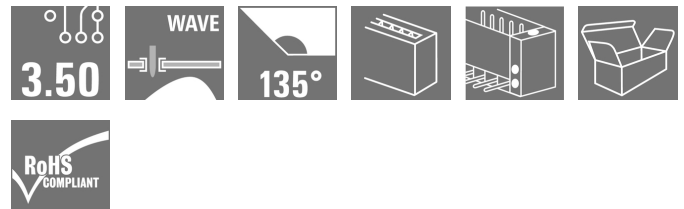


## OMNIMATE Signal - series BL/SL 3.50 SL 3.50/07/135F 3.2SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
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### Product image



Similar to illustration

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	SL 3.50/07/135F 3.2SN OR BX
Order No.	<a href="#">1643380000</a>
Version	PCB plug-in connector, male header, Flange, THT solder connection, 3.50 mm, Number of poles: 7, 135°, Solder pin length (l): 3.2 mm, tinned, orange, Box
GTIN (EAN)	4008 190282 14 1
Qty.	54 pc(s).
Product data	IEC: 320 V / 15 A UL: 300 V / 10 A
Packaging	Box

Creation date May 3, 2020 5:04:18 PM CEST

**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/07/135F 3.2SN OR BX**

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

Width	31.5 mm	Width (inches)	1.24 inch
Height	16.2 mm	Height (inches)	0.638 inch
Height of lowest version	13 mm	Depth	13.2 mm
Depth (inches)	0.52 inch	Net weight	3.13 g

**System specifications**

Product family	OMNIMATE Signal - series BL/SL 3.50			
Type of connection	Board connection			
Mounting onto the PCB	THT solder connection			
Pitch in mm (P)	3.5 mm			
Pitch in inches (P)	0.138 inch			
Outgoing elbow	135°			
Number of poles	7			
Number of solder pins per pole	1			
Solder pin length (l)	3.2 mm			
Solder pin length tolerance	+0.1 / -0.3 mm			
Tolerance of solder pin position	± 0.1 mm			
Solder pin dimensions	d = 1.2 mm, Octagonal			
Solder pin dimensions = d tolerance	0 / -0,03 mm			
Solder eyelet hole diameter (D)	1.4 mm			
Solder eyelet hole diameter tolerance (D)	+ 0,1 mm			
L1 in mm	21 mm			
L1 in inches	0.827 inch			
Number of rows	1			
Pin series quantity	1			
Touch-safe protection acc. to DIN VDE 57 106	Safe from back-of-hand touch			
Touch-safe protection acc. to DIN VDE 0470	IP 10			
Volume resistance	≤ 5mΩ			
Can be coded	Yes			
Plugging cycles	25			
Plugging force/pole, max.	10 N			
Pulling force/pole, max.	10 N			
Tightening torque	Torque type	PCB, Screw flange		
	Usage information	Tightening torque	min. 0.1 Nm max. 0.15 Nm	
		Recommended screw	Part number	<a href="#">PTSC KA 2.2X4.5</a> <a href="#">WN1412</a>

**Material data**

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	CuSn	Contact surface	tinned
Layer structure of solder connection	1-3 μm Ni / 2-4 μm Sn matt	Layer structure of plug contact	1-3 μm Ni / 2-4 μm Sn matt
Storage temperature, min.	-25 °C	Storage temperature, max.	50 °C
Max. relative humidity during storage	70 %	Operating temperature, min.	-50 °C
Operating temperature, max.	100 °C	Temperature range, installation, min.	-30 °C
Temperature range, installation, max.	100 °C		

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**Technical data**
**Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	15 A
Rated current, max. number of poles (Tu=20°C)	11 A	Rated current, min. number of poles (Tu=40°C)	13 A
Rated current, max. number of poles (Tu=40°C)	9 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 / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	10 A	Rated current (Use group D / CSA)	10 A
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 / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	10 A	Rated current (Use group D / UL 1059)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

**Packing**

Packaging	Box	VPE length	350 mm
VPE width	135 mm	VPE height	30 mm

**Classifications**

ETIM 6.0	EC002637	ETIM 7.0	EC002637
eClass 9.0	27-44-04-02	eClass 9.1	27-44-04-02
eClass 10.0	27-44-04-02	UNSPSC	30-21-18-10

**Data sheet**

**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/07/135F 3.2SN OR 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>• 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	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

**Approvals**

Approvals



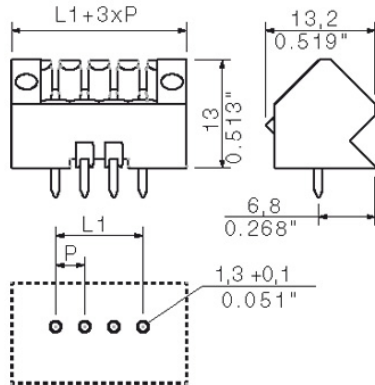
ROHS Conform

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">CAT 2 PORTFOLIOGUIDE EN</a> <a href="#">FL BUILDING SAFETY EN</a> <a href="#">FL APPL LED LIGHTING EN</a> <a href="#">FLIndustr.CONTROLS EN</a> <a href="#">FL MACHINE SAFETY EN</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL INVERTER EN</a> <a href="#">FL_BASE_STATION EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a>
Engineering Data	<a href="#">SL.zip</a>

**Data sheet****OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/07/135F 3.2SN OR BX**

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**Drawings****Dimensional drawing**

**OMNIMATE Signal - series BL/SL 3.50  
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**Mating connector (conditionally pluggable)**
**BL 3.50/180LH**


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 3.50/07/180LH SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1687700000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 17 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190853259	180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> ,	UL: 300 V / 10 A / AWG 28 - AWG 14	
Qty.	54 pc(s).	Box		
Type	BL 3.50/07/180LH SN BK ...	Version	Product data	Packaging
Order No.	<a href="#">1687930000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 17 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190853488	180°, Clamping yoke connection, Clamping range, max.: 1.5 mm <sup>2</sup> ,	UL: 300 V / 10 A / AWG 28 - AWG 14	
Qty.	50 pc(s).	Box		

**BLZF 3.5/180LH**


Female connectors with tension clamp system for connecting cables in 3.50 pitch. They provide space for labelling and can be coded.

**General ordering data**

Type	BLZF 3.50/07/180LH SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1691620000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 14.5 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190373580	180°, Tension-clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> ,	UL: 300 V / 10 A / AWG 26 - AWG 14	
Qty.	50 pc(s).	Box		
Type	BLZF 3.50/07/180LH SN B ...	Version	Product data	Packaging
Order No.	<a href="#">1691850000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 14.5 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190373825	180°, Tension-clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> ,	UL: 300 V / 10 A / AWG 26 - AWG 14	
Qty.	50 pc(s).	Box		

**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/07/135F 3.2SN OR BX**

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**Mating connector (conditionally pluggable)**
**BLZF 3.5/180**


Female connectors with tension clamp system for connecting cables in 3.50 pitch. They provide space for labelling and can be coded.

**General ordering data**

Type	BLZF 3.50/07/180 SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1690240000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 14.5 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190328733	180°, Tension-clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> ,	UL: 300 V / 10 A / AWG 26 - AWG 14	
Qty.	50 pc(s).	Box		
Type	BLZF 3.50/07/180 SN BK ...	Version	Product data	Packaging
Order No.	<a href="#">1690470000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 14.5 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190328986	180°, Tension-clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> ,	UL: 300 V / 10 A / AWG 26 - AWG 14	
Qty.	50 pc(s).	Box		

**BLIDCB 3.5**


Female connectors for fast processing with insulation displacement connectors (IDC) for connecting wires at 3.50 pitch. They provide space for labelling and can be coded.

**General ordering data**

Type	BLIDCB 3.50/07/- SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1751430000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 250 V / 6 A / 0.35 - 0.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248174362	90°/270°, IDC terminal, Clamping range, max.: 0.5 mm <sup>2</sup> , Box	UL: 300 V / 7 A / AWG 22 - AWG 20	
Qty.	10 pc(s).			
Type	BLIDCB 3.50/07/- SN BK ...	Version	Product data	Packaging
Order No.	<a href="#">1770720000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 250 V / 6 A / 0.35 - 0.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248174508	90°/270°, IDC terminal, Clamping range, max.: 0.5 mm <sup>2</sup> , Box	UL: 300 V / 7 A / AWG 22 - AWG 20	
Qty.	10 pc(s).			

**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/07/135F 3.2SN OR BX**

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**Mating connector (conditionally pluggable)**
**BL 3.50/90**


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 3.50/07/90 SN BK BX	Version	Product data	Packaging
Order No.	<a href="#">1638830000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190276379	90°, Clamping yoke connection, Clamping range, max. : 1.5 mm <sup>2</sup> , Box	UL: 300 V / 8 A / AWG 28 - AWG 14	
Qty.	72 pc(s).			
Type	BL 3.50/07/90 SN OR BX	Version	Product data	Packaging
Order No.	<a href="#">1638600000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190276140	90°, Clamping yoke connection, Clamping range, max. : 1.5 mm <sup>2</sup> , Box	UL: 300 V / 8 A / AWG 28 - AWG 14	
Qty.	72 pc(s).			

**BL 3.50/270**


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 3.50/07/270 SN BK BX	Version	Product data	Packaging
Order No.	<a href="#">1639750000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190277307	270°, Clamping yoke connection, Clamping range, max. : 1.5 mm <sup>2</sup> ,	UL: 300 V / 8 A / AWG 28 - AWG 14	
Qty.	72 pc(s).	Box		
Type	BL 3.50/07/270 SN OR BX	Version	Product data	Packaging
Order No.	<a href="#">1639520000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190277079	270°, Clamping yoke connection, Clamping range, max. : 1.5 mm <sup>2</sup> ,	UL: 300 V / 8 A / AWG 28 - AWG 14	
Qty.	72 pc(s).	Box		



**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/07/135F 3.2SN OR BX**

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**Mating connector (conditionally pluggable)**
**BL 3.50/180**


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 3.50/07/180 SN OR BX	Version	Product data	Packaging
Order No.	<a href="#">1597410000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 17 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190013783	180°, Clamping yoke connection, Clamping range, max. : 1.5 mm <sup>2</sup> ,	UL: 300 V / 10 A / AWG 28 - AWG 14	
Qty.	72 pc(s).	Box		
Type	BL 3.50/07/180 SN BK BX	Version	Product data	Packaging
Order No.	<a href="#">1610190000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 17 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190069889	180°, Clamping yoke connection, Clamping range, max. : 1.5 mm <sup>2</sup> ,	UL: 300 V / 10 A / AWG 28 - AWG 14	
Qty.	72 pc(s).	Box		

**BLIDC 3.5 SN**


Female connectors for fast processing with insulation displacement connectors (IDC) for connecting wires at 3.50 pitch. They provide space for labelling and can be coded.

**General ordering data**

Type	BLIDC 3.50/07/180 SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1750840000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 6 A / 0.2 - 0.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248146130	90°/270°, IDC terminal, Clamping range, max. : 0.5 mm <sup>2</sup> , Box	UL: 300 V / 7 A / AWG 22 - AWG 20	
Qty.	50 pc(s).			

**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/07/135F 3.2SN OR BX**

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**Mating connector (fully pluggable)**
**BLIDC 3.5F SN**


Female connectors for fast processing with insulation displacement connectors (IDC) for connecting wires at 3.50 pitch. They provide space for labelling and can be coded.

**General ordering data**

Type	BLIDC 3.50/07/180F SN O ...	Version	Product data	Packaging
Order No.	<a href="#">1751140000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 6 A / 0.2 - 0.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248146697	90°/270°, IDC terminal, Clamping range, max. : 0.5 mm <sup>2</sup> , Box	UL: 300 V / 7 A / AWG 22 - AWG 20	
Qty.	50 pc(s).			

**BLF 3.50/180LH**


Connect efficiently - in a small space: female header with spring connection (PUSH IN) as a plug-in connection level; used together with male headers in 3.50 mm pitch.

**General ordering data**

Type	BLF 3.50/02/180LH SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">2459950000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 2,	IEC: 320 V / 17.5 A / 0.14 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4050118475364	180°, PUSH IN, Spring connection, Clamping range, max. : 1.5 mm <sup>2</sup> ,	UL: 300 V / AWG 26 - AWG 16	
Qty.	132 pc(s).	Box		
Type	BLF 3.50/07/180LH SN BK ...	Version	Product data	Packaging
Order No.	<a href="#">2538060000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 17.5 A / 0.14 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4050118549584	180°, PUSH IN, Spring connection, Clamping range, max. : 1.5 mm <sup>2</sup> ,	UL: 300 V / AWG 26 - AWG 16	
Qty.	54 pc(s).	Box		
Type	BLF 3.50/07/180LH SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">2460000000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 17.5 A / 0.14 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4050118475418	180°, PUSH IN, Spring connection, Clamping range, max. : 1.5 mm <sup>2</sup> ,	UL: 300 V / AWG 26 - AWG 16	
Qty.	54 pc(s).	Box		

**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/07/135F 3.2SN OR BX**

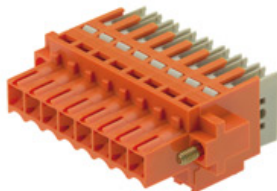
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**Mating connector (fully pluggable)**
**BL 3.50/180F**


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 3.50/07/180F SN OR BX	Version	Product data	Packaging
Order No.	<a href="#">1606690000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 17 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190015176	180°, Clamping yoke connection, Clamping range, max. : 1.5 mm <sup>2</sup> ,	UL: 300 V / 10 A / AWG 28 - AWG 14	
Qty.	54 pc(s).	Box		
Type	BL 3.50/07/180F SN BK BX	Version	Product data	Packaging
Order No.	<a href="#">1615830000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 17 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190062828	180°, Clamping yoke connection, Clamping range, max. : 1.5 mm <sup>2</sup> ,	UL: 300 V / 10 A / AWG 28 - AWG 14	
Qty.	54 pc(s).	Box		

**BLIDCB 3.5F**


Female connectors for fast processing with insulation displacement connectors (IDC) for connecting wires at 3.50 mm pitch. They provide space for labelling and can be coded.

**General ordering data**

Type	BLIDCB 3.50/07/-F SN BK ...	Version	Product data	Packaging
Order No.	<a href="#">1770790000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 250 V / 6 A / 0.35 - 0.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248174577	90°/270°, IDC terminal, Clamping range, max. : 0.5 mm <sup>2</sup> , Box	UL: 300 V / 7 A / AWG 22 - AWG 20	
Qty.	10 pc(s).			
Type	BLIDCB 3.50/07/-F SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1751500000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 250 V / 6 A / 0.35 - 0.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248174430	90°/270°, IDC terminal, Clamping range, max. : 0.5 mm <sup>2</sup> , Box	UL: 300 V / 7 A / AWG 22 - AWG 20	
Qty.	10 pc(s).			

**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/07/135F 3.2SN OR BX**

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**Mating connector (fully pluggable)**
**BLF 3.50/180F**


Connect efficiently - in a small space: female header with spring connection (PUSH IN) as a plug-in connection level; used together with male headers in 3.50 mm pitch.

**General ordering data**

Type	BLF 3.50/07/180F SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">2459440000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 17.5 A / 0.14 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4050118474350	180°, PUSH IN, Spring connection, Clamping range, max.: 1.5 mm <sup>2</sup> ,	UL: 300 V / AWG 26 - AWG 16	
Qty.	54 pc(s).	Box		
Type	BLF 3.50/07/180F SN BK ...	Version	Product data	Packaging
Order No.	<a href="#">2459620000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 17.5 A / 0.14 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4050118475036	180°, PUSH IN, Spring connection, Clamping range, max.: 1.5 mm <sup>2</sup> ,	UL: 300 V / AWG 26 - AWG 16	
Qty.	54 pc(s).	Box		

**BLZF 3.5/180F**


Female connectors with tension clamp system for connecting cables in 3.50 pitch. They provide space for labelling and can be coded.

**General ordering data**

Type	BLZF 3.50/07/180F SN OR ...	Version	Product data	Packaging
Order No.	<a href="#">1690930000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 14.5 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190329440	180°, Tension-clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> ,	UL: 300 V / 10 A / AWG 26 - AWG 14	
Qty.	50 pc(s).	Box		
Type	BLZF 3.50/07/180F SN BK ...	Version	Product data	Packaging
Order No.	<a href="#">1691160000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 14.5 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190329709	180°, Tension-clamp connection, Clamping range, max.: 1.5 mm <sup>2</sup> ,	UL: 300 V / 10 A / AWG 26 - AWG 14	
Qty.	50 pc(s).	Box		

**OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/07/135F 3.2SN OR BX**

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

**Mating connector (fully pluggable)**
**BL 3.50/90F**


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 3.50/07/90F SN OR BX	Version	Product data	Packaging
Order No.	<a href="#">1639060000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190276607	90°, Clamping yoke connection, Clamping range, max. : 1.5 mm <sup>2</sup> , Box	UL: 300 V / 8 A / AWG 28 - AWG 14	
Qty.	60 pc(s).			
Type	BL 3.50/07/90F SN BK BX	Version	Product data	Packaging
Order No.	<a href="#">1639290000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190276836	90°, Clamping yoke connection, Clamping range, max. : 1.5 mm <sup>2</sup> , Box	UL: 300 V / 8 A / AWG 28 - AWG 14	
Qty.	60 pc(s).			

**BL 3.50/270F**


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 3.50/07/270F SN BK BX	Version	Product data	Packaging
Order No.	<a href="#">1640210000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190277772	270°, Clamping yoke connection, Clamping range, max. : 1.5 mm <sup>2</sup> ,	UL: 300 V / 8 A / AWG 28 - AWG 14	
Qty.	50 pc(s).	Box		
Type	BL 3.50/07/270F SN OR BX	Version	Product data	Packaging
Order No.	<a href="#">1639980000</a>	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 7,	IEC: 320 V / 12 A / 0.2 - 1.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190277536	270°, Clamping yoke connection, Clamping range, max. : 1.5 mm <sup>2</sup> ,	UL: 300 V / 8 A / AWG 28 - AWG 14	
Qty.	60 pc(s).	Box		

## OMNIMATE Signal - series BL/SL 3.50 SL 3.50/07/135F 3.2SN OR BX

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# Accessories

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

## Additional accessories



**No task is too small when creating the perfect solution.** br />

Connections form just one part of the overall process. Small details are often the key to the perfect solution in applications where potentials are tested, grouped or even isolated.

A system is not a system without small but useful details:

- Test plugs - ensure reliable pick-up from diagnostic sockets
- Cross-connectors - ensure a stable electrical distribution contact directly at the connection
- Compartment partition elements - divide a large number of male connectors into several separate socket connector channels
- Locks and clips - optional vibration-resistant clip-on connection or mounting for male and female connectors

In tandem with the manufacturing process and application - more accessories = smaller workload

### General ordering data

Type	BL/SL 3.50 VR BK BX	Version	Product data
Order No.	<a href="#">1669300000</a>	PCB plug-in connector, Accessories, Latches, black, Number of poles:	
GTIN (EAN)	4008190428471	1	
Qty.	100 pc(s).		

**Data sheet****OMNIMATE Signal - series BL/SL 3.50  
SL 3.50/07/135F 3.2SN OR BX**

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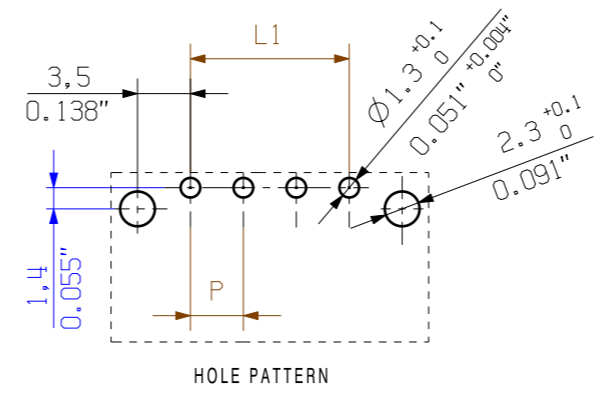
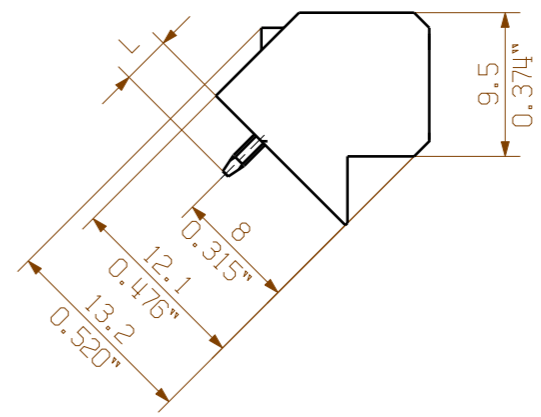
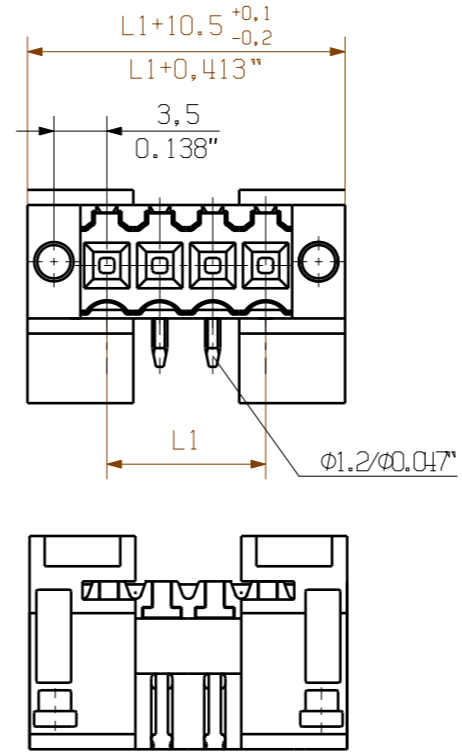
**Accessories**

Type	BL/SL 3.50 VR OR BX	Version	Product data
Order No.	<a href="#">1669310000</a>	PCB plug-in connector, Accessories, Latches, orange, Number of poles:	
GTIN (EAN)	4008190428488	1	
Qty.	100 pc(s).		

MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE  
 DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

DIE DEUTSCHE VERSION IST VERBINDLICH  
 THE GERMAN VERSION IS BINDING

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P= RASTER / PITCH  
 SHOWN SL3.5/04/135F

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

STIFTLAENGE L	TOLERANZ
3,2	0,1 -0,3
4,5	0,1 -0,3

24	80,50	3,169
23	77,00	3,031
22	73,50	2,894
21	70,00	2,756
20	66,50	2,618
19	63,00	2,480
18	59,50	2,343
17	56,00	2,205
16	52,50	2,067
15	49,00	1,929
14	45,50	1,791
13	42,00	1,654
12	38,50	1,516
11	35,00	1,378
10	31,50	1,240
9	28,00	1,102
8	24,50	0,965
7	21,00	0,827
6	17,50	0,689
5	14,00	0,551
4	10,50	0,413
3	7,00	0,276
2	3,50	0,138
n	L1 [mm]	L1 [Inch]

	METRIC TOLERANCES: X. = ±0.3 X.X = ±0.1 X.XX = ±0.05		CAT.NO.:	
	49545/5 20.01.10 HELIS_MA 02		<b>C 21377 05</b>	
<b>MODIFICATION</b>				DRAWING NO. ISSUE NO. SHEET 02 OF 02 SHEETS
		DATE 02.11.2009	NAME HELIS_MA	<b>SL 3.50/.../135(F)...</b> STIFTLAENGE PIN HEADER
SCALE: 2:1		RESPONSIBLE LANG_T	CHECKED 22.01.2010 HECKERT_M	
SUPERSEDES:		APPROVED	HECKERT_M	
PRODUCT FILE: SL 3.50			7296	



## Recommended wave soldering profiles

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### Single Wave:



### Double Wave:



### Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.