

**OMNIMATE Power - series LX**  
**LX 15.00/06/90 4.5SN BK BX**
**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 16

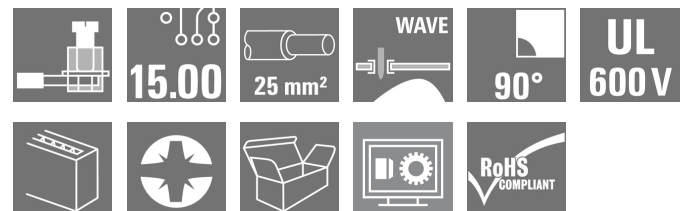
D-32758 Detmold

Germany

Fon: +49 5231 1429-0

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www.weidmueller.com



High-performance PCB terminal with proven clamping yoke connection at 15.00 mm pitch, conductor outlet direction in 90° design. Version and test point

- 1.50 - 25 mm<sup>2</sup> (IEC) / 16 - 4 AWG (UL)
- 1000 V (IEC) / 600 V (UL)
- 101 A (IEC) / 85 A (UL)

**General ordering data**

Type	LX 15.00/06/90 4.5SN BK BX
Order No.	<a href="#">1226500000</a>
Version	PCB terminal, 15.00 mm, No. of poles: 6, 90°, Solder pin length (l): 4.5 mm, tinned, Black, Clamping yoke connection, Clamping range, rated connection, max.: 25 mm <sup>2</sup> , Box
GTIN (EAN)	4050118011234
Qty.	10 pc(s).
Product data	IEC: 1000 V / 101 A / 1.5 - 25 mm <sup>2</sup> UL: 600 V / 85 A / AWG 16 - AWG 4
Packaging	Box

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

Net weight 102.6 g

**System parameters**

Product family	OMNIMATE Power - series LX	Wire connection method	Clamping yoke connection
Mounting onto the PCB	THT solder connection	Conductor outlet direction	90°
Pitch in mm (P)	15 mm	Pitch in inches (P)	0.591 inch
No. of poles	6	Fitted by customer	No
Max. adjacent poles per row	10	Solder pin length (l)	4.5 mm
Solder pin dimensions	1.2 x 1.2 mm	Solder eyelet hole diameter (D)	1.6 mm
Solder eyelet hole diameter tolerance (D)	+ 0,1 mm	Number of solder pins per pole	2
Screwdriver blade	1.0 x 5.5	Screwdriver blade standard	DIN 5264
Tightening torque, min.	2.4 Nm	Tightening torque, max.	4 Nm
Clamping screw	M 5	Stripping length	16 mm
L1 in mm	75 mm	L1 in inches	2.953 inch
Touch-safe protection acc. to DIN VDE 0470	IP 10	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Volume resistance	0.50 mΩ		

**Material data**

Insulating material	Wemid (PA)	Colour	Black
Colour chart (similar)	RAL 9011	Insulating material group	I
CTI	≥ 600	Insulation resistance	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	Contact material	E-Cu
Contact surface	tinned	Layer structure of solder connection	1.5-3 μm Ni / 4-6 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.	120 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	120 °C		

**Conductors suitable for connection**

Clamping range, rated connection, min.	1.31 mm <sup>2</sup>	Clamping range, rated connection, max.	25 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 16	Wire connection cross section AWG, max.	AWG 4
Solid, min. H05(07) V-U	1.5 mm <sup>2</sup>	Solid, max. H05(07) V-U	16 mm <sup>2</sup>
Stranded, min. H07V-R	6 mm <sup>2</sup>	Stranded, max. H07V-R	25 mm <sup>2</sup>
Flexible, min. H05(07) V-K	1.5 mm <sup>2</sup>	Flexible, max. H05(07) V-K	25 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, min.	1.5 mm <sup>2</sup>	w. plastic collar ferrule, DIN 46228 pt 4, max.	16 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, min.	1.5 mm <sup>2</sup>	w. wire end ferrule, DIN 46228 pt 1, max.	16 mm <sup>2</sup>
Plug gauge acc. to EN 60999 a x b; Ø	6.9 mm x 6.9 mm		

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## Technical data


### Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Ta = 20°C)	101 A
Rated current, max. no. of poles (Ta = 20°C)	101 A	Rated current, min. no. of poles (Ta = 40°C)	101 A
Rated current, max. no. of poles (Ta = 40°C)	101 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	1,000 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	8 kV	Short-time withstand current resistance	3 x 1s mit 1000 A

### Rated data acc. to CSA

Rated voltage (Use group B)	600 V	Rated voltage (Use group C)	600 V
Rated voltage (use group D)	600 V	Rated current (use group B)	85 A
Rated current (use group C)	85 A	Rated current (use group D)	5 A
Wire cross-section, AWG, min.	AWG 16	Wire cross-section, AWG, max.	AWG 4

### Rated data acc. to UL 1059

Institute (UR)		Certificate No. (UR)	E60693
Rated voltage (use group B)	600 V	Rated voltage (use group C)	600 V
Rated voltage (use group D)	600 V	Rated current (use group B)	85 A
Rated current (use group C)	85 A	Rated current (use group D)	5 A
Wire cross-section, AWG, min.	AWG 16	Wire cross-section, AWG, max.	AWG 4
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

### Classifications

ETIM 3.0	EC001284	ETIM 4.0	EC002643
ETIM 5.0	EC002643	ETIM 6.0	EC002643
eClass 6.2	27-26-11-01	eClass 7.1	27-44-04-01
eClass 8.1	27-44-04-01	eClass 9.0	27-44-04-01
eClass 9.1	27-44-04-01		

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**Technical data****Notes**

Notes	<ul style="list-style-type: none"> <li>• Additional colours 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> <li>• The test point can only be used as potential-pickup point.</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.

**Approvals**

Approvals



ROHS

Conform

**Downloads**

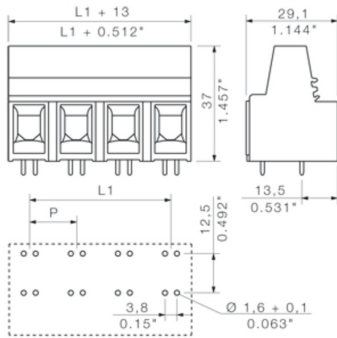
Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">CAT 2 PORTFOLIOGUIDE EN</a> <a href="#">FL APPL. INVERTER EN</a> <a href="#">FL_BASE_STATION_EN</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>
Motion controllers white paper	<a href="#">Download Whitepaper</a>
White Paper UL 600 V	<a href="#">Download Whitepaper</a>

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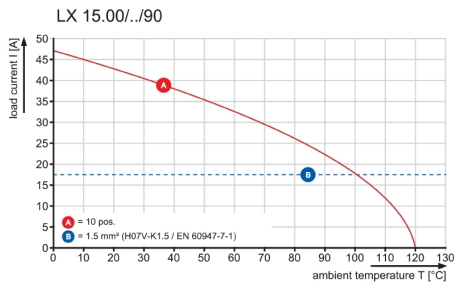
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**Drawings**

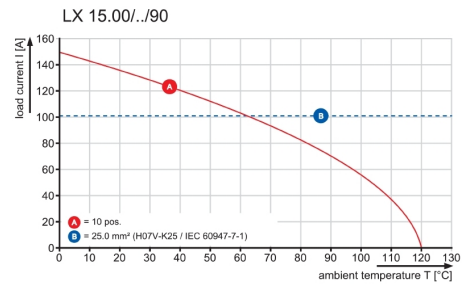
**Dimensional drawing**



**Graph**



**Graph**



## 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.