

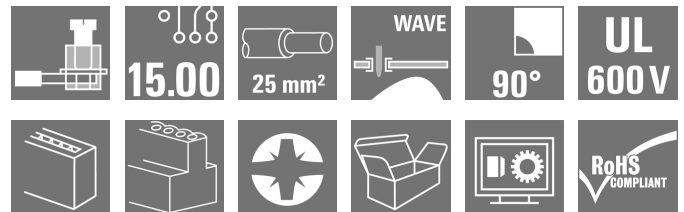
**OMNIMATE Power - series LX
LX 15.00/02/90 4.5SN GY BX**

Weidmüller Interface GmbH & Co. KG
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Product image


Similar to illustration

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


General ordering data

Type	LX 15.00/02/90 4.5SN GY BX
Order No.	1783670000
Version	PCB terminal, 15.00 mm, No. of poles: 2, 90°, Solder pin length (l): 4.5 mm, tinned, Pebble grey, Clamping yoke connection, Clamping range, max.: 25 mm², Box
GTIN (EAN)	4032248184927
Qty.	20 pc(s).
Product data	IEC: 1000 V / 101 A / 1.5 - 25 mm² UL: 600 V / 85 A / AWG 16 - AWG 4
Packaging	Box

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Technical data**Dimensions and weights**

Width	28 mm	Width (inches)	1.102 inch
Height	41.5 mm	Height (inches)	1.634 inch
Height of lowest version	37 mm	Depth	29.1 mm
Depth (inches)	1.146 inch	Net weight	34.7 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	2	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	15 mm	L1 in inches	0.591 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	Pebble grey
Colour chart (similar)	RAL 7032	Insulating material group	I
CTI	≥ 600	Insulation resistance	≥ 10 ⁸ 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, min.	1.31 mm ²	Clamping range, max.	25 mm ²
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 ²	Solid, max. H05(07) V-U	16 mm ²
Stranded, min. H07V-R	6 mm ²	Stranded, max. H07V-R	25 mm ²
Flexible, min. H05(07) V-K	1.5 mm ²	Flexible, max. H05(07) V-K	25 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	1.5 mm ²	w. plastic collar ferrule, DIN 46228 pt 4, max.	16 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	1.5 mm ²	w. wire end ferrule, DIN 46228 pt 1, max.	16 mm ²
Plug gauge in accordance with 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 (Tu=20°C)	101 A
Rated current, max. no. of poles (Tu=20°C)	101 A	Rated current, min. no. of poles (Tu=40°C)	101 A
Rated current, max. no. of poles (Tu=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

Institute (CSA)		Certificate No. (CSA)	200039-1198743
Rated voltage (Use group B / CSA)	600 V	Rated voltage (Use group C / CSA)	600 V
Rated voltage (Use group D / CSA)	600 V	Rated current (Use group B / CSA)	85 A
Rated current (Use group C / CSA)	85 A	Rated current (Use group D / CSA)	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.		

Rated data acc. to UL 1059

Institute (UR)		Certificate No. (UR)	E60693
Rated voltage (Use group B / UL 1059)	600 V	Rated voltage (Use group C / UL 1059)	600 V
Rated voltage (Use group D / UL 1059)	600 V	Rated current (Use group B / UL 1059)	85 A
Rated current (Use group C / UL 1059)	85 A	Rated current (Use group D / UL 1059)	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.		

Packaging

Packaging	Box	VPE length	39 mm
VPE width	91 mm	VPE height	128 mm

Classifications

ETIM 3.0	EC001284	ETIM 4.0	EC002643
ETIM 5.0	EC002643	ETIM 6.0	EC002643
UNSPSC	30-21-18-01	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

Data sheet

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Technical data

Notes

- | | |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Notes | <ul style="list-style-type: none"> • Additional colours on request
 • Rated current related to rated cross-section & min. No. of poles.
 • Wire end ferrule without plastic collar to DIN 46228/1
 • Wire end ferrule with plastic collar to DIN 46228/4
 • 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.
 • The test point can only be used as potential-pickup point. |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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.
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Approvals

Approvals



ROHS	Conform
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Downloads

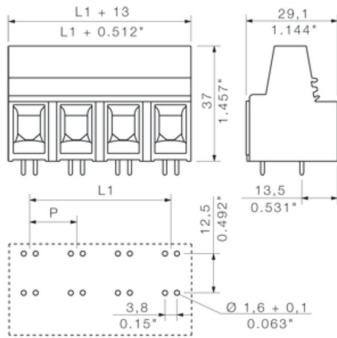
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE FL APPL_INVERTER EN FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN
Engineering Data	EPLAN, WSCAD
Engineering Data	LX.zip STEP
Motion controllers white paper	Download Whitepaper
White Paper UL 600 V	Download Whitepaper

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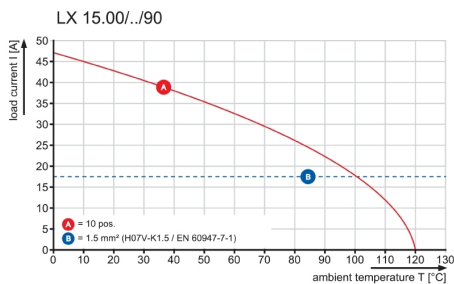
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Drawings

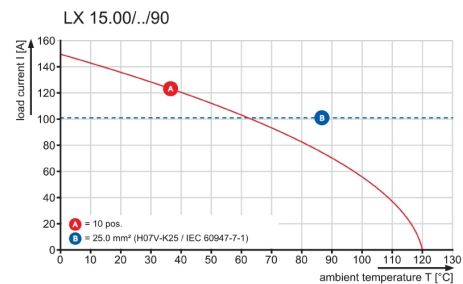
Dimensional drawing



Graph

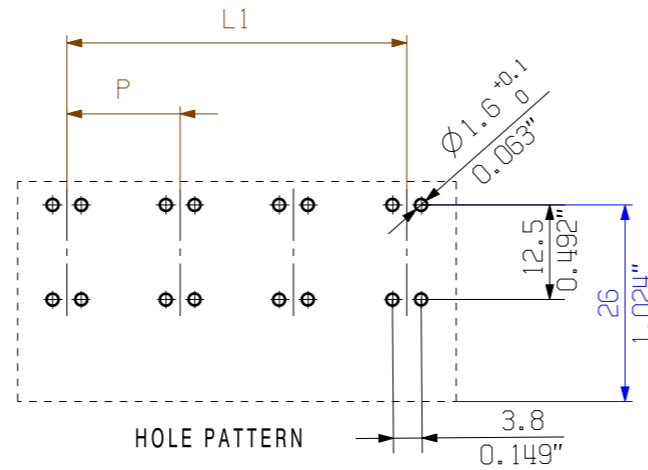
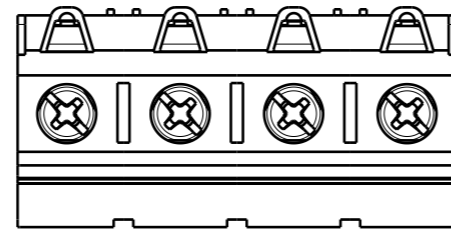
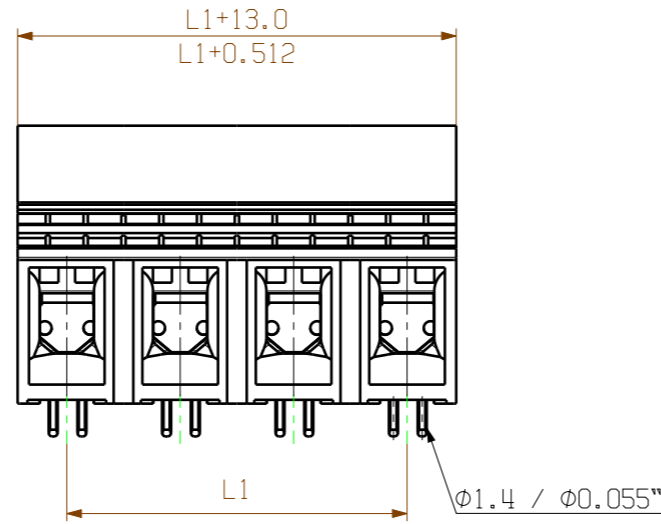


Graph

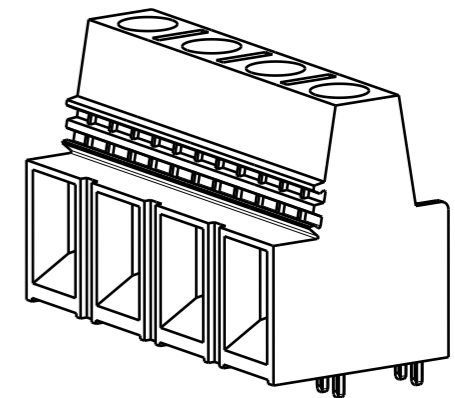
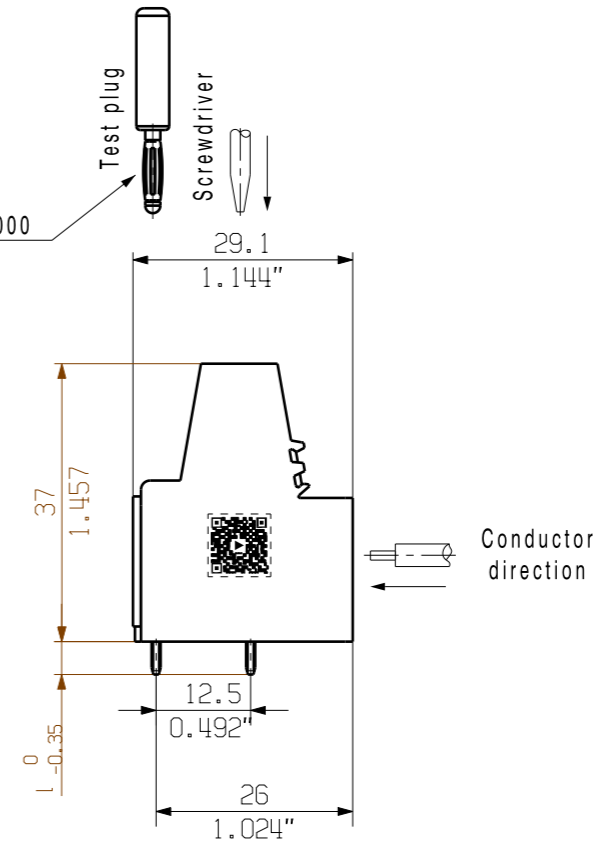


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PS 2.0
Order NO. 031000 0000



P = Pitch
n = No. of Poles
l = Pin length
Shown: LX15.00/04/90/...

PIN LENGTH l	TOLERANCE	n	L1 [mm]	L1 [Inch]
6,5	0/-0,35	10	135,00	5,315
4,5	0/-0,35	9	120,00	4,724
		8	105,00	4,134
		7	90,00	3,543
		6	75,00	2,953
		5	60,00	2,362
		4	45,00	1,772
		3	30,00	1,181
		2	15,00	0,591

For the mounting of PCBs, it should be noted that the rated data 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 60664-1 (VDE 0110). The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 60326-3 very fine.

Weidmüller PCB components are tested to the IEC 60947-7-4 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.

GENERAL TOLERANCE:
DIN ISO 2768-m

	EC00000683	00	Prim PLM Part No.: 009292		Prim ERP Part No.: 1226480000	
	First Issue Date 14.05.2018	Max. nos.			29942 29 Drawing no. Issue no. Sheet 01 of 04 sheets	
	Modification					
	Drawn	Date	Name		LX.. 15.00/./90... LEITERPLATTENKLEMME PCB TERMINAL	
	Responsible					
	Approved	04.12.2018	Xu, Shary			
Scale: 1/1	Size: A3	Drawings Assembly		Product file: 7234 LX 15.00		

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.