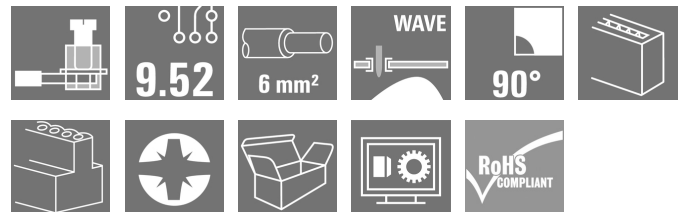


LL 9.52/03/90 5.0SN GY BX

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

www.weidmueller.com

Product image



Similar to illustration

This PCB terminal provides connections for 1000 V, 6 mm² conductor cross-section and 32 A with proven clamping yoke connection at 9.52 mm pitch, conductor outlet direction in 90° design.

General ordering data

| | |
|--------------|---|
| Version | Printed circuit board terminals, 9.52 mm, Number of poles: 3, 90°, Solder pin length (l): 5 mm, tinned, Pebble grey, Clamping yoke connection, Clamping range, max. : 6 mm ² , Box |
| Order No. | 1912980000 |
| Type | LL 9.52/03/90 5.0SN GY BX |
| GTIN (EAN) | 4032248542802 |
| Qty. | 50 Stück |
| Product data | IEC: 1000 V / 32 A / 0.18 - 6 mm ² UL: 300 V / 30 A / AWG 26 - AWG 10 |
| Packaging | Box |

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Technische Daten

Dimensions and weights

| | | | |
|--------------------------|------------|-----------------|------------|
| Depth | 12.5 mm | Depth (inches) | 0.492 inch |
| Height | 26.5 mm | Height (inches) | 1.043 inch |
| Height of lowest version | 21.5 mm | Width | 29.16 mm |
| Width (inches) | 1.148 inch | Net weight | 8.253 g |

Temperatures

| | | | |
|-----------------------------|--------|-----------------------------|--------|
| Operating temperature, min. | -50 °C | Operating temperature, max. | 120 °C |
|-----------------------------|--------|-----------------------------|--------|

System parameters

| | | | |
|--|-----------------------------|--|--------------------------|
| Product family | OMNIMATE Signal - series LL | Wire connection method | Clamping yoke connection |
| Property, clamping point | WireReady | Mounting onto the PCB | THT solder connection |
| Conductor outlet direction | 90° | Pitch in mm (P) | 9.52 mm |
| Pitch in inches (P) | 0.375 inch | Number of poles | 3 |
| Pin series quantity | 1 | Fitted by customer | Yes |
| Number of rows | 1 | Max. adjacent poles per row | 12 |
| Solder pin length (l) | 5 mm | Solder pin dimensions | 0.5 x 1.0 mm |
| Solder eyelet hole diameter (D) | 1.3 mm | Solder eyelet hole diameter tolerance (D)+ | 0, 1 mm |
| Number of solder pins per pole | 1 | Screwdriver blade | 0.8 x 4.0 |
| Screwdriver blade standard | DIN 5264 | Tightening torque, min. | 0.5 Nm |
| Tightening torque, max. | 0.6 Nm | Clamping screw | M 3 |
| Stripping length | 7 mm | L1 in mm | 19.04 mm |
| L1 in inches | 0.75 inch | Touch-safe protection acc. to DIN VDE 0470 | IP 20 |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch | Protection degree | IP20 |

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 | Copper alloy | Contact surface | tinned |
| Coating | 4-6 µm SN | Tinning type | matt |
| Layer structure of solder connection | 2...4 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. | 0.18 mm ² |
| Clamping range, max. | 6 mm ² |
| Wire connection cross section AWG, min. | AWG 26 |
| Wire connection cross section AWG, max. | AWG 10 |
| Solid, min. H05(07) V-U | 0.18 mm ² |
| Solid, max. H05(07) V-U | 6 mm ² |
| Stranded, min. H07V-R | 0.22 mm ² |
| Flexible, min. H05(07) V-K | 0.22 mm ² |
| Flexible, max. H05(07) V-K | 4 mm ² |

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Technische Daten

w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm²
 min.

w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm²
 max.

w. wire end ferrule, DIN 46228 pt 1, 0.5 mm²
 min.

w. wire end ferrule, DIN 46228 pt 1, 4 mm²
 max.

Plug gauge in accordance with EN 60999 a x b; ø 3.6 mm x 3.1 mm; 2.7 mm

| Clampable conductor | Cross-section for conductor connection | Type | fine-wired |
|--|--|------------------------------|-------------------------|
| | | nominal | 0.5 mm ² |
| wire end ferrule | Stripping length | nominal | 6 mm |
| | | Recommended wire-end ferrule | H0.5/6 |
| Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 1 mm ² |
| wire end ferrule | Stripping length | nominal | 6 mm |
| | | Recommended wire-end ferrule | H1.0/6 |
| Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 1.5 mm ² |
| wire end ferrule | Stripping length | nominal | 7 mm |
| | | Recommended wire-end ferrule | H1.5/7 |
| Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 2.5 mm ² |
| wire end ferrule | Stripping length | nominal | 7 mm |
| | | Recommended wire-end ferrule | H2.5/7 |
| Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 0.75 mm ² |
| wire end ferrule | Stripping length | nominal | 6 mm |
| | | Recommended wire-end ferrule | H0.75/6 |

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) | 32 A |
| Rated current, max. number of poles (Tu=20°C) | 32 A | Rated current, min. number of poles (Tu=40°C) | 32 A |
| Rated current, max. number of poles (Tu=40°C) | 32 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 | 690 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 with 120 A |


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Technische Daten

Rated data acc. to CSA

| | | | |
|-----------------------------------|---|-----------------------------------|----------------|
| Institute (CSA) |  | Certificate No. (CSA) | 200039-1815154 |
| Rated voltage (Use group B / CSA) | 300 V | Rated voltage (Use group C / CSA) | 300 V |
| Rated current (Use group B / CSA) | 30 A | Rated current (Use group C / CSA) | 35 A |
| Wire cross-section, AWG, min. | AWG 26 | Wire cross-section, AWG, max. | AWG 10 |
| 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 C / UL 1059) | 300 V |
| Rated current (Use group B / UL 1059) | 30 A | Rated current (Use group C / UL 1059) | 30 A |
| Wire cross-section, AWG, min. | AWG 26 | Wire cross-section, AWG, max. | AWG 10 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Packing

| | | | |
|-----------|--------|------------|--------|
| Packaging | Box | VPE length | 367 mm |
| VPE width | 171 mm | VPE height | 111 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 | ECLASS 12.0 | 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 | <ul style="list-style-type: none"> 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 The data given under CSA relates to a cUL approval - E60693 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. Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months |

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Katalogstand 26.05.2023 / Technische Änderungen vorbehalten

LL 9.52/03/90 5.0SN GY BX

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Technische Daten

Approvals

Approvals



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

Downloads

| | |
|-----------------------------|--|
| Engineering Data | WSCAD |
| Product Change Notification | PCN_2016_273_PL32_Loss_of_nickle_LL_LP_Family_EN PCN_2016_273_PL32_Wegfall_Unternickelung_LL_LP_Familie_DE |
| User Documentation | QR-Code product handling video |
| Catalogues | Catalogues in PDF-format |
| Brochures | 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 |

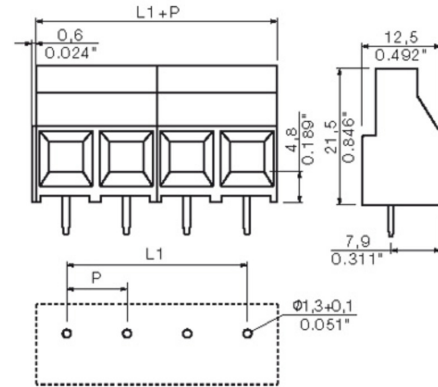
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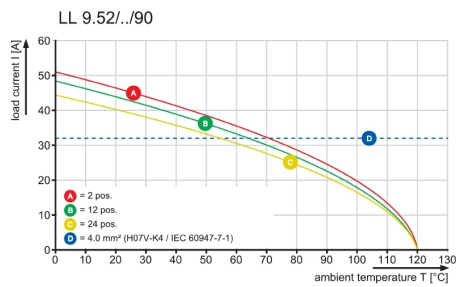
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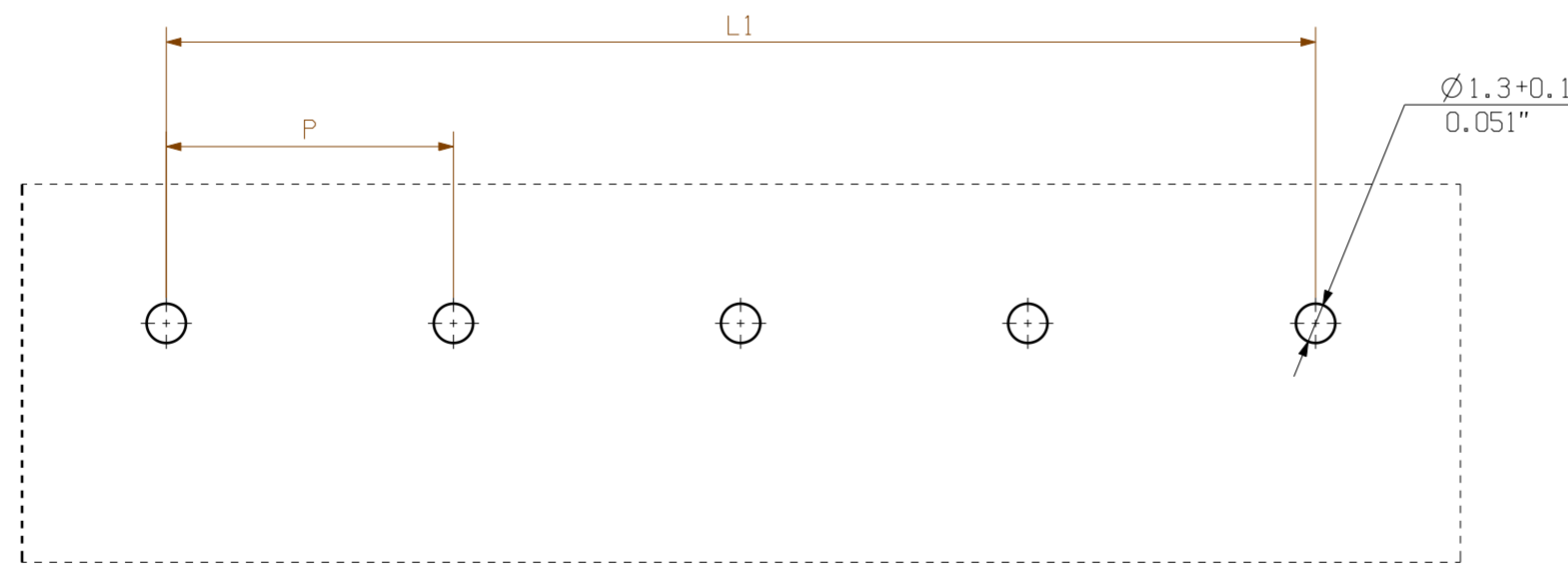
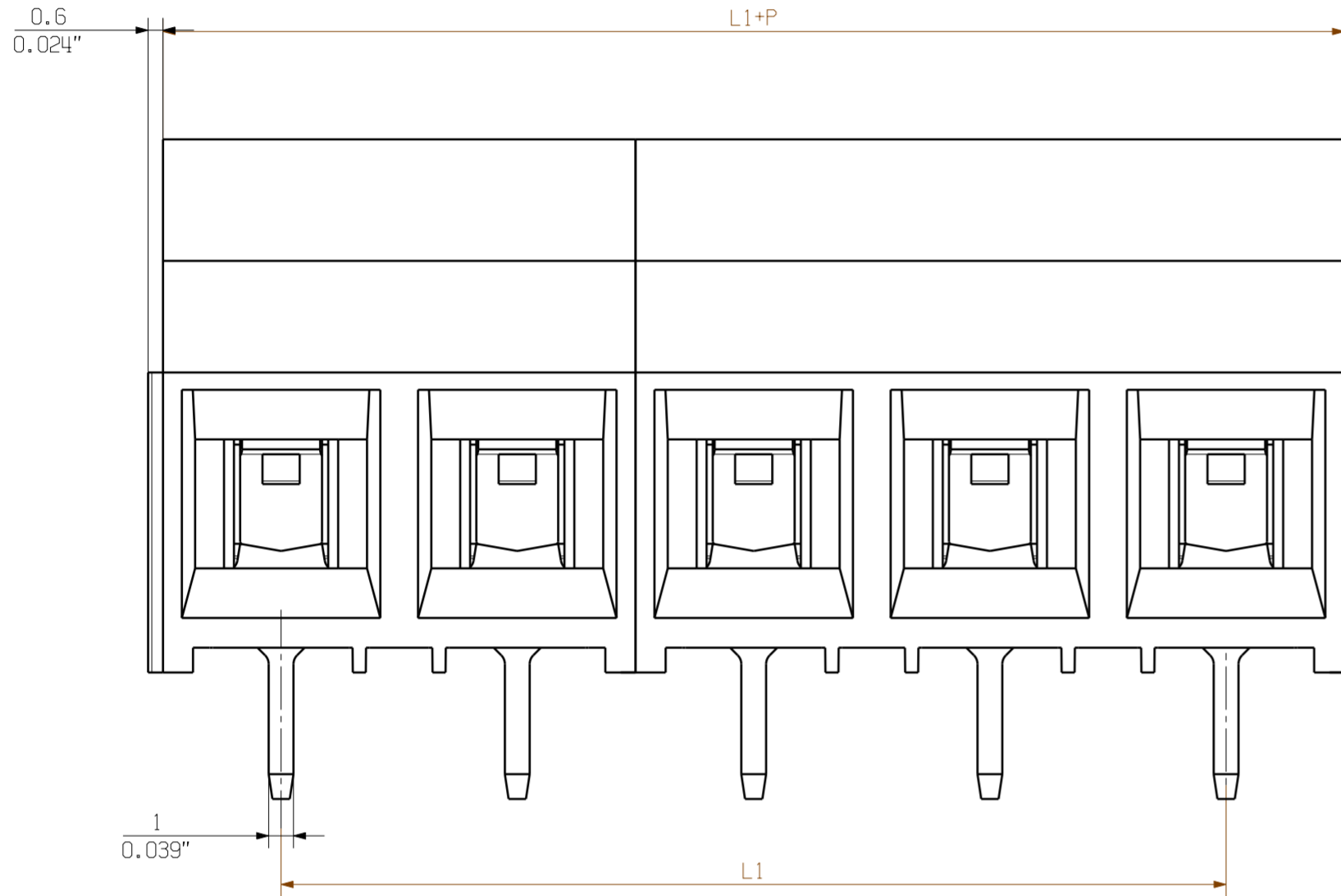
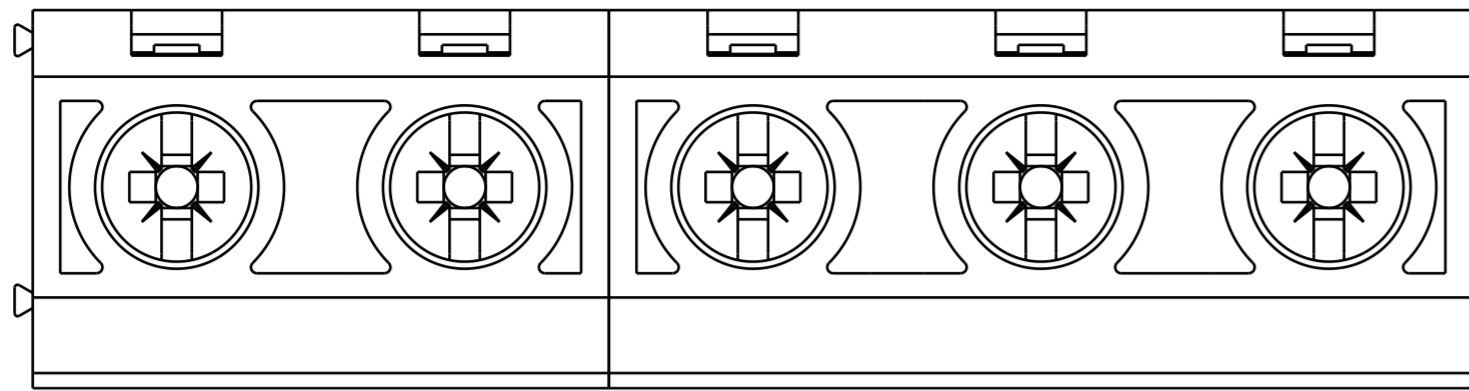
Zeichnungen

Dimensional drawing



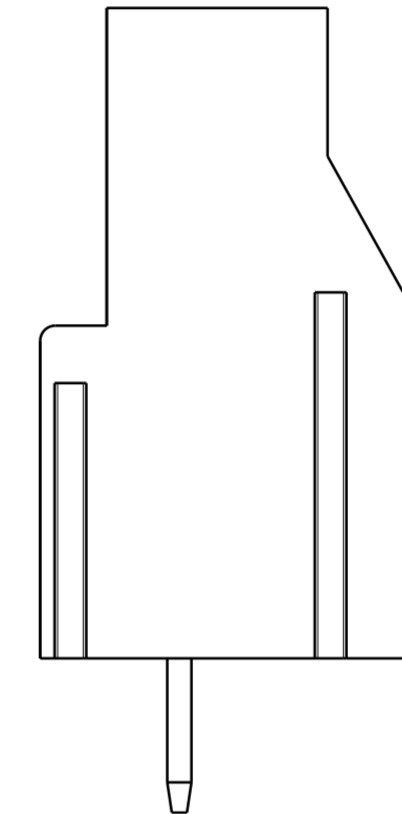
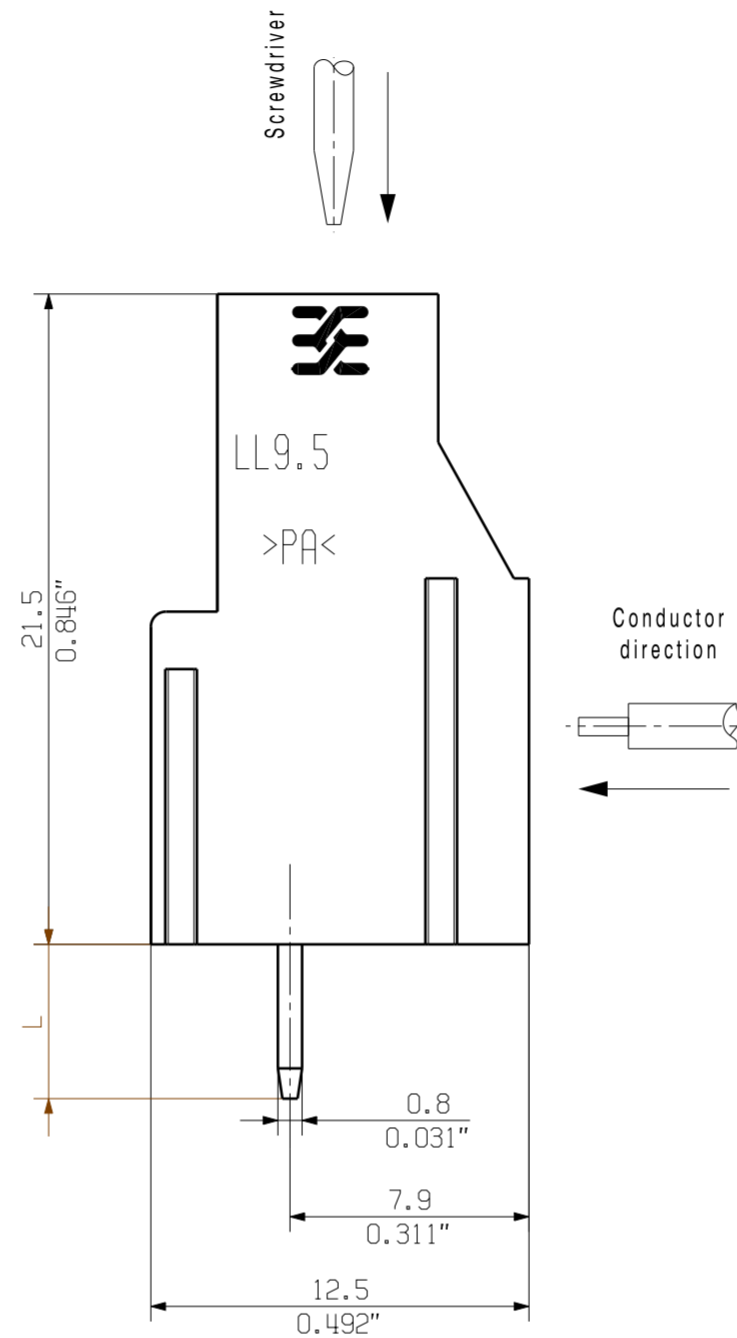
Graph



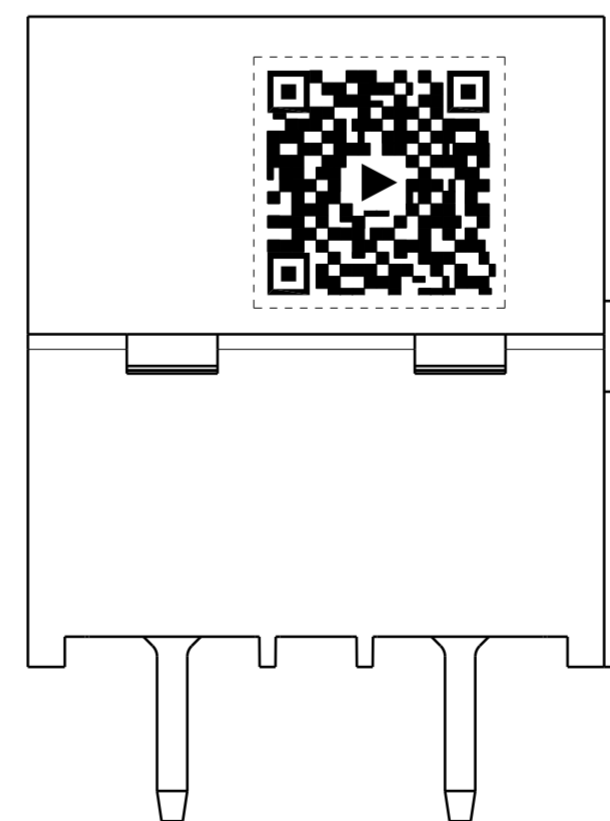


PCB LAYOUT

Customer drawing



| Pin length L | Tolerance |
|--------------|---------------|
| 5.0 | 0.10 -0.25 |



P = 9.52_{0.375} inch Pitch

| | | |
|----|---------|------------|
| 12 | 104.72 | 4.125 |
| 11 | 95.20 | 3.750 |
| 10 | 85.68 | 3.375 |
| 9 | 76.16 | 3.000 |
| 8 | 66.64 | 2.625 |
| 7 | 57.12 | 2.250 |
| 6 | 47.60 | 1.875 |
| 5 | 38.08 | 1.500 |
| 4 | 28.56 | 1.125 |
| 3 | 19.04 | 0.750 |
| 2 | 9.52 | 0.375 |
| N | L1 [mm] | L1 [inch] |
| P | 9.52 mm | 0.375 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 0113). 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.: 026319 | Prim ERP Part No.: 1912970000 |
| | First Issue Date 14.05.2018 | Max. nos. | 41724 | |
| Modification | 10 | | | |
| | Date | Name | LL 9.52/.../90 ... LEITERPLATTENKLEMME PCB TERMINAL | |
| | Drawn | 03.12.2018 | | |
| Responsible | | Xiang, Keqin | | |
| Scale: 4/1 | Size: A2 | Approved | 04.12.2018 | Xu, Shary |
| Drawings Assembly | | | | Product file: 7066 LL 9.52 |

Recommended wave soldering profiles

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 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 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.