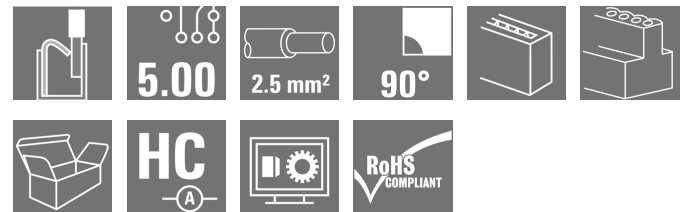


## OMNIMATE Signal - series BL/SL 5.00 BLF 5.00HC/02/90 SN OR BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

### Product image



Similar to illustration

Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.00HC PUSH IN version of the BLZ 5.00HC female connector features a new connection system and a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current. In terms of versatility, the BLF 5.00HC offers just as much as the older versions:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user

### General ordering data

|              |  |
|--------------|--|
| Type         | BLF 5.00HC/02/90 SN OR BX  |
| Order No.    | <a href="#">1980170000</a>   |
| Version      | PCB plug-in connector, female plug, 5.00 mm, Number of poles: 2, 90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm², Box |
| GTIN (EAN)   | 4032248675258  |
| Qty.         | 180 pc(s).   |
| Product data | IEC: 400 V / 24 A / 0.2 - 2.5 mm²<br>UL: 300 V / 18.5 A / AWG 26 - AWG 12  |
| Packaging    | Box  |

Creation date May 3, 2020 3:17:58 AM CEST

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

|            |         |                 |            |
|------------|---------|-----------------|------------|
| Width      | 10 mm   | Width (inches)  | 0.394 inch |
| Height     | 20.8 mm | Height (inches) | 0.819 inch |
| Depth      | 26.2 mm | Depth (inches)  | 1.031 inch |
| Net weight | 4.082 g |                 |            |

**System Parameters**

|  |                                     |  |                     |
|--|-------------------------------------|--|---------------------|
| Product family                               | OMNIMATE Signal - series BL/SL 5.00 | Type of connection                         | Field connection    |
| Wire connection method                       | PUSH IN, Spring connection          | Pitch in mm (P)                            | 5 mm                |
| Pitch in inches (P)                          | 0.197 inch                          | Conductor outlet direction                 | 90°                 |
| Number of poles                              | 2                                   | L1 in mm                                   | 5 mm                |
| L1 in inches                                 | 0.197 inch                          | Number of rows                             | 1                   |
| Pin series quantity                          | 1                                   | Rated cross-section                        | 2.5 mm <sup>2</sup> |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch              | Touch-safe protection acc. to DIN VDE 0470 | IP 20               |
| Volume resistance                            | ≤ 5mΩ                               | Can be coded                               | Yes                 |
| Stripping length                             | 10 mm                               | Screwdriver blade                          | 0.6 x 3.5           |
| Screwdriver blade standard                   | DIN 5264                            | Plugging cycles                            | 25                  |
| Plugging force/pole, max.                    | 10 N                                | Pulling force/pole, max.                   | 12 N                |

**Material data**

|                                       |                          |                                       |                     |
|---------------------------------------|--------------------------|---------------------------------------|---------------------|
| Insulating material                   | PBT                      | Colour                                | orange              |
| Colour of operational elements        | black                    | Material of operational elements      | PBT                 |
| Colour chart (similar)                | RAL 2000                 | Insulating material group             | IIIa                |
| Comparative Tracking Index (CTI)      | ≥ 200                    | Insulation strength                   | ≥ 10 <sup>8</sup> Ω |
| UL 94 flammability rating             | V-0                      | GWFI                                  | 960 °C              |
| Contact material                      | CuSn                     | Contact surface                       | tinned              |
| Layer structure of plug contact       | 4-8 μm Sn hot-dip tinned | Storage temperature, min.             | -25 °C              |
| Storage temperature, max.             | 50 °C                    | Max. relative humidity during storage | 70 %                |
| Operating temperature, min.           | -50 °C                   | Operating temperature, max.           | 100 °C              |
| Temperature range, installation, min. | -30 °C                   | Temperature range, installation, max. | 100 °C              |

**Conductors suitable for connection**

|  |                      |
|--|----------------------|
| Clamping range, min.   | 0.13 mm <sup>2</sup> |
| Clamping range, max.   | 3.31 mm <sup>2</sup> |
| Wire connection cross section AWG, min.                              | AWG 26               |
| Wire connection cross section AWG, max.                              | AWG 12               |
| Solid, min. H05(07) V-U  | 0.2 mm <sup>2</sup>  |
| Solid, max. H05(07) V-U  | 2.5 mm <sup>2</sup>  |
| Flexible, min. H05(07) V-K   | 0.2 mm <sup>2</sup>  |
| Flexible, max. H05(07) V-K   | 2.5 mm <sup>2</sup>  |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.25 mm <sup>2</sup> min. |                      |
| w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm <sup>2</sup> max.  |                      |
| w. wire end ferrule, DIN 46228 pt 1, 0.25 mm <sup>2</sup> min.       |                      |
| w. wire end ferrule, DIN 46228 pt 1, 2.5 mm <sup>2</sup> max.        |                      |

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**Technical data**

|   |  |                              |                            |       |
|---|--|------------------------------|----------------------------|-------|
| Plug gauge in accordance with EN 60999 a x b; ø | 2.8 mm x 2.0 mm  |                              |                            |       |
| Clampable conductor                             | Cross-section for conductor connection   | Type                         | fine-wired                 |       |
|   |  | nominal                      | 0.5 mm <sup>2</sup>        |       |
|   | wire end ferrule   | Stripping length             | nominal                    | 12 mm |
|   |  | Recommended wire-end ferrule | <a href="#">H0.5/16 OR</a> |       |
|   |  | Stripping length             | nominal                    | 10 mm |
|   |  | Recommended wire-end ferrule | <a href="#">H0.5/10</a>    |       |
|   | Cross-section for conductor connection   | Type                         | fine-wired                 |       |
|   |  | nominal                      | 0.75 mm <sup>2</sup>       |       |
|   | wire end ferrule   | Stripping length             | nominal                    | 12 mm |
|   |  | Recommended wire-end ferrule | <a href="#">H0.75/16 W</a> |       |
|   |  | Stripping length             | nominal                    | 10 mm |
|   |  | Recommended wire-end ferrule | <a href="#">H0.75/10</a>   |       |
|   | Cross-section for conductor connection   | Type                         | fine-wired                 |       |
|   |  | nominal                      | 1 mm <sup>2</sup>          |       |
|   | wire end ferrule   | Stripping length             | nominal                    | 12 mm |
|   |  | Recommended wire-end ferrule | <a href="#">H1.0/16D R</a> |       |
|   |  | Stripping length             | nominal                    | 10 mm |
|   |  | Recommended wire-end ferrule | <a href="#">H1.0/10</a>    |       |
|   | Cross-section for conductor connection   | Type                         | fine-wired                 |       |
|   |  | nominal                      | 1.5 mm <sup>2</sup>        |       |
|   | wire end ferrule   | Stripping length             | nominal                    | 10 mm |
|   |  | Recommended wire-end ferrule | <a href="#">H1.5/10</a>    |       |
|   |  | Stripping length             | nominal                    | 12 mm |
|   |  | Recommended wire-end ferrule | <a href="#">H1.5/16 R</a>  |       |
| Cross-section for conductor connection          | Type   | fine-wired                   |                            |       |
|   | nominal  | 2.5 mm <sup>2</sup>          |                            |       |
| wire end ferrule                                | Stripping length   | nominal                      | 10 mm                      |       |
|   | Recommended wire-end ferrule   | <a href="#">H2.5/10</a>      |                            |       |
| Reference text                                  | The outside diameter of the plastic collar should not be larger than the pitch (P). Length of ferrules is to be chosen depending on the product and the rated voltage. |                              |                            |       |
| Max. clamping range                             | 3.31 mm <sup>2</sup>   |                              |                            |       |

**Rated data acc. to IEC**

|   |                        |   |                   |
|---|------------------------|---|-------------------|
| tested acc. to standard   | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C)                         | 24 A              |
| Rated current, max. number of poles (Tu=20°C)                             | 19 A                   | Rated current, min. number of poles (Tu=40°C)                         | 21 A              |
| Rated current, max. number of poles (Tu=40°C)                             | 16.5 A                 | Rated voltage for surge voltage class / pollution degree II/2         | 400 V             |
| Rated voltage for surge voltage class / pollution degree III/2            | 320 V                  | Rated voltage for surge voltage class / pollution degree III/3        | 250 V             |
| Rated impulse voltage for surge voltage class/ pollution degree II/2      | 4 kV                   | Rated impulse voltage for surge voltage class/ pollution degree III/2 | 4 kV              |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 4 kV                   | Short-time withstand current resistance                               | 3 x 1s with 120 A |

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**Technical data****Rated data acc. to CSA**

|                                   |   |                                   |                |
|-----------------------------------|---|-----------------------------------|----------------|
| Institute (CSA)                   |  | Certificate No. (CSA)             | 200039-1121690 |
| Rated voltage (Use group B / CSA) | 300 V   | Rated voltage (Use group D / CSA) | 300 V          |
| Rated current (Use group B / CSA) | 10 A  | Rated current (Use group D / CSA) | 10 A           |
| Wire cross-section, AWG, min.     | AWG 12  | Wire cross-section, AWG, max.     | AWG 26         |
| 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 D / UL 1059) | 300 V  |
| Rated current (Use group B / UL 1059) | 18,5 A  | Rated current (Use group D / UL 1059) | 10 A   |
| Wire cross-section, AWG, min.         | AWG 26  | Wire cross-section, AWG, max.         | AWG 12 |
| Reference to approval values          | Specifications are maximum values, details - see approval certificate.            |                                       |        |

**Packing**

|           |        |            |        |
|-----------|--------|------------|--------|
| Packaging | Box    | VPE length | 30 mm  |
| VPE width | 135 mm | VPE height | 350 mm |

**Classifications**

|             |             |            |             |
|-------------|-------------|------------|-------------|
| ETIM 6.0    | EC002638    | ETIM 7.0   | EC002638    |
| eClass 9.0  | 27-44-03-09 | eClass 9.1 | 27-44-03-09 |
| eClass 10.0 | 27-44-03-09 | UNSPSC     | 30-21-18-01 |

**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>• 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>• Crimping shape "A" for wire end ferrules with PZ 6/5 crimping tool recommended.</li> <li>• The test point can only be used as potential-pickup point.</li> </ul> |
| 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.  |

Creation date May 3, 2020 3:17:58 AM CEST

Catalogue status 17.04.2020 / We reserve the right to make technical changes.

**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 BUILDING SAFETY EN](#)
- [FL APPL LED LIGHTING EN](#)
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- [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

[STEP](#)

White paper PUSH IN wire connection

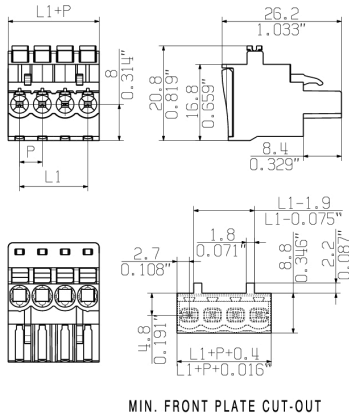
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**Drawings**

**Dimensional drawing**

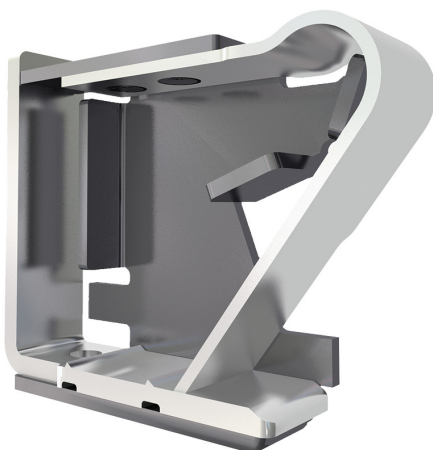


**Product benefits**



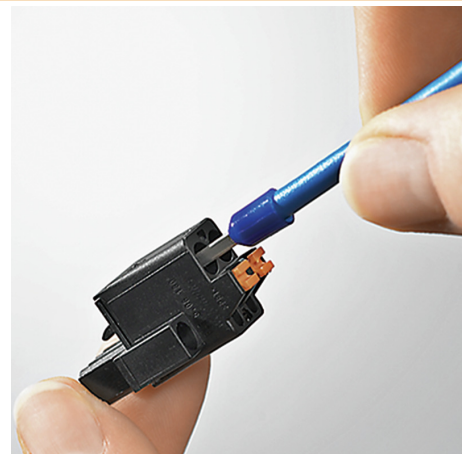
Uncompromising functionality  
High vibration resistance

**Product benefits**



Solid PUSH IN contact  
Safe and durable

**Product benefits**



Cost-effective wiring  
Quick and intuitive operation

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**Mating connector (fully pluggable)**
**SL 5.00/90**


Male connectors with 90° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

| Type       | SL 5.00/02/90 3.2SN OR ... | Version  | Product data                          | Packaging |
|------------|----------------------------|--|---------------------------------------|-----------|
| Order No.  | <a href="#">1571130000</a> | PCB plug-in connector, male header, open side, THT solder connection, 5.00 mm, Number of poles: 2, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box | IEC: 400 V / 18 A<br>UL: 300 V / 15 A | Box       |
| GTIN (EAN) | 4008190156121              |  |                                       |           |
| Qty.       | 100 pc(s).                 |  |                                       |           |
| Type       | SL 5.00/02/90 4.5SN BK ... | Version  | Product data                          | Packaging |
| Order No.  | <a href="#">1625990000</a> | PCB plug-in connector, male header, open side, THT solder connection, 5.00 mm, Number of poles: 2, 90°, Solder pin length (l): 4.5 mm, tinned, black, Box  | IEC: 400 V / 18 A<br>UL: 300 V / 15 A | Box       |
| GTIN (EAN) | 4008190197292              |  |                                       |           |
| Qty.       | 100 pc(s).                 |  |                                       |           |

**SLDV-THR 5.00/180G**


High-temperature resistant, double level, laterally offset, closed ended male header, with solder flange option. 1.5 mm solder pin suitable for reflow soldering. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

| Type       | SLDV-THR 5.00/04/180G 3 ... | Version  | Product data                          | Packaging |
|------------|-----------------------------|--|---------------------------------------|-----------|
| Order No.  | <a href="#">1882690000</a>  | PCB plug-in connector, male header, closed side, THT/THR solder connection, 5.00 mm, Number of poles: 4, 180°, Solder pin length (l): 3.2 mm, tinned, black, Box | IEC: 400 V / 15 A<br>UL: 300 V / 10 A | Box       |
| GTIN (EAN) | 4032248486267               |  |                                       |           |
| Qty.       | 50 pc(s).                   |  |                                       |           |
| Type       | SLDV-THR 5.00/04/180G 1 ... | Version  | Product data                          | Packaging |
| Order No.  | <a href="#">1894980000</a>  | PCB plug-in connector, male header, closed side, THT/THR solder connection, 5.00 mm, Number of poles: 4, 180°, Solder pin length (l): 1.5 mm, tinned, black, Box | IEC: 400 V / 15 A<br>UL: 300 V / 10 A | Box       |
| GTIN (EAN) | 4032248509690               |  |                                       |           |
| Qty.       | 50 pc(s).                   |  |                                       |           |

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**Mating connector (fully pluggable)**
**SL-SMT 5.00HC/180G Box**


High-temperature-resistant pin header, packed in box or tape. On tape, with 1.5 mm solder pin, optimised for automatic assembly. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded. HC = High Current.

**General ordering data**

| Type       | SL-SMT 5.00/02/180G 1.5 ... | Version  | Product data                              | Packaging |
|------------|-----------------------------|--|---|-----------|
| Order No.  | <a href="#">1796630000</a>  | PCB plug-in connector, male header, closed side, THT/THR solder connection, 5.00 mm, Number of poles: 2, 180°, Solder pin length (l): 1.5 mm, tinned, black, Box | IEC: 400 V / 27.5 A<br>UL: 300 V / 18.5 A | Box       |
| GTIN (EAN) | 4032248237258               |  |   |           |
| Qty.       | 100 pc(s).                  |  |   |           |
| Type       | SL-SMT 5.00HC/02/180G 3 ... | Version  | Product data                              | Packaging |
| Order No.  | <a href="#">1841160000</a>  | PCB plug-in connector, male header, closed side, THT/THR solder connection, 5.00 mm, Number of poles: 2, 180°, Solder pin length (l): 3.2 mm, tinned, black, Box | IEC: 400 V / 27.5 A<br>UL: 300 V / 18.5 A | Box       |
| GTIN (EAN) | 4032248352050               |  |   |           |
| Qty.       | 100 pc(s).                  |  |   |           |

**SLD 5.00/90G**


2-tier male header with parallel pin arrangement. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

| Type       | SLD 5.00/04/90G 3.2 SN ... | Version  | Product data                          | Packaging |
|------------|----------------------------|--|---------------------------------------|-----------|
| Order No.  | <a href="#">1614350000</a> | PCB plug-in connector, male header, closed side, THT solder connection, 5.00 mm, Number of poles: 4, 90°, Solder pin length (l): 3.2 mm, tinned, orange, Box | IEC: 400 V / 11 A<br>UL: 300 V / 10 A | Box       |
| GTIN (EAN) | 4008190028855              |  |                                       |           |
| Qty.       | 50 pc(s).                  |  |                                       |           |



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**Mating connector (fully pluggable)**
**SL-SMT 5.00HC/90 Tape**


High-temperature-resistant, 90° angled, open male header. Packed in box or tape. On tape, with 1.5 mm solder pin, optimised for automatic assembly. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded. HC = High Current.

**General ordering data**

| Type       | SL-SMT 5.00HC/02/90 1.5 ... | Version  | Product data                              | Packaging |
|------------|-----------------------------|--|---|-----------|
| Order No.  | <a href="#">1797620000</a>  | PCB plug-in connector, male header, open side, THT/THR solder connection, 5.00 mm, Number of poles: 2, 90°, Solder pin length (l): 1.5 mm, tinned, black, Tape | IEC: 400 V / 27.5 A<br>UL: 300 V / 18.5 A | Tape      |
| GTIN (EAN) | 4032248239627               |  |   |           |
| Qty.       | 350 pc(s).                  |  |   |           |

**SL-SMT 5.00HC/180 Box**


High-temperature-resistant, straight, open pin header. Packed in box or tape. On tape and with 1.5 mm solder pin, optimised for automatic assembly. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded. HC = High Current.

**General ordering data**

| Type       | SL-SMT 5.00HC/02/180 1. ... | Version  | Product data                              | Packaging |
|------------|-----------------------------|--|---|-----------|
| Order No.  | <a href="#">1796480000</a>  | PCB plug-in connector, male header, open side, THT/THR solder connection, 5.00 mm, Number of poles: 2, 180°, Solder pin length (l): 1.5 mm, tinned, black, Box | IEC: 400 V / 27.5 A<br>UL: 300 V / 18.5 A | Box       |
| GTIN (EAN) | 4032248237012               |  |   |           |
| Qty.       | 100 pc(s).                  |  |   |           |
| Type       | SL-SMT 5.00HC/02/180 3. ... | Version  | Product data                              | Packaging |
| Order No.  | <a href="#">1840920000</a>  | PCB plug-in connector, male header, open side, THT/THR solder connection, 5.00 mm, Number of poles: 2, 180°, Solder pin length (l): 3.2 mm, tinned, black, Box | IEC: 400 V / 27.5 A<br>UL: 300 V / 18.5 A | Box       |
| GTIN (EAN) | 4032248351817               |  |   |           |
| Qty.       | 100 pc(s).                  |  |   |           |

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**Mating connector (fully pluggable)**
**SL 5.00/180**


Male connectors with straight outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

| Type       | SL 5.00/02/180 3.2SN OR ... | Version   | Product data                          | Packaging |
|------------|-----------------------------|---|---------------------------------------|-----------|
| Order No.  | <a href="#">1581320000</a>  | PCB plug-in connector, male header, open side, THT solder connection, 5.00 mm, Number of poles: 2, 180°, Solder pin length (l): 3.2 mm, tinned, orange, Box | IEC: 400 V / 18 A<br>UL: 300 V / 15 A | Box       |
| GTIN (EAN) | 4008190180058               |   |                                       |           |
| Qty.       | 100 pc(s).                  |   |                                       |           |

**SL 5.00/180B**


Male connectors with straight outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

| Type       | SL 5.00/02/180B 3.2SN O ... | Version   | Product data                          | Packaging |
|------------|-----------------------------|---|---------------------------------------|-----------|
| Order No.  | <a href="#">1581780000</a>  | PCB plug-in connector, male header, Dovetails for fixing blocks, THT solder connection, 5.00 mm, Number of poles: 2, 180°, Solder pin length (l): 3.2 mm, tinned, orange, Box | IEC: 400 V / 18 A<br>UL: 300 V / 15 A | Box       |
| GTIN (EAN) | 4008190048730               |   |                                       |           |
| Qty.       | 100 pc(s).                  |   |                                       |           |

**OMNIMATE Signal - series BL/SL 5.00  
BLF 5.00HC/02/90 SN OR BX**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

**Mating connector (fully pluggable)**
**SL 5.00/90B**


Male connectors with 90° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

| Type       | SL 5.00/02/90B 3.2SN OR ... | Version  | Product data      | Packaging |
|------------|-----------------------------|--|-------------------|-----------|
| Order No.  | <a href="#">1580860000</a>  | PCB plug-in connector, male header, Dovetails for fixing blocks, THT | IEC: 400 V / 18 A | Box       |
| GTIN (EAN) | 4008190054489               | solder connection, 5.00 mm, Number of poles: 2, 90°, Solder pin      | UL: 300 V / 15 A  |           |
| Qty.       | 100 pc(s).                  | length (l): 3.2 mm, tinned, orange, Box                              |                   |           |

**SL 5.00/135**

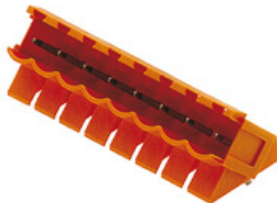

Male connectors with 135° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

| Type       | SL 5.00/02/135 3.2SN OR ... | Version   | Product data      | Packaging |
|------------|-----------------------------|---|-------------------|-----------|
| Order No.  | <a href="#">1630250000</a>  | PCB plug-in connector, male header, open side, THT solder             | IEC: 400 V / 17 A | Box       |
| GTIN (EAN) | 4008190203672               | connection, 5.00 mm, Number of poles: 2, 135°, Solder pin length (l): | UL: 300 V / 15 A  |           |
| Qty.       | 100 pc(s).                  | 3.2 mm, tinned, orange, Box   |                   |           |

**OMNIMATE Signal - series BL/SL 5.00  
BLF 5.00HC/02/90 SN OR BX**

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Germany  
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Fax: +49 5231 14-292083  
www.weidmueller.com

**Mating connector (fully pluggable)**
**SL 5.00/135B**


Male connectors with 135° outlet direction. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

| Type       | SL 5.00/02/135B 3.2SN O ... | Version  | Product data      | Packaging |
|------------|-----------------------------|--|-------------------|-----------|
| Order No.  | <a href="#">1630480000</a>  | PCB plug-in connector, male header, Dovetails for fixing blocks, THT | IEC: 400 V / 17 A | Box       |
| GTIN (EAN) | 4008190203900               | solder connection, 5.00 mm, Number of poles: 2, 135°, Solder pin     | UL: 300 V / 15 A  |           |
| Qty.       | 100 pc(s).                  | length (l): 3.2 mm, tinned, orange, Box                              |                   |           |

**SLD 5.00/180G**


2-tier male header with parallel pin arrangement. The solder pin length is optimised for wave flow soldering. The pin headers provide space for labelling and can be coded.

**General ordering data**

| Type       | SLD 5.00/04/180G 3.2SN ... | Version   | Product data      | Packaging |
|------------|----------------------------|---|-------------------|-----------|
| Order No.  | <a href="#">1614810000</a> | PCB plug-in connector, male header, closed side, THT solder           | IEC: 400 V / 11 A | Box       |
| GTIN (EAN) | 4008190038984              | connection, 5.00 mm, Number of poles: 4, 180°, Solder pin length (l): | UL: 300 V / 10 A  |           |
| Qty.       | 50 pc(s).                  | 3.2 mm, tinned, orange, Box   |                   |           |

**OMNIMATE Signal - series BL/SL 5.00  
BLF 5.00HC/02/90 SN OR BX**

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Fax: +49 5231 14-292083  
www.weidmueller.com

**Mating connector (fully pluggable)**
**SL-SMT 5.00HC/90 Box**


High-temperature-resistant, 90° angled, open male header. Packed in box or tape. On tape, with 1.5 mm solder pin, optimised for automatic assembly. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded. HC = High Current.

**General ordering data**

| Type       | SL-SMT 5.00HC/02/90 1.5 ... | Version   | Product data                              | Packaging |
|------------|-----------------------------|---|---|-----------|
| Order No.  | <a href="#">1796930000</a>  | PCB plug-in connector, male header, open side, THT/THR solder connection, 5.00 mm, Number of poles: 2, 90°, Solder pin length (l): 1.5 mm, tinned, black, Box | IEC: 400 V / 27.5 A<br>UL: 300 V / 18.5 A | Box       |
| GTIN (EAN) | 4032248237715               |   |   |           |
| Qty.       | 100 pc(s).                  |   |   |           |
| Type       | SL-SMT 5.00HC/02/90 3.2 ... | Version   | Product data                              | Packaging |
| Order No.  | <a href="#">1839890000</a>  | PCB plug-in connector, male header, open side, THT/THR solder connection, 5.00 mm, Number of poles: 2, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box | IEC: 400 V / 27.5 A<br>UL: 300 V / 18.5 A | Box       |
| GTIN (EAN) | 4032248350537               |   |   |           |
| Qty.       | 100 pc(s).                  |   |   |           |

**SL-SMT 5.00HC/90G Tape**


High-temperature-resistant pin header, packed in box or tape. On tape, with 1.5 mm solder pin, optimised for automatic assembly. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded. HC = High Current.

**General ordering data**

| Type       | SL-SMT 5.00HC/02/90G 1. ... | Version  | Product data                              | Packaging |
|------------|-----------------------------|--|---|-----------|
| Order No.  | <a href="#">1797690000</a>  | PCB plug-in connector, male header, closed side, THT/THR solder connection, 5.00 mm, Number of poles: 2, 90°, Solder pin length (l): 1.5 mm, tinned, black, Tape | IEC: 400 V / 27.5 A<br>UL: 300 V / 18.5 A | Tape      |
| GTIN (EAN) | 4032248239696               |  |   |           |
| Qty.       | 350 pc(s).                  |  |   |           |

**OMNIMATE Signal - series BL/SL 5.00  
BLF 5.00HC/02/90 SN OR BX**

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Fax: +49 5231 14-292083  
www.weidmueller.com

**Mating connector (fully pluggable)**
**SL-SMT 5.00HC/180 Tape**


High-temperature-resistant, straight, open pin header. Packed in box or tape. On tape and with 1.5 mm solder pin, optimised for automatic assembly. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded. HC = High Current.

**General ordering data**

| Type       | SL-SMT 5.00HC/02/180 1. ... | Version   | Product data        | Packaging |
|------------|-----------------------------|---|---------------------|-----------|
| Order No.  | <a href="#">1797800000</a>  | PCB plug-in connector, male header, open side, THT/THR solder         | IEC: 400 V / 27.5 A | Tape      |
| GTIN (EAN) | 4032248239801               | connection, 5.00 mm, Number of poles: 2, 180°, Solder pin length (l): | UL: 300 V / 18.5 A  |           |
| Qty.       | 250 pc(s).                  | 1.5 mm, tinned, black, Tape   |                     |           |

**SL-SMT 5.00HC/180G Tape**


High-temperature-resistant pin header, packed in box or tape. On tape, with 1.5 mm solder pin, optimised for automatic assembly. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded. HC = High Current.

**General ordering data**

| Type       | SL-SMT 5.00HC/02/180G 1 ... | Version   | Product data        | Packaging |
|------------|-----------------------------|---|---------------------|-----------|
| Order No.  | <a href="#">1797870000</a>  | PCB plug-in connector, male header, closed side, THT/THR solder       | IEC: 400 V / 27.5 A | Tape      |
| GTIN (EAN) | 4032248239870               | connection, 5.00 mm, Number of poles: 2, 180°, Solder pin length (l): | UL: 300 V / 18.5 A  |           |
| Qty.       | 250 pc(s).                  | 1.5 mm, tinned, black, Tape   |                     |           |

**OMNIMATE Signal - series BL/SL 5.00  
BLF 5.00HC/02/90 SN OR BX**

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 Germany  
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 Fax: +49 5231 14-292083  
 www.weidmueller.com

**Mating connector (fully pluggable)**
**SL-SMT 5.00HC/90G Box**


High-temperature-resistant pin header, packed in box or tape. On tape, with 1.5 mm solder pin, optimised for automatic assembly. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded. HC = High Current.

**General ordering data**

| Type       | SL-SMT 5.00HC/02/90G 3. ... | Version   | Product data                              | Packaging |
|------------|-----------------------------|---|---|-----------|
| Order No.  | <a href="#">1840120000</a>  | PCB plug-in connector, male header, closed side, THT/THR solder connection, 5.00 mm, Number of poles: 2, 90°, Solder pin length (l): 3.2 mm, tinned, black, Box | IEC: 400 V / 27.5 A<br>UL: 300 V / 18.5 A | Box       |
| GTIN (EAN) | 4032248350865               |   |   |           |
| Qty.       | 100 pc(s).                  |   |   |           |
| Type       | SL-SMT 5.00HC/02/90G 1. ... | Version   | Product data                              | Packaging |
| Order No.  | <a href="#">1797080000</a>  | PCB plug-in connector, male header, closed side, THT/THR solder connection, 5.00 mm, Number of poles: 2, 90°, Solder pin length (l): 1.5 mm, tinned, black, Box | IEC: 400 V / 27.5 A<br>UL: 300 V / 18.5 A | Box       |
| GTIN (EAN) | 4032248237869               |   |   |           |
| Qty.       | 100 pc(s).                  |   |   |           |

## OMNIMATE Signal - series BL/SL 5.00 BLF 5.00HC/02/90 SN OR BX

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# Accessories

## Coding elements



**Only connects what is supposed to be connected: the right connection at the right place.**

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

### General ordering data

| Type       | BLZ/SL KO BK BX            | Version  | Product data | Packaging |
|------------|----------------------------|--|--------------|-----------|
| Order No.  | <a href="#">1545710000</a> | PCB plug-in connector, Accessories, Coding element, black, Number  |              | Box       |
| GTIN (EAN) | 4008190087142              | of poles: 1  |              |           |
| Qty.       | 50 pc(s).                  |  |              |           |
| Type       | BLZ/SL KO OR BX            | Version  | Product data | Packaging |
| Order No.  | <a href="#">1573010000</a> | PCB plug-in connector, Accessories, Coding element, orange, Number |              | Box       |
| GTIN (EAN) | 4008190048396              | of poles: 1  |              |           |
| Qty.       | 100 pc(s).                 |  |              |           |

## Slotted screwdriver

Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip



### General ordering data

| Type       | SDS 0.6X3.5X200            | Version   |
|------------|----------------------------|---|
| Order No.  | <a href="#">9010110000</a> | Screwdriver, Blade width (B): 3.5 mm, Blade length: 200 mm, Blade thickness (A): 0.6 mm |
| GTIN (EAN) | 4032248300754              |   |
| Qty.       | 1 pc(s).                   |   |
| Type       | SDS 0.6X3.5X100            | Version   |
| Order No.  | <a href="#">9008330000</a> | Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm |
| GTIN (EAN) | 4032248056286              |   |
| Qty.       | 1 pc(s).                   |   |



**Data sheet****OMNIMATE Signal - series BL/SL 5.00  
BLF 5.00HC/02/90 SN OR BX**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
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Germany  
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Fax: +49 5231 14-292083  
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**Accessories****Slotted screwdriver**

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

**General ordering data**

|            |                            |   |
|------------|----------------------------|---|
| Type       | SDIS 0.6X3.5X100           | Version   |
| Order No.  | <a href="#">9008390000</a> | Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade |
| GTIN (EAN) | 4032248056354              | thickness (A): 0.6 mm   |
| Qty.       | 1 pc(s).                   |   |

**Data sheet****OMNIMATE Signal - series BL/SL 5.00  
BLF 5.00HC/02/90 SN OR BX**

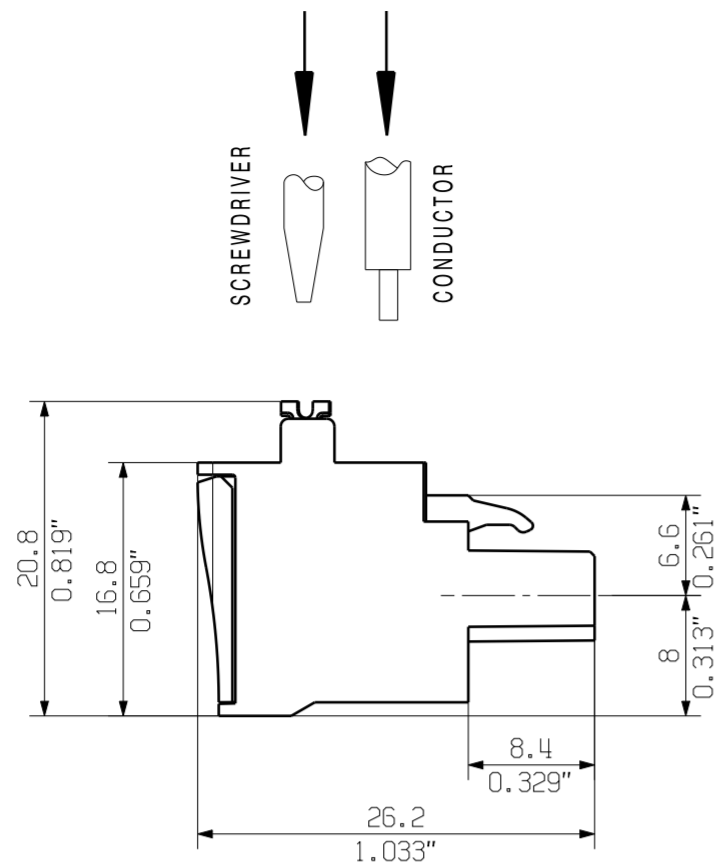
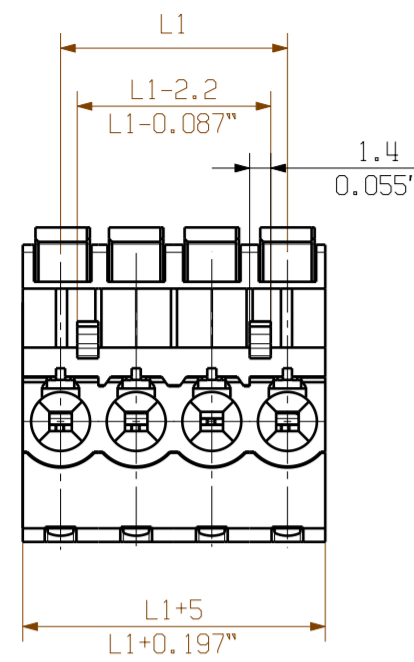
**Weidmüller Interface GmbH & Co. KG**  
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D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
[www.weidmueller.com](http://www.weidmueller.com)

**Drawings****Product benefits**

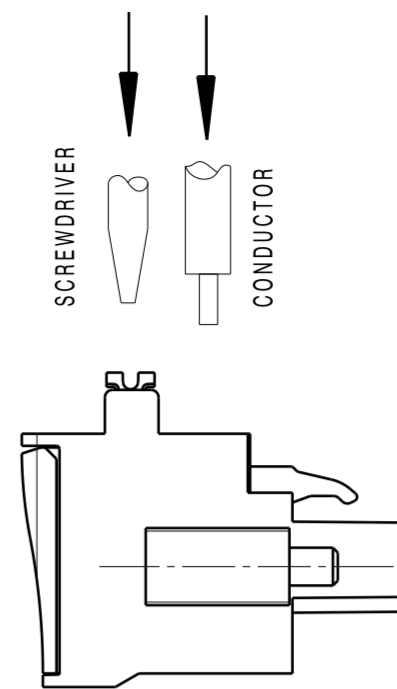
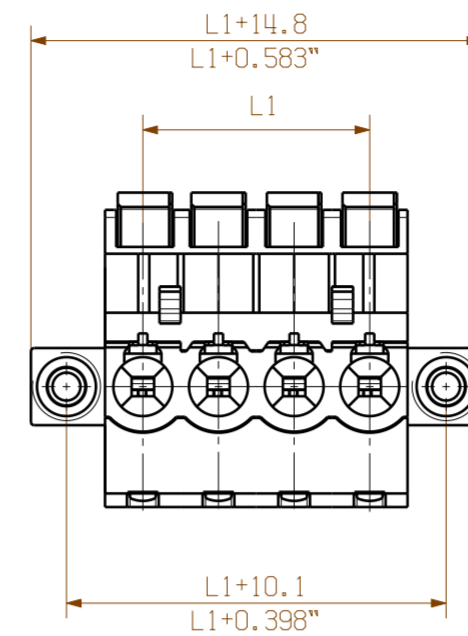
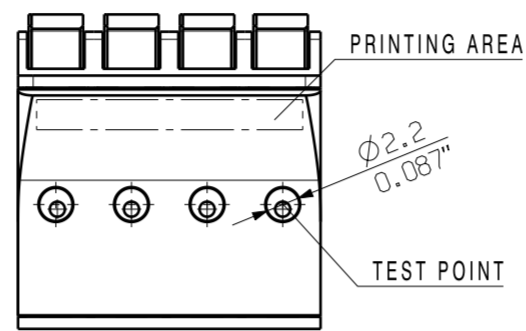
Wide clamping range  
Tool-free wire connection

MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE  
 DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

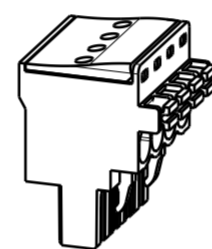
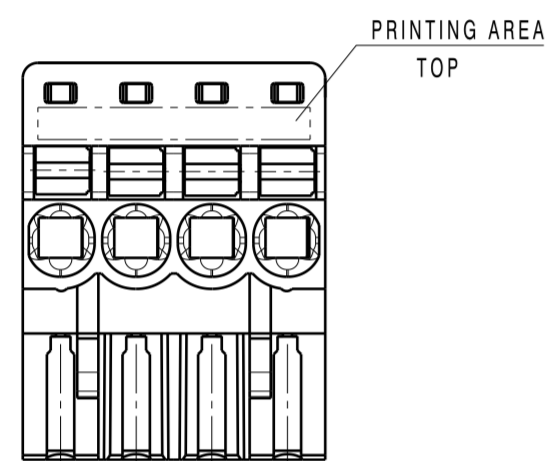
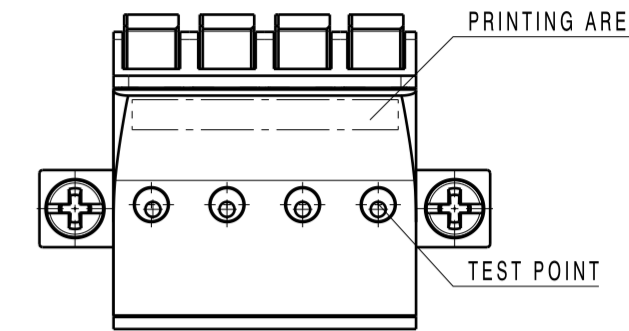
DIE DEUTSCHE VERSION IST VERBINDLICH  
 THE GERMAN VERSION IS BINDING



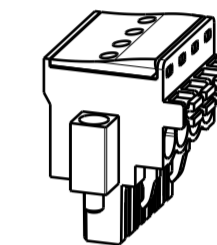
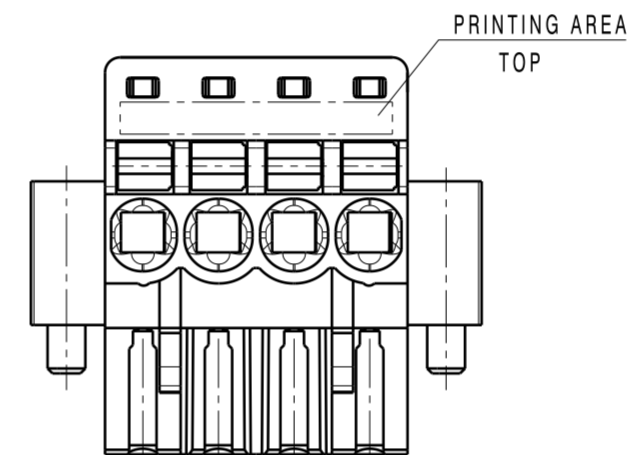
SHOWN: BLF 5.00HC/04/90G SN ...



SHOWN: BLF 5.00HC/04/90F SN ...



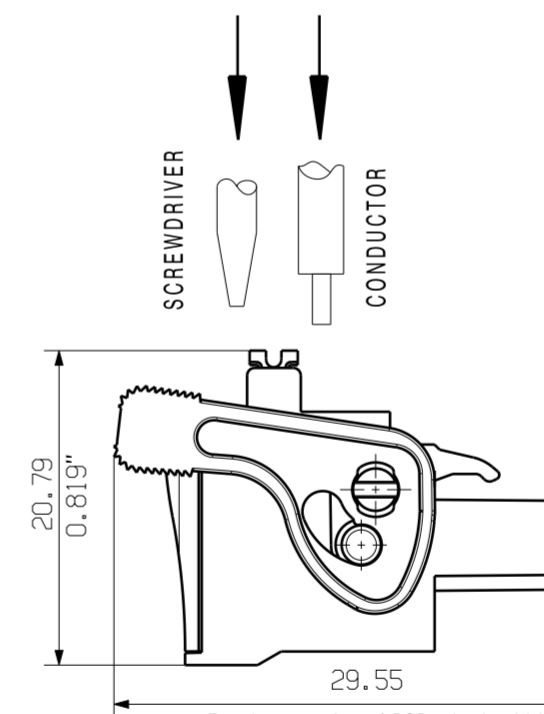
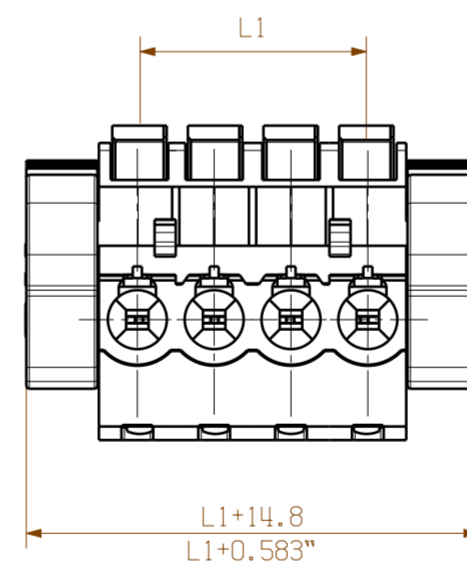
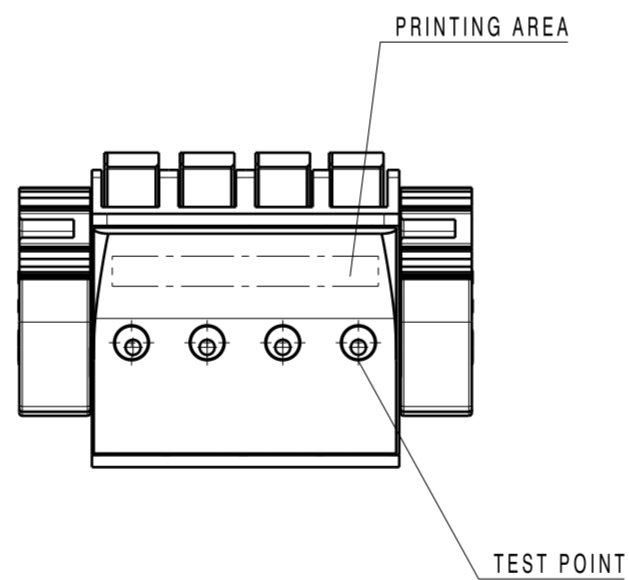
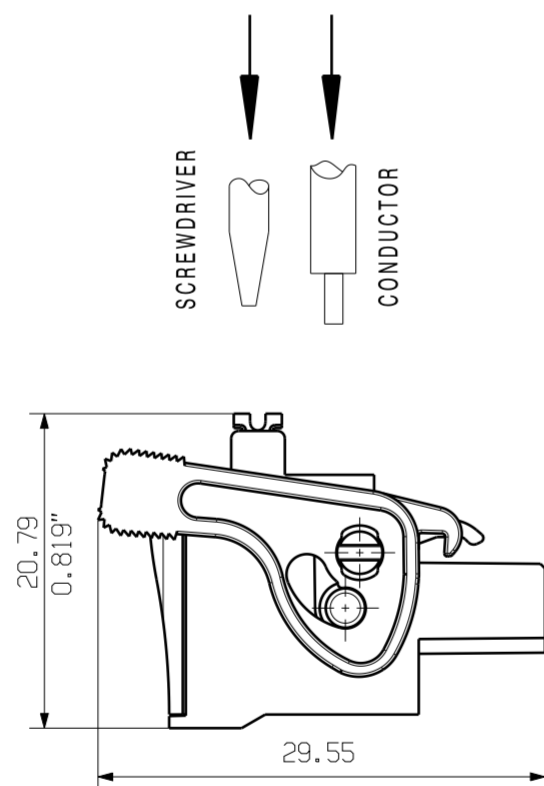
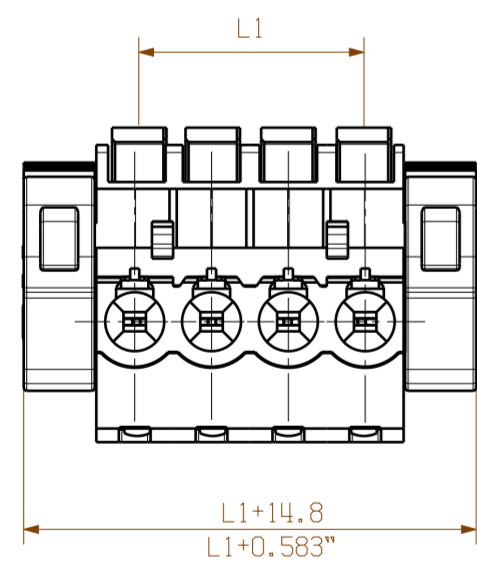
M 1:1



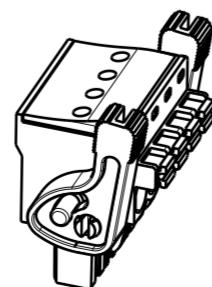
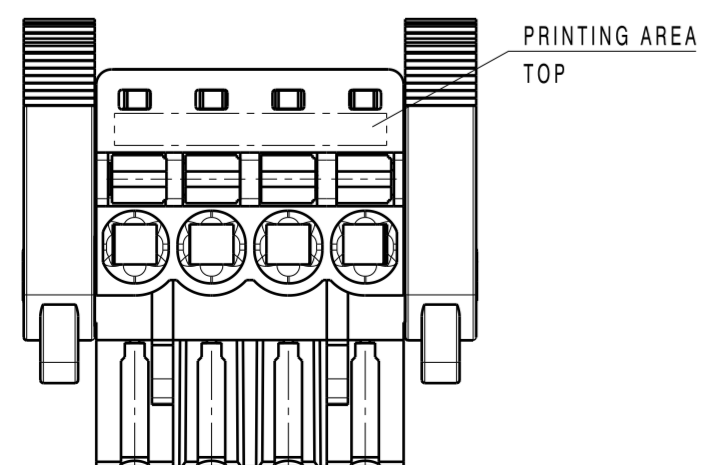
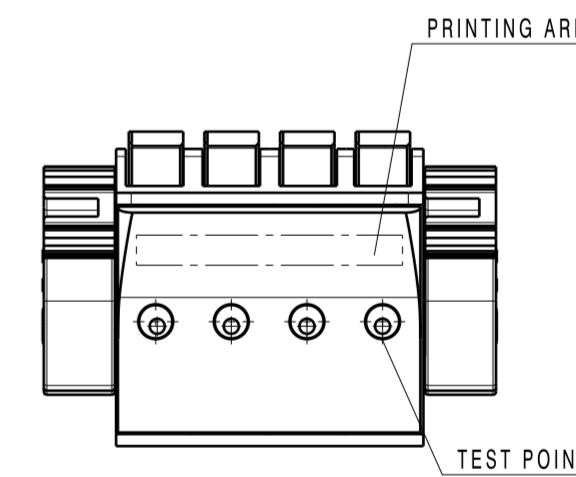
M 1:1

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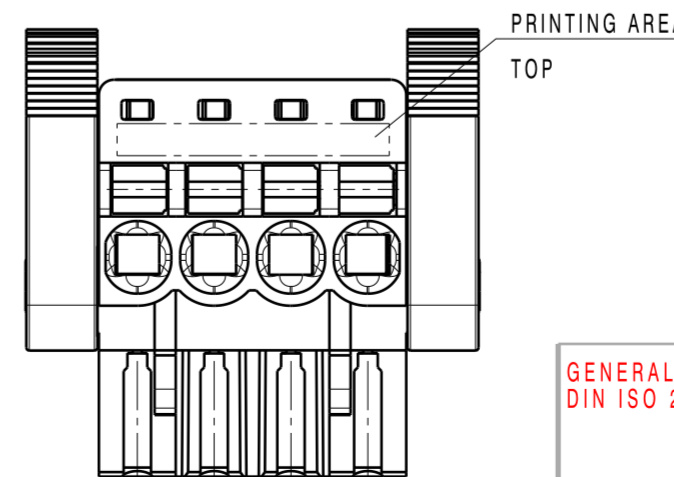
SHOWN: BLF 5.00HC/.../90LR SN ...



SHOWN: BLF 5.00HC/04/90LH SN ...

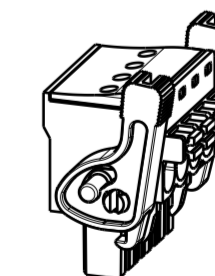


1:1



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 664 / VDE 0110.  
 The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984 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.  
 P = 5.08 RASTER/PITCH  
 n = POLZAHL/NO OF POLES



M 1:1

|    |        |          |
|----|--------|----------|
| 20 | 95     | 3.743    |
| 19 | 90     | 3.546    |
| 18 | 85     | 3.349    |
| 17 | 80     | 3.152    |
| 16 | 75     | 2.955    |
| 15 | 70     | 2.758    |
| 14 | 65     | 2.561    |
| 13 | 60     | 2.364    |
| 12 | 55     | 2.167    |
| 11 | 50     | 1.970    |
| 10 | 45     | 1.773    |
| 9  | 40     | 1.576    |
| 8  | 35     | 1.379    |
| 7  | 30     | 1.182    |
| 6  | 25     | 0.985    |
| 5  | 20     | 0.788    |
| 4  | 15     | 0.591    |
| 3  | 10     | 0.394    |
| 2  | 5      | 0.197    |
| n  | L1[mm] | L1[Inch] |

GENERAL TOLERANCE:  
 DIN ISO 2768-m



89270/5  
 03.12.15 HELIS\_MA 01

MODIFICATION

|             | DATE       | NAME     |
|-------------|------------|----------|
| DRAWN       | 29.11.2007 | HUANG_PA |
| RESPONSIBLE |            | HERTEL_S |
| CHECKED     | 18.12.2015 | HELIS_MA |
| APPROVED    |            | LANG_T   |



CAT.NO.:  
**C 44231 07**  
 DRAWING NO. SHEET 01 OF 01 SHEETS

**BLF 5.00HC/.../90...**  
 BUCHSENLEISTE  
 SOCKET BLOCK

PRODUCT FILE: BLF 5.00 7379