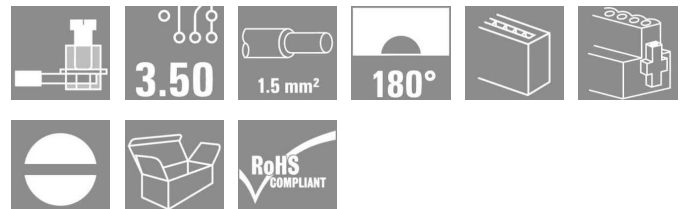


**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 1429-0  
Fax: +49 5231 14292083  
www.weidmueller.com



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

**General ordering data**

Type	BL 3.50/05/180F SN BK BX
Order No.	<a href="#">1615810000</a>
Version	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 5, 180°, Clamping yoke connection, Clamping range, rated connection, max.: 1.5 mm², Box
GTIN (EAN)	4008190062286
Qty.	72 pc(s).
Product data	IEC: 320 V / 17 A / 0.2 - 1.5 mm² UL: 300 V / 10 A / AWG 28 - AWG 14
Packaging	Box

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

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

Net weight 3.819 g

**System parameters**

Product family		Type of connection	
Product family	OMNIMATE Signal - series BL/SL 3.50	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	3.5 mm
Pitch in inches (P)	0.138 inch	Conductor outlet direction	180°
No. of poles	5	L1 in mm	14 mm
L1 in inches	0.551 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	1.5 mm <sup>2</sup>
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Can be coded	Yes	Stripping length	6 mm
Tightening torque for screw flange, min.	0.2 Nm	Tightening torque for screw flange, max.	0.25 Nm
Tightening torque, min.	0.2 Nm	Tightening torque, max.	0.25 Nm
Clamping screw	M 2	Screwdriver blade	0.4 x 2.5
Screwdriver blade standard	DIN 5264	Plugging cycles	25
push-in force/pole	10 N	Withdrawal force per pole	4 N
Packaging	Box		

**Material data**

Insulating material	PBT	Colour	Black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
CTI	≥ 200	Insulation resistance	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	Contact material	Copper alloy
Contact surface	tinned	Layer structure of plug contact	4-8 μm Sn hot-dip tinned
Storage temperature, min.	-25 °C	Storage temperature, max.	55 °C
Max. relative humidity during storage	80 %	Operating temperature, min.	-50 °C
Operating temperature, max.	100 °C	Temperature range, installation, min.	-30 °C
Temperature range, installation, max.	100 °C		

**Conductors suitable for connection**

Clamping range, rated connection, min.	0.08 mm <sup>2</sup>	Clamping range, rated connection, max.	1.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 28	Wire connection cross section AWG, max.	AWG 14
Solid, min. H05(07) V-U	0.2 mm <sup>2</sup>	Solid, max. H05(07) V-U	1.5 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.2 mm <sup>2</sup>	Flexible, max. H05(07) V-K	1.5 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.2 mm <sup>2</sup>	w. plastic collar ferrule, DIN 46228 pt 4, max.	1.5 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm <sup>2</sup>	w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm <sup>2</sup>
Plug gauge acc. to EN 60999 a x b; Ø	2.4 mm x 1.5 mm		

## OMNIMATE Signal - series BL/SL 3.50 BL 3.50/05/180F SN BK BX

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## Technical data


### Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Ta = 20°C)	17 A
Rated current, max. no. of poles (Ta = 20°C)	12 A	Rated current, min. no. of poles (Ta = 40°C)	14.5 A
Rated current, max. no. of poles (Ta = 40°C)	10 A	Rated voltage for surge voltage class / pollution degree II/2	320 V
Rated voltage for surge voltage class / pollution degree III/2	160 V	Rated voltage for surge voltage class / pollution degree III/3	160 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	2.5 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	2.5 kV	Short-time withstand current resistance	3 x 1s with 100 A

### Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	154685-1318353
Rated voltage (Use group B)	300 V	Rated voltage (use group D)	300 V
Rated current (use group B)	10 A	Rated current (use group D)	10 A
Wire cross-section, AWG, min.	AWG 28	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

### Rated data acc. to UL 1059

Institute (UR)		Certificate No. (UR)	E60693
Rated voltage (use group B)	300 V	Rated voltage (use group D)	300 V
Rated current (use group B)	10 A	Rated current (use group D)	10 A
Wire cross-section, AWG, min.	AWG 28	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

### Classifications

ETIM 3.0	EC001284	ETIM 4.0	EC002637
ETIM 5.0	EC002637	ETIM 6.0	EC002637
UNSPSC	30-21-18-10	eClass 5.1	27-26-07-04
eClass 6.2	27-26-07-04	eClass 7.1	27-44-04-02
eClass 8.1	27-44-04-02	eClass 9.0	27-44-04-02
eClass 9.1	27-44-04-02		

**Data sheet**

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

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**Technical data**

**Notes**

Notes	<ul style="list-style-type: none"> <li>• Additional colours on request</li> <li>• Gold-plated contact surfaces on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Max. outer diameter of the conductor: 2.9 mm</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</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>
IPC conformity	The products are developed, manufactured and delivered according to the internationally recognised IPC-A-610 standard, category "permissible". More extensive demands on the products can be evaluated on request.

**Approvals**

Approvals	
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ROHS	Conform
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**Downloads**

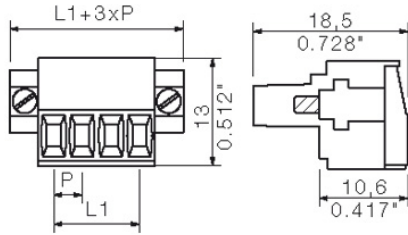
Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<a href="#">FL DRIVES EN</a> <a href="#">FL DRIVES DE</a>

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

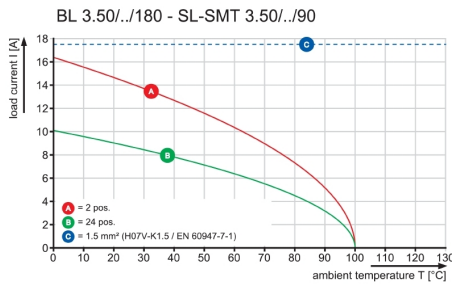
**Weidmüller Interface GmbH & Co. KG**  
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**Drawings**

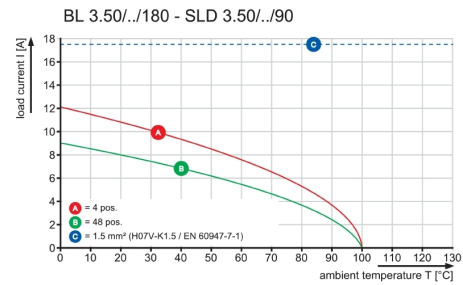
**Dimensional drawing**



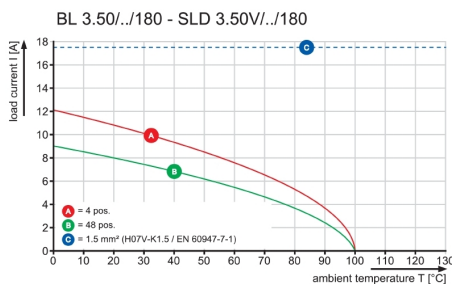
**Graph**



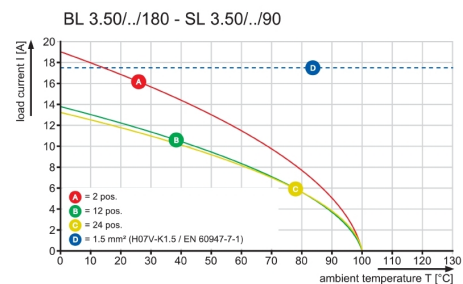
**Graph**



**Graph**

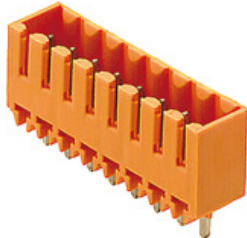


**Graph**



**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

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**Mating connector (conditionally pluggable)**
**SL 3.50/180G**


Pin headers for wave soldering in 3.50 mm pitch

- Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB
- Housing variant: screw flange (F)
- Packed in a cardboard box (BX)
- Pin header can be coded

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL	<a href="#">1604500000</a>	PCB plug-in connector, male	4008190066871	50 pc(s).	IEC: 320 V / 17 A	Box
3.50/05/180G		header, closed side, THT			UL: 300 V / 10 A	
3.2SN OR BX		solder connection, 3.50 mm, No. of poles: 5, 180°, Solder pin length (l): 3.2 mm, tinned, Orange, Box				

**SL-SMT 3.5/180G Tape**


**High-temperature-resistant male header, 3.50 mm pitch.**

- **Plugging direction parallel (90°), straight 180° or angled (135°) to PCB**
- **Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)**
- **Optimised for the SMT process**
- **Pin length 3.2 mm universal for all soldering methods**
- **Pin length 1.5 mm optimised for reflow soldering methods**
- **Packed either in a box (BX) or tape-on-reel (RL)**
- **Male header can be coded**

**General ordering data**

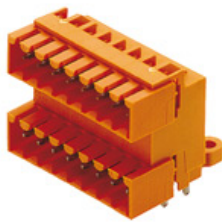
Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL-SMT	<a href="#">1753014002</a>	PCB plug-in connector, male	4032248193226	265 pc(s).	IEC: 320 V / 15 A	Tape
3.50/05/180G		header, closed side, THT/			UL: 300 V / 10 A	(Ø
1.5SN BK RL		THR solder connection, 3.50 mm, No. of poles: 5, 180°, Solder pin length (l): 1.5 mm, tinned, Black, Tape				330 mm);
		(Ø 330 mm); Rs = 10 <sup>9</sup> - 10 <sup>12</sup> Ω				Rs = -

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

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**Mating connector (conditionally pluggable)**

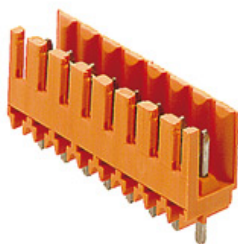
10<sup>12</sup>  
Ω

**SLD 3.50/90G**


Two-tier pin header for wave soldering in 3.50 mm pitch. The connector is available in open, closed and flange versions. The male connectors provide space for labelling and can be coded. Packed in a cardboard box.

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SLD	<a href="#">1633610000</a>	PCB plug-in connector, male	4008190258061	50 pc(s).	IEC: 200 V / 10.5 A UL: 300 V / 8 A	Box
3.50/10/90G		header, closed side, THT				
3.2SN OR BX		solder connection, 3.50 mm, No. of poles: 10, 90°, Solder pin length (l): 3.2 mm, tinned, Orange, Box				

**SL 3.50/180**


Pin headers for wave soldering in 3.50 mm pitch

- Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB
- Housing variant: screw flange (F)
- Packed in a cardboard box (BX)
- Pin header can be coded

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL	<a href="#">1604800000</a>	PCB plug-in connector, male	4008190005092	50 pc(s).	IEC: 320 V / 17 A UL: 300 V / 10 A	Box
3.50/05/180		header, open side, THT				
3.2SN OR BX		solder connection, 3.50 mm, No. of poles: 5, 180°, Solder pin length (l): 3.2 mm, tinned, Orange, Box				

## OMNIMATE Signal - series BL/SL 3.50 BL 3.50/05/180F SN BK BX

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### Mating connector (conditionally pluggable)

#### SL-SMT 3.5/90G Tape



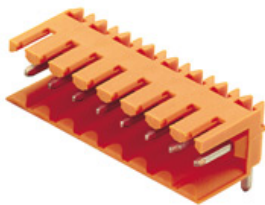
**High-temperature-resistant male header, 3.50 mm pitch.**

- **Plugging direction parallel (90°), straight 180° or angled (135°) to PCB**
- **Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)**
- **Optimised for the SMT process**
- **Pin length 3.2 mm universal for all soldering methods**
- **Pin length 1.5 mm optimised for reflow soldering methods**
- **Packed either in a box (BX) or tape-on-reel (RL)**
- **Male header can be coded**

#### General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL-SMT	<a href="#">1761574002</a>	PCB plug-in connector, male	4032248193363	385 pc(s).	IEC: 320 V / 15 A UL: 300 V / 10 A	Tape
3.50/05/90G		header, closed side, THT/ THR solder connection,				(Ø
1.5SN BK RL		3.50 mm, No. of poles: 5, 90°, Solder pin length (l): 1.5 mm, tinned, Black, Tape				330 mm); Rs = 10 <sup>9</sup> - 10 <sup>12</sup> Ω

#### SL 3.50/90



Pin headers for wave soldering in 3.50 mm pitch

- **Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB**
- **Housing variant: screw flange (F)**
- **Packed in a cardboard box (BX)**
- **Pin header can be coded**

#### General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL	<a href="#">1597240000</a>	PCB plug-in connector, male	4008190055776	50 pc(s).	IEC: 320 V / 17 A UL: 300 V / 10 A	Box
3.50/05/90		header, open side, THT				
3.2SN OR BX		solder connection, 3.50 mm, No. of poles: 5, 90°,				

**OMNIMATE Signal - series BL/SL 3.50**  
**BL 3.50/05/180F SN BK BX**

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**Mating connector (conditionally pluggable)**

Solder pin length (l): 3.2  
 mm, tinned, Orange, Box

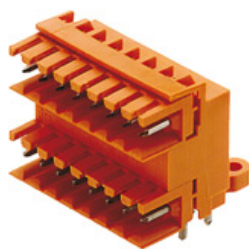
**SL-THR 3.5/135F**


**High-temperature-resistant male header, 3.50 mm pitch.**

- **Plugging direction parallel (90°), straight 180° or angled (135°) to PCB**
- **Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)**
- **Optimised for the SMT process**
- **Pin length 3.2 mm universal for all soldering methods**
- **Pin length 1.5 mm optimised for reflow soldering methods**
- **Packed either in a box (BX) or tape-on-reel (RL)**
- **Male header can be coded**

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL-SMT	<a href="#">1003540000</a>	PCB plug-in connector, male	4032248700172	72 pc(s).	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
3.50/05/135F		header, Flange, THT/THR				
3.2SN BK BX		solder connection, 3.50 mm, No. of poles: 5, 135°, Solder pin length (l): 3.2 mm, tinned, Black, Box				

**SLD 3.50/90**


Two-tier pin header for wave soldering in 3.50 mm pitch. The connector is available in open, closed and flange versions. The male connectors provide space for labelling and can be coded. Packed in a cardboard box.

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SLD	<a href="#">1633380000</a>	PCB plug-in connector, male	4008190257835	50 pc(s).	IEC: 200 V / 10.5 A UL: 300 V / 8 A	Box
3.50/10/90		header, open side, THT				
3.2SN OR BX		solder connection, 3.50 mm, No. of poles: 10, 90°, Solder pin length (l): 3.2 mm, tinned, Orange, Box				

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

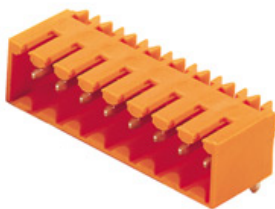
**Weidmüller Interface GmbH & Co. KG**  
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**Mating connector (conditionally pluggable)****SL-SMT 3.5/90G Box****High-temperature-resistant male header, 3.50 mm pitch.**

- **Plugging direction parallel (90°), straight 180° or angled (135°) to PCB**
- **Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)**
- **Optimised for the SMT process**
- **Pin length 3.2 mm universal for all soldering methods**
- **Pin length 1.5 mm optimised for reflow soldering methods**
- **Packed either in a box (BX) or tape-on-reel (RL)**
- **Male header can be coded**

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL-SMT 3.50/05/90G 3.2SN BK BX	<a href="#">1841660000</a>	PCB plug-in connector, male header, closed side, THT/ THR solder connection, 3.50 mm, No. of poles: 5, 90°, Solder pin length (l): 3.2 mm, tinned, Black, Box	4032248353019	50 pc(s).	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
SL-SMT 3.50/05/90G 1.5SN BK BX	<a href="#">1761572001</a>	PCB plug-in connector, male header, closed side, THT/ THR solder connection, 3.50 mm, No. of poles: 5, 90°, Solder pin length (l): 1.5 mm, tinned, Black, Box	4032248132065	50 pc(s).	IEC: 320 V / 15 A UL: 300 V / 10 A	Box

**SL 3.50/90G****Pin headers for wave soldering in 3.50 mm pitch**

- **Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB**
- **Housing variant: screw flange (F)**
- **Packed in a cardboard box (BX)**
- **Pin header can be coded**

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL 3.50/05/90G 3.2SN OR BX	<a href="#">1605100000</a>	PCB plug-in connector, male header, closed side, THT solder connection, 3.50 mm, No. of poles: 5, 90°	4008190102609	50 pc(s).	IEC: 320 V / 17 A UL: 300 V / 10 A	Box

## OMNIMATE Signal - series BL/SL 3.50 BL 3.50/05/180F SN BK BX

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### Mating connector (conditionally pluggable)

Solder pin length (l): 3.2  
 mm, tinned, Orange, Box

#### SL-SMT 3.5/180G Box



**High-temperature-resistant male header, 3.50 mm pitch.**

- **Plugging direction parallel (90°), straight 180° or angled (135°) to PCB**
- **Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)**
- **Optimised for the SMT process**
- **Pin length 3.2 mm universal for all soldering methods**
- **Pin length 1.5 mm optimised for reflow soldering methods**
- **Packed either in a box (BX) or tape-on-reel (RL)**
- **Male header can be coded**

#### General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL-SMT 3.50/05/180G 3.2SN BK BX	<a href="#">1842350000</a>	PCB plug-in connector, male header, closed side, THT/ THR solder connection, 3.50 mm, No. of poles: 5, 180°, Solder pin length (l): 3.2 mm, tinned, Black, Box	4032248353705	50 pc(s).	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
SL-SMT 3.50/05/180G 1.5SN BK BX	<a href="#">1753012001</a>	PCB plug-in connector, male header, closed side, THT/ THR solder connection, 3.50 mm, No. of poles: 5, 180°, Solder pin length (l): 1.5 mm, tinned, Black, Box	4032248130900	50 pc(s).	IEC: 320 V / 15 A UL: 300 V / 10 A	Box

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

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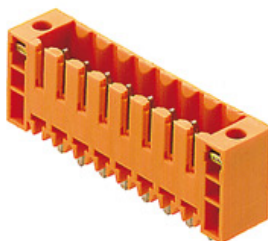
**Mating connector (fully pluggable)**
**SL-SMT 3.5/180F Box**


**High-temperature-resistant male header, 3.50 mm pitch.**

- **Plugging direction parallel (90°), straight 180° or angled (135°) to PCB**
- **Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)**
- **Optimised for the SMT process**
- **Pin length 3.2 mm universal for all soldering methods**
- **Pin length 1.5 mm optimised for reflow soldering methods**
- **Packed either in a box (BX) or tape-on-reel (RL)**
- **Male header can be coded**

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL-SMT 3.50/05/180F 3.2SN BK BX	<a href="#">1842800000</a>	PCB plug-in connector, male header, Flange, THT/THR solder connection, 3.50 mm, No. of poles: 5, 180°, Solder pin length (l): 3.2 mm, tinned, Black, Box	4032248354160	72 pc(s).	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
SL-SMT 3.50/05/180F 1.5SN BK BX	<a href="#">1760992001</a>	PCB plug-in connector, male header, Flange, THT/THR solder connection, 3.50 mm, No. of poles: 5, 180°, Solder pin length (l): 1.5 mm, tinned, Black, Box	4032248131563	72 pc(s).	IEC: 320 V / 15 A UL: 300 V / 10 A	Box

**SL 3.50/180F**


Pin headers for wave soldering in 3.50 mm pitch

- **Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB**
- **Housing variant: screw flange (F)**
- **Packed in a cardboard box (BX)**
- **Pin header can be coded**

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL 3.50/05/180F 3.2SN OR BX	<a href="#">1607530000</a>	PCB plug-in connector, male header, Flange, THT solder connection, 3.50 mm, No. of poles: 5, 180°, Solder pin	4008190067335	50 pc(s).	IEC: 320 V / 17 A UL: 300 V / 10 A	Box

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

**Weidmüller Interface GmbH & Co. KG**  
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Germany  
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Fax: +49 5231 14292083  
www.weidmueller.com

**Mating connector (fully pluggable)**

length (l): 3.2 mm, tinned,  
Orange, Box

**SL-SMT 3.5/90F Box**

**High-temperature-resistant male header, 3.50 mm pitch.**

- **Plugging direction parallel (90°), straight 180° or angled (135°) to PCB**
- **Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)**
- **Optimised for the SMT process**
- **Pin length 3.2 mm universal for all soldering methods**
- **Pin length 1.5 mm optimised for reflow soldering methods**
- **Packed either in a box (BX) or tape-on-reel (RL)**
- **Male header can be coded**

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL-SMT 3.50/05/90F 3.2SN BK BX	<a href="#">1842110000</a>	PCB plug-in connector, male header, Flange, THT/THR solder connection, 3.50 mm, No. of poles: 5, 90°, Solder pin length (l): 3.2 mm, tinned, Black, Box	4032248353460	72 pc(s).	IEC: 320 V / 15 A UL: 300 V / 10 A	Box

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

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**Mating connector (fully pluggable)**
**SL-SMT 3.5/90LF Box**


**High-temperature-resistant male header, 3.50 mm pitch.**

- **Plugging direction parallel (90°), straight 180° or angled (135°) to PCB**
- **Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)**
- **Optimised for the SMT process**
- **Pin length 3.2 mm universal for all soldering methods**
- **Pin length 1.5 mm optimised for reflow soldering methods**
- **Packed either in a box (BX) or tape-on-reel (RL)**
- **Male header can be coded**

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL-SMT 3.50/05/90LF 3.2SN BK BX	<a href="#">1841890000</a>	PCB plug-in connector, male header, Solder flange, THT/ THR solder connection, 3.50 mm, No. of poles: 5, 90°, Solder pin length (l): 3.2 mm, tinned, Black, Box	4032248353248	72 pc(s).	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
SL-SMT 3.50/05/90LF 1.5SN BK BX	<a href="#">1804970000</a>	PCB plug-in connector, male header, Solder flange, THT/ THR solder connection, 3.50 mm, No. of poles: 5, 90°, Solder pin length (l): 1.5 mm, tinned, Black, Box	4032248268870	72 pc(s).	IEC: 320 V / 15 A UL: 300 V / 10 A	Box

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

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**Mating connector (fully pluggable)**
**SL-SMT 3.5/180LF Box**


**High-temperature-resistant male header, 3.50 mm pitch.**

- **Plugging direction parallel (90°), straight 180° or angled (135°) to PCB**
- **Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)**
- **Optimised for the SMT process**
- **Pin length 3.2 mm universal for all soldering methods**
- **Pin length 1.5 mm optimised for reflow soldering methods**
- **Packed either in a box (BX) or tape-on-reel (RL)**
- **Male header can be coded**

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL-SMT 3.50/05/180LF 3.2SN BK BX	<a href="#">1842570000</a>	PCB plug-in connector, male header, Solder flange, THT/ THR solder connection, 3.50 mm, No. of poles: 5, 180°, Solder pin length (l): 3.2 mm, tinned, Black, Box	4032248353934	72 pc(s).	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
SL-SMT 3.50/05/180LF 1.5SN BK BX	<a href="#">1804730000</a>	PCB plug-in connector, male header, Solder flange, THT/ THR solder connection, 3.50 mm, No. of poles: 5, 180°, Solder pin length (l): 1.5 mm, tinned, Black, Box	4032248268818	72 pc(s).	IEC: 320 V / 15 A UL: 300 V / 10 A	Box

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

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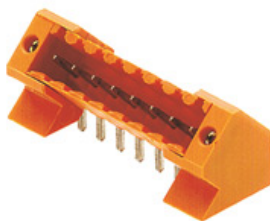
**Mating connector (fully pluggable)**
**SL-SMT 3.5/90LF Tape**


**High-temperature-resistant male header, 3.50 mm pitch.**

- **Plugging direction parallel (90°), straight 180° or angled (135°) to PCB**
- **Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)**
- **Optimised for the SMT process**
- **Pin length 3.2 mm universal for all soldering methods**
- **Pin length 1.5 mm optimised for reflow soldering methods**
- **Packed either in a box (BX) or tape-on-reel (RL)**
- **Male header can be coded**

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL-SMT	<a href="#">1805340000</a>	PCB plug-in connector, male	4032248269594	385 pc(s).	IEC: 320 V / 15 A	Tape
3.50/05/90LF		header, Solder flange, THT/ THR solder connection,			UL: 300 V / 10 A	(Ø
1.5SN BK RL		3.50 mm, No. of poles: 5, 90°, Solder pin length (l): 1.5 mm, tinned, Black, Tape				330 mm); Rs = 10 <sup>9</sup> - 10 <sup>12</sup> Ω
		(Ø 330 mm); Rs = 10 <sup>9</sup> - 10 <sup>12</sup> Ω				

**SL 3.50/135F**


Pin headers for wave soldering in 3.50 mm pitch

- **Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB**
- **Housing variant: screw flange (F)**
- **Packed in a cardboard box (BX)**
- **Pin header can be coded**

**General ordering data**

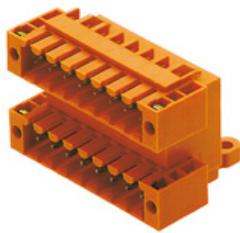
Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL	<a href="#">1643360000</a>	PCB plug-in connector, male	4008190282127	72 pc(s).	IEC: 320 V / 15 A	Box
3.50/05/135F		header, Flange, THT solder connection, 3.50 mm, No. of poles: 5, 135°, Solder pin			UL: 300 V / 10 A	
3.2SN OR BX						

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

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**Mating connector (fully pluggable)**

length (l): 3.2 mm, tinned,  
Orange, Box

**SLD 3.50/90F**


Two-tier pin header for wave soldering in 3.50 mm pitch. The connector is available in open, closed and flange versions. The male connectors provide space for labelling and can be coded. Packed in a cardboard box.

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SLD	<a href="#">1633840000</a>	PCB plug-in connector, male	4008190258290	50 pc(s).	IEC: 200 V / 10.5 A	Box
3.50/10/90F		header, Flange, THT solder connection, 3.50 mm, No. of poles: 10, 90°, Solder pin length (l): 3.2 mm, tinned, Orange, Box			UL: 300 V / 8 A	

**SL-SMT 3.5/180LF Tape**


**High-temperature-resistant male header, 3.50 mm pitch.**

- **Plugging direction parallel (90°), straight 180° or angled (135°) to PCB**
- **Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)**
- **Optimised for the SMT process**
- **Pin length 3.2 mm universal for all soldering methods**
- **Pin length 1.5 mm optimised for reflow soldering methods**
- **Packed either in a box (BX) or tape-on-reel (RL)**
- **Male header can be coded**

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL-SMT	<a href="#">1805250000</a>	PCB plug-in connector, male	4032248269525	265 pc(s).	IEC: 320 V / 15 A	Tape
3.50/05/180LF		header, Solder flange, THT/THR solder connection, 3.50 mm, No. of poles: 5, 180°, Solder pin length (l): 1.5 mm, tinned, Black, Tape			UL: 300 V / 10 A	(Ø 330 mm); Rs = 10 <sup>9</sup>

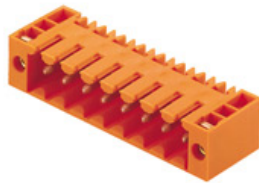
**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

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**Mating connector (fully pluggable)**

(Ø 330 mm); Rs = 10<sup>9</sup> -  
 10<sup>12</sup> Ω

-  
 10<sup>12</sup>  
 Ω

**SL 3.50/90F**


Pin headers for wave soldering in 3.50 mm pitch

- Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB
- Housing variant: screw flange (F)
- Packed in a cardboard box (BX)
- Pin header can be coded

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
SL	<a href="#">1607070000</a>	PCB plug-in connector, male	4008190170127	50 pc(s).	IEC: 320 V / 17 A	Box
3.50/05/90F		header, Flange, THT solder			UL: 300 V / 10 A	
3.2SN OR BX		connection, 3.50 mm, No. of poles: 5, 90°, Solder pin length (l): 3.2 mm, tinned, Orange, Box				

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

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**Accessories**

**Strain reliefs**



**For frequent load changes: the "trailer coupling" for plug-in connectors.**

The strain relief can do more than just relieve the strain on conductors:

Simply clip onto the plug and

- bundle conductors
- guide cables
- use as a connection and disconnection aid

No damage to the connecting points, clear, tidy wiring and easy to handle.

User advantages: permanent heavy-duty connections for harsh industrial environments and convenient operation ensure improved system availability.

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BL 3.50 ZE03 BK BX	<a href="#">1627820000</a>	PCB plug-in connector, Accessories, Strain relief, Black, No. of poles: 3	4008190202552	50 pc(s).		Box
BL 3.50 ZE03 OR BX	<a href="#">1629680000</a>	PCB plug-in connector, Accessories, Strain relief, Orange, No. of poles: 3	4008190202569	50 pc(s).		Box

## OMNIMATE Signal - series BL/SL 3.50 BL 3.50/05/180F SN BK BX

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# Accessories

## Cover hoods



### Effective protection, optimised ergonomics and closed design:

From the strain relief on the connected conductors and the visual/contact protection and the disconnection aid: the optional retrofit hoods perform mechanical, visual and haptic functions.

The two half shells clip together securely, enclose the plug completely and offer the following functions:

- Cable ties or integrated cable clips provide strain relief.
- Marked with dekafix labels or adhesive strips
- Mounting side by side without losing poles or displacing the pitch
- Compatible: suitable for plugs with or without a flange or mounting bracket
- Flexible: 1-3 cable outlets leading in different directions available depending on the size

Weidmüller hoods offer added stability, better identification, complete compatibility and versatility. The result: maximum reliability and user-friendliness in any application.

### General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BL 3.50 AH05 BK BX	<a href="#">1745600000</a>	PCB plug-in connector, Accessories, Cover hood, Black, No. of poles: 5	4008190985165	10 pc(s).		Box

## Coding elements



### Only connects what is supposed to be connected: the right connection at the right place.

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

### General ordering data

Type	Order No.	Version	GTIN (EAN)	Qty.	Product data	Packaging
BL SL 3.5 KO SW	<a href="#">1610100000</a>	PCB plug-in connector, Accessories, Coding element, Black, No. of poles: 1	4008190187637	100 pc(s).		Box
BL SL 3.5 KO OR	<a href="#">1693430000</a>	PCB plug-in connector, Accessories, Coding	4008190867447	100 pc(s).		Box

Creation date July 28, 2017 7:20:01 AM CEST

**Data sheet**

**OMNIMATE Signal - series BL/SL 3.50  
BL 3.50/05/180F SN BK BX**

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**Accessories**

element, Orange, No. of  
poles: 1

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