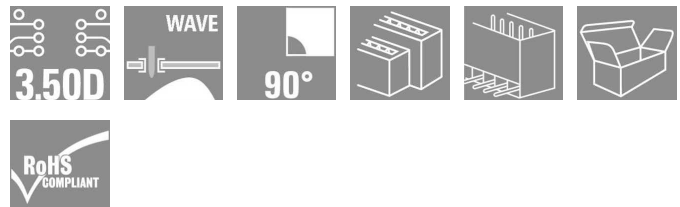


**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row  
S2L 3.50/06/90G 3.5SN OR BX**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
[www.weidmueller.com](http://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)

**General ordering data**

Type	S2L 3.50/06/90G 3.5SN OR BX
Order No.	<a href="#">1727830000</a>
Version	PCB plug-in connector, male header, closed side, Solder connection, 3.50 mm, No. of poles: 6, 90°, Solder pin length (l): 3.5 mm, tinned, Orange, Box
GTIN (EAN)	4032248045242
Qty.	50 pc(s).
Product data	IEC: 250 V / 10 A UL: 150 V / 10 A
Packaging	Box

Creation date October 22, 2013 4:48:37 PM CEST

**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row  
S2L 3.50/06/90G 3.5SN OR BX**

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**Technical data****Dimensions and weights**

Net weight	1.61 g
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**System parameters**

Product family		Mounting onto the PCB	
OMNIMATE Signal - series B2L/S2L 3.50 - 2-row		Solder connection	
Outgoing elbow	90°	Pitch in mm (P)	3.5 mm
Pitch in inches (P)	0.138 inch	No. of poles	6
Solder pin length (l)	3.5 mm	Pin dimensions	d = 1.0 mm, Octagonal
Can be coded	Yes	Number of solder pins per pole	1
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (D)	+ 0.1 mm
L1 in mm	7 mm	L1 in inches	0.276 inch
Touch-safe protection acc. to DIN VDE 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	IIIa	UL 94 flammability rating	V-0
CTI	≥ 200	Contact material	Cu-Leg
Contact surface	tinned	Max. relative humidity during storage	93 %


**DIN IEC rating data**

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 classcontamination degree III/3	2.5 kV
Rated voltage for surge voltage class pollution degree III/2	125 V	Rated impulse voltage for surge voltage classpollution degree III/2	2.5 kV
Rated voltage for surge voltage class pollution degree II/2	250 V	Rated impulse voltage for surge voltage classpollution degree II/2	2.5 kV
Short-time withstand current resistance	3 x 1s with 77 A		

**CSA rating data**

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

**UL 1059 rating data**

Institute (UR)		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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**Technical data**
**Classifications**

UNSPSC	30-21-18-10	eClass 5.1	27-26-07-01
eClass 6.2	27-26-07-04	eClass 7.1	27-44-04-02

**Notes**

Notes	<ul style="list-style-type: none"> <li>• Additional colours on request</li> <li>• Gold-plated contact surfaces on request</li> <li>• Spacing between rows: see hole layout</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• P on drawing = pitch</li> <li>• 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.</li> </ul>
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**Approvals**

Approvals



ROHS

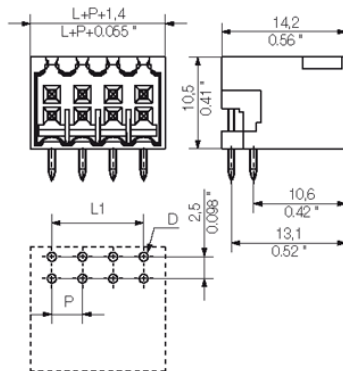
Conform

**Downloads**
CAD Library (P-CAD Format - ASCII) [S2L-SMT.zip](#)CAD Library (P-CAD Format - Standard) [S2L-SMT.zip](#)[3-D model](#)

### OMNIMATE Signal - series B2L/S2L 3.50 - 2-row S2L 3.50/06/90G 3.5SN OR BX

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## Drawings



**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row  
S2L 3.50/06/90G 3.5SN OR BX**

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**Mating connector (conditionally pluggable)**
**B2L 3.50F QV SN**


Female connector with integral cross-connection and clear printing for uninterrupted relaying of potential at full current-carrying capacity with the maximum cable cross-section. The cross-connection is positioned vertically between the poles of rows directly on top of each other. Conductor connection with tension clamp system with straight outlet and 3.5 mm pitch. Flange and release lever available. Packed in cardboard box.

- 0.20 - 1.0mm<sup>2</sup> (IEC) / 28 - 18 AWG (UL)
- 80 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
B2L	<a href="#">1944670000</a>	PCB plug-in connector,	4032248619603	50 pc(s).	IEC: 200 V / 10.6 A / 0.2 - 1 mm <sup>2</sup>	Box
3.50/06/180FQV3		female plug, 3.50 mm,			UL: 150 V / 7 A / AWG 28 - AWG 18	
SN BK BX		No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm <sup>2</sup> , Box				

**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row  
S2L 3.50/06/90G 3.5SN OR BX**

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**Mating connector (conditionally 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 1 mm<sup>2</sup> 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 3.5 mm pitch size

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

Connection data / Performance:

- 0.20 - 1.0 mm<sup>2</sup> (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.

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
B2L 3.50/06/180F SN OR BX	<a href="#">1748010000</a>	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm <sup>2</sup> , Box	4032248037933	50 pc(s).	IEC: 250 V / 10.3 A / 0.2 - 1 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box
B2L 3.50/06/180F SN BK BX	<a href="#">1748170000</a>	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm <sup>2</sup> , Box	4032248038008	50 pc(s).	IEC: 250 V / 10.3 A / 0.2 - 1 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box

# OMNIMATE Signal - series B2L/S2L 3.50 - 2-row S2L 3.50/06/90G 3.5SN OR BX

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## Mating connector (conditionally pluggable)

### B2L 3.50LH QV SN



Female connector with integral cross-connection and clear printing for uninterrupted relaying of potential at full current-carrying capacity with the maximum cable cross-section. The cross-connection is positioned vertically between the poles of rows directly on top of each other. Conductor connection with tension clamp system with straight outlet and 3.5 mm pitch. Flange and release lever available. Packed in cardboard box.

- 0.20 - 1.0mm<sup>2</sup> (IEC) / 28 - 18 AWG (UL)
- 80 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

#### General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
B2L	<a href="#">1944750000</a>	PCB plug-in connector,	4032248619689	50 pc(s).	IEC: 200 V / 10.6 A / 0.2 - 1 mm <sup>2</sup>	Box
3.50/06/180LH QV3		female plug, 3.50 mm,			UL: 150 V / 7 A / AWG 28 - AWG 18	
SN BK BX		No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm <sup>2</sup> , Box				

### 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 - 1.0mm<sup>2</sup> (IEC) / 28 - 18 AWG (UL)
- 80 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

#### General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
B2L	<a href="#">1748330000</a>	PCB plug-in connector,	4032248038114	50 pc(s).	IEC: 250 V / 10.3 A / 0.2 - 1 mm <sup>2</sup>	Box
3.50/06/180LH		female plug, 3.50 mm,			UL: 300 V / 10 A / AWG 28 - AWG 16	
SN OR BX		No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm <sup>2</sup> , Box				
B2L	<a href="#">1748490000</a>	PCB plug-in connector,	4032248038206	50 pc(s).	IEC: 250 V / 10.3 A / 0.2 - 1 mm <sup>2</sup>	Box
3.50/06/180LH		female plug, 3.50 mm,			UL: 300 V / 10 A / AWG 28 - AWG 16	
SN BK BX		No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm <sup>2</sup> , Box				

**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row  
S2L 3.50/06/90G 3.5SN OR BX**

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**Mating connector (fully pluggable)**
**B2L 3.50 QV SN**


Female connector with integral cross-connection and clear printing for uninterrupted relaying of potential at full current-carrying capacity with the maximum cable cross-section. The cross-connection is positioned vertically between the poles of rows directly on top of each other. Conductor connection with tension clamp system with straight outlet and 3.5 mm pitch. Flange and release lever available. Packed in cardboard box.

- 0.20 - 1.0mm<sup>2</sup> (IEC) / 28 - 18 AWG (UL)
- 80 V (IEC) / 150 V (UL)
- 10 A (IEC) / 10 A (UL)

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
B2L	<a href="#">1944590000</a>	PCB plug-in connector,	4032248619528	50 pc(s).	IEC: 200 V / 10.6 A / 0.2 - 1 mm <sup>2</sup>	Box
3.50/06/180QV3		female plug, 3.50 mm,			UL: 150 V / 7 A / AWG 28 - AWG 18	
SN BK BX		No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm <sup>2</sup> , Box				



# OMNIMATE Signal - series B2L/S2L 3.50 - 2-row S2L 3.50/06/90G 3.5SN OR BX

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## Mating connector (fully pluggable)

### B2L 3.50



### 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 1 mm<sup>2</sup> 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 3.5 mm pitch size

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

Connection data / Performance:

- 0.20 - 1.0 mm<sup>2</sup> (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:

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

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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.

### General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
B2L 3.50/06/180 SN BK BX PRT	<a href="#">1024260000</a>	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm <sup>2</sup> , Box	4032248743704	50 pc(s).	IEC: 200 V / 10.3 A / 0.2 - 1 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box
B2L 3.50/06/180 SN OR BX	<a href="#">1727560000</a>	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm <sup>2</sup> , Box	4032248037704	50 pc(s).	IEC: 200 V / 10.3 A / 0.2 - 1 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box

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S2L 3.50/06/90G 3.5SN OR BX**

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**Mating connector (fully pluggable)**

B2L 3.50/06/180 SN OR BX PRT	<a href="#">1847520000</a>	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm <sup>2</sup> , Box	4032248366569 50 pc(s).	IEC: 200 V / 10.3 A / 0.2 - 1 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box
B2L 3.50/06/180 SN BK BX PRT	<a href="#">1814960000</a>	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm <sup>2</sup> , Box	4032248303359 50 pc(s).	IEC: 200 V / 10.3 A / 0.2 - 1 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box
B2L 3.50/06/180 SN BK BX	<a href="#">1727640000</a>	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm <sup>2</sup> , Box	4032248037834 50 pc(s).	IEC: 200 V / 10.3 A / 0.2 - 1 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 16	Box

