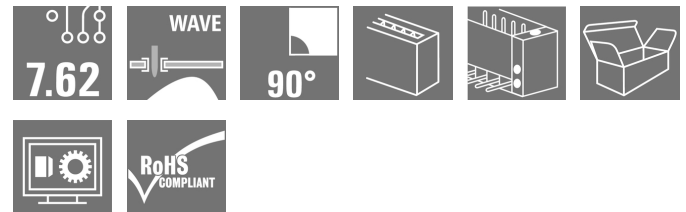
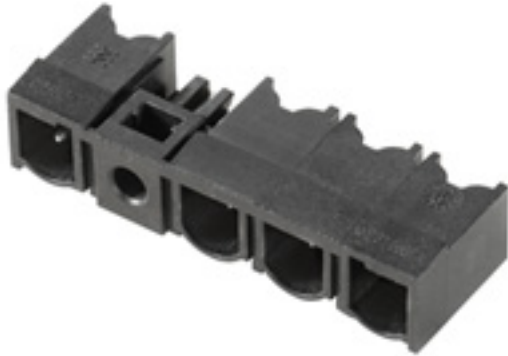


**OMNIMATE Power - series BL/SL 7.62IT  
SL 7.62IT/03/90MF2 3.2SN BK BX**

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



90° male header with soldered flange fastening with 7.62 pitch for 400 V IT power networks according to IEC 61800-5-1. UL approval as per UL840 600 V with leading PE contact.

Meets the increased requirements on touch safety for IT power networks as per IEC 61800-5-1 for 400 V to earth, when combined with female header BLZ 7.62 IT...

Without a female header, the mating profile guarantees minimum touch safety of 1 mm with 20 N pressure on the test finger. The interlock in the middle flange reduces the space requirements in comparison with conventional solutions by one pitch width. On request: available with screw flange or without flange.

**General ordering data**

Type	SL 7.62IT/03/90MF2 3.2SN BK BX
Order No.	<a href="#">1173640000</a>
Version	PCB plug-in connector, male header, closed side, Middle flange, THT solder connection, 7.62 mm, No. of poles: 3, 90°, Solder pin length (l): 3.2 mm, tinned, Black, Box
GTIN (EAN)	4032248966516
Qty.	100 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**

Net weight 2.484 g

**System specifications**

Product family		Mounting onto the PCB	
Product family	OMNIMATE Power - series BL/SL 7.62IT		THT solder connection
Pitch in mm (P)	7.62 mm	Pitch in inches (P)	0.3 inch
Outgoing elbow	90°	No. of poles	3
Number of solder pins per pole	1	Solder pin length (l)	3.2 mm
Tolerance of solder pin position	± 0.1 mm	Solder pin dimensions	1.0 x 1.0 mm
Solder eyelet hole diameter (D)	1.3 mm	Solder eyelet hole diameter tolerance (D)	+ 0,1 mm
L1 in mm	22.86 mm	L1 in inches	0.9 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	push-in force/pole	10 N
Packaging	Box		

**Material data**

Insulating material		Colour	
Insulating material	PBT GF	Colour	Black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
CTI	≥ 200	Insulation resistance	≥ 10 <sup>8</sup> Ω
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	2-3 µm Ni / 2-4 µm Sn matt	Storage temperature, min.	-25 °C
Storage temperature, max.	55 °C	Max. relative humidity during storage	80 %
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		Rated current, min. no. of poles (Tu=20°C)	
tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Tu=20°C)	29 A
Rated current, max. no. of poles (Tu=20°C)	26 A	Rated current, min. no. of poles (Tu=40°C)	25 A
Rated current, max. no. 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**

Institute (CSA)		Certificate No. (CSA)	200039-1121690
Rated voltage (Use group B)	300 V	Rated voltage (Use group C)	300 V
Rated voltage (use group D)	600 V	Rated current (use group B)	20 A
Rated current (use group C)	20 A	Rated current (use group D)	5 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)	300 V	Rated voltage (use group C)	300 V
Rated voltage (use group D)	600 V	Rated current (use group B)	20 A
Rated current (use group C)	20 A	Rated current (use group D)	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.		

**Classifications**

ETIM 4.0	EC002637	ETIM 5.0	EC002637
ETIM 6.0	EC002637	eClass 6.2	27-26-07-04
eClass 7.1	27-44-04-02	eClass 8.1	27-44-04-02
eClass 9.0	27-44-04-02	eClass 9.1	27-44-04-02

**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>• 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>• MFX and MSFX: X= Position of the middle flange e.g. MF2, MSF3</li> </ul>
IPC conformity	The products are developed, manufactured and delivered according to the internationally recognised IPC-A-610 standard, category "permissible". More extensive demands on the products can be evaluated on request.

**Data sheet**

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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 HEATING ELECTR EN](#)
- [FL APPL INVERTER EN](#)
- [FL\\_BASE\\_STATION\\_EN](#)
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Engineering Data

[EPLAN, WSCAD](#)

Motion controllers white paper

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White Paper UL 600 V

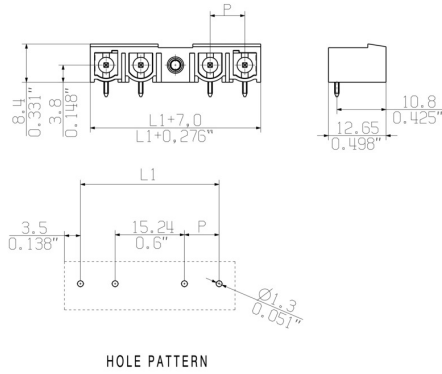
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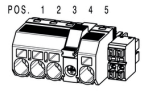
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**Drawings**

**Dimensional drawing**



**Connection diagram**

6	M(S)F6	o	o	o	o	o	X	o
6	M(S)F5	o	o	o	o	X	o	o
6	M(S)F4	o	o	o	X	o	o	o
6	M(S)F3	o	o	X	o	o	o	o
6	M(S)F2	o	X	o	o	o	o	o
5	M(S)F5	o	o	o	o	X	o	
5	M(S)F4	o	o	o	X	o	o	
5	M(S)F3	o	o	X	o	o	o	
5	M(S)F2	o	X	o	o	o	o	
4	M(S)F4	o	o	o	X	o		
4	M(S)F3	o	o	X	o	o		
4	M(S)F2	o	X	o	o	o		
3	M(S)F3	o	o	X	o			
3	M(S)F2	o	X	o	o			
2	M(S)F2	o	X	o				
NO OF POLES	X = MIDDLE FLANGE POSITION	1	2	3	4	5	6	7
								

## 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.