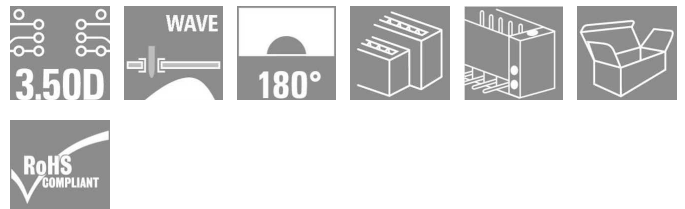


OMNIMATE Signal - series B2L/S2L 3.50 - 2-row
S2L 3.50/08/180F 3.5SN BK BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
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 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com



Straight 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 3.50/08/180F 3.5SN BK BX
Order No.	1729600000
Version	PCB plug-in connector, male header, Flange, Solder connection, 3.50 mm, No. of poles: 8, 180°, Solder pin length (l): 3.5 mm, tinned, Black, Box
GTIN (EAN)	4032248041008
Qty.	50 pc(s).
Product data	IEC: 250 V / 10 A UL: 150 V / 10 A
Packaging	Box

Creation date August 29, 2013 10:48:15 AM CEST

OMNIMATE Signal - series B2L/S2L 3.50 - 2-row

S2L 3.50/08/180F 3.5SN BK BX

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Technical data

Dimensions and weights

Net weight 3.3 g

System parameters

Product family	OMNIMATE Signal - series B2L/S2L 3.50 - 2-row	Mounting onto the PCB	Solder connection
Outgoing elbow	180°	Pitch in mm (P)	3.5 mm
Pitch in inches (P)	0.138 inch	No. of poles	8
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	10.5 mm	L1 in inches	0.413 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	Black
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 class pollution 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)		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	• Additional colours on request • Gold-plated contact surfaces on request • Spacing between rows: see hole layout • 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.
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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](#)

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Technical drawings of a rectangular table and its base.

Top Drawing (Table):

- Length: $L1 + 3 \times P$
- Width: 14.2 (0.559)
- Height: 10.5 (0.413)
- Leg diameter: $\varnothing 0.167$
- Leg height: 6.8 (0.268)
- Table top thickness: 4.3 (0.167)

Bottom Drawing (Base):

- Length: $L1$
- Width: $L1 + 2 \times P$
- Hole diameter: $\varnothing 0.167$
- Hole position from bottom edge: 2.5 (0.098)
- Hole position from side edge: 0.017
- Diagonal dimension: $\varnothing 0.191$

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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 - 1.0mm² (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	1944760000	PCB plug-in connector,	4032248619696	50 pc(s).	IEC: 200 V / 10.6 A / 0.2 - 1 mm ²	Box
3.50/08/180LHQV4		female plug, 3.50 mm,			UL: 150 V / 7 A / AWG 28 - AWG 18	
SN BK BX		No. of poles: 8, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box				

**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row
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Mating connector (conditionally 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 mm² 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 mm² (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 3.50/08/180 SN OR BX	1727570000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 8, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box	4032248036752	50 pc(s).	IEC: 200 V / 10.3 A / 0.2 - 1 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
B2L 3.50/08/180 SN DKG BX PRT	1789570000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 8, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box	4032248210480	50 pc(s).	IEC: 200 V / 10.3 A / 0.2 - 1 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box

OMNIMATE Signal - series B2L/S2L 3.50 - 2-row S2L 3.50/08/180F 3.5SN BK BX

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Mating connector (conditionally pluggable)

B2L 3.50/08/180 SN OR BX PRT	1847530000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 8, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box	4032248366576 50 pc(s).	IEC: 200 V / 10.3 A / 0.2 - 1 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
B2L 3.50/08/180 SN BK BX PRT	1896510000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 8, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box	4032248512010 50 pc(s).	IEC: 200 V / 10.3 A / 0.2 - 1 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
B2L 3.50/08/180 SN BK BX PRT	1024270000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 8, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box	4032248743711 50 pc(s).	IEC: 200 V / 10.3 A / 0.2 - 1 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
B2L 3.50/08/180 SN BK BX	1727650000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 8, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box	4032248037841 50 pc(s).	IEC: 200 V / 10.3 A / 0.2 - 1 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	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 - 1.0mm² (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 3.50/08/180LH SN BK BX	1748500000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 8, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box	4032248038213 50 pc(s).		IEC: 250 V / 10.3 A / 0.2 - 1 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
B2L 3.50/08/180LH SN OR BX	1748340000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 8, 180°,	4032248038121 50 pc(s).		IEC: 250 V / 10.3 A / 0.2 - 1 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box

Creation date August 29, 2013 10:48:15 AM CEST

Catalogue status 08.08.2013 / We reserve the right to make technical changes.

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S2L 3.50/08/180F 3.5SN BK BX**

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Mating connector (conditionally pluggable)

Tension clamp connection,
 Clamping range, rated
 connection, max.: 1 mm²,
 Box

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.

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- 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	1944600000	PCB plug-in connector,	4032248619535	50 pc(s).	IEC: 200 V / 10.6 A / 0.2 - 1 mm ²	Box
3.50/08/180QV4		female plug, 3.50 mm,			UL: 150 V / 7 A / AWG 28 - AWG 18	
SN BK BX		No. of poles: 8, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box				

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S2L 3.50/08/180F 3.5SN BK BX**

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Mating connector (fully pluggable)
B2L 3.50F QV SN


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- 10 A (IEC) / 10 A (UL)

General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
B2L	1944680000	PCB plug-in connector,	4032248619610	50 pc(s).	IEC: 200 V / 10.6 A / 0.2 - 1 mm ²	Box
3.50/08/180FQV4		female plug, 3.50 mm,			UL: 150 V / 7 A / AWG 28 - AWG 18	
SN BK BX		No. of poles: 8, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box				

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B2L 3.50F

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General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
B2L 3.50/08/180F SN BK BX	1748180000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 8, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box	4032248038015	50 pc(s).	IEC: 250 V / 10.3 A / 0.2 - 1 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box
B2L 3.50/08/180F SN OR BX	1748020000	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 8, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box	4032248036783	50 pc(s).	IEC: 250 V / 10.3 A / 0.2 - 1 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16	Box

