

## BLDF 5.08/07/180 SN BK BX

Weidmüller Interface GmbH & Co. KG

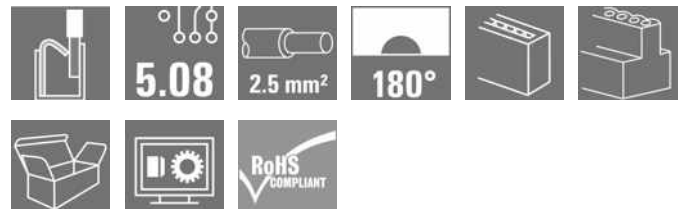
Klingenbergstraße 26

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: 7, 180°, PUSH IN with actuator, Clamping range, max. : 3.31 mm <sup>2</sup> , Box
Order No.	<a href="#">1000910000</a>
Type	BLDF 5.08/07/180 SN BK BX
GTIN (EAN)	4032248817450
Qty.	32 pc(s).
Product data	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup> UL: 300 V / 18.5 A / AWG 12 - AWG 26
Packaging	Box

Creation date August 29, 2023 8:59:06 AM CEST

## BLDF 5.08/07/180 SN BK BX

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Dimensions and weights

Depth	28.3 mm	Depth (inches)	1.114 inch
Height	24.7 mm	Height (inches)	0.972 inch
Width	35.56 mm	Width (inches)	1.4 inch
Net weight	20.19 g		

## Temperatures

Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
-----------------------------	--------	-----------------------------	--------

## 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 inch	Conductor outlet direction	180°
Number of poles	7	L1 in mm	30.48 mm
L1 in inches	1.2 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	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	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, 0.25 mm <sup>2</sup> min.	

Creation date August 29, 2023 8:59:06 AM CEST

Catalogue status 18.08.2023 / We reserve the right to make technical changes.

2

## BLDF 5.08/07/180 SN BK BX

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

www.weidmueller.com

## Technical data

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

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.

**BLDF 5.08/07/180 SN BK BX**

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

www.weidmueller.com

**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

**BLDF 5.08/07/180 SN BK BX**

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

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

**Technical data****Classifications**

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	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

**Important note**

IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.
Notes	<ul style="list-style-type: none"> <li>• Additional variants 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> <li>• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months</li> </ul>

**Approvals**

Approvals



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

**BLDF 5.08/07/180 SN BK BX****Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany

www.weidmueller.com

**Technical data****Downloads**

---

Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">FL BUILDING SAFETY EN</a> <a href="#">FL APPL LED LIGHTING EN</a> <a href="#">FLIndustr.CONTROLS EN</a> <a href="#">FL MACHINE SAFETY EN</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL INVERTER EN</a> <a href="#">FL_BASE_STATION_EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a> <a href="#">PO OMNIMATE EN</a>

---

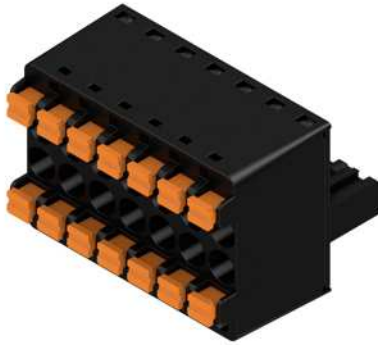
**BLDF 5.08/07/180 SN BK BX**

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

www.weidmueller.com

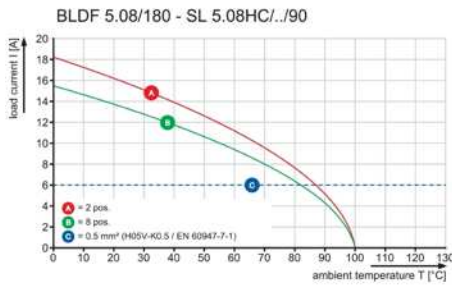
**Drawings**

**Product image**

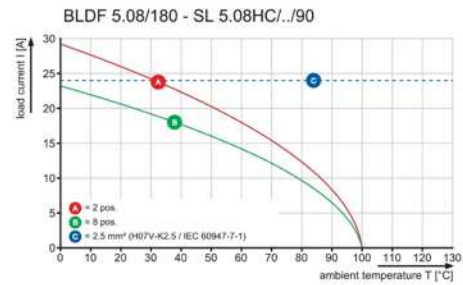


**Dimensional drawing**

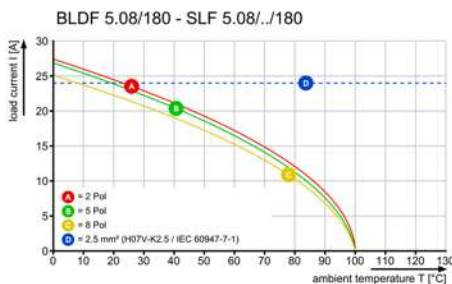
**Graph**



**Graph**



**Graph**



Uncompromising functionality  
 High vibration resistance

**Product benefits**



Solid PUSH IN contact  
Safe and durable

**Product benefits**

**Product benefits**

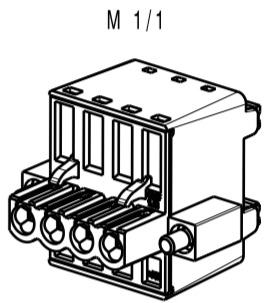
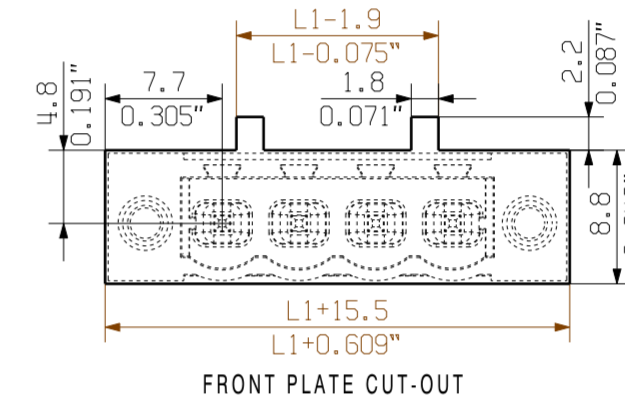
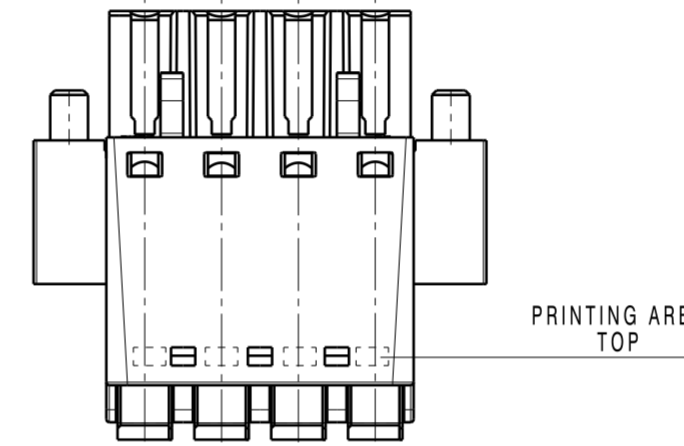
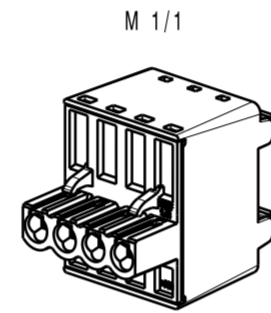
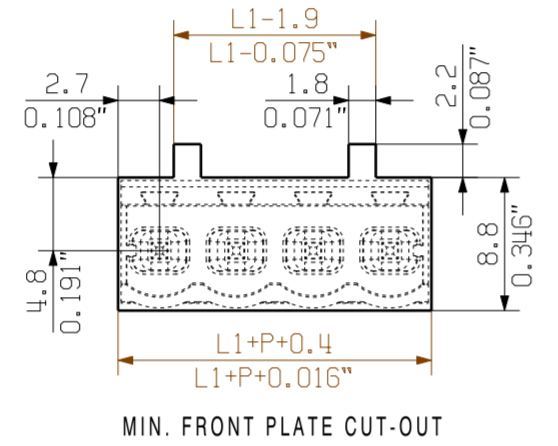
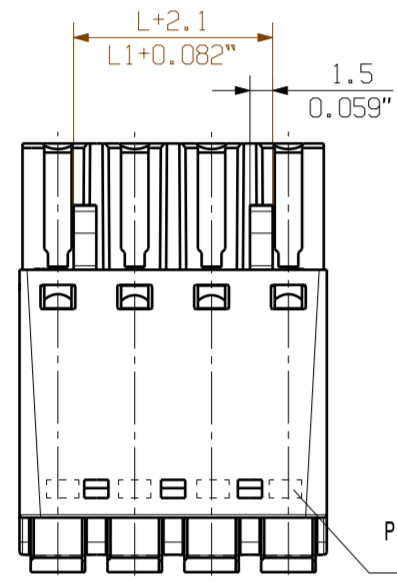
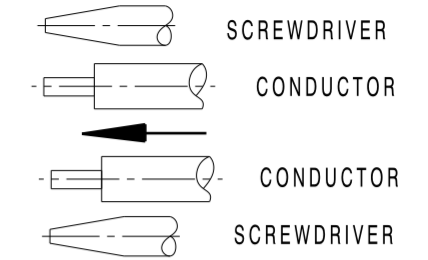
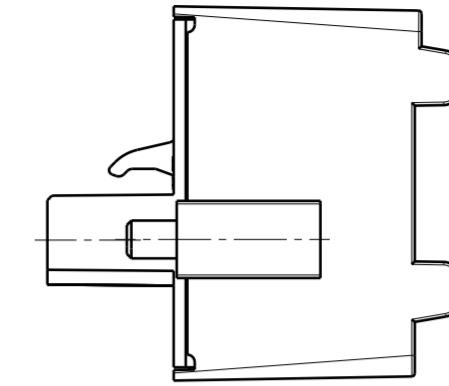
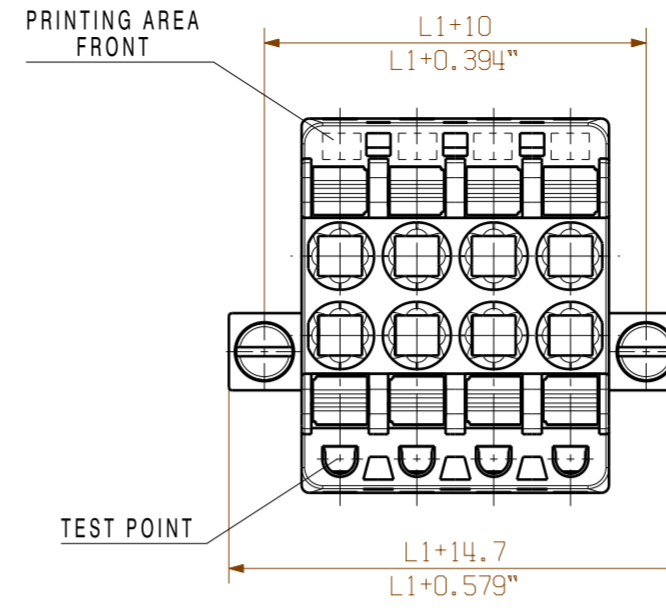
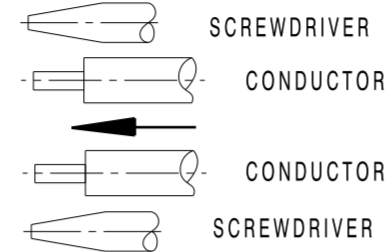
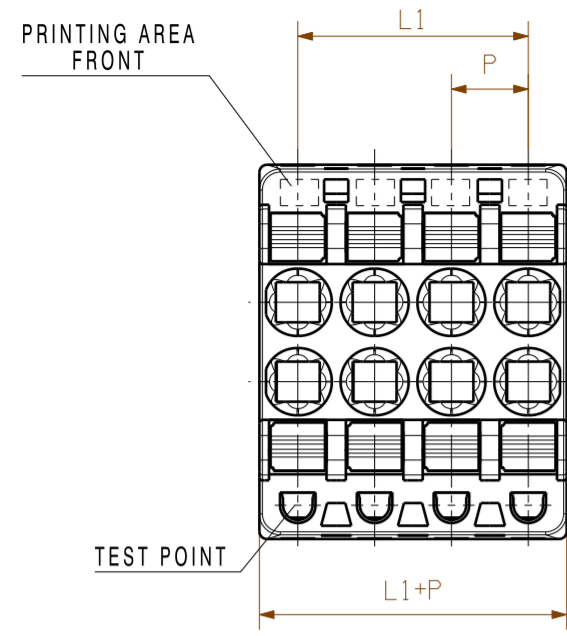


Cost-effective wiring  
Quick and intuitive operation

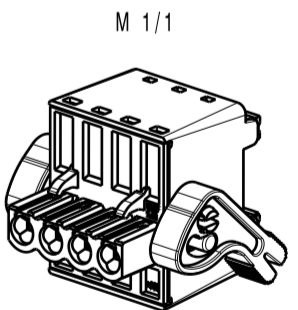
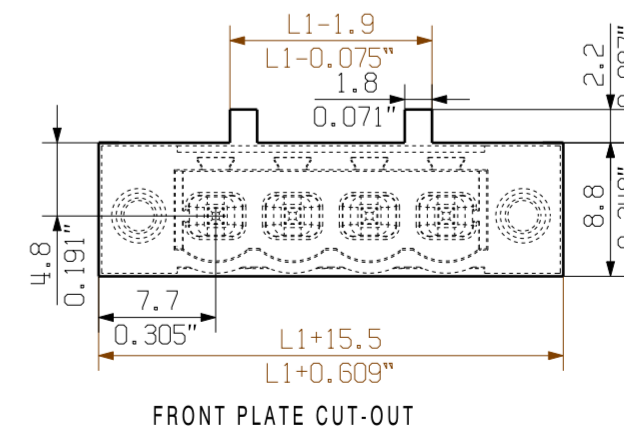
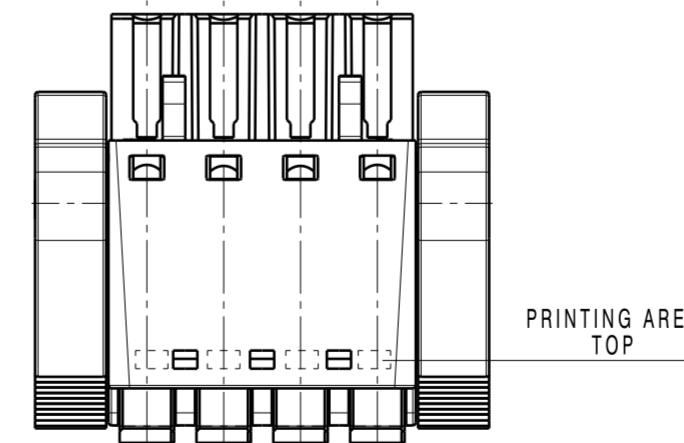
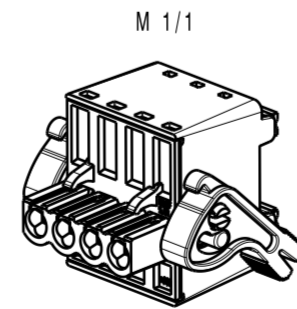
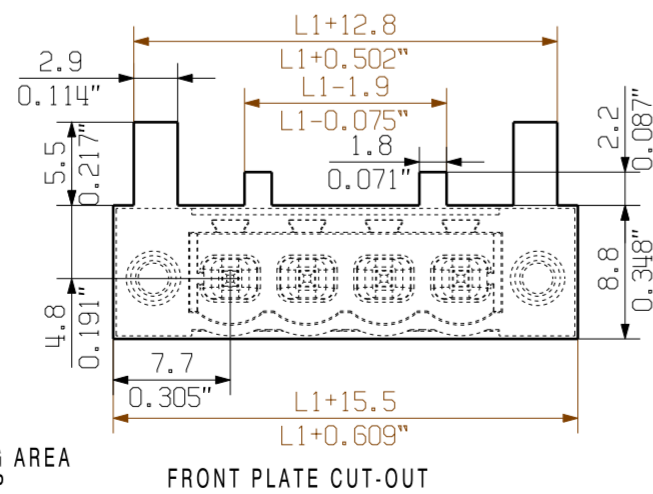
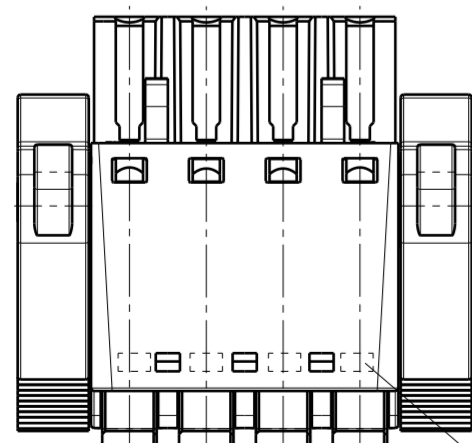
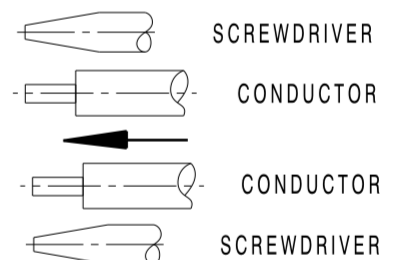
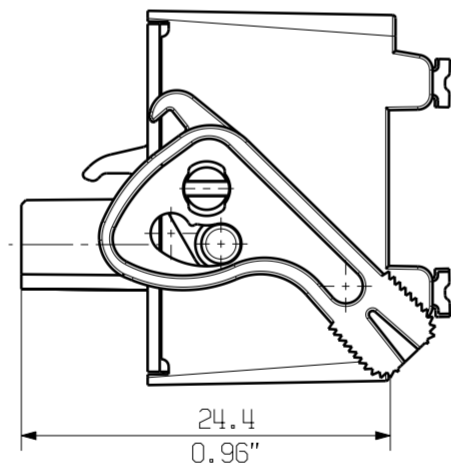


Wide clamping range  
Tool-free wire connection

SHOWN: BLDf 5.08/04/180 G



SHOWN: BLDf 5.08/04/180 LR



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.

ALLGEMEINGUELTIGE KUNDENZEICHUNG, AKTUELLER STAND NUR AUF ANFRAGE  
GENERAL CUSTOMER DRAWING, TOPICAL VERSION ONLY IF REQUIRED

GENERAL TOLERANCE:  
DIN ISO 2768-m

EC00002032		Prim PLM Part No.: 002876		Prim ERP Part No.: 1001170000	
First Issue Date 01.03.2010		Max. nos. Modification		<b>47786</b> Drawing no. Issue no. Sheet 02 of 02 sheets	
		Date Name Drawn 22.07.2019 Helis, Maria Responsible Hertel, Suzann Approved 31.07.2019 Hertel, Suzann			
Scale: 2:1		Size: A2		BLDf 5.08/.../180... BUCHSENLEISTE SOCKET BLOCK Product file: 7379 BLF 5.08 180	

POLES	MASS L1 DIM. [mm]	MASS L1 DIM. [Inch]
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

P=5.08 RASTER  
PITCH