

## SL 7.62HP/12/180LF 3.2 SN OR BX

**Weidmüller Interface GmbH & Co. KG**

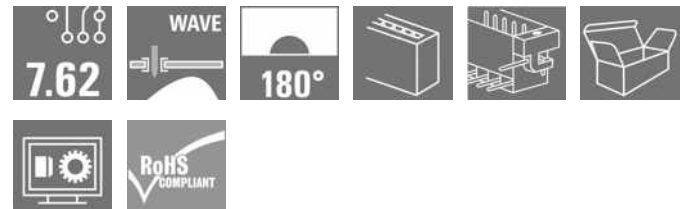
Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

### Product image



#### Power on board - 100% safety, 100% integration, 100% cost-effectiveness:

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

High-performance male header for applications up to 12 kVA:

- 29 A at 400 V (IEC)
- 20 A at 600 V (UL)
- Single compartment mating profile

Assisting in device approval:

- Meets the requirements for 600 V according to UL 508 / UL840.
- Meets the increased requirements on touch safety as per IEC68100-5-1 when combined with female header BLZ 7.62 HP

The slimming diet for multiple-stage device series:

Reduce the size and cut costs in the high-volume lower performance range without compromising device approval!

Male header, 180° outlet direction, with solder flanges

#### General ordering data

Version	PCB plug-in connector, male header, Solder flange, THT solder connection, 7.62 mm, Number of poles: 12, 180°, Solder pin length (l): 3.2 mm, tinned, orange, Box
Order No.	<a href="#">1141300000</a>
Type	SL 7.62HP/12/180LF 3.2 SN OR BX
GTIN (EAN)	4032248923878
Qty.	18 pc(s).
Product data	IEC: 630 V / 29 A UL: 300 V / 20 A
Packaging	Box

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

Depth	8.4 mm	Depth (inches)	0.331 inch
Height	15 mm	Height (inches)	0.591 inch
Height of lowest version	11.8 mm	Net weight	6 g

**Temperatures**

Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
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**System specifications**

Product family	OMNIMATE Power - series BL/SL 7.62HP	Type of connection	Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	7.62 mm
Pitch in inches (P)	0.3 inch	Outgoing elbow	180°
Number of poles	12	Number of solder pins per pole	1
Solder pin length (l)	3.2 mm	Solder pin dimensions	1.0 x 1.0 mm
Solder pin dimensions = d tolerance	+0,01 / -0,03 mm	Solder eyelet hole diameter (D)	1.4 mm
Solder eyelet hole diameter tolerance (D)	+ 0,1 mm	L1 in mm	83.82 mm
L1 in inches	3.3 inch	Number of rows	1
Pin series quantity	1	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch, plugged
Touch-safe protection acc. to DIN VDE 0470	IP20 plugged	Can be coded	Yes
Tightening torque for screw flange, min.	0.15 Nm	Tightening torque for screw flange, max.	0.25 Nm
Plugging cycles	25		

**Material data**

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Copper alloy	Contact surface	tinned
Layer structure of solder connection	2...3 µm Ni / 2...4 µm Sn matt	Layer structure of plug contact	1...3 µm Ni / 2...4 µm Sn matt
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	100 °C

**Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	29 A
Rated current, max. number of poles (Tu=20°C)	26 A	Rated current, min. number of poles (Tu=40°C)	25 A
Rated current, max. number of poles (Tu=40°C)	21 A	Rated voltage for surge voltage class / pollution degree II/2	630 V
Rated voltage for surge voltage class / pollution degree III/2	500 V	Rated voltage for surge voltage class / pollution degree III/3	400 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	6 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.	6.5 mm	Creepage distance, min.	8.1 mm

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## Technical data

## Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group C / CSA)	300 V
Rated voltage (Use group D / CSA)	600 V	Rated current (Use group B / CSA)	20 A
Rated current (Use group C / CSA)	20 A	Rated current (Use group D / CSA)	5 A

## Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group C / UL 1059)	300 V
Rated voltage (Use group D / UL 1059)	600 V	Rated current (Use group B / UL 1059)	20 A
Rated current (Use group C / UL 1059)	20 A	Rated current (Use group D / UL 1059)	5 A
Clearance distance, min.	6.5 mm	Creepage distance, min.	11.2 mm
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

## Packing

Packaging	Box	VPE length	338 mm
VPE width	130 mm	VPE height	14 mm

## Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ECLASS 9.0	27-44-04-02
ECLASS 9.1	27-44-04-02	ECLASS 10.0	27-44-04-02
ECLASS 11.0	27-46-02-01	ECLASS 12.0	27-46-02-01

## Important note

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.

Notes

- Additional variants on request
- Gold-plated contact surfaces on request
- Rated current related to rated cross-section & min. No. of poles.
- 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.
- Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

**Data sheet**

**SL 7.62HP/12/180LF 3.2 SN OR BX**

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**Technical data**

**Approvals**

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Product Change Notification	<a href="#">DE - Change of packaging</a> <a href="#">EN - Change of packaging</a> <a href="#">DE - Change of packaging Step 2</a> <a href="#">EN - Change of packaging Step 2</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<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>

**Data sheet**

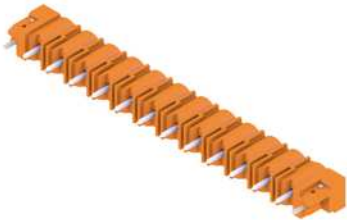
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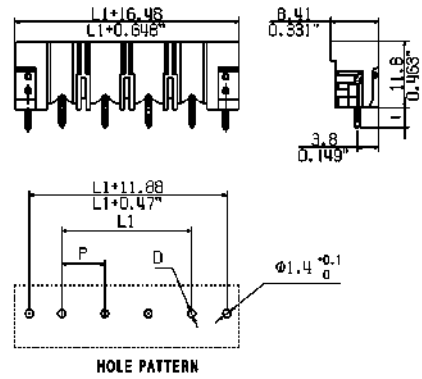
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**Drawings**

**Product image**

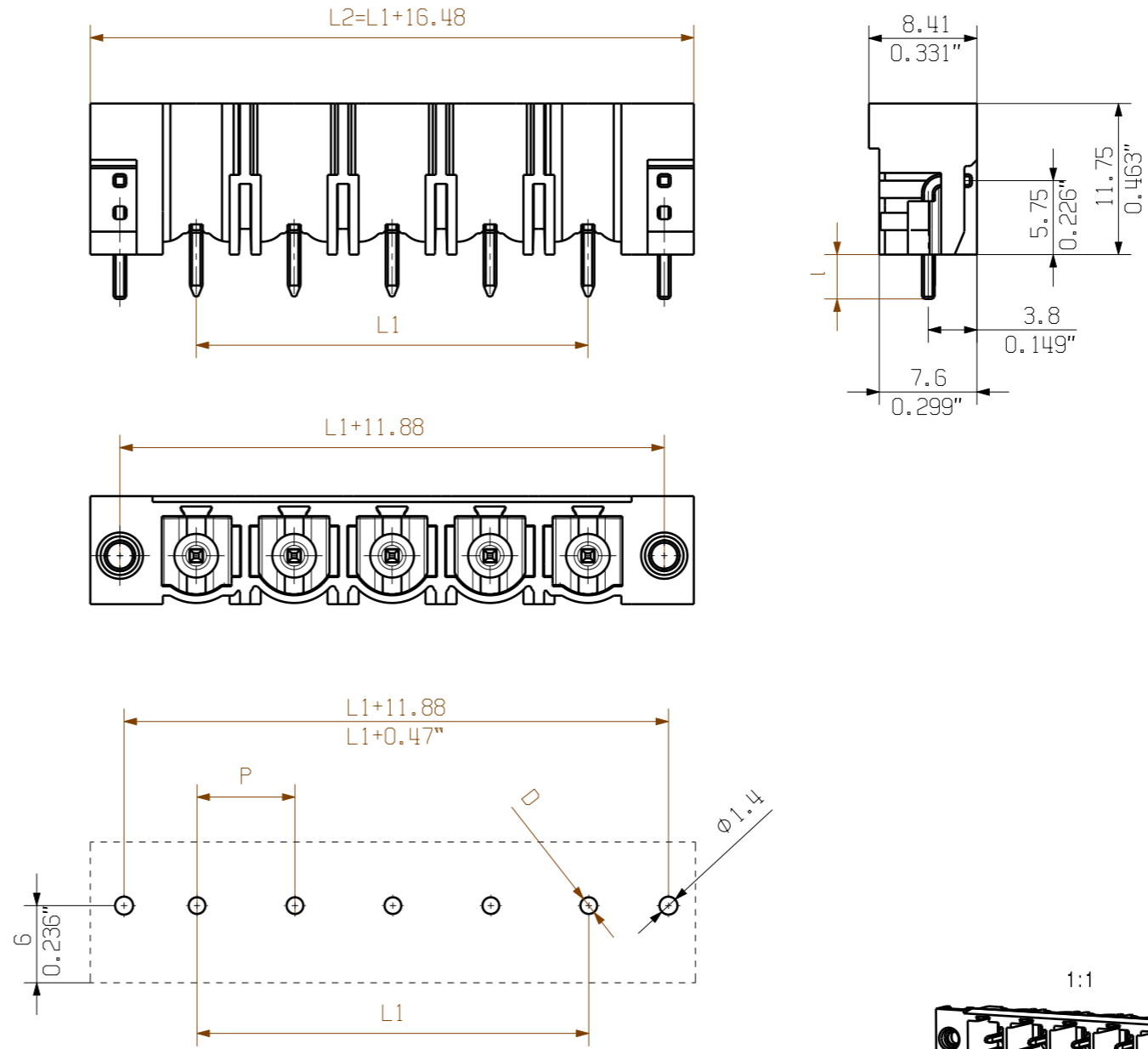


**Dimensional drawing**



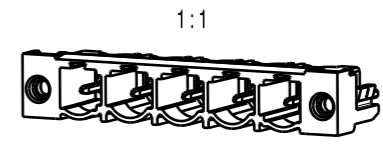
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hole pattern

P = 7.62 Raster Pitch  
 D = Ø1.3 0.51"  
 d = 1.2 0.047"  
 n = Polzahl/ number of poles



4,5	+0.1 -0.3
3,2	+0.1 -0.3
MASS I / DIM I	TOLERANZ / TOLERANCES

12	83,82	3,300
11	76,20	3,000
10	68,58	2,700
9	60,96	2,400
8	53,34	2,100
7	45,72	1,800
6	38,10	1,500
5	30,48	1,200
4	22,86	0,900
3	15,24	0,600
2	7,62	0,300
n	L1 [mm]	L1 [inch]

shown: SL 7.62HP/05/180LF

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 with 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.

Fehl. Masse und Angaben siehe Datenblatt  
 Further dim. & info. see data sheet

General tolerance: DIN ISO 2768-mK		103327/5 03.04.18 HELIS_MA 00		Cat.no.: .	
		Modification			
		Drawn	Date	Name	<b>3 47881 06</b> Drawing no. Issue no. Sheet 03 of 03 sheets
Responsible	28.06.2017	HELIS_MA	<b>SL 7.62HP/./180...</b> STIFTLISTE MALE HEADER		
Checked	23.04.2018	HELIS_MA		Product file: SL 7.62HP	
Supersedes: .	Approved	LANG_T	7375		

## Recommended wave soldering profiles

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
 www.weidmueller.com

### Single Wave:



### Double Wave:



### Wave soldering profiles

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

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

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

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