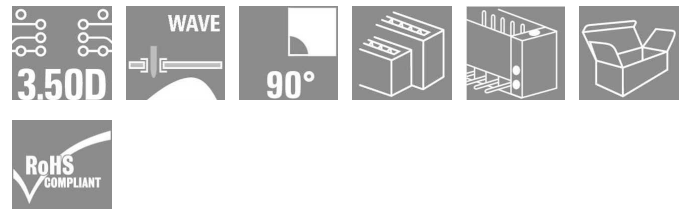


**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row
S2L 3.50/06/90F 3.5SN BK BX**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com



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 3.50/06/90F 3.5SN BK BX |
| Order No. | 1728630000 |
| Version | PCB plug-in connector, male header, Flange, Solder connection, 3.50 mm, No. of poles: 6, 90°, Solder pin length (l): 3.5 mm, tinned, Black, Box |
| GTIN (EAN) | 4032248040094 |
| Qty. | 50 pc(s). |
| Product data | IEC: 250 V / 10 A UL: 150 V / 10 A |
| Packaging | Box |

Creation date August 29, 2013 10:47:32 AM CEST

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Technical data**Dimensions and weights**

| | |
|------------|--------|
| Net weight | 2.98 g |
|------------|--------|

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 | 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 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
- 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.

Approvals

Approvals



ROHS Conform

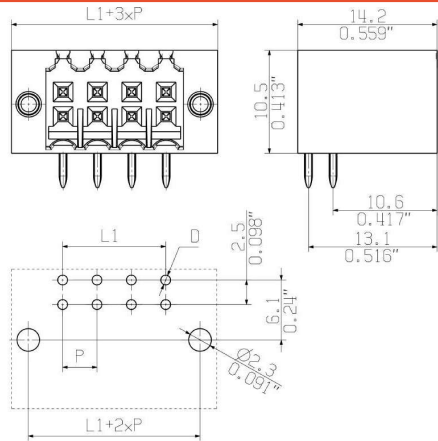
Downloads

- 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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Drawings



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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 | 1944750000 | PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box | 4032248619689 | 50 pc(s). | IEC: 200 V / 10.6 A / 0.2 - 1 mm ² UL: 150 V / 7 A / AWG 28 - AWG 18 | Box |

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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 3.50/06/180 SN BK BX PRT | 1814960000 | PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box | 4032248303359 | 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 3.50/06/180 SN OR BX | 1727560000 | PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box | 4032248037704 | 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
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Mating connector (conditionally pluggable)

| | | | | | |
|------------------------------------|----------------------------|---|-------------------------|---|-----|
| B2L 3.50/06/180 SN BK BX | 1727640000 | PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box | 4032248037834 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 3.50/06/180 SN BK BX PRT | 1024260000 | PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box | 4032248743704 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 3.50/06/180 SN OR BX PRT | 1847520000 | PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box | 4032248366569 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 3.50/06/180LH SN OR BX | 1748330000 | PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box | 4032248038114 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 3.50/06/180LH SN BK BX | 1748490000 | PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box | 4032248038206 50 pc(s). | | IEC: 250 V / 10.3 A / 0.2 - 1 mm ² UL: 300 V / 10 A / AWG 28 - AWG 16 | Box |

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S2L 3.50/06/90F 3.5SN BK BX**

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 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmuller.com

Mating connector (conditionally 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 - 1.0mm² (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 | 1944590000 | PCB plug-in connector, | 4032248619528 | 50 pc(s). | IEC: 200 V / 10.6 A / 0.2 - 1 mm ² | 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 ² , Box | | | | |

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 Germany
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Mating connector (fully 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.

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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 | 1944670000 | PCB plug-in connector, female plug, 3.50 mm, No. of poles: 6, 180°, Tension clamp connection, Clamping range, rated connection, max.: 1 mm ² , Box | 4032248619603 | 50 pc(s). | IEC: 200 V / 10.6 A / 0.2 - 1 mm ² UL: 150 V / 7 A / AWG 28 - AWG 18 | Box |

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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 1 mm² and bridges the gap between insufficient space and more functions.

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Dimensions: double the connection density with 3.5 mm pitch size

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

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- 80 V / 10 A (IEC) / 150 V / 10 A (UL)
- No. of poles: 4 to 36

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General ordering data

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

