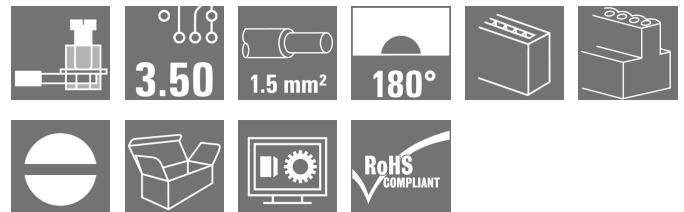


OMNIMATE Signal - series BL/SL 3.50 BL 3.50/23/180 SN OR BX

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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 3.50/23/180 SN OR BX
Order No.	1620350000
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)	4008190155056
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 8:47:17 PM CEST

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

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Technical data**Dimensions and weights**

Width	80.5 mm	Width (inches)	3.169 inch
Height	13 mm	Height (inches)	0.512 inch
Depth	18.5 mm	Depth (inches)	0.728 inch
Net weight	20.414 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
		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
		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
		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
		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	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

**OMNIMATE Signal - series BL/SL 3.50
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Technical data

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		
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 / 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	70 mm
VPE width	84 mm	VPE height	104 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

Data sheet

**OMNIMATE Signal - series BL/SL 3.50
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Technical data

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.

Approvals

Approvals



ROHS

Conform

Downloads

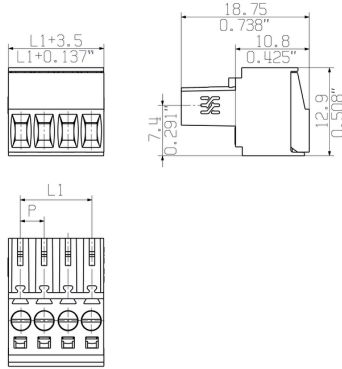
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FLIndustr.CONTROLS EN FL MACHINE SAFETY EN FL HEATING ELECTR EN FL APPL INVERTER EN FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN
Engineering Data	EPLAN.WSCAD
Engineering Data	STEP

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

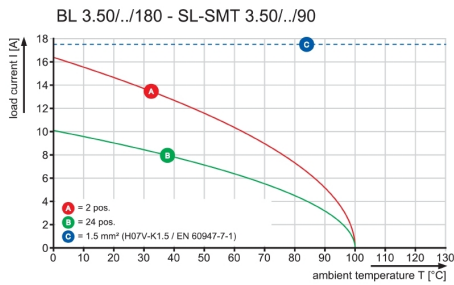
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Drawings

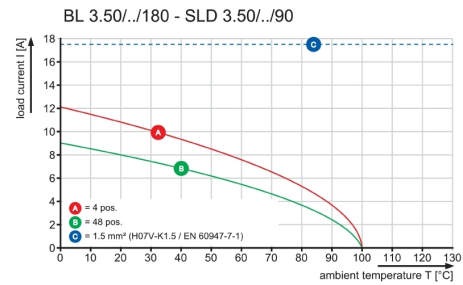
Dimensional drawing



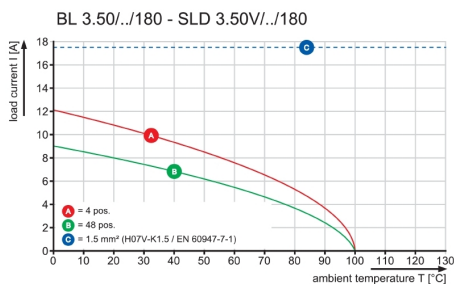
Graph



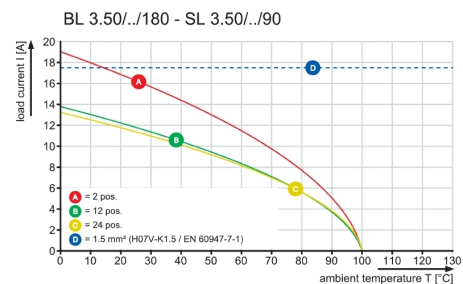
Graph



Graph



Graph



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

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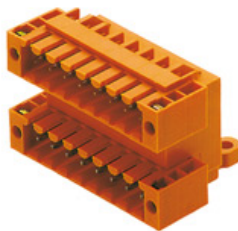
Mating connector (conditionally pluggable)
SL 3.50/135F


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		

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		

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

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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 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).			
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).			

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).			

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

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Mating connector (conditionally pluggable)

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).			

SL-SMT 3.5/180LF Box



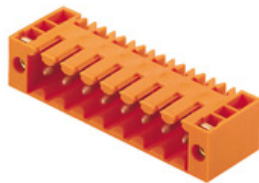
High-temperature-resistant male header, 3.50 mm pitch.

- **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 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).			
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).			

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 3.2SN GY ...	Version	Product data	Packaging
Order No.	1620060000	PCB plug-in connector, male header, Flange, THT solder connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (l): 3.2 mm, tinned, Pebble grey, Box	IEC: / 17 A UL: 300 V / 10 A	Box
GTIN (EAN)	4008190151072			
Qty.	20 pc(s).			

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

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Mating connector (conditionally pluggable)

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 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 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		

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	IEC: 320 V / 15 A	Box
GTIN (EAN)	4032248353644	connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	18 pc(s).	3.2 mm, tinned, black, Box		

**OMNIMATE Signal - series BL/SL 3.50
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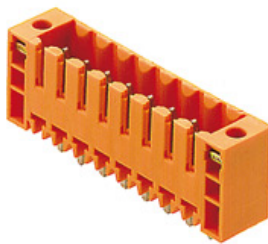
Mating connector (conditionally pluggable)
SL-SMT 3.5/180F Box


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 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 G ...	Version	Product data	Packaging
Order No.	1622470000	PCB plug-in connector, male header, Flange, THT solder connection, 3.50 mm, Number of poles: 23, 180°, Solder pin length (l): 3.2 mm, tinned, Pebble grey, Box	IEC: 320 V / 17 A UL: 300 V / 10 A	Box
GTIN (EAN)	4008190193133			
Qty.	20 pc(s).			
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, 3.50 mm, Number of poles: 23, 180°, Solder pin length (l): 3.2 mm, tinned, Signal green, Box	IEC: 320 V / 17 A UL: 300 V / 10 A	Box
GTIN (EAN)	4008190193355			
Qty.	20 pc(s).			
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, 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)	4008190189440			
Qty.	20 pc(s).			

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

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Mating connector (conditionally pluggable)

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 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		

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

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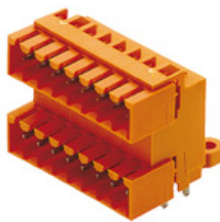
Mating connector (fully pluggable)**SL-THR 3.5/135F**

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	IEC: 320 V / 15 A	Box
GTIN (EAN)	4032248700356	connection, 3.50 mm, Number of poles: 23, 135°, Solder pin length	UL: 300 V / 10 A	
Qty.	18 pc(s).	(I): 3.2 mm, tinned, black, 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 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 (I):	UL: 300 V / 8 A	
Qty.	10 pc(s).	3.2 mm, tinned, orange, Box		
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 (I):	UL: 300 V / 8 A	
Qty.	10 pc(s).	3.2 mm, tinned, Signal green, Box		
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 (I):	UL: 300 V / 8 A	
Qty.	10 pc(s).	4.5 mm, tinned, black, Box		

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

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Mating connector (fully 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 Tray



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

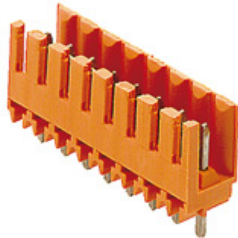
- **Plugging direction parallel (90°), straight 180° or angled (135°) to PCB**
- **Housing variants: closed side (G), screw flange (F), solder flange (LF) or snap-on solder flange (RF)**
- **Optimised for the SMT process**
- **Pin length 3.2 mm universal for all soldering methods**
- **Pin length 1.5 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 connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (!): 1.5 mm, tinned, black, Tray	IEC: 320 V / 15 A UL: 300 V / 10 A	Tray
GTIN (EAN)	4032248134021			
Qty.	18 pc(s).			

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

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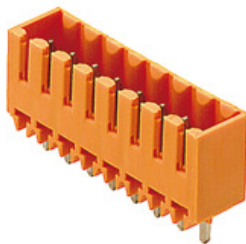
Mating connector (fully pluggable)
SL 3.50/180


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	IEC: 320 V / 17 A	Box
GTIN (EAN)	4008190173494	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 3.50/180G


Pin headers for wave soldering in 3.50 mm pitch

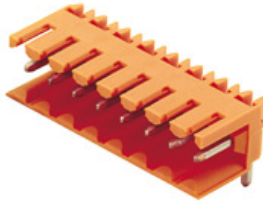
- Plugging direction is parallel (90°), straight 180° or angled (135°) to the PCB
- Housing variant: screw flange (F)
- Packed in a cardboard box (BX)
- Pin header can be coded

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		

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

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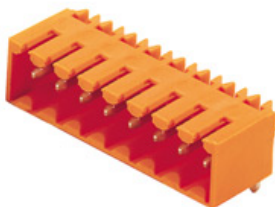
Mating connector (fully pluggable)
SL 3.50/90


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 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 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 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		
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 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		

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 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 (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	4.5 mm, tinned, orange, Box		

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

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Mating connector (fully pluggable)

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 (l):	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 (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, Pebble grey, 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 (l):	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 (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	3.2 mm, tinned, Signal green, Box		

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 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		
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	IEC: 320 V / 15 A	Box
GTIN (EAN)	4032248132348	connection, 3.50 mm, Number of poles: 23, 90°, Solder pin length (l):	UL: 300 V / 10 A	
Qty.	20 pc(s).	1.5 mm, tinned, black, Box		

OMNIMATE Signal - series BL/SL 3.50 BL 3.50/23/180 SN OR 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	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).			
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 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).			

OMNIMATE Signal - series BL/SL 3.50 BL 3.50/23/180 SN 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

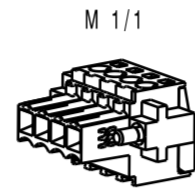
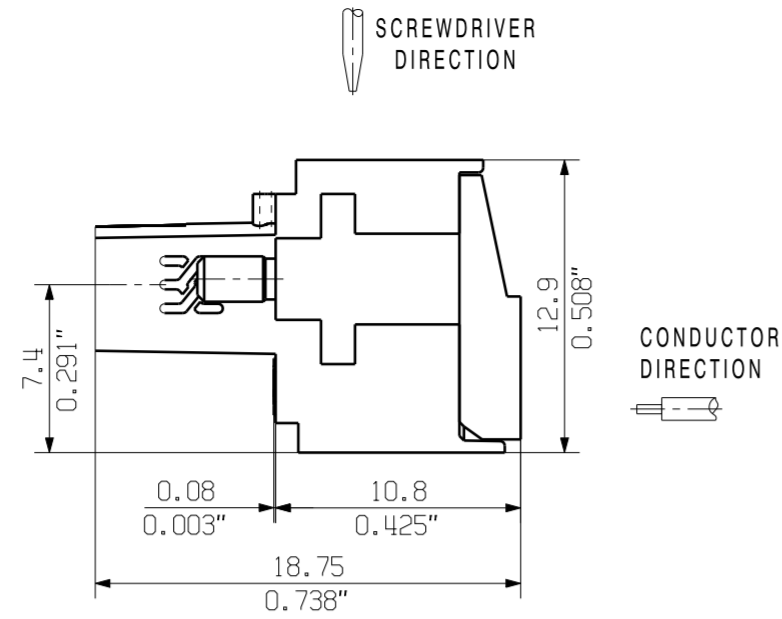
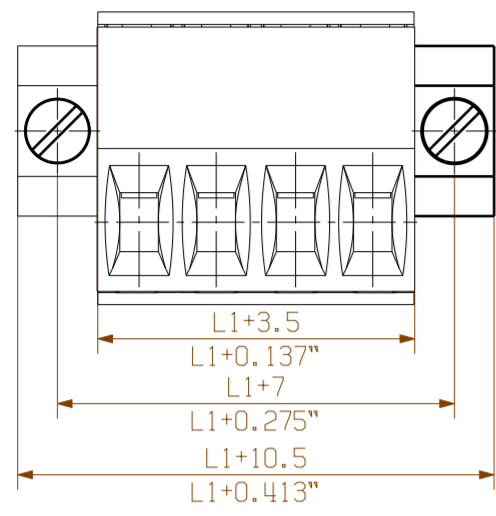
The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

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.

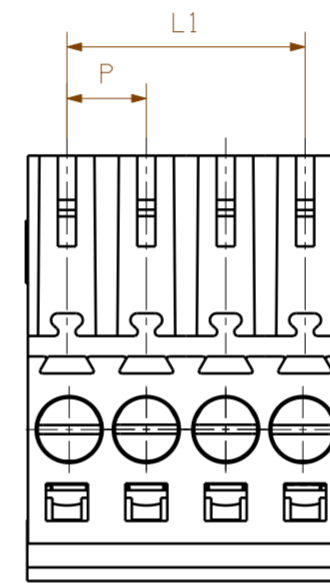
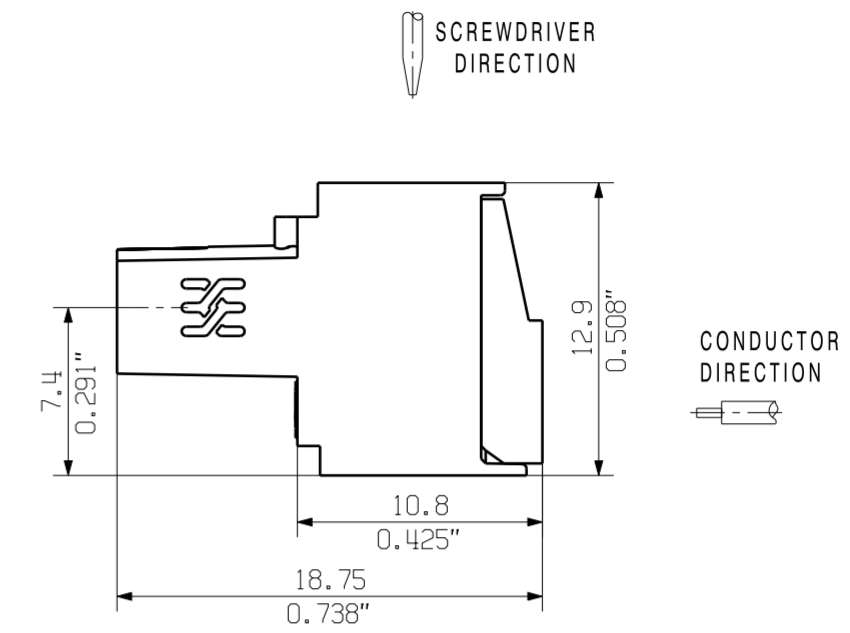
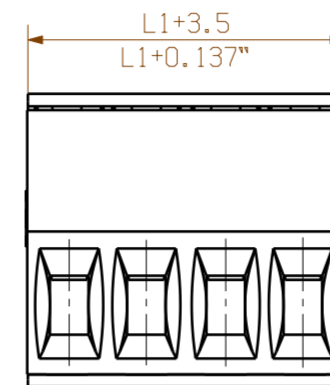
General ordering data

Type	BL SL 3.5 KO 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).			
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).			

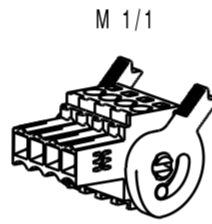
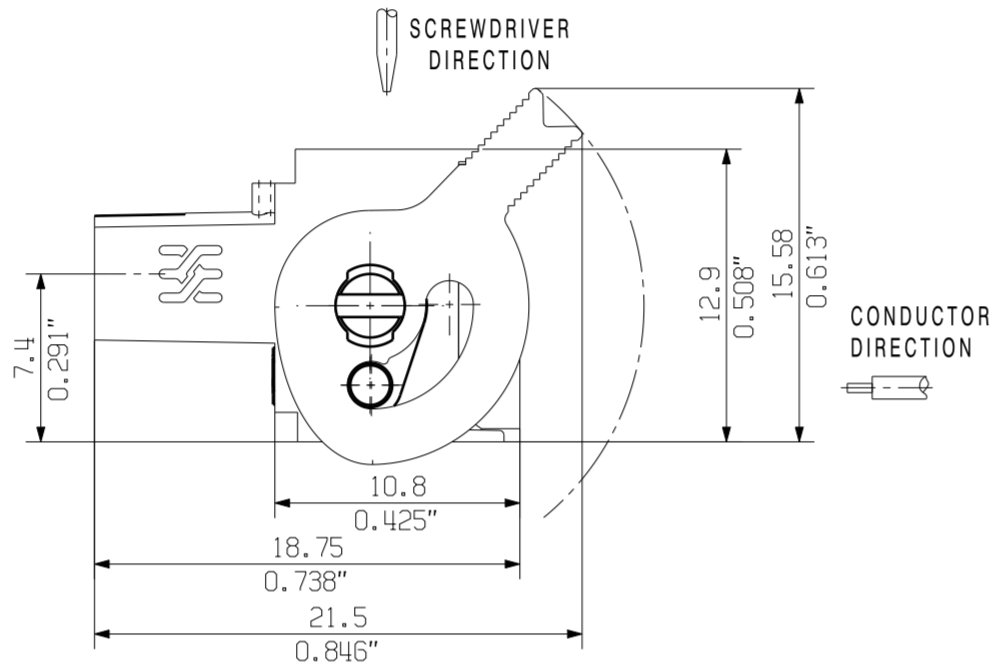
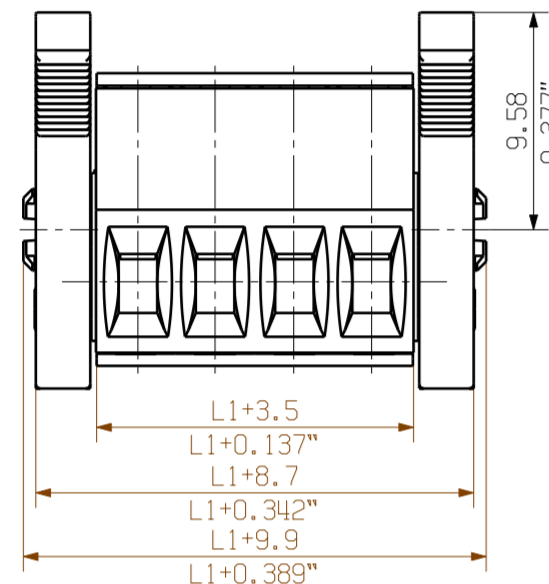
BL 3.50/04/180F



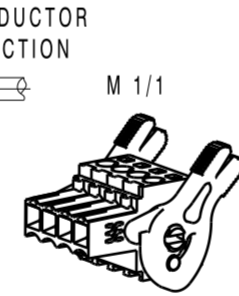
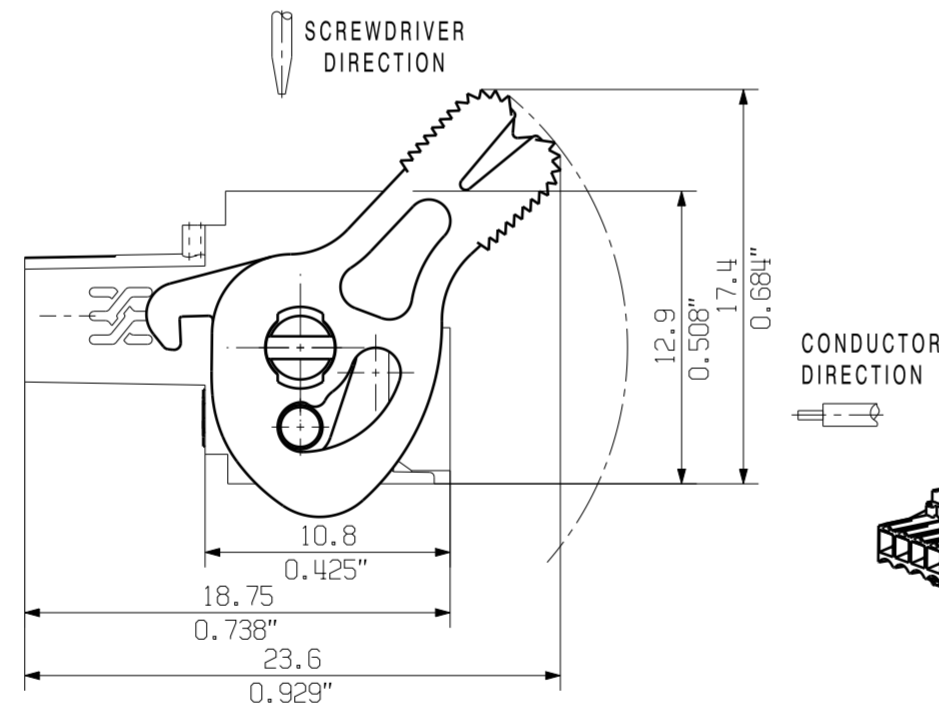
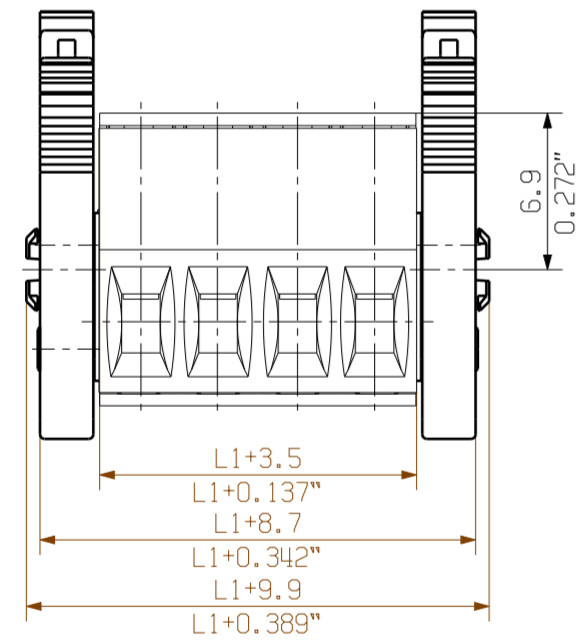
BL 3.50/04/180



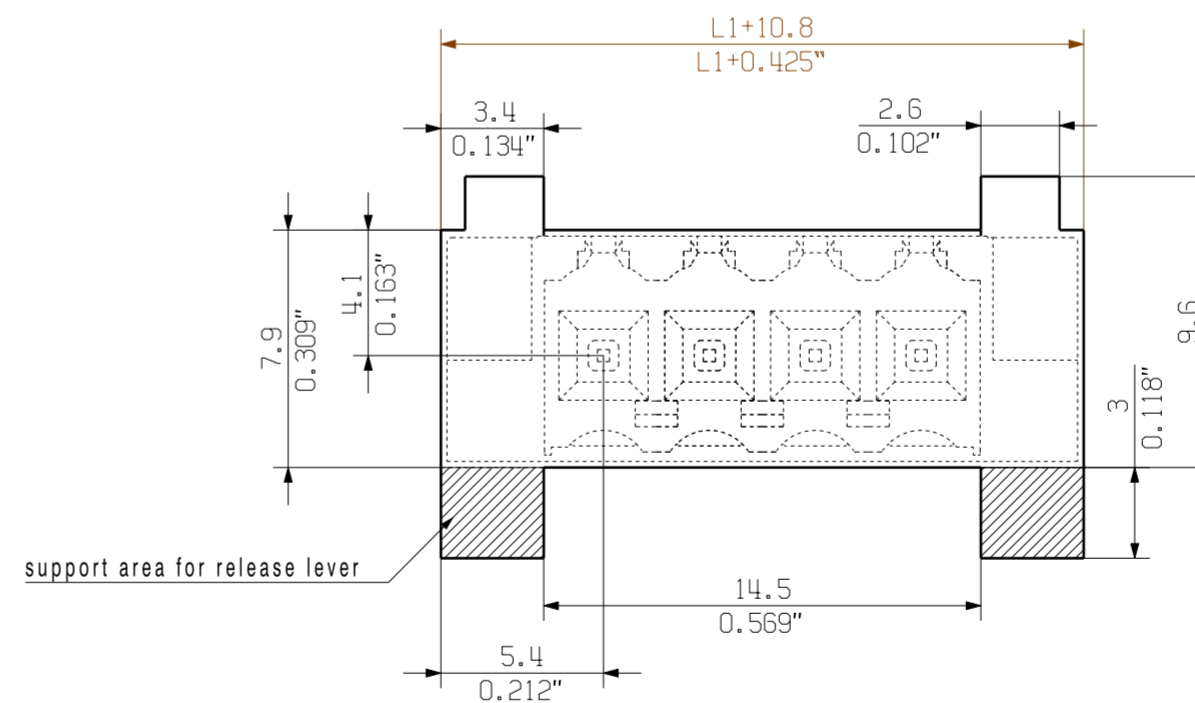
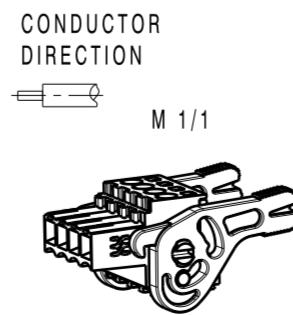
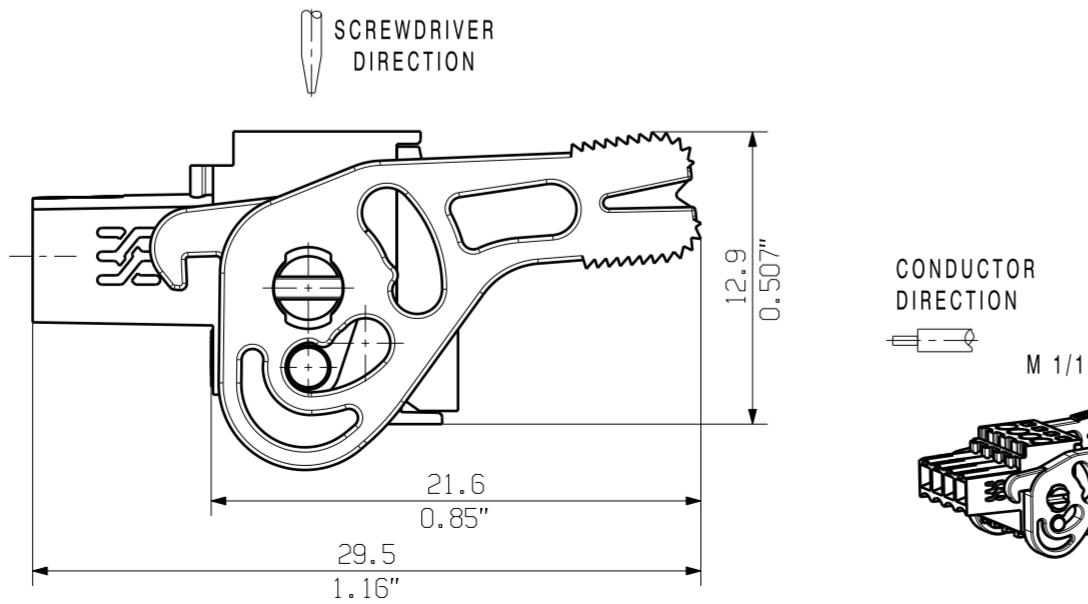
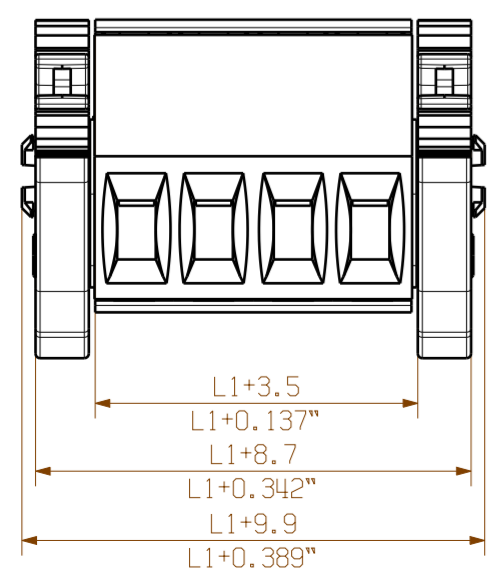
BL 3.50/04/180LH



BL 3.50/04/180LR



BL 3.50/04/180LR REDESIGN



P = 3.50 RASTER PITCH

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, thermal and corrosive stress will be satisfied.

24	80.5	3.169
23	77.0	3.032
22	73.5	2.894
21	70.0	2.756
20	66.5	2.618
19	63.0	2.480
18	59.5	2.343
17	56.0	2.205
16	52.5	2.067
15	49.0	1.929
14	45.5	1.791
13	42.0	1.654
12	38.5	1.516
11	35.0	1.378
10	31.5	1.240
9	28.0	1.102
8	24.5	0.965
7	21.0	0.827
6	17.5	0.689
5	14.0	0.551
4	10.5	0.413
3	7.0	0.276
2	3.5	0.138
n	POLZAHL POLES	L1 [mm] L1 [inch]

GENERAL TOLERANCE: DIN ISO 2768-m

103300/5
17.05.18 HELIS_MA 01

RoHS COMPLIANT

Modification

Date Name

Drawn 02.09.2008 HELIS_MA

Responsible AMANN_A

Checked

Approved LANG_T

Cat.no.: 3 19675 (36)

Sheet 00 of 00 sheets

Scale: 5/1

Supersedes: .

Product file: BL 3.50

9382

BL 3.50/././180 BUCHSENSTECKER FEMALE PLUG

Prüfung / Verification

ALLGEMEINGÜELTIGE KUNDENZEICHNUNG, AKTUELLER STAND NUR AUF ANFRAGE
GENERAL CUSTOMER DRAWING, TOPICAL VERSION ONLY IF REQUIRED

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