

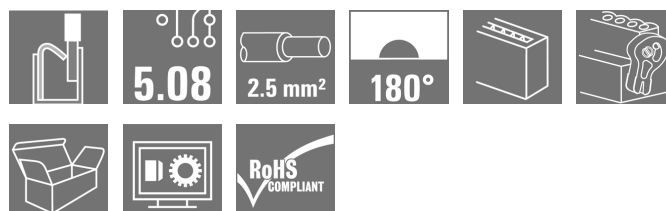
**BLDF 5.08/04/180LH SN BK BX****Weidmüller Interface GmbH & Co. KG**

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 18.5 A 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, so you can design the interlock based on the requirements of the user.

**General ordering data**

|              |                                                                                                                                                             |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version      | PCB plug-in connector, female plug, 5.08 mm, Number of poles: 4, 180°, PUSH IN, Tension-clamp connection, Clamping range, max. : 3.31 mm <sup>2</sup> , Box |
| Order No.    | <a href="#">1001100000</a>                                                                                                                                  |
| Type         | BLDF 5.08/04/180LH SN BK BX                                                                                                                                 |
| GTIN (EAN)   | 4032248817924                                                                                                                                               |
| Qty.         | 40 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 March 22, 2021 12:11:00 PM CET

## BLDF 5.08/04/180LH SN BK BX

Weidmüller Interface GmbH &amp; Co. KG

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## Technical data

## Dimensions and weights

|                |            |                 |            |
|----------------|------------|-----------------|------------|
| Depth          | 29.6 mm    | Depth (inches)  | 1.165 inch |
| Height         | 24.7 mm    | Height (inches) | 0.972 inch |
| Net weight     | 15.55 g    | Width           | 30.12 mm   |
| Width (inches) | 1.186 inch |                 |            |

## System Parameters

|                                              |                                     |                                            |                     |
|----------------------------------------------|-------------------------------------|--------------------------------------------|---------------------|
| Product family                               | OMNIMATE Signal - series BL/SL 5.08 | Type of connection                         | Field connection    |
| Wire connection method                       | PUSH IN, Tension-clamp connection   | Pitch in mm (P)                            | 5.08 mm             |
| Pitch in inches (P)                          | 0.2 inch                            | Conductor outlet direction                 | 180°                |
| Number of poles                              | 4                                   | L1 in mm                                   | 15.24 mm            |
| L1 in inches                                 | 0.6 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                            | ≤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                      | CuSn                       | 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, max. number of poles  
(Tu=20°C)

17.4 A

Rated current, max. number of poles  
(Tu=40°C)

14.9 A

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 voltage for surge voltage class /  
pollution degree III/2

320 V

Rated impulse voltage for surge voltage  
class/ pollution degree II/2

4 kV

Rated impulse voltage for surge voltage  
class/ contamination degree III/3

4 kV

Rated current, min. number of poles  
(Tu=20°C)

20.8 A

Rated current, min. number of poles  
(Tu=40°C)

17.9 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

Rated voltage for surge voltage class /  
pollution degree II/2

400 V

Rated voltage for surge voltage class /  
pollution degree III/3

250 V

Rated impulse voltage for surge voltage  
class/ pollution degree III/2

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 current (Use group B / CSA)

18.5 A

Wire cross-section, AWG, min.

AWG 12

Reference to approval values

Specifications are  
maximum values, details -  
see approval certificate.

Rated voltage (Use group D / CSA)

300 V

Rated current (Use group D / CSA)

10 A

Wire cross-section, AWG, max.

AWG 26

## Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059)

300 V

Rated current (Use group B / UL 1059)

18.5 A

Wire cross-section, AWG, min.

AWG 12

Reference to approval values

Specifications are  
maximum values, details -  
see approval certificate.

Rated voltage (Use group D / UL 1059)

300 V

Rated current (Use group D / UL 1059)

10 A

Wire cross-section, AWG, max.

AWG 26

## Packing

Packaging

Box

VPE length

35 mm

VPE width

135 mm

VPE height

350 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, min.  
number of poles (Ta=20°C)

28.1 A

Rated current cross-connector, max.  
number of poles (Ta=40°C)

19.9 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    |
| 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 |

**Important note**

IPC conformity      Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

- Notes
- Additional colours on request
  - 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.
  - Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

**Approvals**

Approvals



|                       |         |
|-----------------------|---------|
| ROHS                  | Conform |
| UL File Number Search | E60693  |

**Downloads**

|                                             |                                                 |
|---------------------------------------------|-------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of the Manufacturer</a> |
| Engineering Data                            | <a href="#">STEP</a>                            |
| Engineering Data                            | <a href="#">WSCAD</a>                           |

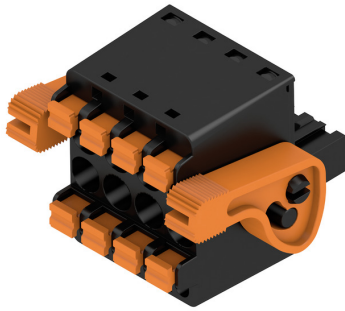
## BLDF 5.08/04/180LH SN BK BX

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Klingenbergstraße 26  
D-32758 Detmold  
Germany

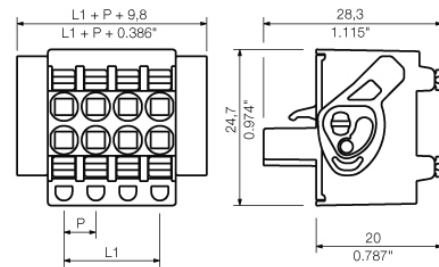
[www.weidmueller.com](http://www.weidmueller.com)

## Drawings

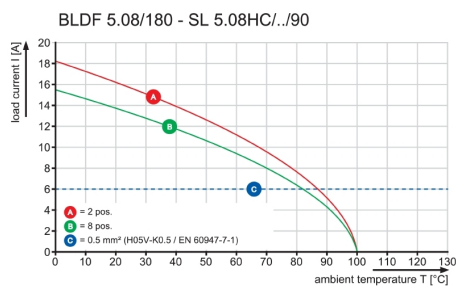
### Product image



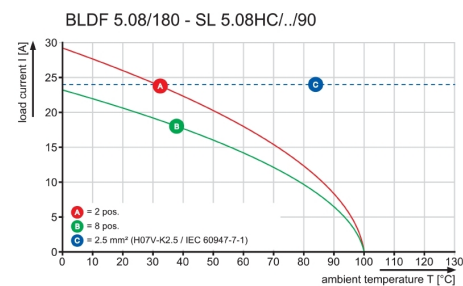
### Dimensional drawing



### Graph



### Graph



Uncompromising functionality  
High vibration resistance

**BLDF 5.08/04/180LH SN BK BX**

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**Drawings**

**Product benefits**



Solid PUSH IN contact  
Safe and durable

**Product benefits**

**Product benefits**



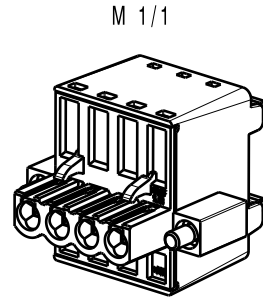
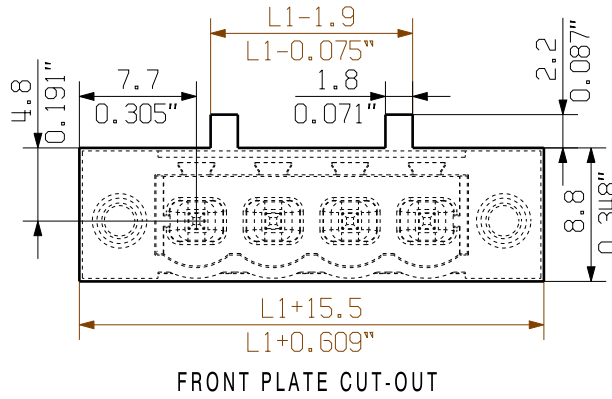
Cost-effective wiring  
Quick and intuitive operation



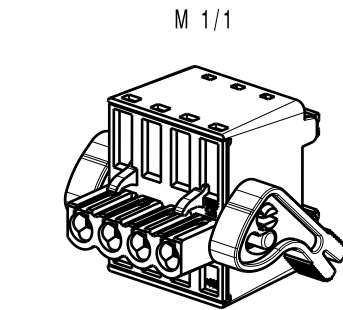
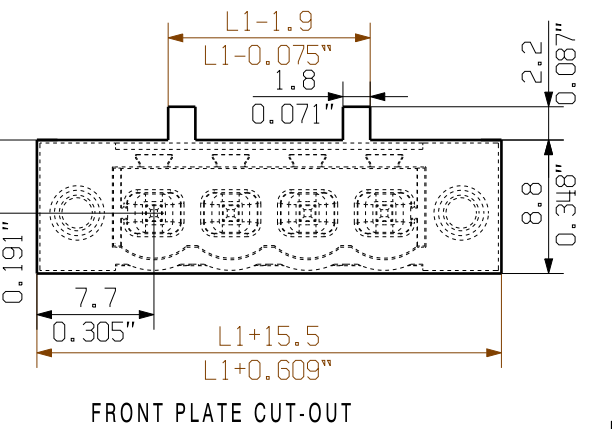
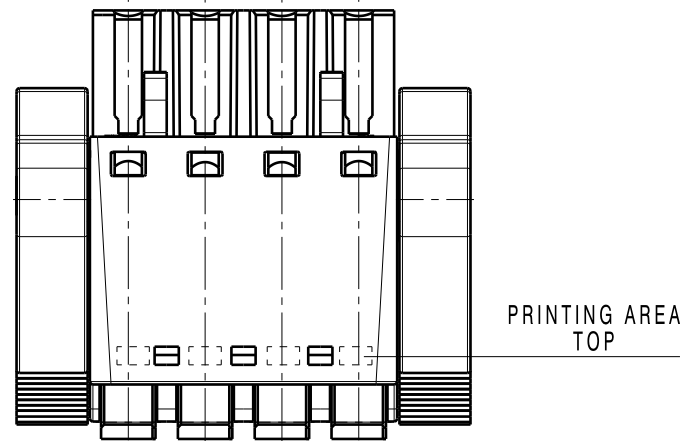
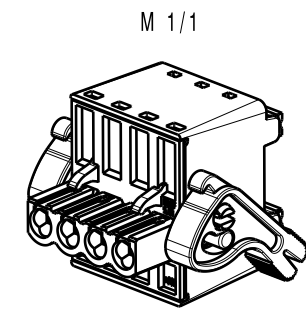
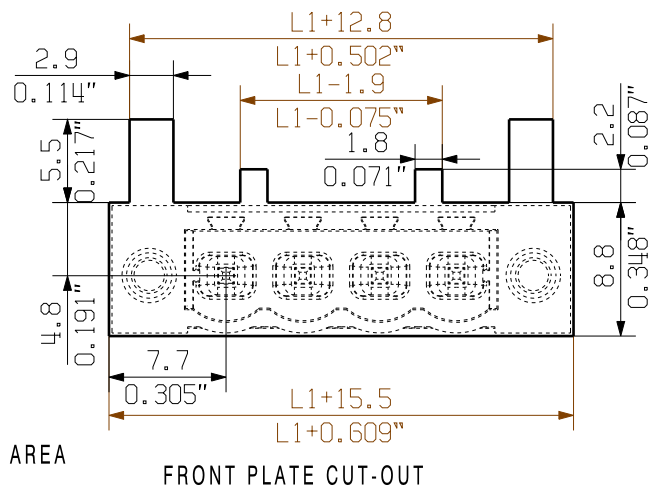
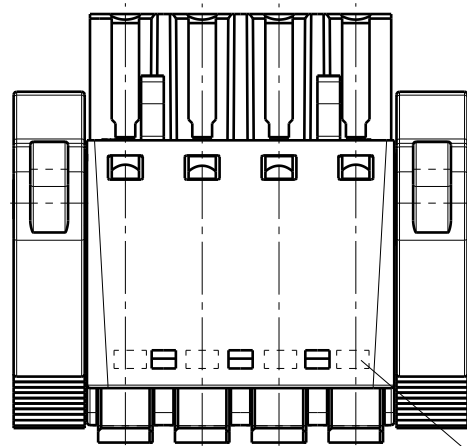
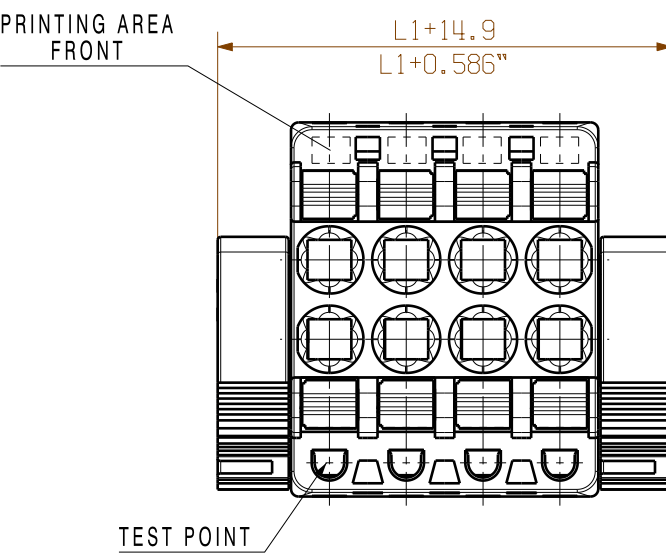
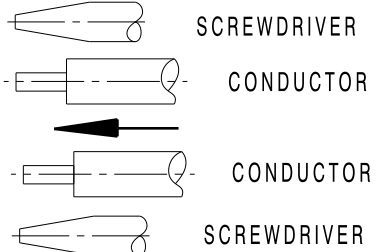
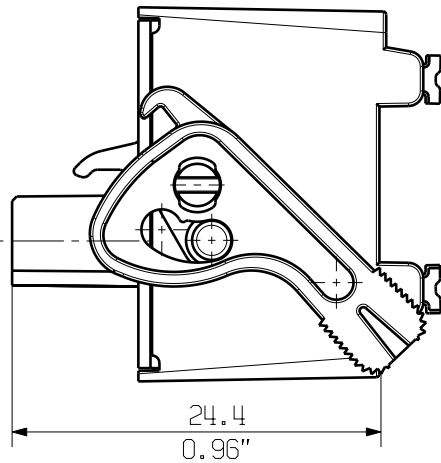
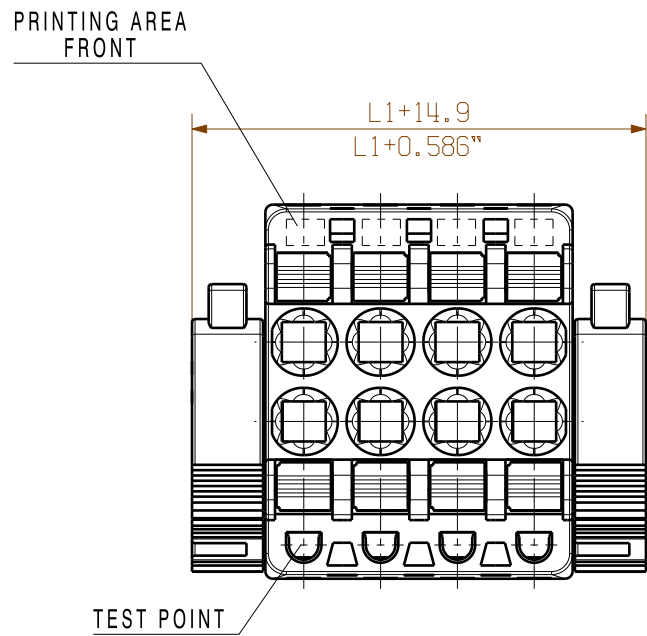
Wide clamping range  
Tool-free wire connection

Creation date March 22, 2021 12:11:00 PM CET

SHOWN: BLDF 5.08/04/180 G



SHOWN: BLDF 5.08/04/180 LR



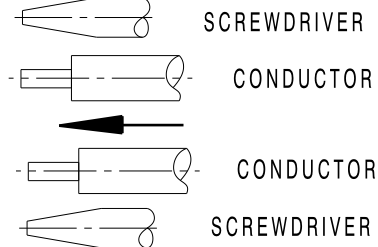
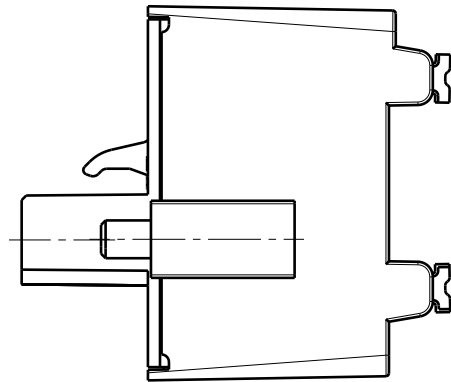
P=5.08 RASTER PITCH

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.

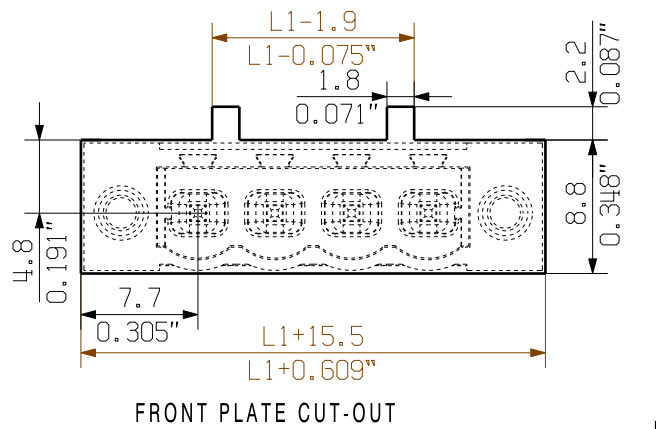
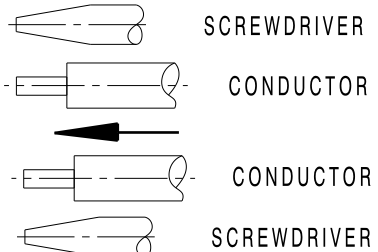
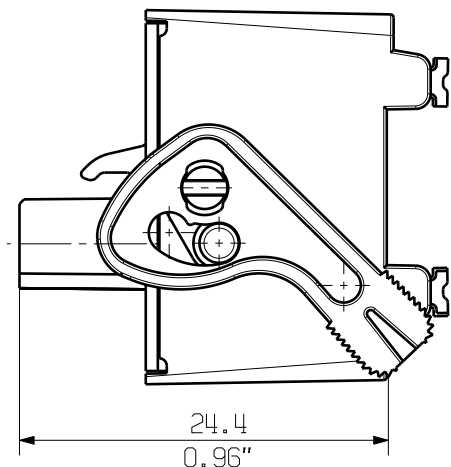
Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

GENERAL TOLERANCE: DIN ISO 2768-m

SHOWN: BLDF 5.08/04/180 F



SHOWN: BLDF 5.08/04/180 LH



|           |           |             |
|-----------|-----------|-------------|
| 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                              |
|                                 |                                | Date<br>22.07.2019<br>Name<br>Helis, Maria<br>Responsible<br>Hertel, Suzann<br>Approved<br>31.07.2019<br>Hertel, Suzann | <b>Weidmüller</b>         | <b>47786</b><br>Drawing no. 02 of 02 sheets<br>Issue no. 6 |
| Scale: 2:1<br>Drawings Assembly | Size: A2                       | BLDF 5.08/.../180...<br>BUCHSENLEISTE<br>SOCKET BLOCK<br>Product file: 7379 BLF 5.08 180                                |                           |                                                            |

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