

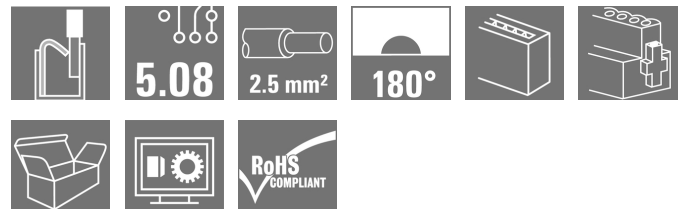
BLDF 5.08/07/180F SN BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

Similar to illustration

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 2.5mm² 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, Spring connection, Clamping range, max. : 3.31 mm ² , Box
Order No.	1000990000
Type	BLDF 5.08/07/180F SN BK BX
GTIN (EAN)	4032248817474
Qty.	24 pc(s).
Product data	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm ² UL: 300 V / 18.5 A / AWG 12 - AWG 26
Packaging	Box

Creation date March 22, 2021 12:09:47 PM CET

BLDF 5.08/07/180F SN BK BX

Weidmüller Interface GmbH & Co. KG

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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
Net weight	21.22 g	Width	45.36 mm
Width (inches)	1.786 inch		

System Parameters

Product family	OMNIMATE Signal - series BL/SL 5.08		
Type of connection	Field connection		
Wire connection method	PUSH IN, Spring connection		
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 ²		
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		
Tightening torque	Torque type	Screw flange	
	Usage information	Tightening torque	min. 0.2 Nm max. 0.25 Nm

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 ⁸ Ω
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 ²
Clamping range, max.	3.31 mm ²
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 ²

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Solid, max. H05(07) V-U	2.5 mm ²			
Flexible, min. H05(07) V-K	0.2 mm ²			
Flexible, max. H05(07) V-K	2.5 mm ²			
w. plastic collar ferrule, DIN 46228 pt 4, 0.25 mm ² min.				
w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm ² max.				
w. wire end ferrule, DIN 46228 pt 1, 0.25 mm ² min.				
w. wire end ferrule, DIN 46228 pt 1, 2.5 mm ² max.				
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 ²	
	wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H0.5/16 OR	
		Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.5/10	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm ²	
	wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H0.75/16 W	
		Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.75/10	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm ²	
	wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H1.0/16D R	
		Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H1.0/10	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1.5 mm ²	
	wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H1.5/10	
		Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H1.5/16 R	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	2.5 mm ²	
	wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H2.5/10	
		Stripping length	nominal	13 mm
		Recommended wire-end ferrule	H2.5/16DS BL	
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

30 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	Declaration of the Manufacturer
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD

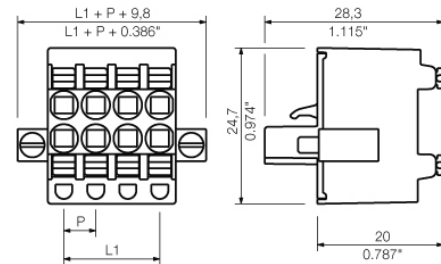
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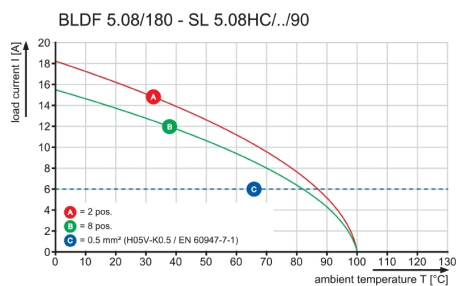
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Drawings

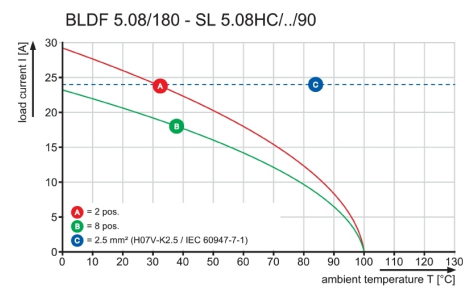
Dimensional drawing



Graph



Graph



Uncompromising functionality
High vibration resistance

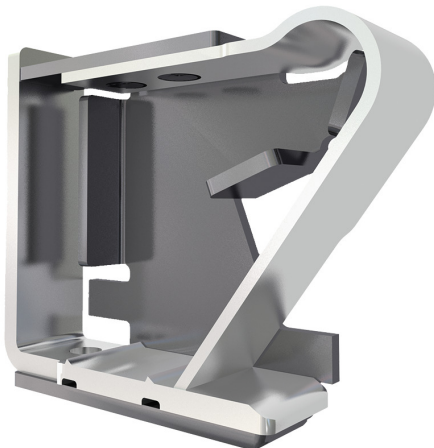
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Drawings

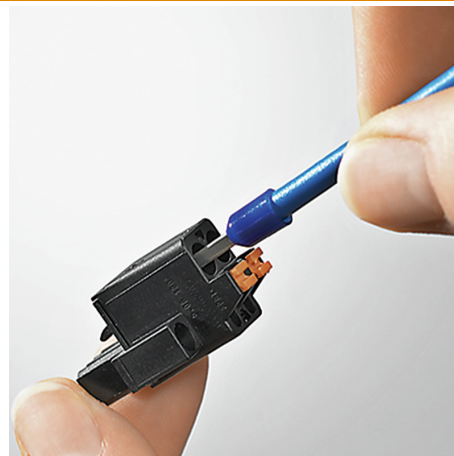
Product benefits



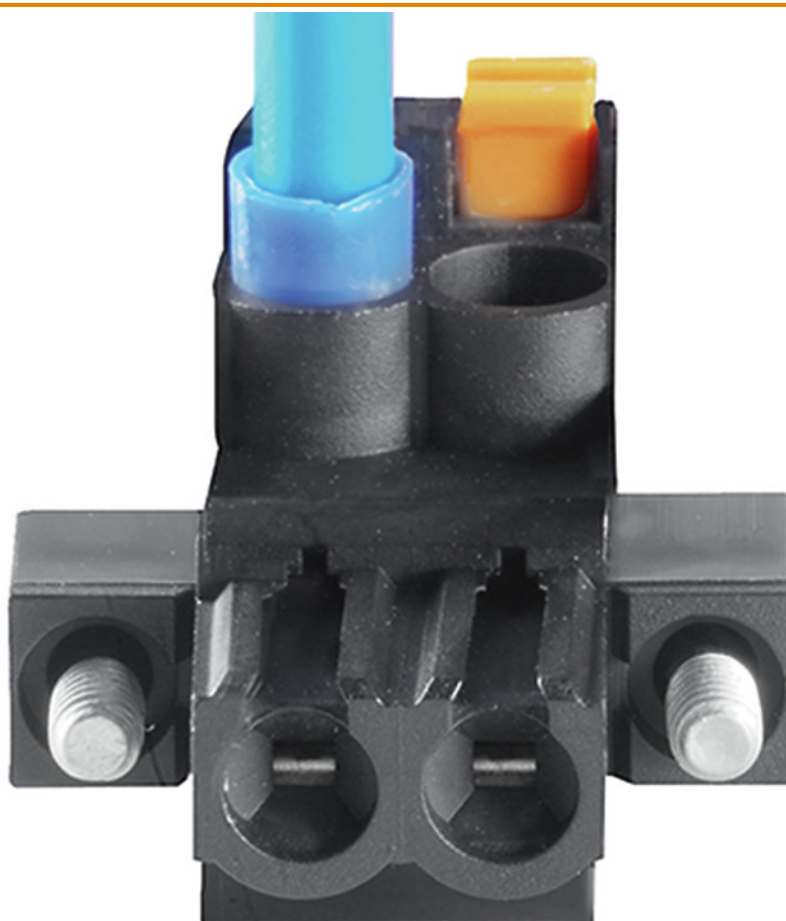
Solid PUSH IN contact
Safe and durable

Product benefits

Product benefits



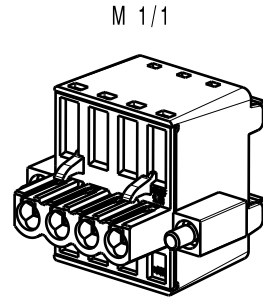
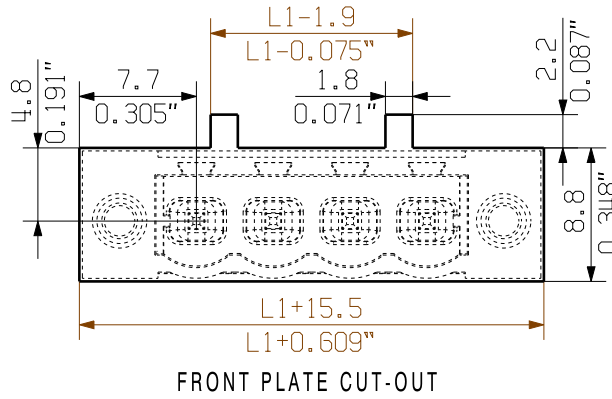
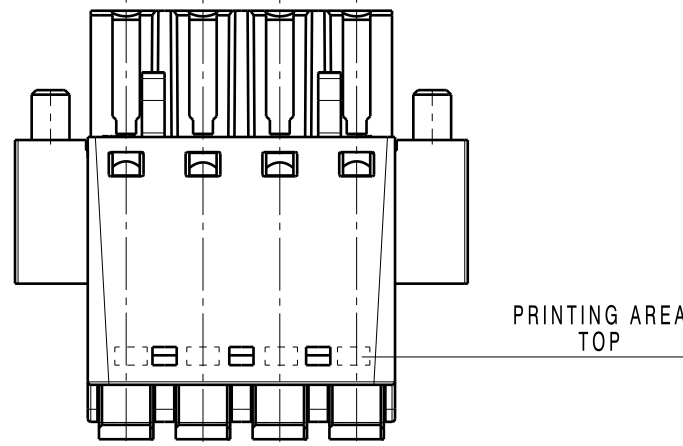
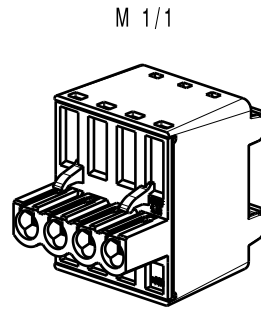
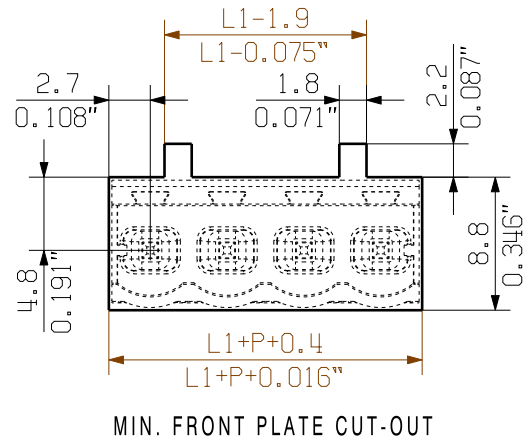
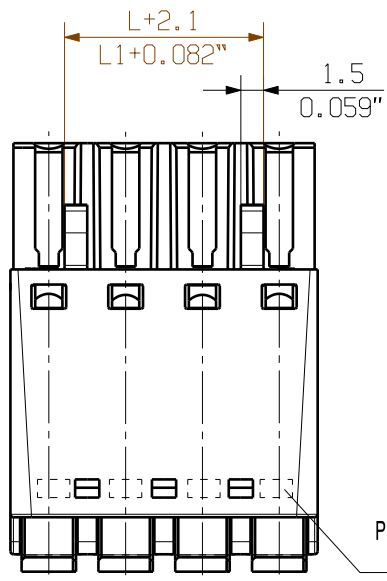
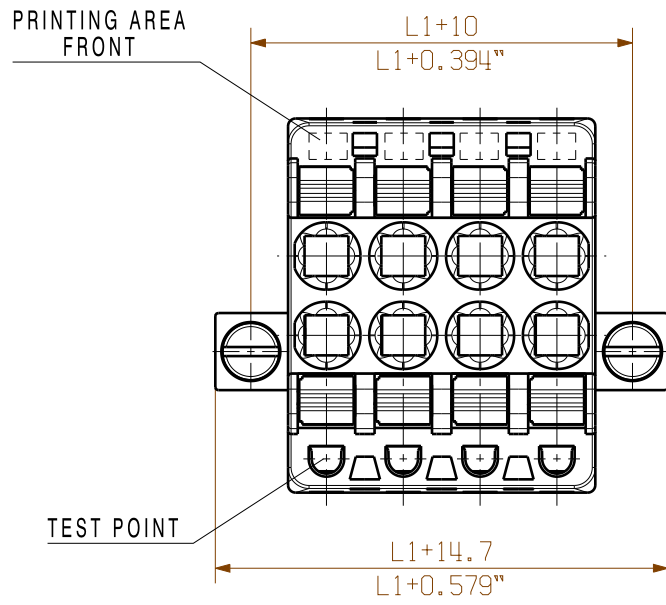
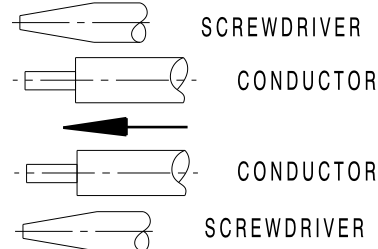
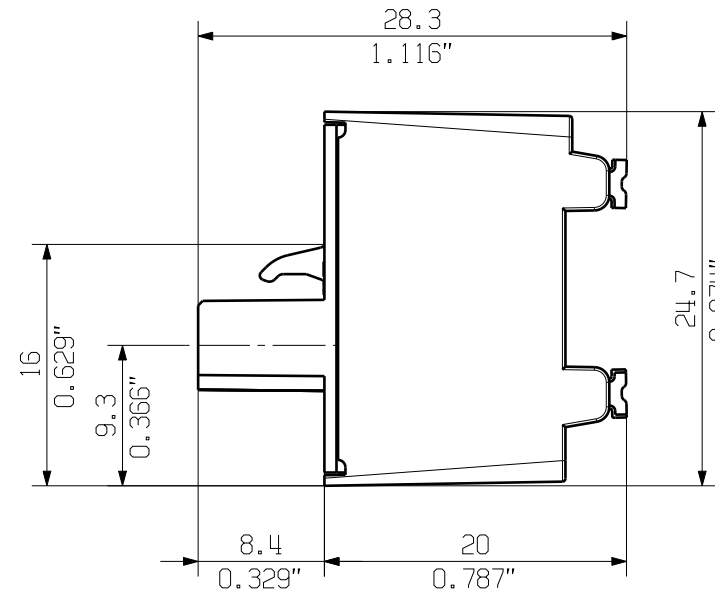
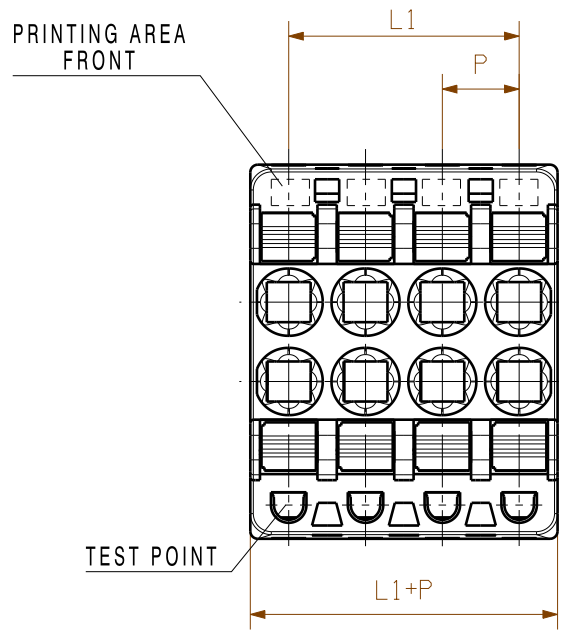
Cost-effective wiring
Quick and intuitive operation



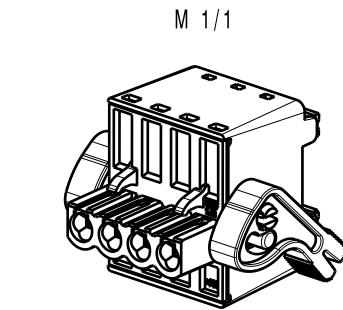
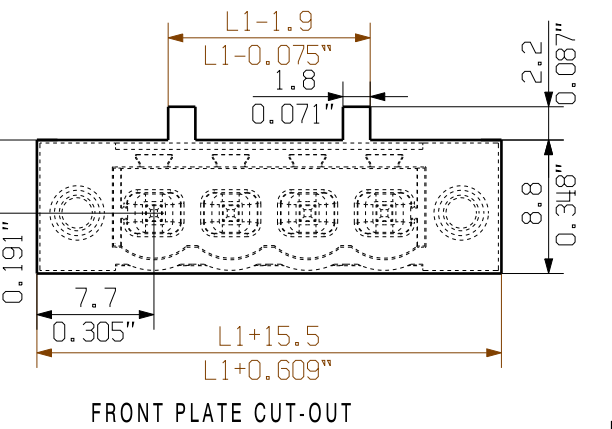
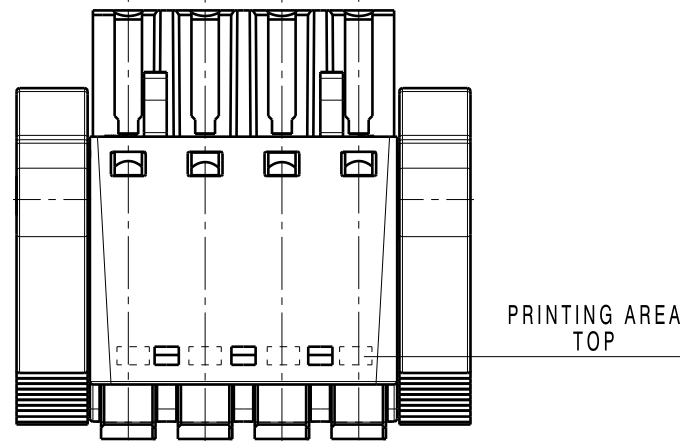
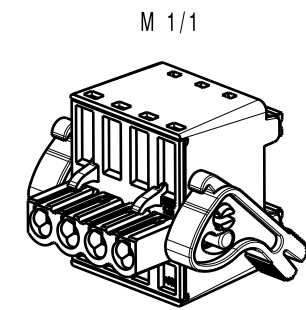
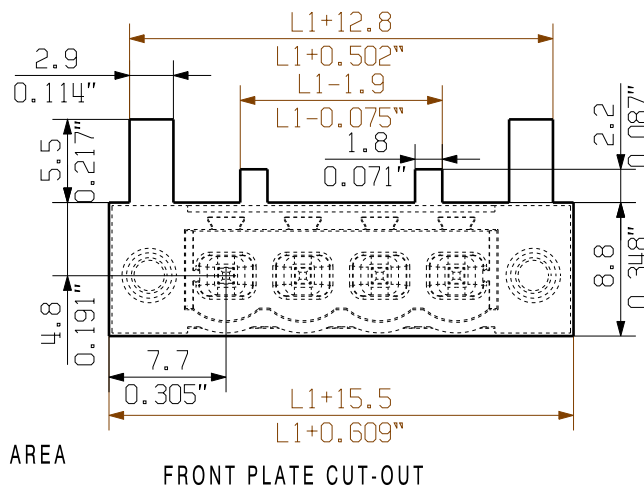
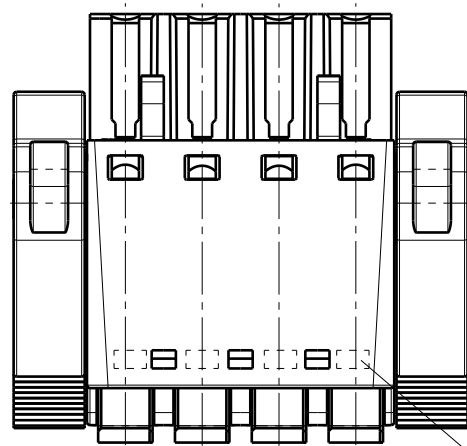
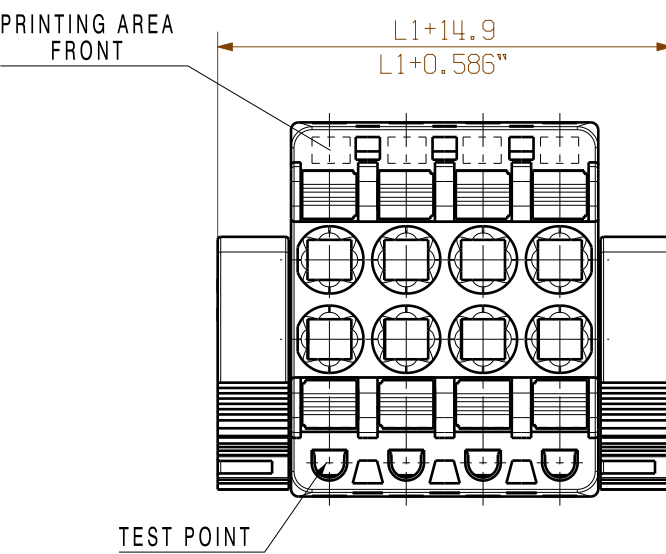
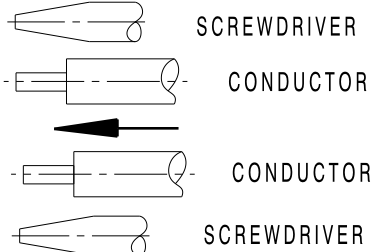
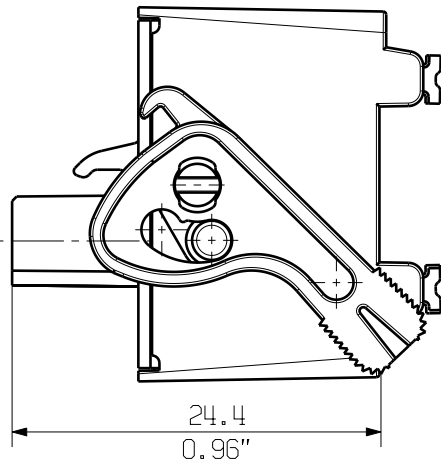
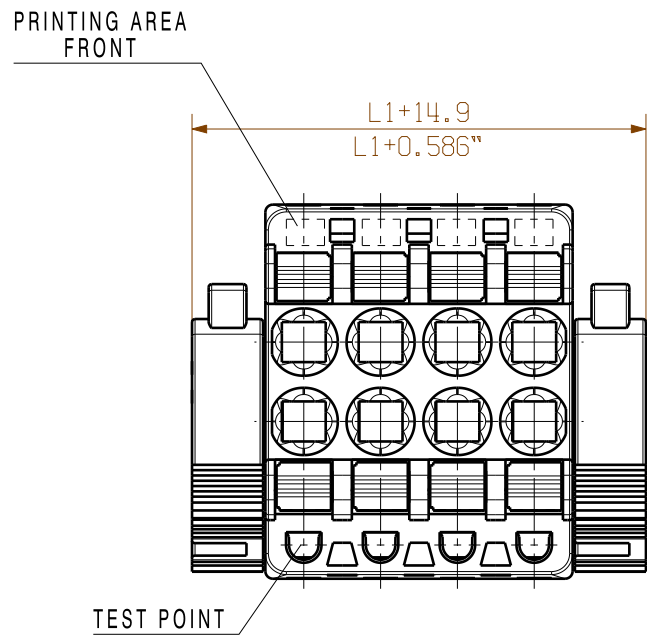
Wide clamping range
Tool-free wire connection

Creation date March 22, 2021 12:09:47 PM CET

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SHOWN: BLDF 5.08/04/180 LR

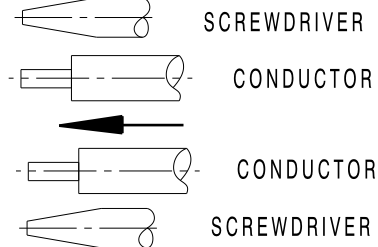
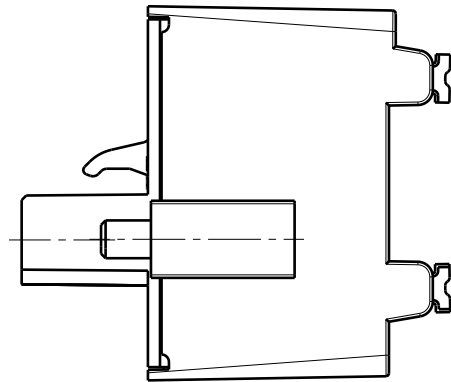


For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance with VDE 0110. The current-carrying capacity and pitch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

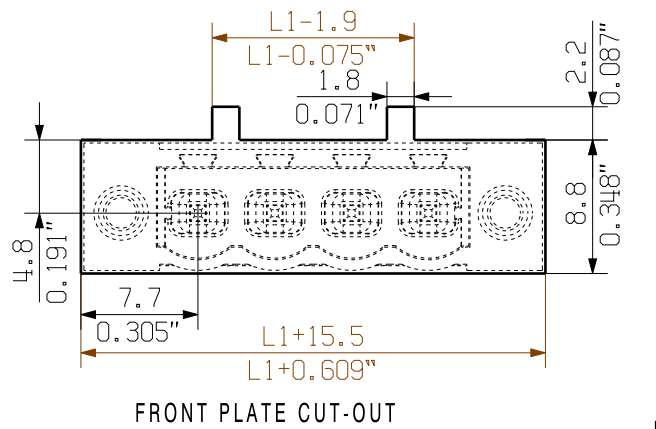
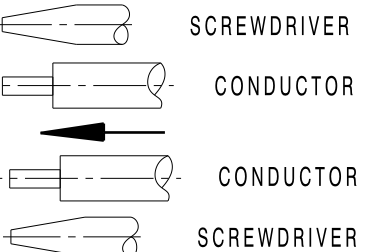
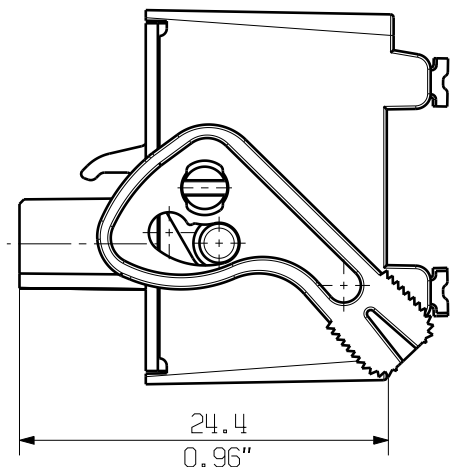
Weidmüller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

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]

P=5.08 RASTER
PITCH

EC00002032	Max. nos.	Prim PLM Part No.: 002876	Prim ERP Part No.: 1001170000
First Issue Date 01.03.2010	Modification	Weidmüller	47786
Drawn 22.07.2019 Helis, Maria	Date 22.07.2019 Helis, Maria	Sheet 02 of 02 sheets	Issue no. 6
Responsible 31.07.2019 Hertel, Suzann	Approved 31.07.2019 Hertel, Suzann	BLDF 5.08/.../180... BUCHSENLEISTE SOCKET BLOCK	
Scale: 2:1	Size: A2	Product file: 7379 BLF 5.08 180	
Drawings Assembly			

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