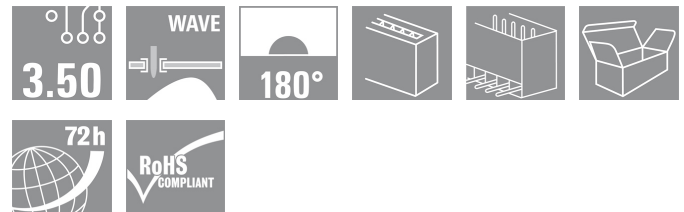


## OMNIMATE Signal - series BL/SL 3.50 SL 3.50/02/180G 3.2SN OR BX

**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="#">1604470000</a>
Type	SL 3.50/02/180G 3.2SN OR BX
Version	PCB plug-in connector, male header, closed side, Solder connection, 3.50 mm, No. of poles: 2, 180°, Solder pin length (l): 3.2 mm, tinned, Orange, Box
GTIN (EAN)	4008190137526
Qty.	100 pc(s).
Product data	IEC: 320 V / 17 A UL: 300 V / 10 A
Packaging	Box

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**OMNIMATE Signal - series BL/SL 3.50**  
**SL 3.50/02/180G 3.2SN OR BX**

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

Net weight 0.58 g

**System parameters**

Product family		Mounting onto the PCB	
OMNIMATE Signal - series BL/SL 3.50		Solder connection	
Outgoing elbow	180°	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

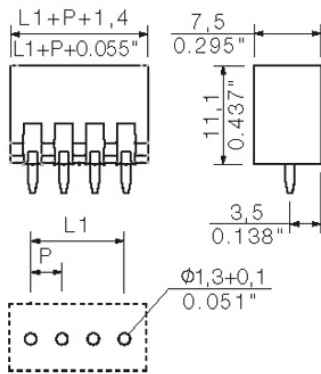
**Downloads**

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

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**Drawings**



## OMNIMATE Signal - series BL/SL 3.50 SL 3.50/02/180G 3.2SN OR BX

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### Mating connector (fully pluggable)

#### 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="#">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 yoke connection, Clamping range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4008190435868	100 pc(s).	IEC: 320 V / 17 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 14	Box
<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> UL: 300 V / 10 A / AWG 28 - AWG 14	Box

#### 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="#">1639700000</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> UL: 300 V / 8 A / AWG 28 - AWG 14	Box
<a href="#">1639470000</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	4008190277024	100 pc(s).	IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 8 A / AWG 28 - AWG 14	Box

## OMNIMATE Signal - series BL/SL 3.50 SL 3.50/02/180G 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



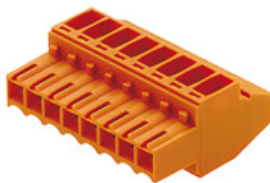
Female connectors for fast wiring with IDC system for connecting conductors at 3.50 mm pitch. They include space for labelling and can be coded.

- 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> 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> UL: 300 V / 7 A / AWG 22 - AWG 20	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="#">1638780000</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 range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4008190276324	100 pc(s).	IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 8 A / AWG 28 - AWG 14	Box
<a href="#">1638550000</a>	BL 3.50/02/90 SN OR BX	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 2, 90°, Clamping	4008190276102	100 pc(s).	IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 8 A / AWG 28 - AWG 14	Box

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**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/02/180G 3.2SN OR BX**

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**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 3.50/02/180G 3.2SN OR BX**

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**Mating connector (conditionally pluggable)**
**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> 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> UL: 300 V / 8 A / AWG 28 - AWG 14	Box

**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> 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	4008190276782	100 pc(s).	IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 8 A / AWG 28 - AWG 14	Box



**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/02/180G 3.2SN OR BX**

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Fax: +49 5231 14-292083  
www.weidmueller.com

**Mating connector (conditionally pluggable)**

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

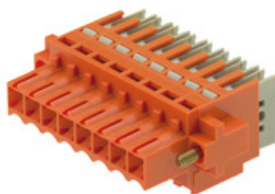
**BL 3.5/180F**


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> 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> UL: 300 V / 10 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="#">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 terminal, Clamping range, rated connection, max.: 0.5 mm <sup>2</sup> , Box	4032248174386	10 pc(s).	IEC: 250 V / 6 A / 0.35 - 0.5 mm <sup>2</sup> UL: 300 V / 7 A / AWG 22 - AWG 20	Box
<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	4032248174522	10 pc(s).	IEC: 250 V / 6 A / 0.35 - 0.5 mm <sup>2</sup> UL: 300 V / 7 A / AWG 22 - AWG 20	Box

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**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/02/180G 3.2SN OR BX**

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**Mating connector (conditionally pluggable)**

terminal, Clamping range,  
 rated connection, max.: 0.5  
 mm<sup>2</sup>, 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> 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 range, rated connection, max.: 1.5 mm <sup>2</sup> , Box	4008190853204	100 pc(s).	IEC: 320 V / 17 A / 0.2 - 1.5 mm <sup>2</sup> UL: 300 V / 10 A / AWG 28 - AWG 14	Box