

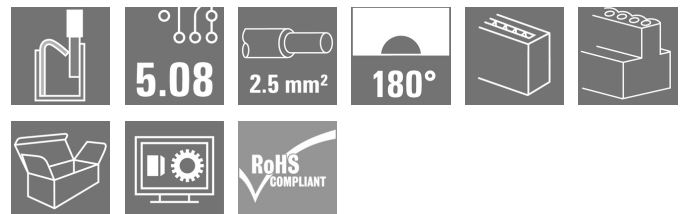
**BLDF 5.08/03/180 SN BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Product image**

The powerful daisy-chain solution for high-performance signal bus applications is also suitable for 400V auxiliary power chains with 18.5A current-carrying capacity. The large clamping capacity (up to 2.5mm<sup>2</sup> wire cross-sections) is particularly beneficial for long bus cables or high currents because of the low voltage drop.

Four flange variations, including the patented release latch, allow for user-friendly unplugging designs.

**General ordering data**

|              |   |
|--------------|---|
| Version      | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3, 180°, PUSH IN with actuator, Clamping range, max. : 3.31 mm <sup>2</sup> , Box |
| Order No.    | <a href="#">1000870000</a>  |
| Type         | BLDF 5.08/03/180 SN BK BX   |
| GTIN (EAN)   | 4032248817276   |
| Qty.         | 80 pc(s).   |
| Product data | IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup><br>UL: 300 V / 18.5 A / AWG 12 - AWG 26   |
| Packaging    | Box   |

Creation date July 7, 2024 6:21:30 PM CEST

Catalogue status 29.06.2024 / We reserve the right to make technical changes.

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

|            |          |                 |            |
|------------|----------|-----------------|------------|
| Depth      | 28.3 mm  | Depth (inches)  | 1.114 inch |
| Height     | 24.7 mm  | Height (inches) | 0.972 inch |
| Width      | 15.24 mm | Width (inches)  | 0.6 inch   |
| Net weight | 8.7 g    |                 |            |

**System Parameters**

|  |                                     |  |                              |
|--|-------------------------------------|--|------------------------------|
| Product family                               | OMNIMATE Signal - series BL/SL 5.08 | Type of connection                         | Field connection             |
| Wire connection method                       | PUSH IN with actuator               | Pitch in mm (P)                            | 5.08 mm                      |
| Pitch in inches (P)                          | 0.2 "                               | Conductor outlet direction                 | 180°                         |
| Number of poles                              | 3                                   | L1 in mm                                   | 10.16 mm                     |
| L1 in inches                                 | 0.4 "                               | 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 | IP20 plugged/ IP10 unplugged |
| Protection degree                            | IP20                                | Volume resistance                          | ≤5 mΩ                        |
| 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.                  | 9.5 N                        |
| Pulling force/pole, max.                     | 7.5 N                               |  |                              |

**Material data**

|                                       |                            |                                       |        |
|---------------------------------------|----------------------------|---------------------------------------|--------|
| Insulating material                   | PBT                        | Colour                                | black  |
| Colour chart (similar)                | RAL 9011                   | Insulating material group             | IIIa   |
| Comparative Tracking Index (CTI)      | ≥ 200                      | UL 94 flammability rating             | V-0    |
| Contact material                      | Cu-alloy                   | Contact surface                       | tinned |
| Layer structure of plug contact       | 4...8 µm Sn hot-dip tinned | Storage temperature, min.             | -40 °C |
| Storage temperature, max.             | 70 °C                      | 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, min.                            | 0.25 mm <sup>2</sup> |
| w. wire end ferrule, DIN 46228 pt 1, max.                            | 2.5 mm <sup>2</sup>  |
| Plug gauge in accordance with EN 60999 a x b; ø                      | 2.8 mm x 2.0 mm      |

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**Technical data**

|                              |  |                              |                            |       |  |
|------------------------------|--|------------------------------|----------------------------|-------|--|
| 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>    |       |  |
| Stripping length             |  | nominal                      | 13 mm                      |       |  |
| Recommended wire-end ferrule |  | <a href="#">H2.5/16DS BL</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. |                              |                            |       |  |

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## Technical data


## Rated data acc. to IEC

|   |                        |   |                   |
|---|------------------------|---|-------------------|
| tested acc. to standard   | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C)                         | 20.8 A            |
| Rated current, max. number of poles (Tu=20°C)                             | 17.4 A                 | Rated current, min. number of poles (Tu=40°C)                         | 17.9 A            |
| Rated current, max. number of poles (Tu=40°C)                             | 14.9 A                 | Rated current cross-connector, min. number of poles (Ta=20°C)         | 28.1 A            |
| Rated current cross-connector, max. number of poles (Ta=20°C)             | 23.3 A                 | Rated current cross-connector, min. number of poles (Ta=40°C)         | 24.2 A            |
| Rated current cross-connector, max. number of poles (Ta=40°C)             | 19.9 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 |

## 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) | 18.5 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 12  | Wire cross-section, AWG, max.         | AWG 26 |
| Reference to approval values          | Specifications are maximum values, details - see approval certificate.              |                                       |        |

## Packing

|           |        |            |        |
|-----------|--------|------------|--------|
| Packaging | Box    | VPE length | 351 mm |
| VPE width | 137 mm | VPE height | 38 mm  |

## Cross-connector rated data according to DIN IEC

|   |        |   |        |
|---|--------|---|--------|
| Rated current cross-connector, max. number of poles (Ta=20°C) | 23.3 A | Rated current cross-connector, max. number of poles (Ta=40°C) | 19.9 A |
| Rated current cross-connector, min. number of poles (Ta=20°C) | 28.1 A | Rated current cross-connector, min. number of poles (Ta=40°C) | 24.2 A |

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## Technical data

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002638    | ETIM 7.0    | EC002638    |
| ETIM 8.0    | EC002638    | ETIM 9.0    | EC002638    |
| ECLASS 9.0  | 27-44-03-09 | ECLASS 9.1  | 27-44-03-09 |
| ECLASS 10.0 | 27-44-03-09 | ECLASS 11.0 | 27-46-02-02 |
| ECLASS 12.0 | 27-46-02-02 | ECLASS 13.0 | 27-46-02-02 |

## Environmental Product Compliance

REACH SVHC

/

## 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 variants on request
- Gold-plated contact surfaces 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
- Crimping shape "A" for wire end ferrules with PZ 6/5 crimping tool recommended.
- The test point can only be used as potential-pickup point.
- In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

## Approvals

Approvals



ROHS

Conform

UL File Number Search

UL Website

Certificate No. (cURus)

E60693

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[www.weidmueller.com](http://www.weidmueller.com)**Technical data****Downloads**Approval/Certificate/Document of Con-  
formity[Declaration of the Manufacturer](#)

Engineering Data

[CAD data – STEP](#)

Catalogues

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Brochures

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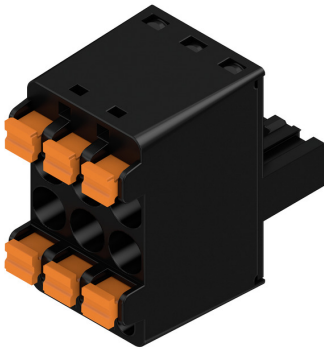
## BLDF 5.08/03/180 SN BK BX

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D-32758 Detmold  
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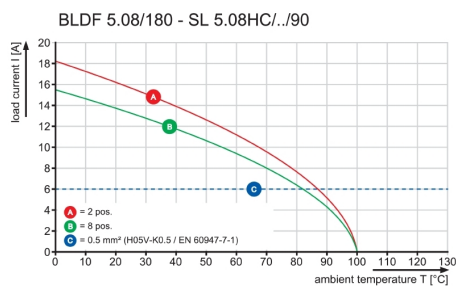
## Drawings

### Product image

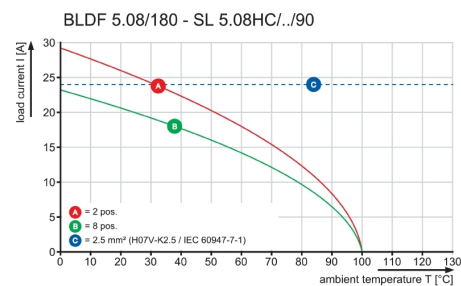


### Dimensional drawing

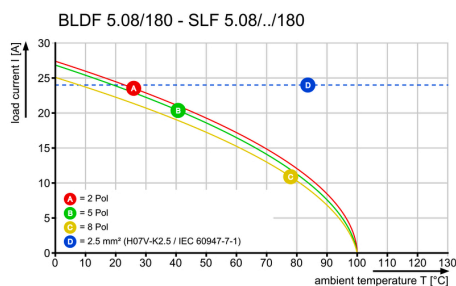
### Graph



### Graph



### Graph



Uncompromising functionality  
High vibration resistance

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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, Screwdriver |
| GTIN (EAN) | 4032248300754              |                          |
| Qty.       | 1 pc(s).                   |                          |
| Type       | SDS 0.6X3.5X100            | Version                  |
| Order No.  | <a href="#">9008330000</a> | Screwdriver, Screwdriver |
| GTIN (EAN) | 4032248056286              |                          |
| Qty.       | 1 pc(s).                   |                          |

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[www.weidmueller.com](http://www.weidmueller.com)**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, Screwdriver |
| GTIN (EAN) | 4032248056354              |                          |
| Qty.       | 1 pc(s).                   |                          |

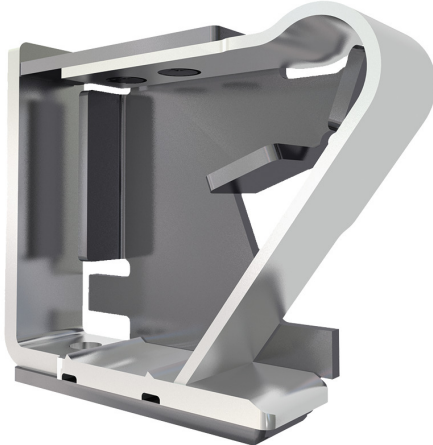
**BLDF 5.08/03/180 SN BK BX**

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Drawings

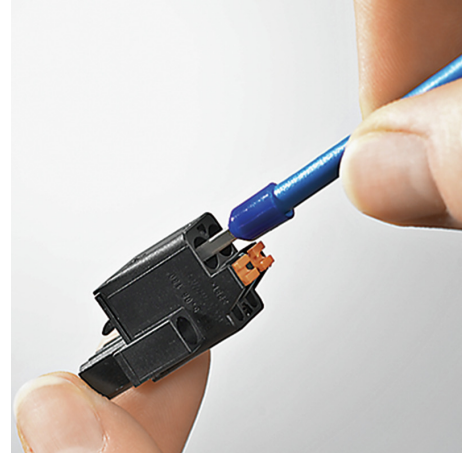
Product benefits



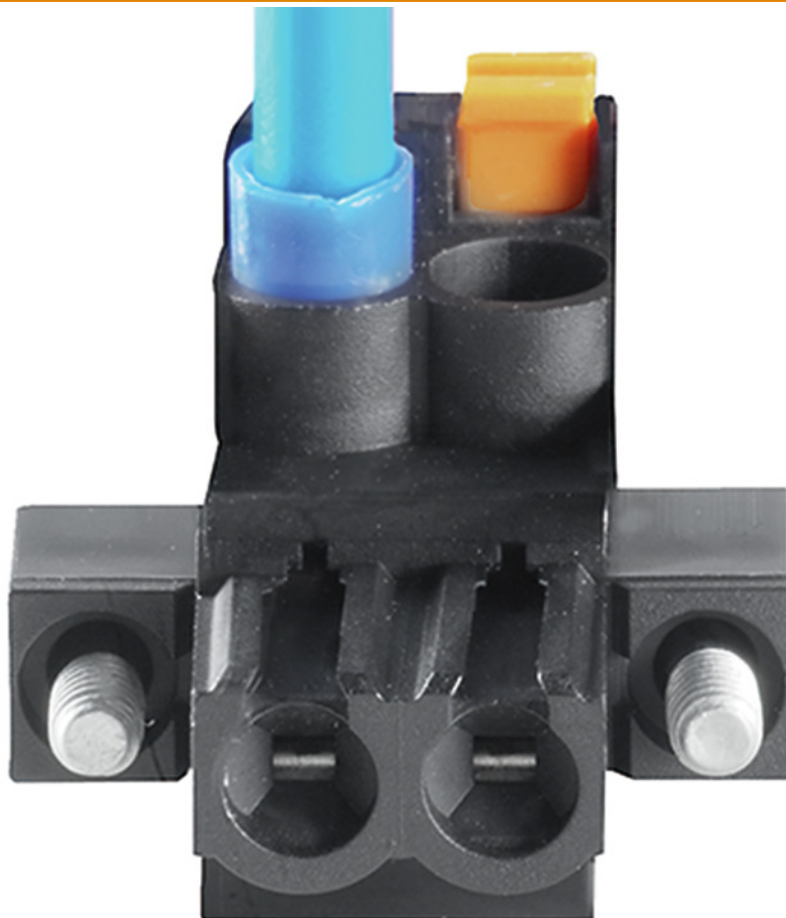
Solid PUSH IN contact  
Safe and durable

Product benefits

Product benefits



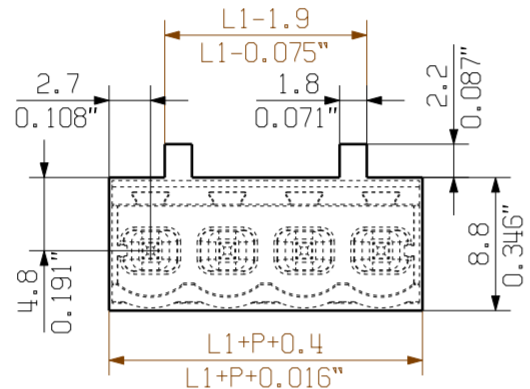
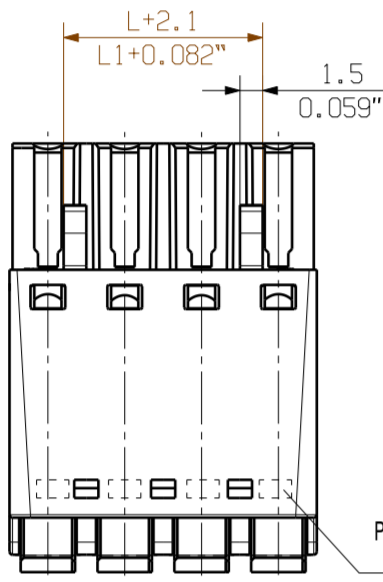
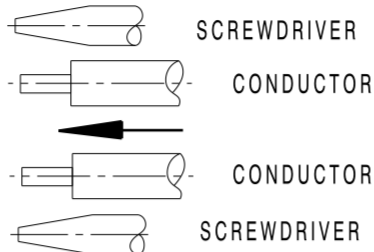
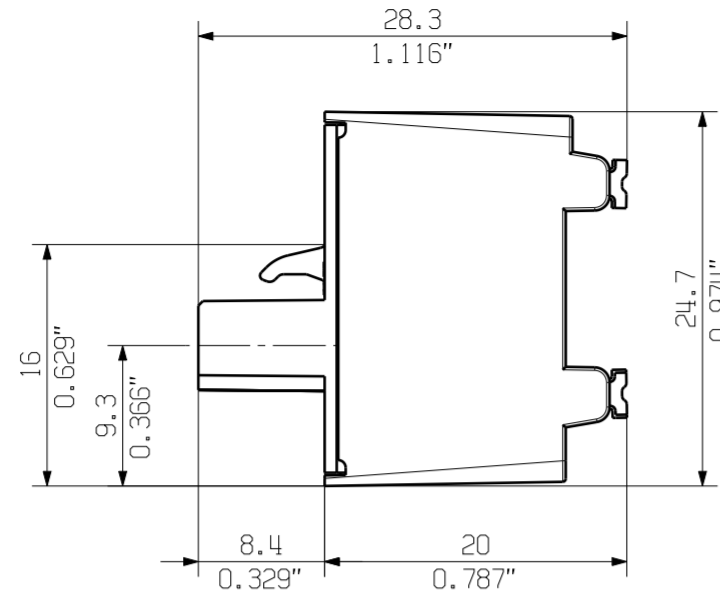
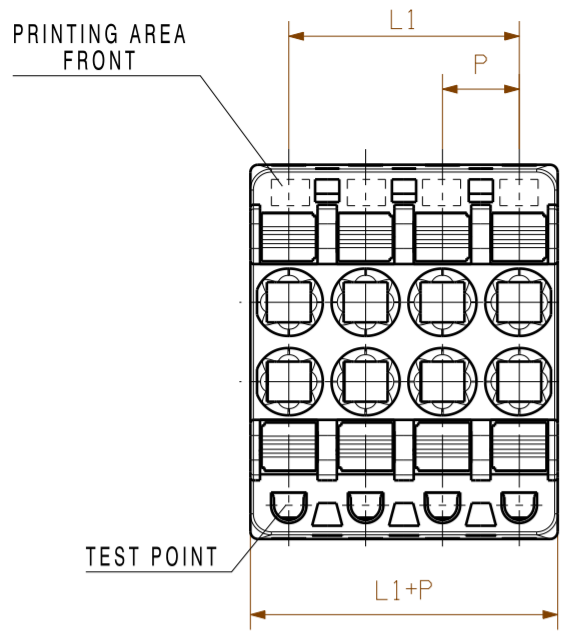
Cost-effective wiring  
Quick and intuitive operation



Wide clamping range  
Tool-free wire connection

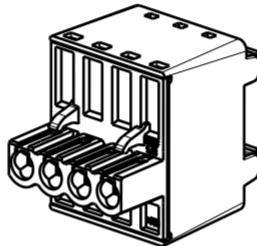
Creation date July 7, 2024 6:21:30 PM CEST

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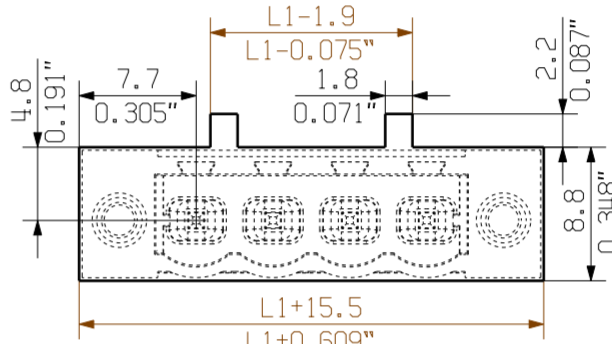
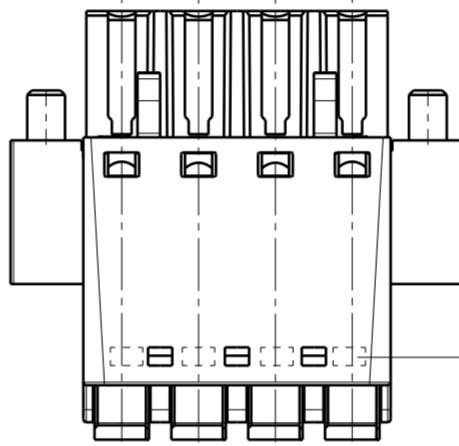
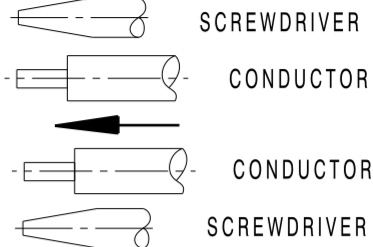
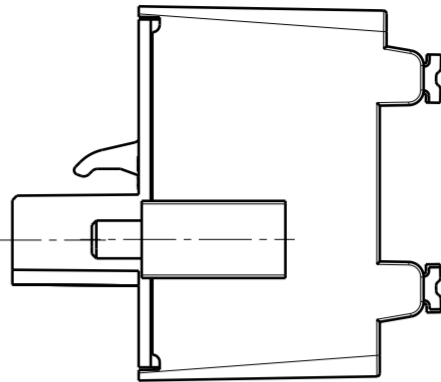
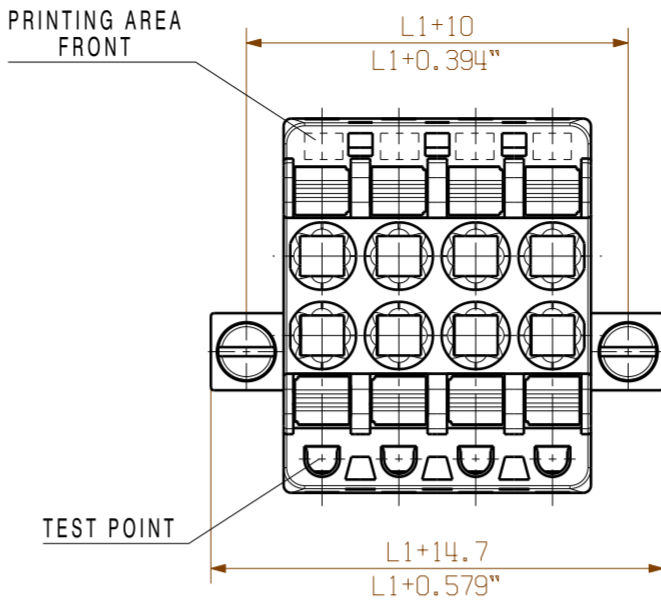


MIN. FRONT PLATE CUT-OUT

M 1/1

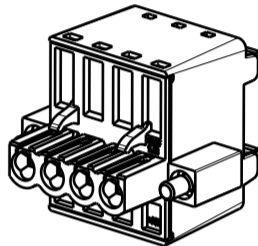


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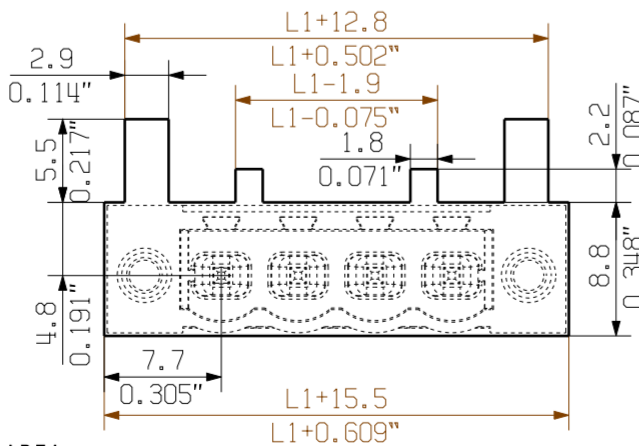
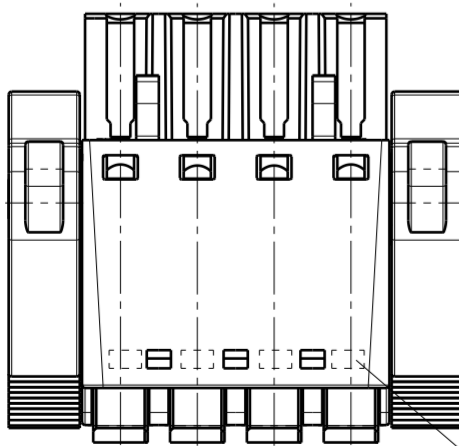
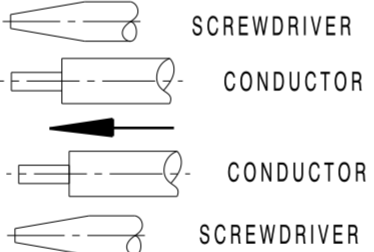
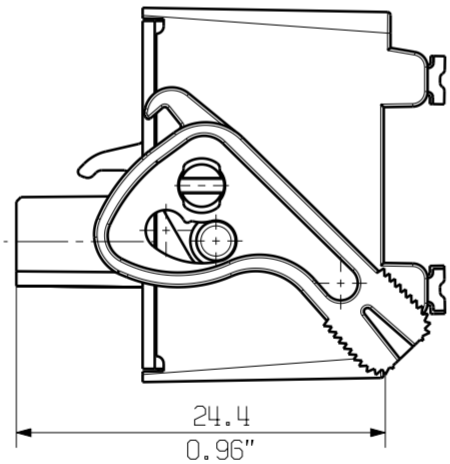
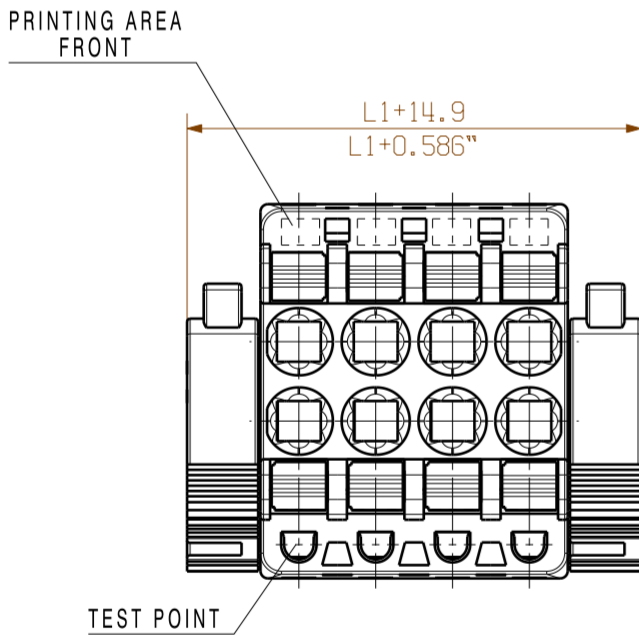


FRONT PLATE CUT-OUT

M 1/1

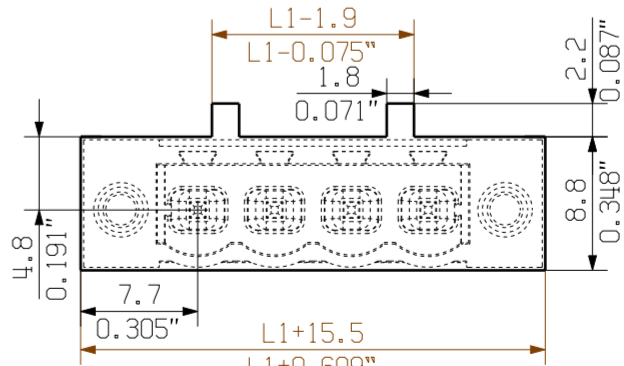
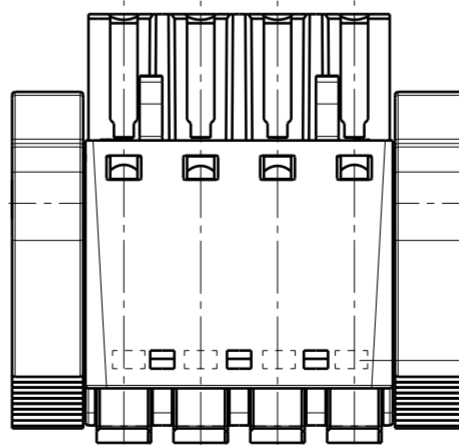
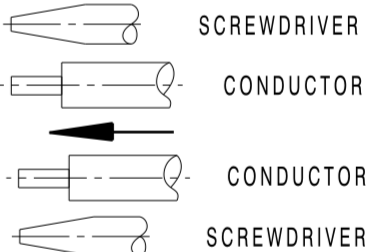
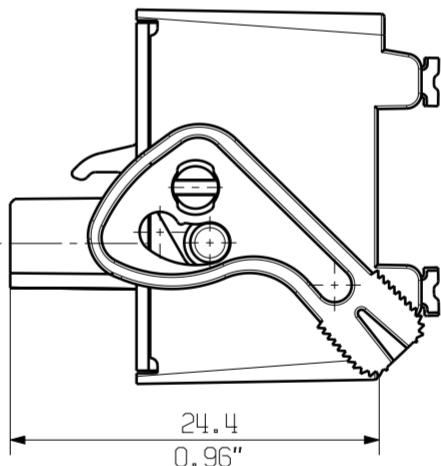
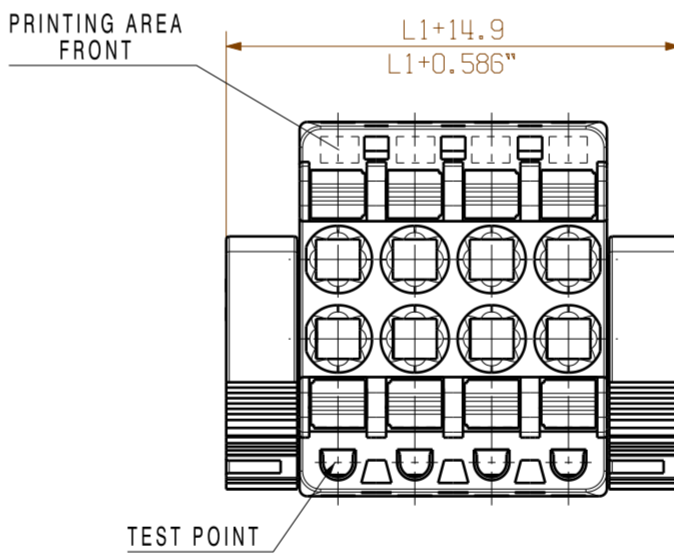
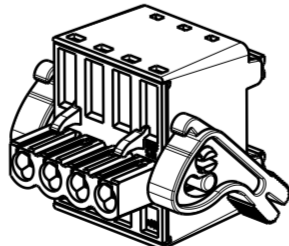


SHOWN: BLDF 5.08/04/180 LR



FRONT PLATE CUT-OUT

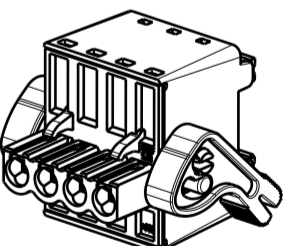
M 1/1



FRONT PLATE CUT-OUT

P=5.08 RASTER PITCH

M 1/1



For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance with VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors 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

ALLGEMEINGÜELTIGE KUNDENZEICHNUNG, AKTUELLER STAND NUR AUF ANFRAGE  
GENERAL CUSTOMER DRAWING, TOPICAL VERSION ONLY IF REQUIRED

|           |           |             |
|-----------|-----------|-------------|
| 8         | 35.56     | 1.400       |
| 7         | 30.48     | 1.200       |
| 6         | 25.40     | 1.000       |
| 5         | 20.32     | 0.800       |
| 4         | 15.24     | 0.600       |
| 3         | 10.16     | 0.400       |
| 2         | 5.08      | 0.200       |
| POLZAHL n | MASS L1   | MASS L1     |
| POLES     | DIM. [mm] | DIM. [Inch] |

|            |            |                                |            |                           |             |                                 |          |                               |                |
|------------|------------|--------------------------------|------------|---------------------------|-------------|---------------------------------|----------|-------------------------------|----------------|
|            | EC00002032 | First Issue Date<br>01.03.2010 |            | Max. nos.<br>Modification |             | Prim PLM Part No.: 002876       |          | Prim ERP Part No.: 1001170000 |                |
|            |            | Drawn                          | 22.07.2019 | Helis, Maria              | Responsible | Hertel, Suzann                  | Approved | 31.07.2019                    | Hertel, Suzann |
| Scale: 2:1 |            | Size: A2                       |            | Drawings Assembly         |             | <b>Weidmüller</b>               |          |                               |                |
|            |            |                                |            |                           |             | BLDF 5.08/.../180...            |          | BUCHSENLEISTE<br>SOCKET BLOCK |                |
|            |            |                                |            |                           |             | Product file: 7379 BLF 5.08 180 |          |                               |                |