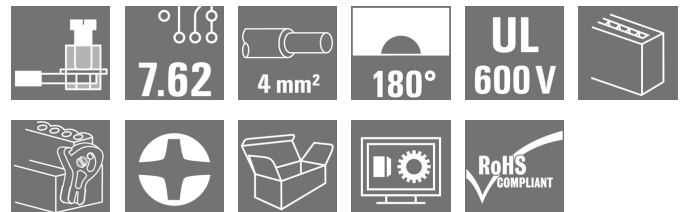


## OMNIMATE Power - series BL/SL 7.62HP SLZ 7.62HP/04/180LR SN OR BX

**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



180° inverted male header with clamping yoke connection for field wiring in 2.5 mm<sup>2</sup> with a 7.62 pitch. Also ideal as a touch-safe solution for inverse voltages. Meets the requirements of UL1059 600 V class C and IEC 61800-5-1. Variants: available without flange, with external flange or with release latch.

### General ordering data

Type	SLZ 7.62HP/04/180LR SN OR BX
Order No.	<a href="#">1043490000</a>
Version	PCB plug-in connector, male plug, 7.62 mm, Number of poles: 4, Clamping yoke connection, Clamping range, max. : 2.5 mm <sup>2</sup> , Box
GTIN (EAN)	4032248775064
Qty.	42 pc(s).
Product data	IEC: 1000 V / 20 A / 0.5 - 2.5 mm <sup>2</sup> UL: 600 V / 17 A / AWG 20 - AWG 12
Packaging	Box

Creation date May 1, 2020 10:35:10 AM CEST

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

Net weight 10 g

**System Parameters**

Product family		Type of connection	
OMNIMATE Power - series BL/SL 7.62HP		Field connection	
Wire connection method	Clamping yoke connection	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.3 inch	Number of poles	4
L1 in mm	22.86 mm	L1 in inches	0.9 inch
Number of rows	1	Pin series quantity	1
Rated cross-section	2.5 mm <sup>2</sup>	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Touch-safe protection acc. to DIN VDE 0470	IP 20	Can be coded	Yes
Stripping length	8 mm	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.5 Nm	Screwdriver blade	0.6 x 3.5
Screwdriver blade standard	DIN 5264		

**Material data**

Insulating material		Colour	
PBT		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	Copper alloy	Contact surface	tinned
Layer structure of plug contact	2-3 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.	-25 °C	Temperature range, installation, max.	100 °C

**Conductors suitable for connection**

Clamping range, min.	0.08 mm <sup>2</sup>
Clamping range, max.	2.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 20
Wire connection cross section AWG, max.	AWG 12
Solid, min. H05(07) V-U	0.5 mm <sup>2</sup>
Solid, max. H05(07) V-U	2.5 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.5 mm <sup>2</sup>
Flexible, max. H05(07) V-K	2.5 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.5 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, max.	1.5 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm <sup>2</sup>
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.0 mm

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**Technical data**

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.5 mm <sup>2</sup>
wire end ferrule	Cross-section for conductor connection	Stripping length	nominal 10 mm
		Recommended wire-end ferrule	<a href="#">H0.5/14 OR</a>
Cross-section for conductor connection	Cross-section for conductor connection	Type	fine-wired
		nominal	0.75 mm <sup>2</sup>
wire end ferrule	Cross-section for conductor connection	Stripping length	nominal 10 mm
		Recommended wire-end ferrule	<a href="#">H0.75/14T HBL</a>
Cross-section for conductor connection	Cross-section for conductor connection	Type	fine-wired
		nominal	1 mm <sup>2</sup>
wire end ferrule	Cross-section for conductor connection	Stripping length	nominal 10 mm
		Recommended wire-end ferrule	<a href="#">H1.0/14 GE</a>
Cross-section for conductor connection	Cross-section for conductor connection	Type	fine-wired
		nominal	1.5 mm <sup>2</sup>
wire end ferrule	Cross-section for conductor connection	Stripping length	nominal 10 mm
		Recommended wire-end ferrule	<a href="#">H1.5/14D SW</a>
Cross-section for conductor connection	Cross-section for conductor connection	Type	fine-wired
		nominal	2.5 mm <sup>2</sup>
wire end ferrule	Cross-section for conductor connection	Stripping length	nominal 7 mm
		Recommended wire-end ferrule	<a href="#">H1.5/7</a>
Cross-section for conductor connection	Cross-section for conductor connection	Type	fine-wired
		nominal	2.5 mm <sup>2</sup>
wire end ferrule	Cross-section for conductor connection	Stripping length	nominal 7 mm
		Recommended wire-end ferrule	<a href="#">H2.5/7</a>
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	2.5 mm <sup>2</sup>		

**Rated data acc. to IEC**


tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	20 A
Rated current, max. number of poles (Tu=20°C)	20 A	Rated current, min. number of poles (Tu=40°C)	17.5 A
Rated current, max. number of poles (Tu=40°C)	17.5 A	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated voltage for surge voltage class / pollution degree III/2	1,000 V	Rated voltage for surge voltage class / pollution degree III/3	630 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	8 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	6 kV	Short-time withstand current resistance	3 x 1s with 180 A
Clearance, min.	11.9 mm	Creepage distance, min.	11.9 mm

## OMNIMATE Power - series BL/SL 7.62HP SLZ 7.62HP/04/180LR SN OR BX


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## Technical data

### Rated data acc. to CSA

Institute (CSA)				Certificate No. (CSA)	
				200039-1121690	
Rated voltage (Use group B / CSA)	600 V	Rated voltage (Use group C / CSA)	600 V	Rated current (Use group B / CSA)	17 A
Rated voltage (Use group D / CSA)	600 V	Rated current (Use group D / CSA)	5 A	Wire cross-section, AWG, min.	AWG 20
Rated current (Use group C / CSA)	17 A	Wire cross-section, AWG, max.	AWG 12	Reference to approval values	Specifications are maximum values, details - see approval certificate.

### Rated data acc. to UL 1059

Institute (cURus)				Certificate No. (cURus)	
				E60693	
Rated voltage (Use group B / UL 1059)	600 V	Rated voltage (Use group C / UL 1059)	600 V	Rated current (Use group B / UL 1059)	17 A
Rated voltage (Use group D / UL 1059)	600 V	Rated current (Use group D / UL 1059)	5 A	Wire cross-section, AWG, min.	AWG 20
Rated current (Use group C / UL 1059)	17 A	Wire cross-section, AWG, max.	AWG 12	Reference to approval values	Specifications are maximum values, details - see approval certificate.

### Packing

Packaging	Box	VPE length	0
VPE width	0	VPE height	0

### 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	30-21-18-01

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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>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• P on drawing = pitch</li> <li>• Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.</li> </ul>
IPC conformity	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="#">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="#">EPLAN_WSCAD</a>
Engineering Data	<a href="#">STEP</a>
White paper power electronics connected correctly	<a href="#">Download Whitepaper</a>
User Documentation	<a href="#">QR-Code product handling video</a>
White paper UL 600 V	<a href="#">Download Whitepaper</a>

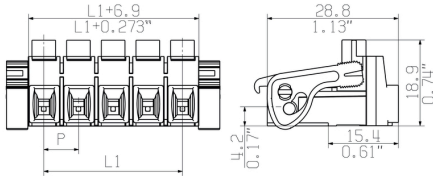
**Data sheet**

**OMNIMATE Power - series BL/SL 7.62HP  
SLZ 7.62HP/04/180LR SN OR BX**

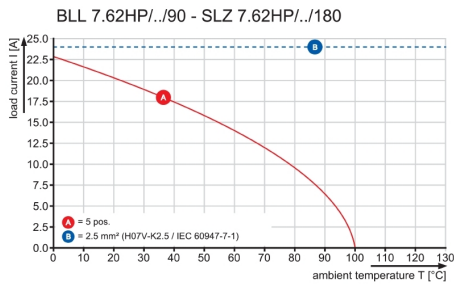
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**Drawings**

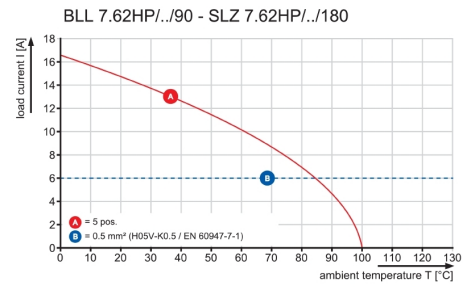
**Dimensional drawing**



**Graph**



**Graph**



**OMNIMATE Power - series BL/SL 7.62HP  
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**Mating connector (fully pluggable)****BLZ 7.62HP/180LR****Power on board - 100% safety, 100% integration, 100% cost-effectiveness:**

The compact, efficient solution for UL-600V applications in the lower performance range up to 12kVA.

- 29 A at 630 V (IEC)
- 20 A at 600 V (UL)
- Single compartment mating profile
- Clamping range: 0.08 - 4 mm<sup>2</sup> / AWG 28 - 12

Assistance with device approval:

- meets the requirements for 600 V in accordance with UL508/UL840
- meets the more stringent touch-safety requirements of IEC68100-5-1

The slimming cure for multiple-stage device series: reduced size and cut costs in the high-volume lower performance range without compromising device approval!

**General ordering data**

Type	BLZ 7.62HP/04/180LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1093450000</a>	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 4,	IEC: 630 V / 29 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248864430	Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box	UL: 600 V / 20 A / AWG 20 - AWG 12	
Qty.	35 pc(s).			

Type	BLZ 7.62HP/04/180LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1093490000</a>	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 4,	IEC: 630 V / 29 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248864478	Clamping yoke connection, Clamping range, max. : 4 mm <sup>2</sup> , Box	UL: 600 V / 20 A / AWG 20 - AWG 12	
Qty.	35 pc(s).			

**BLF 7.62HP/180LR**

180° female header with PUSH-IN connection technology for field wiring in 2.5 mm<sup>2</sup> with a 7.62 pitch.

Meets the requirements as per UL1059 600 V class C and IEC 61800-5-1

Variants: without flange, external flange, release latch.

**General ordering data**

Type	BLF 7.62HP/04/180LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1043970000</a>	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 4,	IEC: 1000 V / 24 A / 0.5 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248775514	PUSH IN, Clamping range, max. : 2.5 mm <sup>2</sup> , Box	UL: 600 V / 20 A / AWG 20 - AWG 12	
Qty.	42 pc(s).			

## Data sheet

### OMNIMATE Power - series BL/SL 7.62HP SLZ 7.62HP/04/180LR SN OR BX

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## Mating connector (fully pluggable)

Type	BLF 7.62HP/04/180LR SN ...	Version	Product data	Packaging
Order No.	<a href="#">1044010000</a>	PCB plug-in connector, female plug, 7.62 mm, Number of poles: 4,	IEC: 1000 V / 24 A / 0.5 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248775552	PUSH IN, Clamping range, max. : 2.5 mm <sup>2</sup> , Box	UL: 600 V / 20 A / AWG 20 - AWG 12	
Qty.	42 pc(s).			



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# Accessories

## PZ



### Crimping tools for wire end ferrules, with and without plastic collars

- Ratchet guarantees precise crimping
- Release option in the event of incorrect operation

### General ordering data

Type	PZ 6/5	Version	
Order No.	<a href="#">9011460000</a>	Pressing tool, Crimping tool for wire-end ferrules, 0.25mm <sup>2</sup> , 6mm <sup>2</sup> ,	
GTIN (EAN)	4008190165352	Trapezoidal indentation crimp	
Qty.	1 pc(s).		

## 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	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	<a href="#">1545710000</a>	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 pc(s).			
Type	BLZ/SL KO OR BX	Version	Product data	Packaging
Order No.	<a href="#">1573010000</a>	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			

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**Accessories**

**Slotted screwdriver**

Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip



**General ordering data**

Type	SDS 0.6X3.5X100	Version
Order No.	<a href="#">9008330000</a>	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4032248056286	
Qty.	1 pc(s).	

**Slotted screwdriver**

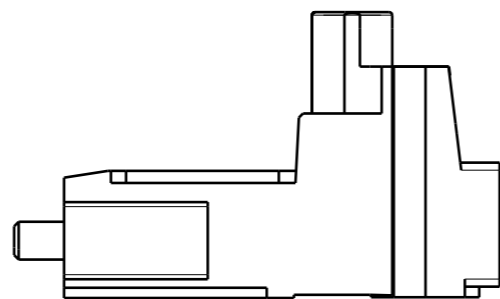
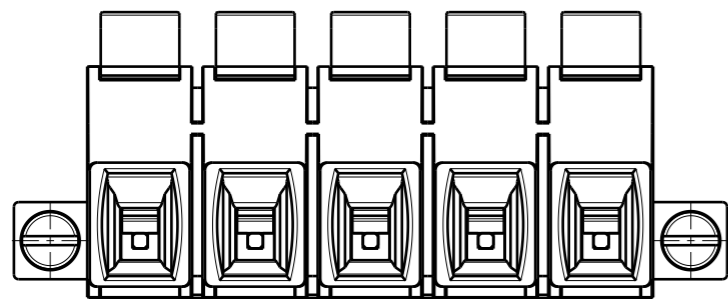
VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip



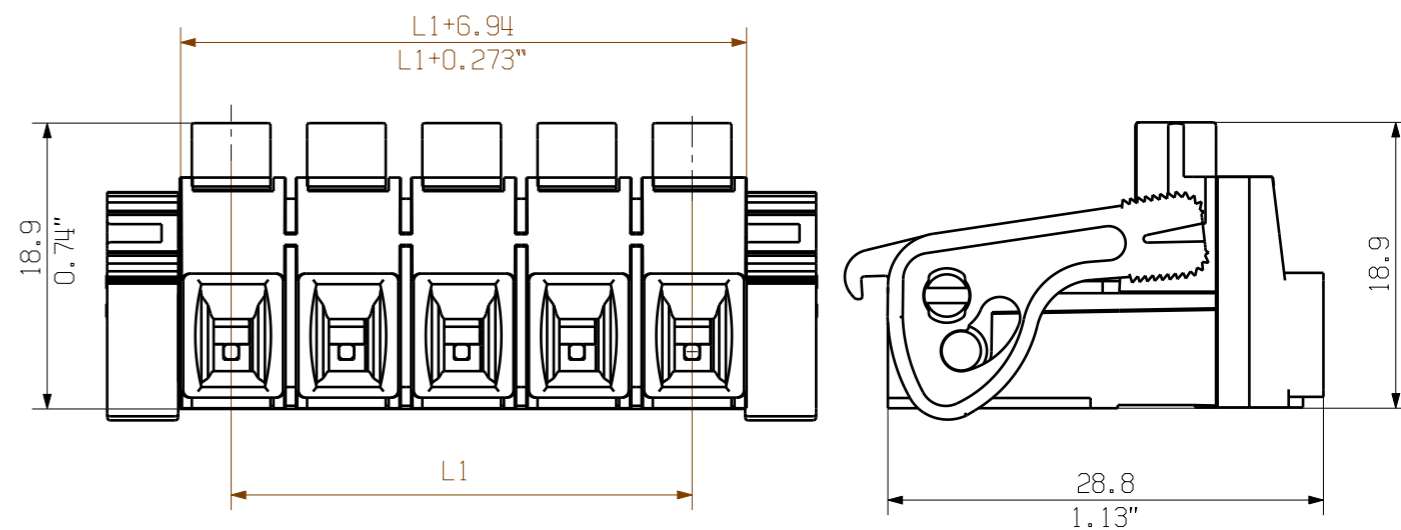
**General ordering data**

Type	SDIS 0.6X3.5X100	Version
Order No.	<a href="#">9008390000</a>	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4032248056354	
Qty.	1 pc(s).	

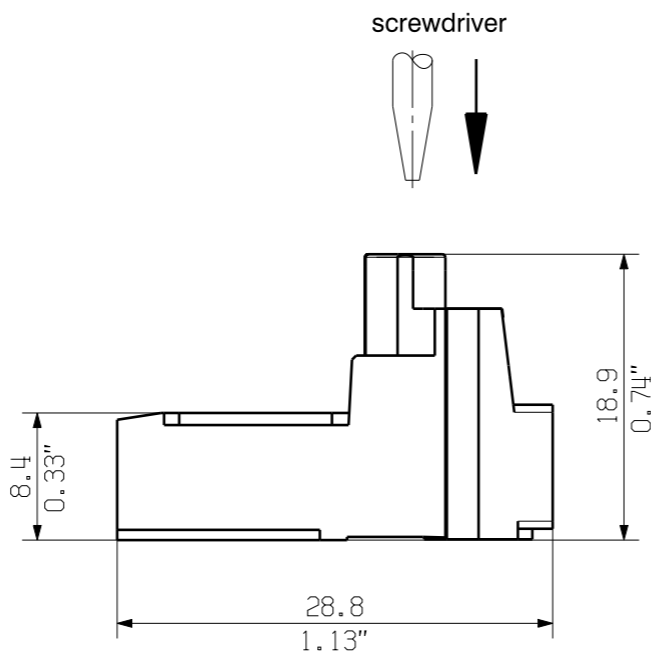
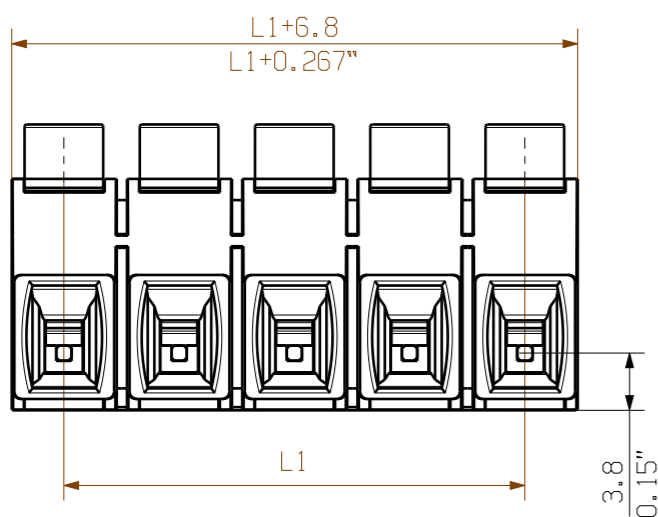
SLZ7.62HP/.../180F



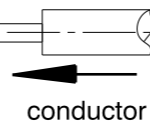
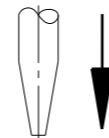
SLZ7.62HP/.../180LR



SLZ7.62HP/.../180G

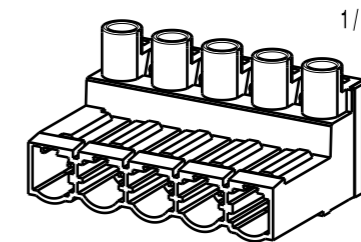


screwdriver

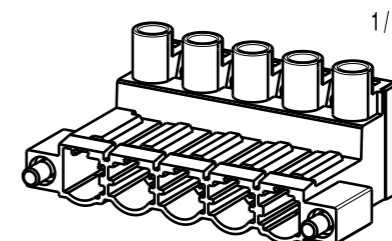


conductor

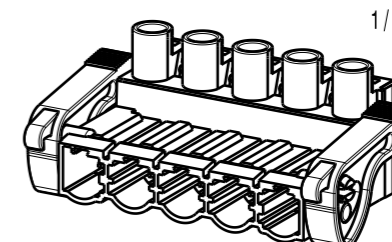
SLZ7.62HP/.../180G



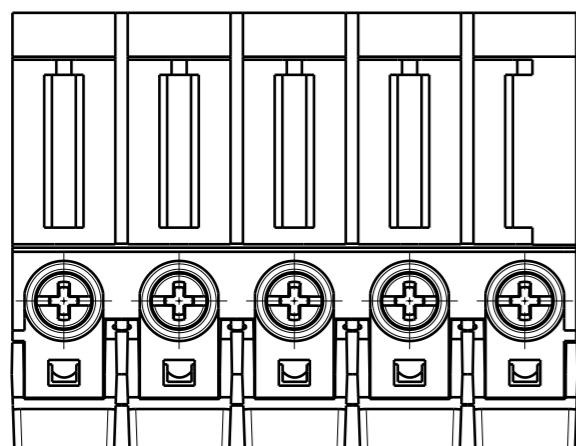
SLZ7.62HP/.../180F



SLZ7.62HP/.../180LR



12	83,82	3,30
11	76,20	3,00
10	68,58	2,70
9	60,96	2,40
8	53,34	2,10
7	45,72	1,80
6	38,10	1,50
5	30,48	1,20
4	22,86	0,90
3	15,24	0,60
2	7,62	0,30
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 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.

GENERAL TOLERANCE:  
DIN ISO 2768-mK



103327/5  
05.04.18 HELIS\_MA 01

Modification

	Date	Name
Drawn	24.04.2017	HELIS_MA
Responsible		KRUG_M
Checked	23.04.2018	HELIS_MA
Approved		LANG_T

Scale: 2:1

Supersedes: .

Cat.no.: .

3 45005 07

Drawing no. Issue no.  
Sheet 01 of 01 sheets

**Weidmüller**

**SLZ 7.62HP/.../180**  
STIFTLISTE  
PIN HEADER

Product file: SLZ7.62HP

7374