

## BLL 7.62HP/03/90F 3.2SN BK BX

**Weidmüller Interface GmbH & Co. KG**

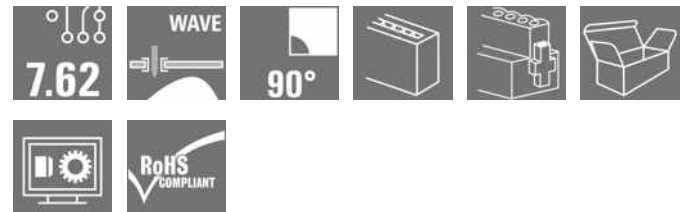
Klingenbergstraße 26

D-32758 Detmold

Germany

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

### Product image



90° female header for the PCB with a pitch of 7.62.

Meets IEC 61800-5-1 requirements and enables UL approval as per UL840 600 V. Ideal touch-safe solution for the power output and intermediate circuit applications.

The mating profile guarantees touch safety of >3 mm as per IEC61800-5-1.

Variants: without flange, flange version, soldered flange version.

### General ordering data

Version	PCB plug-in connector, female header, Flange, THT solder connection, 7.62 mm, Number of poles: 3, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box
Order No.	<a href="#">1043280000</a>
Type	BLL 7.62HP/03/90F 3.2SN BK BX
GTIN (EAN)	4032248774852
Qty.	54 pc(s).
Product data	IEC: 630 V / 24 A UL: 300 V / 20 A
Packaging	Box

Creation date April 28, 2023 3:50:52 PM CEST

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

Depth	24.5 mm	Depth (inches)	0.965 inch
Height	12.8 mm	Height (inches)	0.504 inch
Width	32.04 mm	Width (inches)	1.261 inch
Net weight	2.25 g		

**Temperatures**

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

Product family	OMNIMATE Power - series BL/SL 7.62HP	Type of connection	Board connection
Pitch in mm (P)	7.62 mm	Pitch in inches (P)	0.3 inch
Number of poles	3	L1 in mm	15.24 mm
L1 in inches	0.6 inch	Number of rows	1
Pin series quantity	1	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
Tightening torque for screw flange, min.	0.15 Nm	Tightening torque for screw flange, max.	0.25 Nm
Plugging force/pole, max.	10 N	Pulling force/pole, max.	7 N

**Material data**

Insulating material	PA GF	Colour	black
Colour chart (similar)	RAL 9011	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	4...8 µm Sn hot-dip tinned
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)	24 A
Rated current, max. number of poles (Tu=20°C)	24 A	Rated current, min. number of poles (Tu=40°C)	24 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	630 V	Rated voltage for surge voltage class / pollution degree III/3	400 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 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.	7.2 mm	Creepage distance, min.	7.8 mm

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**Technical data****Rated data acc. to CSA**

Institute (CSA)



Certificate No. (CSA)

200039-1121690

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

Rated voltage (Use group C / CSA)	150 V
Rated current (Use group B / CSA)	20 A
Rated current (Use group D / CSA)	10 A

Reference to approval values

Specifications are maximum values, details - see approval certificate.

**Rated data acc. to UL 1059**

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059)	300 V
Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group C / UL 1059)	20 A

Rated voltage (Use group C / UL 1059)	150 V
Rated current (Use group B / UL 1059)	20 A
Rated current (Use group D / UL 1059)	10 A

Clearance distance, min.	7.2 mm
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Creepage distance, min.	7.8 mm
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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	27 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

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**Technical data****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	<ul style="list-style-type: none"> <li>• Additional variants on request</li> <li>• Gold-plated contact surfaces on request</li> <li>• Spacing between rows: see hole layout</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• P on drawing = pitch</li> <li>• Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.</li> <li>• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months</li> </ul>

**Approvals**

Approvals



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

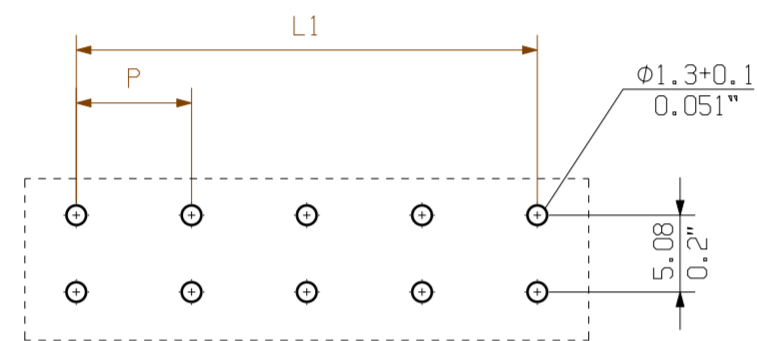
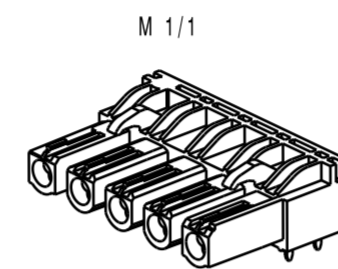
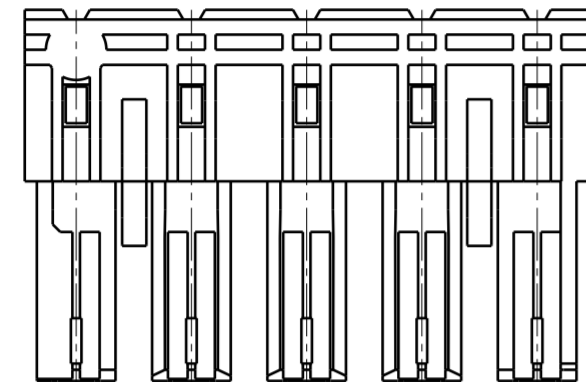
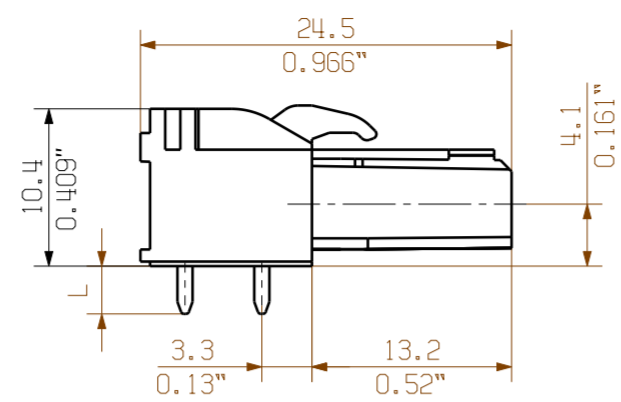
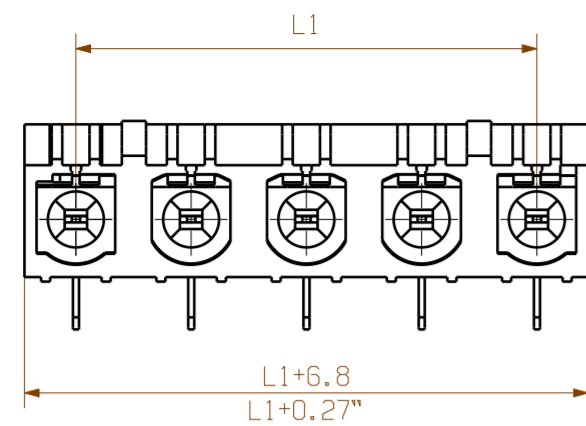
**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Engineering Data	<a href="#">WSCAD</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> <a href="#">PO OMNIMATE EN</a>



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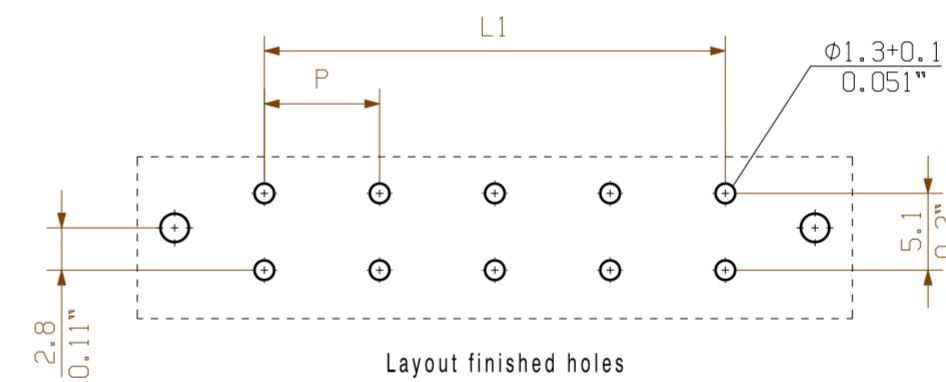
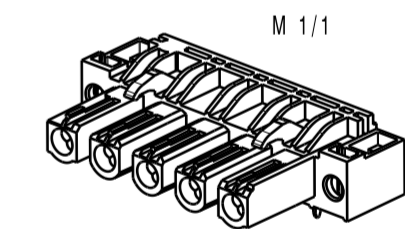
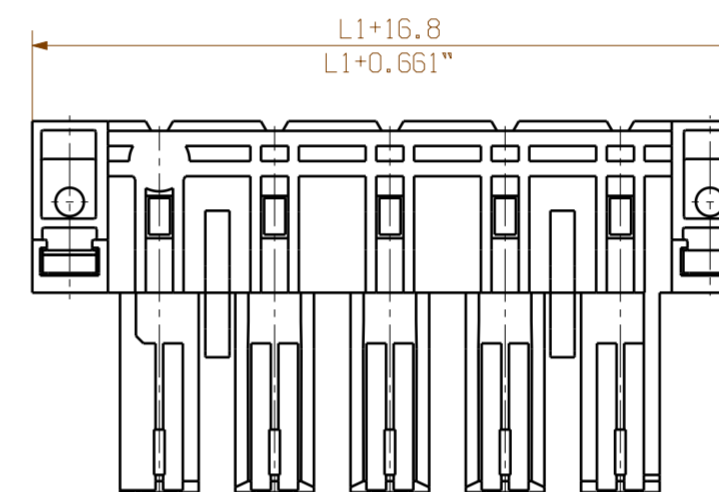
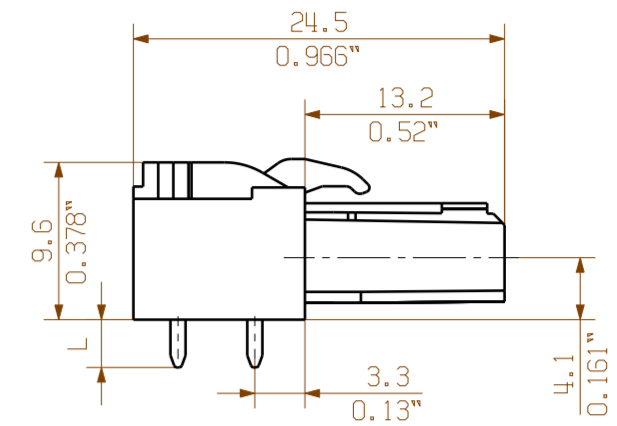
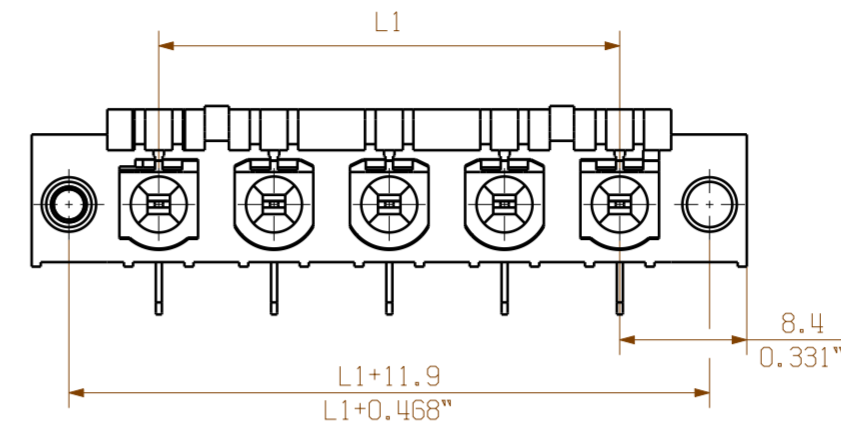
BLL7.62HP/.../90



Layout finished holes

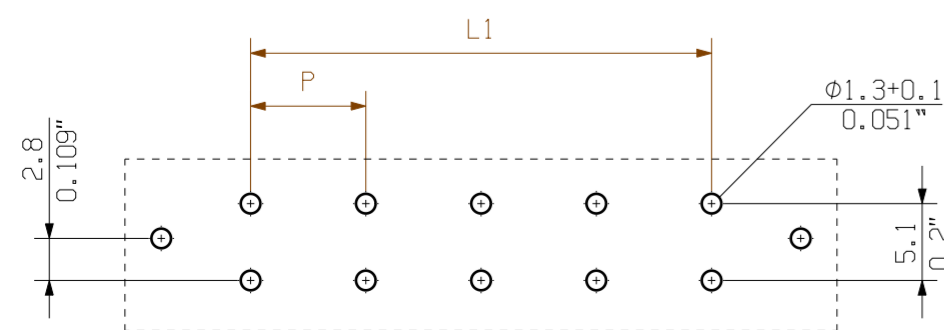
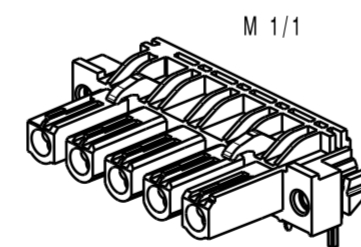
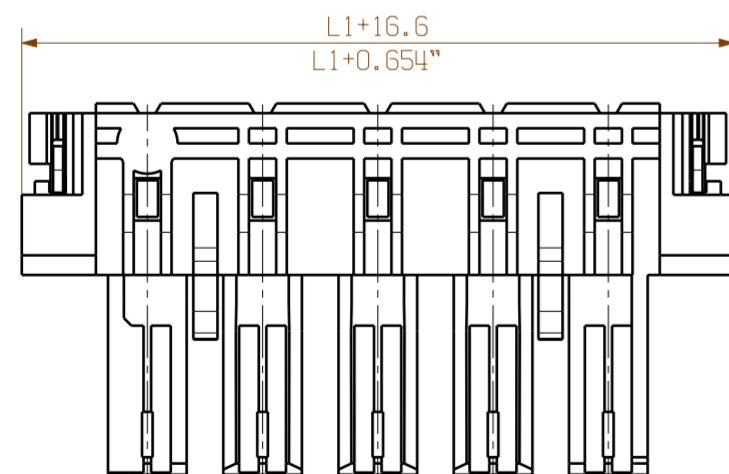
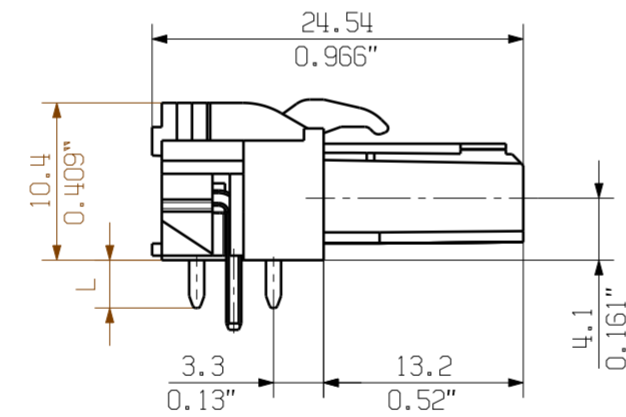
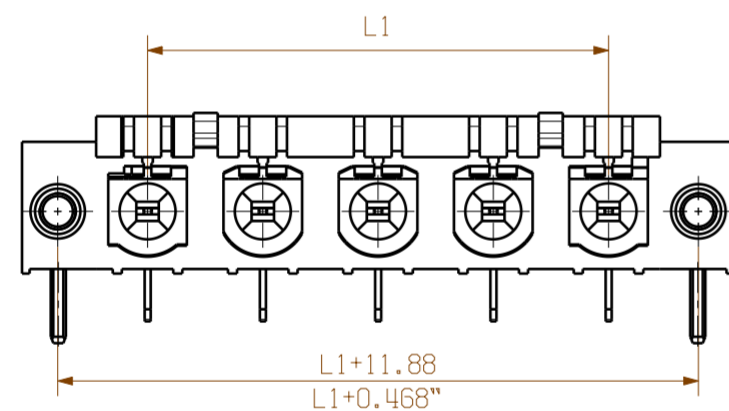
DIE DEUTSCHE VERSION IST VERBINDLICH  
 THE GERMAN VERSION IS BINDING

BLL7.62HP/.../90F



Layout finished holes

BLL7.62HP/.../90LF



Layout finished holes

For the mounting of PCBs, it should be noted that the rated data stated here relates only to the PCB components alone.  
 The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 864 / 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 EN 61984 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.

n = POLZAHL / NO OF POLES  
 P = RASTER/ PITCH

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)

	DIN ISO 2768-m	CAT. NO.:	
	72010/5 12.09.13 HELIS_MA 00	C 45003 04	
MODIFICATION		DRAWING NO. SHEET 02 OF 02 SHEETS	
		DATE	NAME
DRAWN		17.09.2007	POCTA_C
RESPONSIBLE		STUCKMANN_P	
CHECKED		12.09.2013	HECKERT_M
APPROVED		HANKE_D	
SCALE: 2/1		PRODUCT FILE: BLL7.62HP	
SUPERSEDES: .		7373	

**BLL7.62HP/.../90...**  
 BUCHSENLEISTE  
 SOCKET BLOCK

WEITERE SOWIE VERVIELFAELTIGUNG DIESER DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATTET.  
 ZUMWIDERHANDLUNGEN VERPFLICHTEN ZU SCHADENSATZ ALLE RECHTE FUER DEN FALL DER PATENT-, GEBRAUCHSMUSTER-, ODER GESCHWACHMUSTERTUNG VORBEHALTEN.  
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## Recommended wave soldering profiles

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### Single Wave:



### Double Wave:



### Wave soldering profiles

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

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

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

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