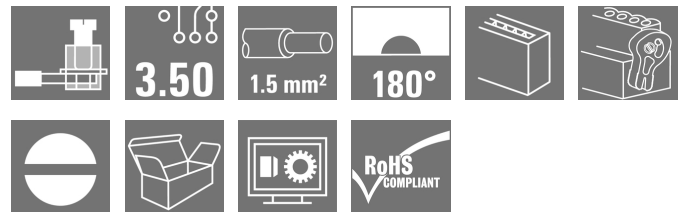


OMNIMATE Signal - series BL/SL 3.50 BL 3.50/23/180LH SN OR BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Product image



Similar to illustration

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 3.50/23/180LH SN OR BX
Order No.	1687860000
Version	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 23, 180°, Clamping yoke connection, Clamping range, max. : 1.5 mm², Box
GTIN (EAN)	4008190853419
Qty.	18 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

Creation date May 3, 2020 2:08:15 PM CEST

**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/23/180LH SN OR BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
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Technical data**Dimensions and weights**

Width	87 mm	Width (inches)	3.425 inch
Height	14.9 mm	Height (inches)	0.587 inch
Depth	29.5 mm	Depth (inches)	1.161 inch
Net weight	23.08 g		

System Parameters

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°
Number of poles	23	L1 in mm	77 mm
L1 in inches	3.031 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	1.5 mm ²
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Volume resistance	≤ 5mΩ	Can be coded	Yes
Stripping length	6 mm	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	Plugging force/pole, max.	7 N
Pulling force/pole, max.	5 N		

Material data

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	GWFI	960 °C
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.	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

Conductors suitable for connection

Clamping range, min.	0.08 mm ²
Clamping range, max.	1.5 mm ²
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 ²
Solid, max. H05(07) V-U	1.5 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²
Flexible, max. H05(07) V-K	1.5 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 1.5 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, 0.2 mm ² min.	
w. wire end ferrule, DIN 46228 pt 1, 1.5 mm ² max.	

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Technical data

Plug gauge in accordance with EN 60999 a x b; ø 2.4 mm x 1.5 mm

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.5 mm ²
wire end ferrule		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	H0.5/12 OR
		Stripping length	nominal 6 mm
		Recommended wire-end ferrule	H0.5/6
Cross-section for conductor connection	Type	fine-wired	
	nominal	0.75 mm ²	
wire end ferrule		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	H0.75/12 W
		Stripping length	nominal 6 mm
		Recommended wire-end ferrule	H0.75/6
Cross-section for conductor connection	Type	fine-wired	
	nominal	1 mm ²	
wire end ferrule		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	H1.0/12 GE
		Stripping length	nominal 6 mm
		Recommended wire-end ferrule	H1.0/6
Cross-section for conductor connection	Type	fine-wired	
	nominal	0.25 mm ²	
wire end ferrule		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	H0.25/10 HBL
		Stripping length	nominal 5 mm
		Recommended wire-end ferrule	H0.25/5
Cross-section for conductor connection	Type	fine-wired	
	nominal	0.34 mm ²	
wire end ferrule		Stripping length	nominal 8 mm
		Recommended wire-end ferrule	H0.34/10 TK

Reference text The outside diameter of the plastic collar should not be larger than the pitch (P). Length of ferrules is to be chosen depending on the product and the rated voltage.

Max. clamping range 1.5 mm²

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	17 A
Rated current, max. number of poles (Tu=20°C)	12 A	Rated current, min. number of poles (Tu=40°C)	14.5 A
Rated current, max. number of poles (Tu=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	320 V	Rated impulse voltage for surge voltage class/ pollution degree III/2	160 V
Rated impulse voltage for surge voltage class/ contamination degree III/3	160 V	Short-time withstand current resistance	3 x 1s with 100 A


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Technical data
Rated data acc. to CSA

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
Wire cross-section, AWG, min.	AWG 28	Wire cross-section, AWG, max.	AWG 14

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
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.		

Packing

Packaging	Box	VPE length	61 mm
VPE width	100 mm	VPE height	118 mm

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
eClass 9.0	27-44-03-09	eClass 9.1	27-44-03-09
eClass 10.0	27-44-03-09	UNSPSC	30-21-18-10

Notes

Notes	<ul style="list-style-type: none"> • Additional colours on request • Gold-plated contact surfaces on request • Rated current related to rated cross-section & min. No. of poles. • Max. outer diameter of the conductor: 2.9 mm • Wire end ferrule without plastic collar to DIN 46228/1 • Wire end ferrule with plastic collar to DIN 46228/4 • 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.
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.

Data sheet

**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/23/180LH SN OR BX**

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Klingenbergstraße 26
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Germany
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Technical data

Approvals

Approvals



ROHS

Conform

Downloads

Approval/Certificate/Document of
Conformity

[Declaration of the Manufacturer](#)

Brochure/Catalogue

- [FL DRIVES EN](#)
- [MB DEVICE MANUF. EN](#)
- [FL DRIVES DE](#)
- [CAT 2 PORTFOLIOGUIDE EN](#)
- [FL BUILDING SAFETY EN](#)
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- [FLIndustr.CONTROLS EN](#)
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- [FL HEATING ELECTR EN](#)
- [FL APPL INVERTER EN](#)
- [FL_BASE_STATION_EN](#)
- [FL ELEVATOR EN](#)
- [FL POWER SUPPLY EN](#)
- [FL 72H SAMPLE SER EN](#)
- [PO OMNIMATE EN](#)

Engineering Data

[EPLAN, WSCAD](#)

Engineering Data

[STEP](#)

Product Change Notification

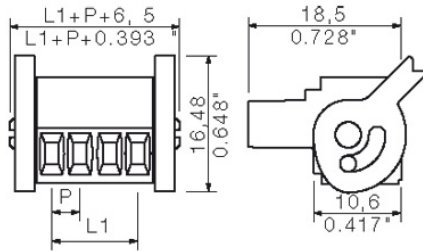
[Change of Material LR 3.50 - DE](#)
[Change of Material LR 3.50 - EN](#)

**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/23/180LH SN OR BX**

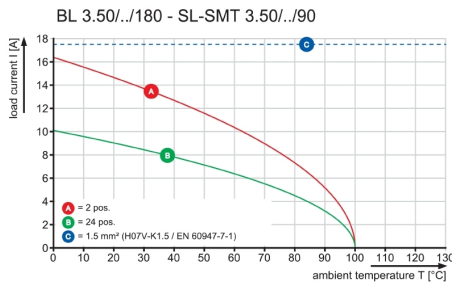
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
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Drawings

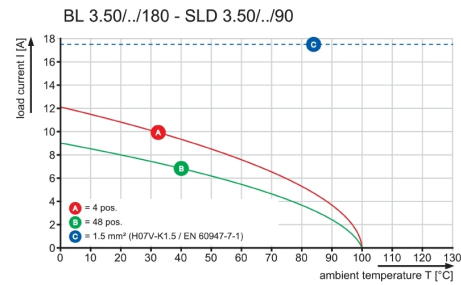
Dimensional drawing



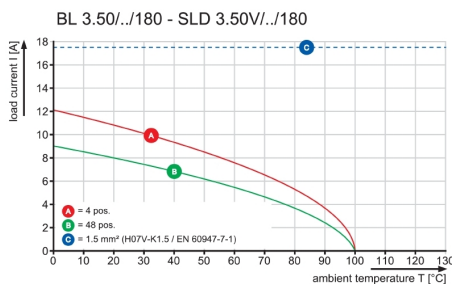
Graph



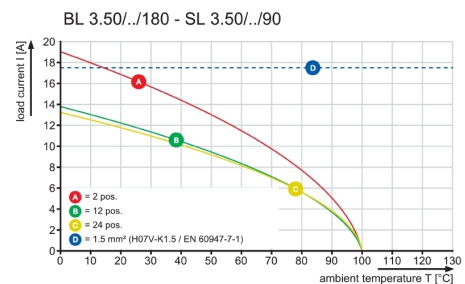
Graph



Graph

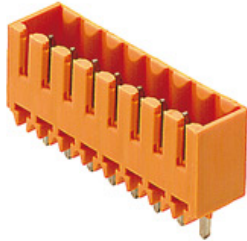


Graph



**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/23/180LH SN OR BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

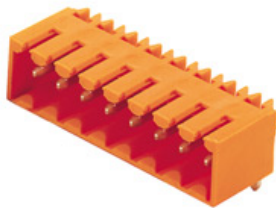
Mating connector (conditionally pluggable)**SL 3.50/180G**

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	SL 3.50/23/180G 3.2SN O ...	Version	Product data	Packaging
Order No.	1621850000	PCB plug-in connector, male header, closed side, THT solder	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190181536	connection, 3.50 mm, Number of poles: 23, 180°, Solder pin length	UL: 300 V / 10 A	
Qty.	20 pc(s).	(I): 3.2 mm, tinned, orange, Box		

SL 3.50/90G

Pin headers for wave soldering in 3.50 mm pitch

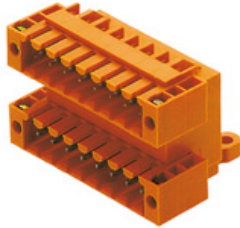
- Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB
- Housing variant: screw flange (F)
- Packed in a cardboard box (BX)
- Pin header can be coded

General ordering data

Type	SL 3.50/23/90G 3.2SN OR ...	Version	Product data	Packaging
Order No.	1619440000	PCB plug-in connector, male header, closed side, THT solder	IEC: / 17 A	Box
GTIN (EAN)	4008190140120	connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, orange, Box		
Type	SL 3.50/23/90G 3.2SN GY ...	Version	Product data	Packaging
Order No.	1619670000	PCB plug-in connector, male header, closed side, THT solder	IEC: / 17 A	Box
GTIN (EAN)	4008190144487	connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, Pebble grey, Box		
Type	SL 3.50/23/90G 4.5SN OR ...	Version	Product data	Packaging
Order No.	1617960000	PCB plug-in connector, male header, closed side, THT solder	IEC: / 17 A	Box
GTIN (EAN)	4008190114688	connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	20 pc(s).	4.5 mm, tinned, orange, Box		
Type	SL 3.50/23/90G 4.5SN BK ...	Version	Product data	Packaging
Order No.	1618040000	PCB plug-in connector, male header, closed side, THT solder	IEC: / 17 A	Box
GTIN (EAN)	4008190115975	connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	20 pc(s).	4.5 mm, tinned, black, Box		
Type	SL 3.50/23/90G 3.2SN DK ...	Version	Product data	Packaging
Order No.	1619750000	PCB plug-in connector, male header, closed side, THT solder	IEC: / 17 A	Box
GTIN (EAN)	4008190146122	connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (I):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, Signal green, Box		

**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/23/180LH SN OR BX**

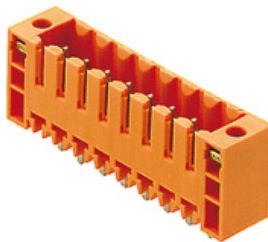
Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
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Mating connector (conditionally pluggable)
SLD 3.50/90F


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	SLD 3.50/46/90F 3.2SN O ...	Version	Product data	Packaging
Order No.	1634020000	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: 200 V / 10.5 A	Box
GTIN (EAN)	4008190258474	3.50 mm, Number of poles: 46, 90°, Solder pin length (l): 3.2 mm,	UL: 300 V / 8 A	
Qty.	10 pc(s).	tinned, orange, Box		

SL 3.50/180F


Pin headers for wave soldering in 3.50 mm pitch

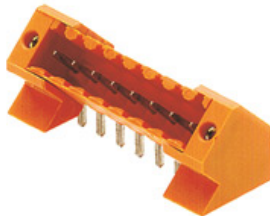
- Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB
- Housing variant: screw flange (F)
- Packed in a cardboard box (BX)
- Pin header can be coded

General ordering data

Type	SL 3.50/23/180F 3.2SN D ...	Version	Product data	Packaging
Order No.	1622690000	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190193355	3.50 mm, Number of poles: 23, 180°, Solder pin length (l): 3.2 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, Signal green, Box		
Type	SL 3.50/23/180F 3.2SN O ...	Version	Product data	Packaging
Order No.	1622240000	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190189440	3.50 mm, Number of poles: 23, 180°, Solder pin length (l): 3.2 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, orange, Box		
Type	SL 3.50/23/180F 4.5SN B ...	Version	Product data	Packaging
Order No.	1618970000	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190131128	3.50 mm, Number of poles: 23, 180°, Solder pin length (l): 4.5 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, black, Box		
Type	SL 3.50/23/180F 4.5SN O ...	Version	Product data	Packaging
Order No.	1618890000	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190129569	3.50 mm, Number of poles: 23, 180°, Solder pin length (l): 4.5 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, orange, Box		
Type	SL 3.50/23/180F 3.2SN G ...	Version	Product data	Packaging
Order No.	1622470000	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190193133	3.50 mm, Number of poles: 23, 180°, Solder pin length (l): 3.2 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, Pebble grey, Box		

**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/23/180LH SN OR BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
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www.weidmueller.com

Mating connector (conditionally pluggable)
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	SL 3.50/23/135F 3.2SN O ...	Version	Product data	Packaging
Order No.	1643540000	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: 320 V / 15 A	Box
GTIN (EAN)	4008190282301	3.50 mm, Number of poles: 23, 135°, Solder pin length (l): 3.2 mm,	UL: 300 V / 10 A	
Qty.	18 pc(s).	tinned, orange, Box		

SL-SMT 3.5/90G Tray


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	SL-SMT 3.50/23/90G 1.5S ...	Version	Product data	Packaging
Order No.	1761753001	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 15 A	Tray
GTIN (EAN)	4032248134021	connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	18 pc(s).	1.5 mm, tinned, black, Tray		

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Germany
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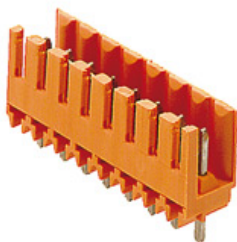
Mating connector (conditionally pluggable)
SL-THR 3.5/135F


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	SL-SMT 3.50/23/135F 3.2 ...	Version	Product data	Packaging
Order No.	1003730000	PCB plug-in connector, male header, Flange, THT/THR solder connection, 3.50 mm, Number of poles: 23, 135°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248700356			
Qty.	18 pc(s).			

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	SL 3.50/23/180 3.2SN OR ...	Version	Product data	Packaging
Order No.	1621460000	PCB plug-in connector, male header, open side, THT solder connection, 3.50 mm, Number of poles: 23, 180°, Solder pin length (l): 3.2 mm, tinned, orange, Box	IEC: 320 V / 17 A UL: 300 V / 10 A	Box
GTIN (EAN)	4008190173494			
Qty.	20 pc(s).			

**OMNIMATE Signal - series BL/SL 3.50
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Klingenbergstraße 26
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Germany
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Mating connector (conditionally pluggable)
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	SL-SMT 3.50/23/180G 1.5 ...	Version	Product data	Packaging
Order No.	1753192001	PCB plug-in connector, male header, closed side, THT/THR solder connection, 3.50 mm, Number of poles: 23, 180°, Solder pin length (l): 1.5 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248131099			
Qty.	20 pc(s).			
Type	SL-SMT 3.50/23/180G 3.2 ...	Version	Product data	Packaging
Order No.	1842520000	PCB plug-in connector, male header, closed side, THT/THR solder connection, 3.50 mm, Number of poles: 23, 180°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248353880			
Qty.	20 pc(s).			

**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/23/180LH SN OR BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmuller.com

Mating connector (conditionally pluggable)
SL-SMT 3.5/180G Tray


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	SL-SMT 3.50/23/180G 1.5 ...	Version	Product data	Packaging
Order No.	1753193001	PCB plug-in connector, male header, closed side, THT/THR solder connection, 3.50 mm, Number of poles: 23, 180°, Solder pin length (!): 1.5 mm, tinned, black, Tray	IEC: 320 V / 15 A UL: 300 V / 10 A	Tray
GTIN (EAN)	4032248133062			
Qty.	18 pc(s).			

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

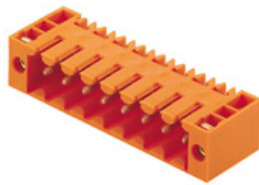
Type	SL-SMT 3.50/23/90G 1.5S ...	Version	Product data	Packaging
Order No.	1761752001	PCB plug-in connector, male header, closed side, THT/THR solder connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (!): 1.5 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248132348			
Qty.	20 pc(s).			

**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/23/180LH SN OR BX**

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Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Mating connector (conditionally pluggable)

Type	SL-SMT 3.50/23/90G 3.2S ...	Version	Product data	Packaging
Order No.	1841840000	PCB plug-in connector, male header, closed side, THT/THR solder	IEC: 320 V / 15 A	Box
GTIN (EAN)	4032248353194	connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, black, Box		

SL 3.50/90F


Pin headers for wave soldering in 3.50 mm pitch

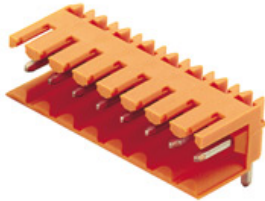
- Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB
- Housing variant: screw flange (F)
- Packed in a cardboard box (BX)
- Pin header can be coded

General ordering data

Type	SL 3.50/23/90F 4.5SN OR ...	Version	Product data	Packaging
Order No.	1618260000	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: / 17 A	Box
GTIN (EAN)	4008190119096	3.50 mm, Number of poles: 23, 90°, Solder pin length (l): 4.5 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, orange, Box		
Type	SL 3.50/23/90F 3.2SN GY ...	Version	Product data	Packaging
Order No.	1620060000	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: / 17 A	Box
GTIN (EAN)	4008190151072	3.50 mm, Number of poles: 23, 90°, Solder pin length (l): 3.2 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, Pebble grey, Box		
Type	SL 3.50/23/90F 4.5SN BK ...	Version	Product data	Packaging
Order No.	1618340000	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: / 17 A	Box
GTIN (EAN)	4008190120689	3.50 mm, Number of poles: 23, 90°, Solder pin length (l): 4.5 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, black, Box		
Type	SL 3.50/23/90F 3.2SN OR ...	Version	Product data	Packaging
Order No.	1619830000	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: / 17 A	Box
GTIN (EAN)	4008190147617	3.50 mm, Number of poles: 23, 90°, Solder pin length (l): 3.2 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, orange, Box		
Type	SL 3.50/23/90F 3.2SN DK ...	Version	Product data	Packaging
Order No.	1620270000	PCB plug-in connector, male header, Flange, THT solder connection,	IEC: / 17 A	Box
GTIN (EAN)	4008190153984	3.50 mm, Number of poles: 23, 90°, Solder pin length (l): 3.2 mm,	UL: 300 V / 10 A	
Qty.	20 pc(s).	tinned, Signal green, Box		

**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/23/180LH SN OR BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

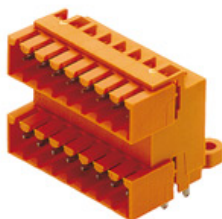
Mating connector (conditionally pluggable)**SL 3.50/90**

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	SL 3.50/23/90 4.5SN BK ...	Version	Product data	Packaging
Order No.	1617880000	PCB plug-in connector, male header, open side, THT solder	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190113681	connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	4.5 mm, tinned, black, Box		
Type	SL 3.50/23/90 3.2SN OR ...	Version	Product data	Packaging
Order No.	1619050000	PCB plug-in connector, male header, open side, THT solder	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190132965	connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, orange, Box		
Type	SL 3.50/23/90 3.2SN GY ...	Version	Product data	Packaging
Order No.	1619280000	PCB plug-in connector, male header, open side, THT solder	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190137144	connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, Pebble grey, Box		
Type	SL 3.50/23/90 4.5SN OR ...	Version	Product data	Packaging
Order No.	1617800000	PCB plug-in connector, male header, open side, THT solder	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190111854	connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	4.5 mm, tinned, orange, Box		
Type	SL 3.50/23/90 3.2SN DKG ...	Version	Product data	Packaging
Order No.	1619360000	PCB plug-in connector, male header, open side, THT solder	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190138400	connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, Signal green, Box		

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	SLD 3.50/46/90G 3.2SN D ...	Version	Product data	Packaging
Order No.	1675060000	PCB plug-in connector, male header, closed side, THT solder	IEC: 200 V / 10.5 A	Box
GTIN (EAN)	4008190445751	connection, 3.50 mm, Number of poles: 46, 90°, Solder pin length (l):	UL: 300 V / 8 A	
Qty.	10 pc(s).	3.2 mm, tinned, Signal green, Box		

**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/23/180LH SN OR BX**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Mating connector (conditionally pluggable)

Type	SLD 3.50/46/90G 4.5SN B ...	Version	Product data	Packaging
Order No.	1634480000	PCB plug-in connector, male header, closed side, THT solder	IEC: 200 V / 10.5 A	Box
GTIN (EAN)	4008190258931	connection, 3.50 mm, Number of poles: 46, 90°, Solder pin length (!):	UL: 300 V / 8 A	
Qty.	10 pc(s).	4.5 mm, tinned, black, Box		
Type	SLD 3.50/46/90G 3.2SN O ...	Version	Product data	Packaging
Order No.	1633790000	PCB plug-in connector, male header, closed side, THT solder	IEC: 200 V / 10.5 A	Box
GTIN (EAN)	4008190258245	connection, 3.50 mm, Number of poles: 46, 90°, Solder pin length (!):	UL: 300 V / 8 A	
Qty.	10 pc(s).	3.2 mm, tinned, orange, Box		

**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/23/180LH SN OR BX**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

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	SL-SMT 3.50/23/90LF 1.5 ...	Version	Product data	Packaging
Order No.	1805150000	PCB plug-in connector, male header, Solder flange, THT/THR solder connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (l): 1.5 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248269051			
Qty.	20 pc(s).			
Type	SL-SMT 3.50/23/90LF 3.2 ...	Version	Product data	Packaging
Order No.	1842060000	PCB plug-in connector, male header, Solder flange, THT/THR solder connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248353415			
Qty.	18 pc(s).			

**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/23/180LH SN OR BX**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
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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	SL-SMT 3.50/23/180F 3.2 ...	Version	Product data	Packaging
Order No.	1842980000	PCB plug-in connector, male header, Flange, THT/THR solder connection, 3.50 mm, Number of poles: 23, 180°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248354443			
Qty.	18 pc(s).			

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	SL-SMT 3.50/23/90F 3.2S ...	Version	Product data	Packaging
Order No.	1842290000	PCB plug-in connector, male header, Flange, THT/THR solder connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248353644			
Qty.	18 pc(s).			

**OMNIMATE Signal - series BL/SL 3.50
BL 3.50/23/180LH SN OR BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
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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	SL-SMT 3.50/23/180LF 3. ...	Version	Product data	Packaging
Order No.	1842750000	PCB plug-in connector, male header, Solder flange, THT/THR solder connection, 3.50 mm, Number of poles: 23, 180°, Solder pin length (l): 3.2 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248354115			
Qty.	18 pc(s).			
Type	SL-SMT 3.50/23/180LF 1. ...	Version	Product data	Packaging
Order No.	1804920000	PCB plug-in connector, male header, Solder flange, THT/THR solder connection, 3.50 mm, Number of poles: 23, 180°, Solder pin length (l): 1.5 mm, tinned, black, Box	IEC: 320 V / 15 A UL: 300 V / 10 A	Box
GTIN (EAN)	4032248268689			
Qty.	20 pc(s).			

OMNIMATE Signal - series BL/SL 3.50 BL 3.50/23/180LH SN OR BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
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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	BL 3.50 ZE08 BK BX	Version	Product data	Packaging
Order No.	1627830000		PCB plug-in connector, Accessories, Strain relief, black, Number of	Box
GTIN (EAN)	4008190202576		poles: 8	
Qty.	50 pc(s).			
Type	BL 3.50 ZE03 BK BX	Version	Product data	Packaging
Order No.	1627820000		PCB plug-in connector, Accessories, Strain relief, black, Number of	Box
GTIN (EAN)	4008190202552		poles: 3	
Qty.	50 pc(s).			
Type	BL 3.50 ZE03 OR BX	Version	Product data	Packaging
Order No.	1629680000		PCB plug-in connector, Accessories, Strain relief, orange, Number of	Box
GTIN (EAN)	4008190202569		poles: 3	
Qty.	50 pc(s).			
Type	BL 3.50 ZE08 OR BX	Version	Product data	Packaging
Order No.	1629690000		PCB plug-in connector, Accessories, Strain relief, orange, Number of	Box
GTIN (EAN)	4008190202583		poles: 8	
Qty.	50 pc(s).			

OMNIMATE Signal - series BL/SL 3.50 BL 3.50/23/180LH SN OR BX

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

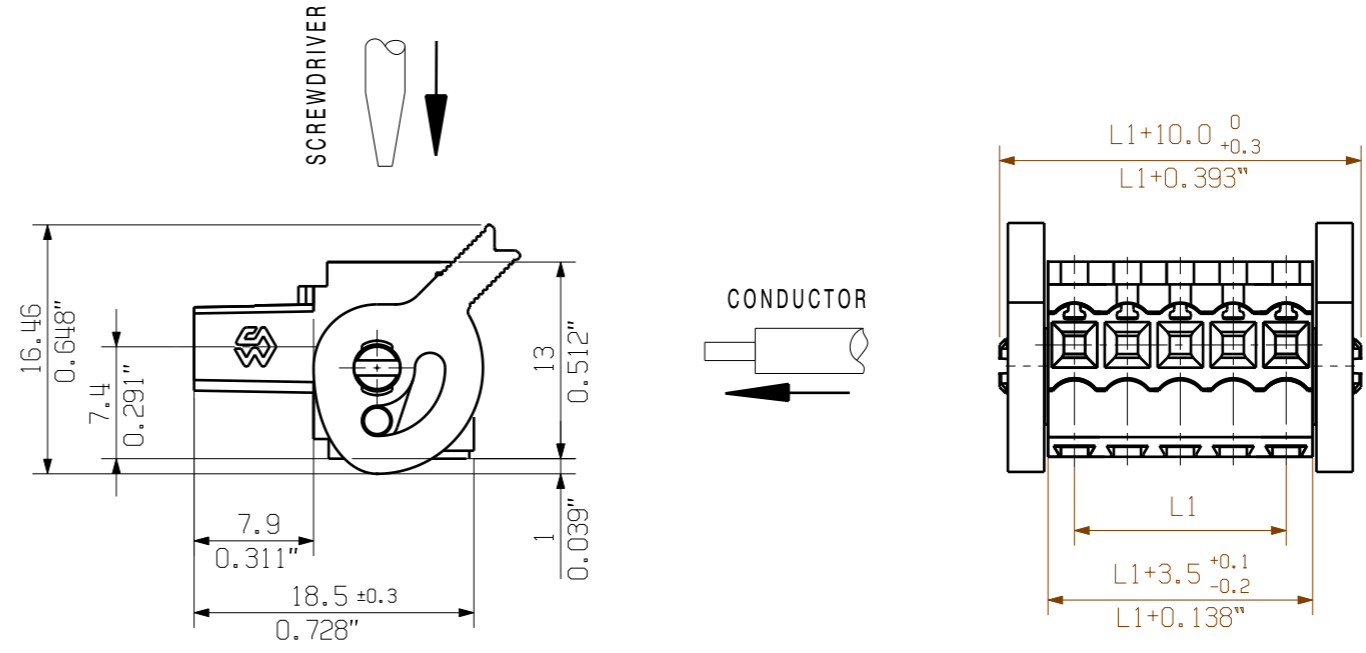
General ordering data

Type	BL SL 3.5 KO SW	Version	Product data	Packaging
Order No.	1610100000	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.	1693430000	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190867447	of poles: 1		
Qty.	100 pc(s).			

DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING

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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]

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

SHOWN: BL 3.50/04/180/LH...

	DIN ISO 2768-m		69114/0 20.03.13 HELIS_MA 01			CAT.NO.:		
	MODIFICATION		DRAWING NO. C 22682			ISSUE NO. 11		
		DATE	NAME	SHEET 01 OF 02 SHEETS				
SCALE: 2/1		DRAWN	21.07.2009	HELIS_MA	BL 3.50/././180/ L(H/R) BUCHSENLEISTE SOCKET BLOCK			
SUPERSEDES: .		RESPONSIBLE		LANG_T				
		CHECKED	04.04.2013	HECKERT_M				
		APPROVED		HECKERT_M	PRODUCT FILE: BL 3.50 7382			