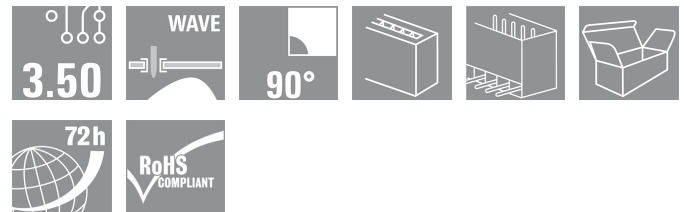
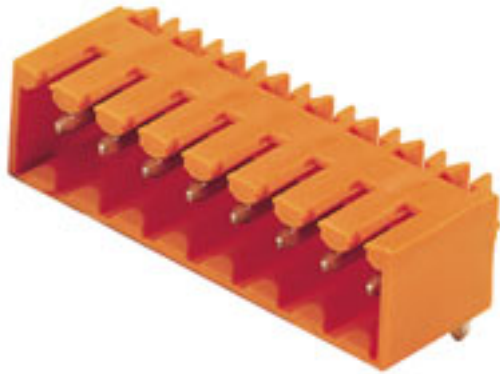


## OMNIMATE Signal - series BL/SL 3.50 SL 3.50/02/90G 3.2SN OR BX

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



Male header with 3.50 mm pitch for wave soldering

- Plugging direction angled to the PCB (135°)
- Housing variant: screw flange (F)
- Packaged in cardboard box (BX)
- Male header can be coded

250 V (IEC) / 300 V (UL)

17 A (IEC) / 10 A (UL)

### General ordering data

|              |   |
|--------------|---|
| Order No.    | <a href="#">1605070000</a>  |
| Type         | SL 3.50/02/90G 3.2SN OR BX  |
| Version      | PCB plug-in connector, male header, closed side, Solder connection, 3.50 mm, No. of poles: 2, 90°, Solder pin length (l): 3.2 mm, tinned, Orange, Box |
| GTIN (EAN)   | 4008190085100   |
| Qty.         | 100 pc(s).  |
| Product data | IEC: 320 V / 17 A<br>UL: 300 V / 10 A   |
| Packaging    | Box   |

Creation date April 19, 2013 3:50:12 PM CEST

Catalogue status 12.03.2013 / We reserve the right to make technical changes.

**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/02/90G 3.2SN OR BX**

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

Net weight 0.62 g

**System parameters**

| Product family                                    |                                     | Mounting onto the PCB                        |                              |
|---|-------------------------------------|--|------------------------------|
| Product family                                    | OMNIMATE Signal - series BL/SL 3.50 |  | Solder connection            |
| Outgoing elbow                                    | 90°                                 | Pitch in mm (P)                              | 3.5 mm                       |
| Pitch in inches (P)                               | 0.138 inch                          | No. of poles                                 | 2                            |
| Solder pin length (l)                             | 3.2 mm                              | Pin dimensions                               | d = 1.2 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 (D)+ 0,1 mm |                                     | L1 in mm                                     | 3.5 mm                       |
| L1 in inches                                      | 0.138 inch                          | Insulation resistance                        | 10 <sup>3</sup> Ω            |
| 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                      | CuSn   |
| Contact surface                  | tinned | Continuous operating temp., min.      | -25 °C |
| Continuous operating temp., max. | 100 °C | Max. relative humidity during storage | 80 %   |


**DIN IEC rating data**

|  |                   |   |        |
|--|-------------------|---|--------|
| Rated current, min. no. of poles (Tu=20°C)                     | 17 A              | Rated current, max. no. of poles (Tu=20°C)                                | 12 A   |
| Rated current, number of poles (Tu=40°C), min                  | 14.5 A            | Rated current, number of poles (Tu=40°C), max.                            | 10 A   |
| Rated voltage for surge voltage class / pollution degree III/3 | 160 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 | 160 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  | 320 V             | Rated impulse voltage for surge voltage class/ pollution degree II/2      | 2.5 kV |
| Short-time withstand current resistance                        | 3 x 1s with 100 A |   |        |

**CSA rating data**

|                             |   |                             |       |
|-----------------------------|---|-----------------------------|-------|
| Institute (CSA)             |  | 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**

|                             |   |                             |       |
|-----------------------------|---|-----------------------------|-------|
| Institute (UR)              |  | 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  |                             |       |

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**Technical data**

**Classifications**

|            |             |            |             |
|------------|-------------|------------|-------------|
| ETIM 3.0   | EC001284    | UNSPSC     | 30-21-18-10 |
| eClass 4.1 | 27-26-07-01 | eClass 5.1 | 27-26-07-04 |
| 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
  - 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

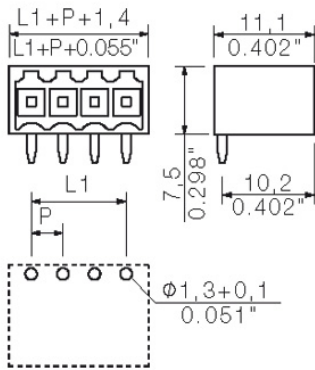
**Downloads**

- CAD Library (P-CAD Format - ASCII) [SLLIA](#)  
 CAD Library (P-CAD Format - Standard) [SLLIB](#)  
[3-D model](#)

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**Drawings**



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**Mating connector (fully pluggable)**
**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 mm<sup>2</sup> (IEC) / 28 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17 A (IEC) / 10 A (UL)

**General ordering data**

| Order No.                 | Type                    | Version   | GTIN (EAN)    | Qty.       | Product data   | Packaging |
|---------------------------|-------------------------|---|---------------|------------|--|-----------|
| <a href="#">163970000</a> | 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, rated connection, max.: 1.5 mm <sup>2</sup> , Box | 4008190277253 | 100 pc(s). | IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 8 A / AWG 28 - AWG 14 | Box       |
| <a href="#">163947000</a> | 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, rated connection, max.: 1.5 mm <sup>2</sup> , Box | 4008190277024 | 100 pc(s). | IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 8 A / AWG 28 - AWG 14 | Box       |

**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 mm<sup>2</sup> (IEC) / 28 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17 A (IEC) / 10 A (UL)

**General ordering data**

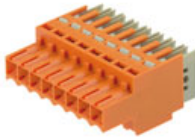
| Order No.                 | Type                   | Version  | GTIN (EAN)    | Qty.       | Product data   | Packaging |
|---------------------------|------------------------|--|---------------|------------|--|-----------|
| <a href="#">163855000</a> | BL 3.50/02/90 SN OR BX | PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box | 4008190276102 | 100 pc(s). | IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 8 A / AWG 28 - AWG 14 | Box       |
| <a href="#">163878000</a> | 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  | 4008190276324 | 100 pc(s). | IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 8 A / AWG 28 - AWG 14 | Box       |

**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/02/90G 3.2SN OR BX**

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**Mating connector (fully pluggable)**

range, rated connection,  
max.: 1.5 mm<sup>2</sup>, Box

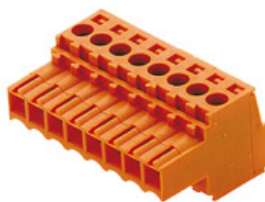
**BLIDCB 3.5**


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 mm<sup>2</sup> (IEC) / 22 - 20 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 6 A (IEC) / 7 A (UL)

**General ordering data**

| Order No.                  | Type                      | Version   | GTIN (EAN)    | Qty.      | Product data   | Packaging |
|----------------------------|---------------------------|---|---------------|-----------|--|-----------|
| <a href="#">1770670000</a> | 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, rated connection, max.: 0.5 mm <sup>2</sup> , Box | 4032248174454 | 10 pc(s). | IEC: 250 V / 6 A / 0.35 - 0.5 mm <sup>2</sup><br>UL: 300 V / 7 A / AWG 22 - AWG 20 | Box       |
| <a href="#">1751380000</a> | 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, rated connection, max.: 0.5 mm <sup>2</sup> , Box | 4032248174201 | 10 pc(s). | IEC: 250 V / 6 A / 0.35 - 0.5 mm <sup>2</sup><br>UL: 300 V / 7 A / AWG 22 - AWG 20 | Box       |

**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 mm<sup>2</sup> (IEC) / 28 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17 A (IEC) / 10 A (UL)

**General ordering data**

| Order No.                  | Type                    | Version   | GTIN (EAN)    | Qty.       | Product data  | Packaging |
|----------------------------|-------------------------|---|---------------|------------|---|-----------|
| <a href="#">1615670000</a> | 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, rated connection, max.: 1.5 mm <sup>2</sup> , Box | 4008190058890 | 100 pc(s). | IEC: 320 V / 17 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 10 A / AWG 28 - AWG 14 | Box       |
| <a href="#">1597360000</a> | BL 3.50/02/180 SN OR BX | PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping  | 4008190435868 | 100 pc(s). | IEC: 320 V / 17 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 10 A / AWG 28 - AWG 14 | Box       |

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**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/02/90G 3.2SN OR BX**

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[www.weidmueller.com](http://www.weidmueller.com)

**Mating connector (fully pluggable)**

yoke connection, Clamping  
range, rated connection,  
max.: 1.5 mm<sup>2</sup>, Box

**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/02/90G 3.2SN OR BX**

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**Mating connector (conditionally pluggable)**
**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 mm<sup>2</sup> (IEC) / 28 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17 A (IEC) / 10 A (UL)

**General ordering data**

| Order No.                  | Type                    | Version  | GTIN (EAN)    | Qty.       | Product data   | Packaging |
|----------------------------|-------------------------|--|---------------|------------|--|-----------|
| <a href="#">1639010000</a> | 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, rated connection, max.: 1.5 mm <sup>2</sup> , Box | 4008190276553 | 100 pc(s). | IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 8 A / AWG 28 - AWG 14 | Box       |
| <a href="#">1639240000</a> | 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, rated connection, max.: 1.5 mm <sup>2</sup> , Box | 4008190276782 | 100 pc(s). | IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 8 A / AWG 28 - AWG 14 | Box       |

**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 mm<sup>2</sup> (IEC) / 28 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17 A (IEC) / 10 A (UL)

**General ordering data**

| Order No.                  | Type                      | Version   | GTIN (EAN)    | Qty.       | Product data  | Packaging |
|----------------------------|---------------------------|---|---------------|------------|---|-----------|
| <a href="#">1687880000</a> | 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, rated connection, max.: 1.5 mm <sup>2</sup> , Box | 4008190853433 | 100 pc(s). | IEC: 320 V / 17 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 10 A / AWG 28 - AWG 14 | Box       |
| <a href="#">1687650000</a> | 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  | 4008190853204 | 100 pc(s). | IEC: 320 V / 17 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 10 A / AWG 28 - AWG 14 | Box       |



## OMNIMATE Signal - series BL/SL 3.50 SL 3.50/02/90G 3.2SN OR BX

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### Mating connector (conditionally pluggable)

range, rated connection,  
max.: 1.5 mm<sup>2</sup>, Box

#### BL 3.5/270F



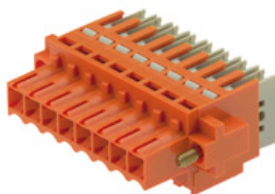
Female connectors with clamping yoke screw system for connecting conductors at 3.50 mm pitch. They include space for labelling and can be coded.

- 0.20 - 1.5 mm<sup>2</sup> (IEC) / 28 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17 A (IEC) / 10 A (UL)

#### General ordering data

| Order No.                  | Type                     | Version   | GTIN (EAN)    | Qty.       | Product data   | Packaging |
|----------------------------|--------------------------|---|---------------|------------|--|-----------|
| <a href="#">1639930000</a> | 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, rated connection, max.: 1.5 mm <sup>2</sup> , Box | 4008190277482 | 100 pc(s). | IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 8 A / AWG 28 - AWG 14 | Box       |
| <a href="#">1640160000</a> | 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, rated connection, max.: 1.5 mm <sup>2</sup> , Box | 4008190277727 | 100 pc(s). | IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 8 A / AWG 28 - AWG 14 | Box       |

#### BLIDCB 3.5F



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 mm<sup>2</sup> (IEC) / 22 - 20 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 6 A (IEC) / 7 A (UL)

#### General ordering data

| Order No.                  | Type                       | Version   | GTIN (EAN)    | Qty.      | Product data   | Packaging |
|----------------------------|----------------------------|---|---------------|-----------|--|-----------|
| <a href="#">1770740000</a> | 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, rated connection, max.: 0.5 mm <sup>2</sup> , Box | 4032248174522 | 10 pc(s). | IEC: 250 V / 6 A / 0.35 - 0.5 mm <sup>2</sup><br>UL: 300 V / 7 A / AWG 22 - AWG 20 | Box       |
| <a href="#">1751450000</a> | BLIDCB 3.50/02/-F SN OR BX | PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°/270°, IDC   | 4032248174386 | 10 pc(s). | IEC: 250 V / 6 A / 0.35 - 0.5 mm <sup>2</sup><br>UL: 300 V / 7 A / AWG 22 - AWG 20 | Box       |

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**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/02/90G 3.2SN OR BX**

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 Fax: +49 5231 14-292083  
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**Mating connector (conditionally pluggable)**

terminal, Clamping range,  
 rated connection, max.: 0.5  
 mm<sup>2</sup>, 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 mm<sup>2</sup> (IEC) / 28 - 14 AWG (UL)
- 250 V (IEC) / 300 V (UL)
- 17 A (IEC) / 10 A (UL)

**General ordering data**

| Order No.                  | Type                     | Version   | GTIN (EAN)    | Qty.       | Product data  | Packaging |
|----------------------------|--------------------------|---|---------------|------------|---|-----------|
| <a href="#">1615780000</a> | 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, rated connection, max.: 1.5 mm <sup>2</sup> , Box | 4008190061272 | 100 pc(s). | IEC: 320 V / 17 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 10 A / AWG 28 - AWG 14 | Box       |
| <a href="#">1606640000</a> | BL 3.50/02/180F SN OR BX | PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box | 4008190187088 | 100 pc(s). | IEC: 320 V / 17 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 10 A / AWG 28 - AWG 14 | Box       |