

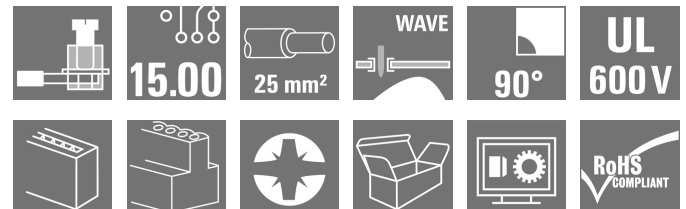
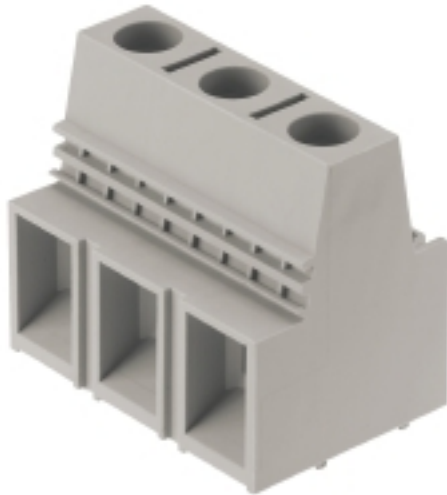
**LX 15.00/05/90 4.5SN GY BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**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**

|              |                                                                                                                                                                                      |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version      | Printed circuit board terminals, 15.00 mm, Number of poles: 5, 90°, Solder pin length (l): 4.5 mm, tinned, Pebble grey, Clamping yoke connection, Clamping range, max. : 25 mm², Box |
| Order No.    | <a href="#">1806460000</a>                                                                                                                                                           |
| Type         | LX 15.00/05/90 4.5SN GY BX                                                                                                                                                           |
| GTIN (EAN)   | 4032248276219                                                                                                                                                                        |
| Qty.         | 20 pc(s).                                                                                                                                                                            |
| Product data | IEC: 1000 V / 101 A / 1.5 - 25 mm²<br>UL: 600 V / 85 A / AWG 16 - AWG 4                                                                                                              |
| Packaging    | Box                                                                                                                                                                                  |

Creation date October 30, 2021 12:28:51 PM CEST

## LX 15.00/05/90 4.5SN GY BX

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Dimensions and weights

|                          |            |                 |            |
|--------------------------|------------|-----------------|------------|
| Depth                    | 29.1 mm    | Depth (inches)  | 1.146 inch |
| Height                   | 41.5 mm    | Height (inches) | 1.634 inch |
| Height of lowest version | 37 mm      | Width           | 73 mm      |
| Width (inches)           | 2.874 inch | Net weight      | 85.5 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               |
| Number of poles                              | 5                          | Pin series quantity                        | 1                        |
| 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               | 4                          | 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                                   | 60 mm                    |
| L1 in inches                                 | 2.362 inch                 | Touch-safe protection acc. to DIN VDE 0470 | IP 10                    |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch     | Protection degree                          | IP20                     |
| Volume resistance                            | 0.50 mΩ                    |                                            |                          |

## Material data

|                                       |                                  |                                       |             |
|---------------------------------------|----------------------------------|---------------------------------------|-------------|
| Insulating material                   | Wemid (PA)                       | Colour                                | Pebble grey |
| Colour chart (similar)                | RAL 7032                         | Insulating material group             | I           |
| Comparative Tracking Index (CTI)      | ≥ 600                            | 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.             | -40 °C      |
| Storage temperature, max.             | 70 °C                            | 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 <sup>2</sup> |
| Clamping range, 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, 1.5 mm <sup>2</sup> min. |                      |
| w. plastic collar ferrule, DIN 46228 pt 4, 16 mm <sup>2</sup> max.  |                      |

## LX 15.00/05/90 4.5SN GY BX

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

|                                                 |                                                                                                                                                                        |                              |                          |       |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------------------------|-------|
| w. wire end ferrule, DIN 46228 pt 1, min.       | 1.5 mm²                                                                                                                                                                |                              |                          |       |
| w. wire end ferrule, DIN 46228 pt 1, max.       | 16 mm²                                                                                                                                                                 |                              |                          |       |
| Plug gauge in accordance with EN 60999 a x b; ø | 6.9 mm x 6.9 mm                                                                                                                                                        |                              |                          |       |
| Clampable conductor                             | Cross-section for conductor connection                                                                                                                                 | Type                         | fine-wired               |       |
|                                                 |                                                                                                                                                                        | nominal                      | 4 mm²                    |       |
|                                                 | wire end ferrule                                                                                                                                                       | Stripping length             | nominal                  | 15 mm |
|                                                 |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H4.0/15</a>  |       |
|                                                 | Cross-section for conductor connection                                                                                                                                 | Type                         | fine-wired               |       |
|                                                 |                                                                                                                                                                        | nominal                      | 6 mm²                    |       |
|                                                 | wire end ferrule                                                                                                                                                       | Stripping length             | nominal                  | 15 mm |
|                                                 |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H6.0/15</a>  |       |
|                                                 | Cross-section for conductor connection                                                                                                                                 | Type                         | fine-wired               |       |
|                                                 |                                                                                                                                                                        | nominal                      | 10 mm²                   |       |
|                                                 | wire end ferrule                                                                                                                                                       | Stripping length             | nominal                  | 15 mm |
|                                                 |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H10.0/15</a> |       |
|                                                 | Cross-section for conductor connection                                                                                                                                 | Type                         | fine-wired               |       |
|                                                 |                                                                                                                                                                        | nominal                      | 16 mm²                   |       |
|                                                 | wire end ferrule                                                                                                                                                       | Stripping length             | nominal                  | 15 mm |
|                                                 |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H16.0/15</a> |       |
| Reference text                                  | Length of ferrules is to be chosen depending on the product and the rated voltage., The outside diameter of the plastic collar should not be larger than the pitch (P) |                              |                          |       |

## Rated data acc. to IEC

|                                                                           |                        |                                                                       |                   |
|---------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------|-------------------|
| tested acc. to standard                                                   | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C)                         | 101 A             |
| Rated current, max. number of poles (Tu=20°C)                             | 101 A                  | Rated current, min. number of poles (Tu=40°C)                         | 101 A             |
| Rated current, max. number 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.              |                                   |                |

**LX 15.00/05/90 4.5SN GY BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Technical data****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.

**Packing**

|           |       |            |        |
|-----------|-------|------------|--------|
| Packaging | Box   | VPE length | 306 mm |
| VPE width | 96 mm | VPE height | 84 mm  |

**Classifications**

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002643    | ETIM 7.0    | EC002643    |
| ETIM 8.0    | EC002643    | ECLASS 9.0  | 27-44-04-01 |
| ECLASS 9.1  | 27-44-04-01 | ECLASS 10.0 | 27-44-04-01 |
| ECLASS 11.0 | 27-46-01-01 |             |             |

**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 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.
- Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

**Approvals**

Approvals



ROHS      Conform

UL File Number Search      E60693

Creation date October 30, 2021 12:28:51 PM CEST

Catalogue status 22.10.2021 / We reserve the right to make technical changes.

## LX 15.00/05/90 4.5SN GY BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany

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

## Technical data

### Downloads

|                                             |                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of the Manufacturer</a>                                                                                                                                                                                                                                                                                    |
| Engineering Data                            | <a href="#">STEP</a>                                                                                                                                                                                                                                                                                                               |
| Engineering Data                            | <a href="#">EPLAN, WSCAD</a>                                                                                                                                                                                                                                                                                                       |
| User Documentation                          | <a href="#">QR-Code product handling video</a>                                                                                                                                                                                                                                                                                     |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>                                                                                                                                                                                                                                                                                           |
| Brochures                                   | <a href="#">FL DRIVES EN</a><br><a href="#">MB DEVICE MANUF. EN</a><br><a href="#">FL DRIVES DE</a><br><a href="#">FL APPL INVERTER EN</a><br><a href="#">FL BASE STATION EN</a><br><a href="#">FL ELEVATOR EN</a><br><a href="#">FL POWER SUPPLY EN</a><br><a href="#">FL 72H SAMPLE SER EN</a><br><a href="#">PO OMNIMATE EN</a> |

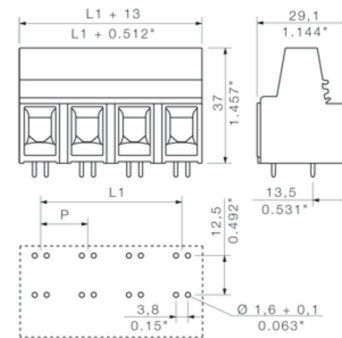
## LX 15.00/05/90 4.5SN GY BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany

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

# Drawings

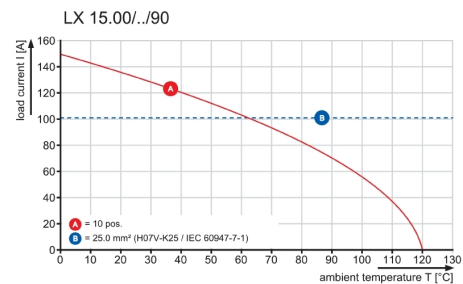
## Dimensional drawing



## Graph



## Graph

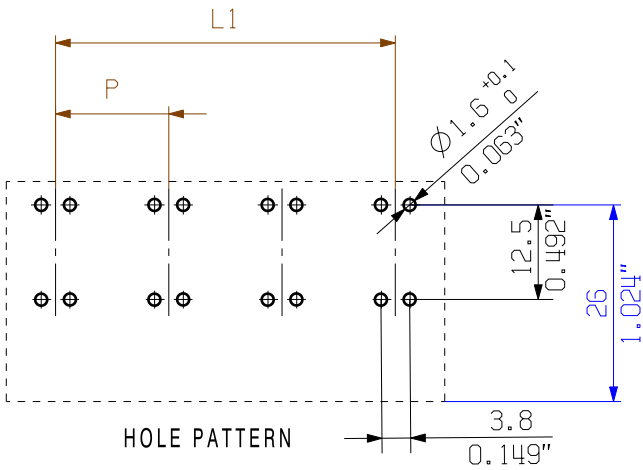
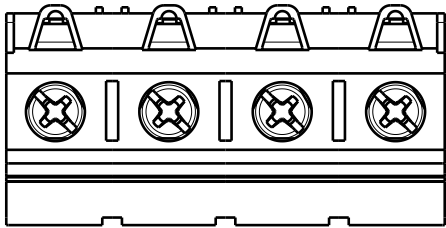
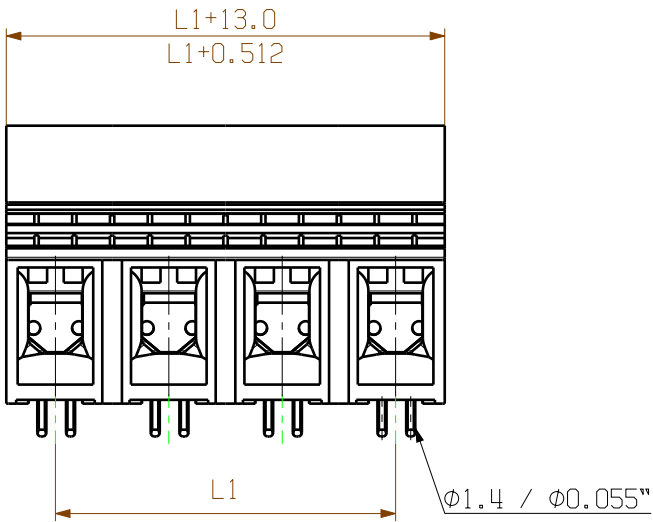


The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. Weidmueller exclusively reserves the right to file for patents, utility models or designs.

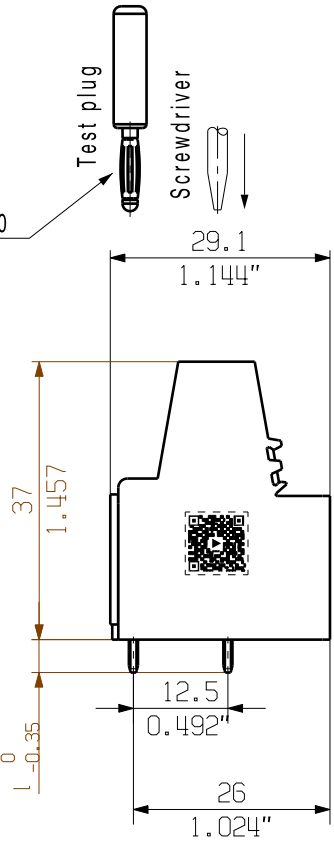
© Weidmueller Interface GmbH & Co. KG

Dimensions without tolerances are no check dimensions

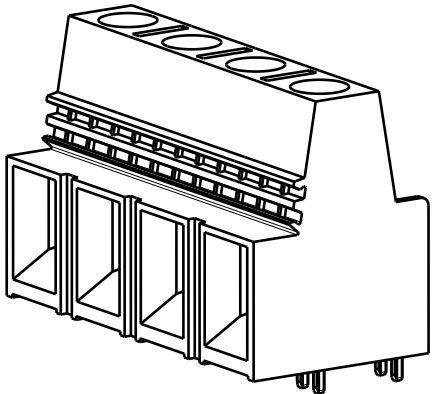
The English version is binding



PS 2.0  
Order NO. 031000 0000



Conductor  
direction



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

|                 |           |
|-----------------|-----------|
| 6,5             | 0/-0,35   |
| 4,5             | 0/-0,35   |
| PIN LENGTH<br>l | TOLERANCE |

|    |         |           |
|----|---------|-----------|
| 10 | 135,00  | 5,315     |
| 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     |
| n  | L1 [mm] | L1 [Inch] |

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<br>14.05.2018 |             | Max. nos.<br>Modification |              | <b>Weidmüller</b>                                                |  |
|                   |                                | Drawn       | Date                      | Name         | <b>LX.. 15.00/./90...</b><br>LEITERPLATTENKLEMME<br>PCB TERMINAL |  |
|                   |                                | Responsible |                           | Xiang, Keqin |                                                                  |  |
| Scale: 1/1        |                                | Approved    | Date                      | Name         |                                                                  |  |
| Size: A3          |                                |             | 04.12.2018                | Xu, Shary    | Product file: 7234 LX 15.00                                      |  |
| Drawings Assembly |                                |             |                           |              |                                                                  |  |

29942

Drawing no. 29

Sheet 01 of 04 sheets

## 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](http://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.

We reserve the right to make technical changes.