

## BLDF 5.08/05/180LR SN BK BX

Weidmüller Interface GmbH & Co. KG

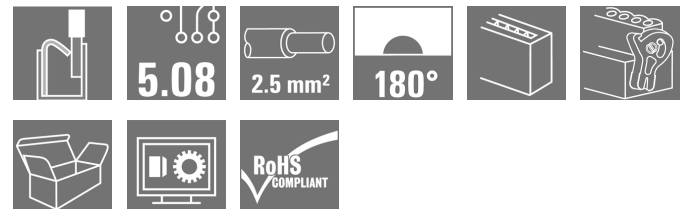
Klingenbergstraße 26

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 18.5 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: 5, 180°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm <sup>2</sup> , Box
Order No.	<a href="#">1001040000</a>
Type	BLDF 5.08/05/180LR SN BK BX
GTIN (EAN)	4032248817467
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 March 22, 2021 12:10:34 PM CET

**BLDF 5.08/05/180LR SN BK BX**
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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	16.61 g	Width	35.2 mm
Width (inches)	1.386 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	5	L1 in mm	20.32 mm
L1 in inches	0.8 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	Insulation strength	≥ 10 <sup>8</sup> 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 <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, min.	0.25 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm <sup>2</sup>
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	0
VPE width	0	VPE height	0

## 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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Catalogue status 12.03.2021 / We reserve the right to make technical changes.

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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	<ul style="list-style-type: none"> <li>• Additional colours on request</li> <li>• Gold-plated contact surfaces on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• P on drawing = pitch</li> <li>• Crimping shape "A" for wire end ferrules with PZ 6/5 crimping tool recommended.</li> <li>• The test point can only be used as potential-pickup point.</li> <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	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>

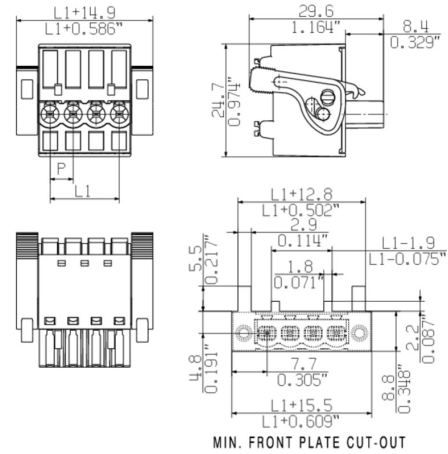
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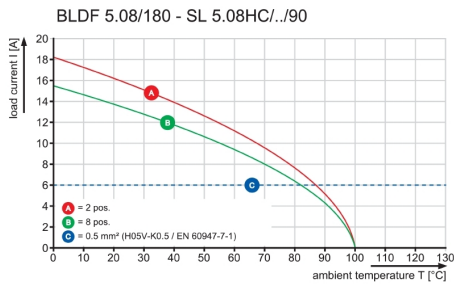
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**Drawings**

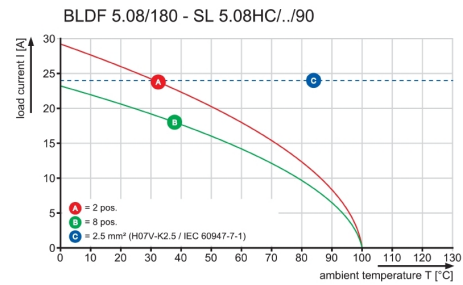
**Dimensional drawing**



**Graph**



**Graph**



**Uncompromising functionality**  
**High vibration resistance**

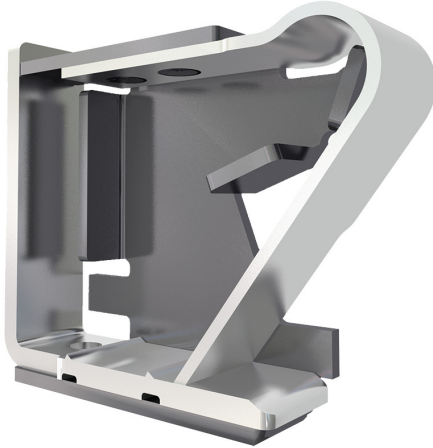
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Drawings

Product benefits



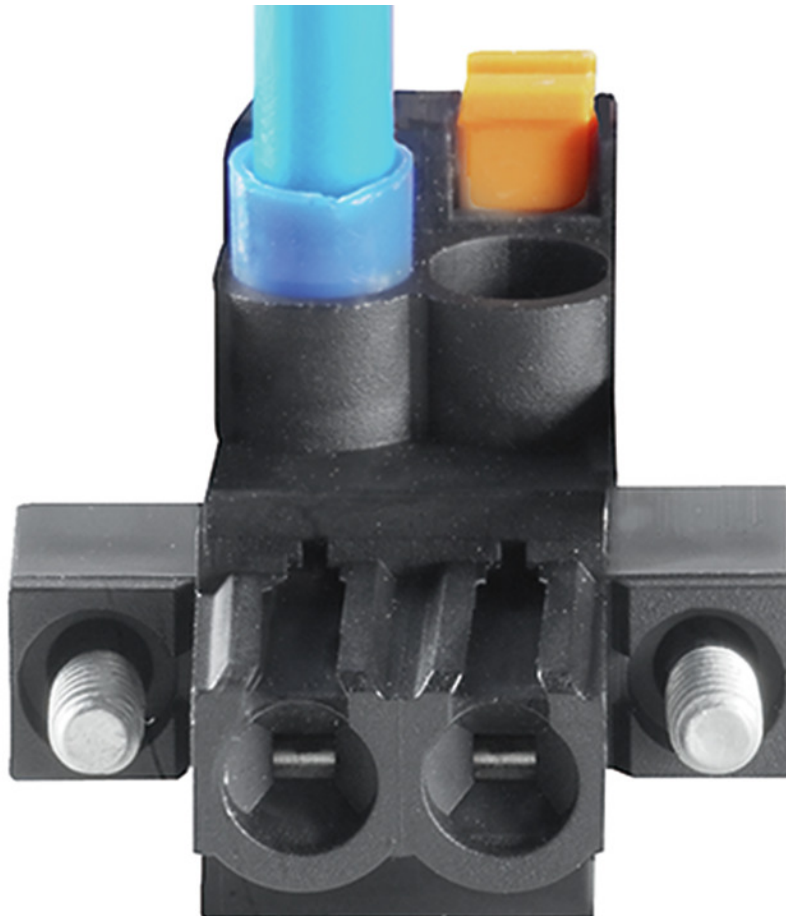
Solid PUSH IN contact  
Safe and durable

Product benefits

Product benefits



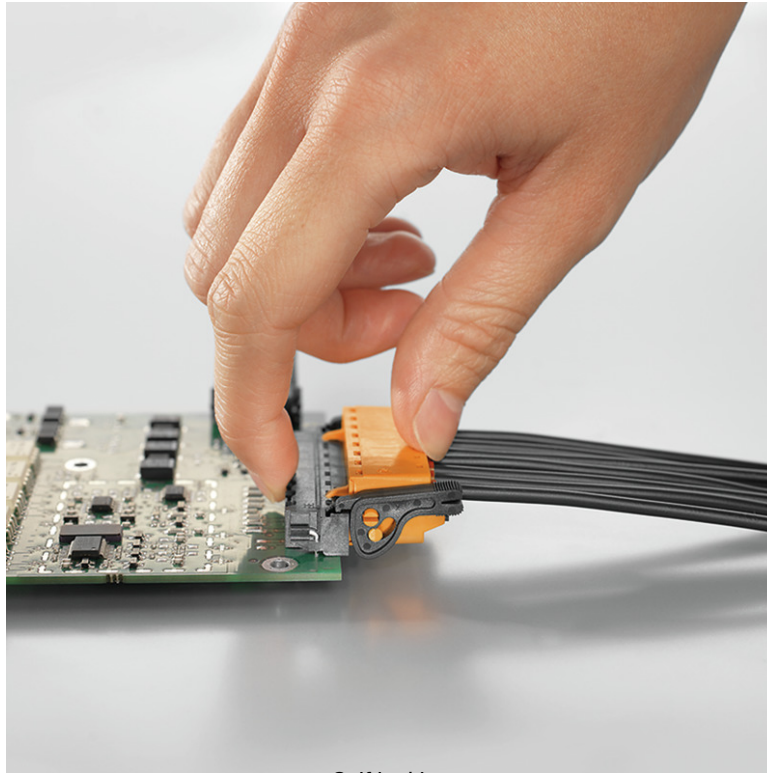
Cost-effective wiring  
Quick and intuitive operation



Wide clamping range  
Tool-free wire connection



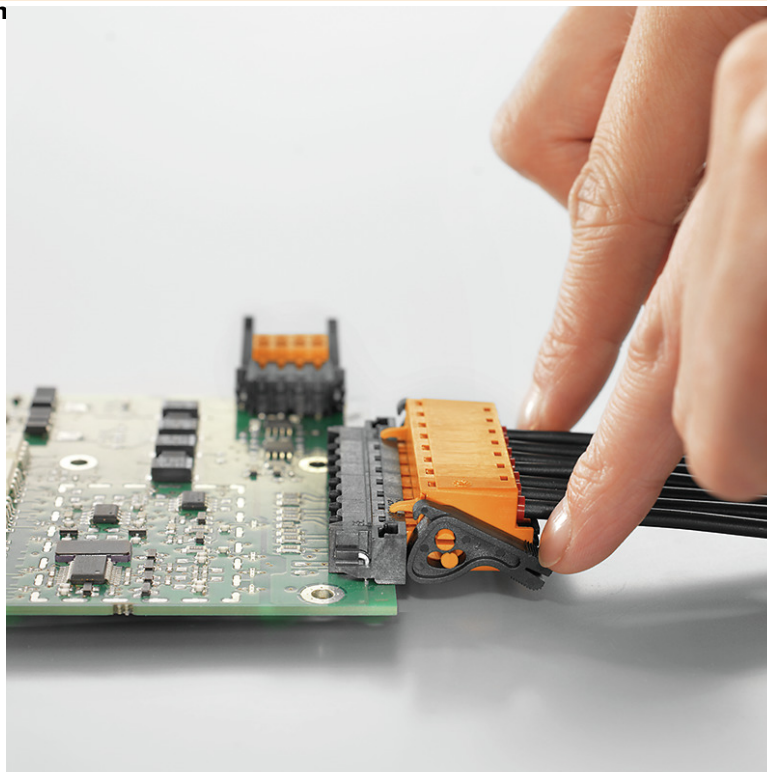
**Product benefits**



Self-locking  
Immediately on plugging in

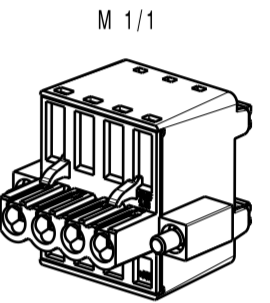
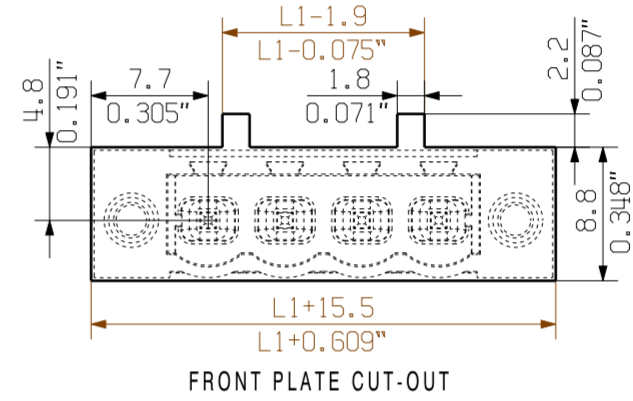
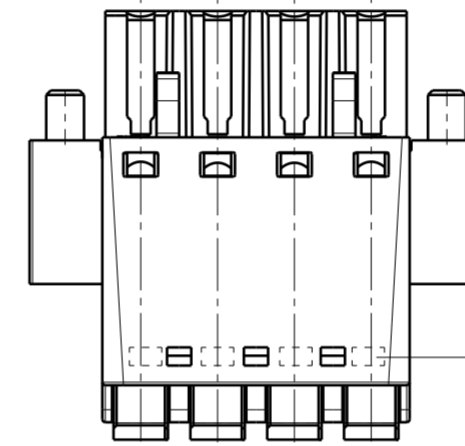
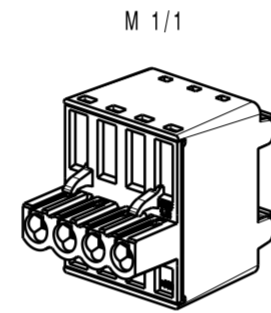
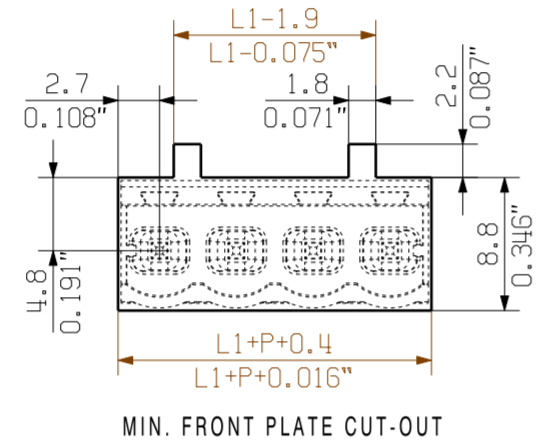
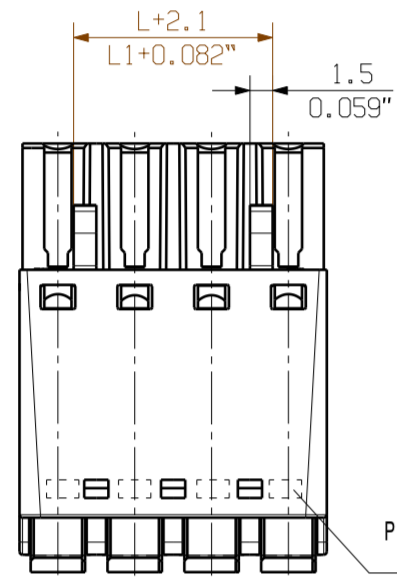
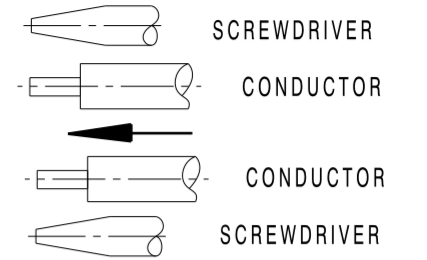
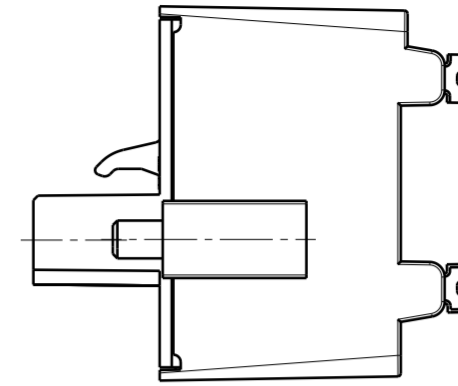
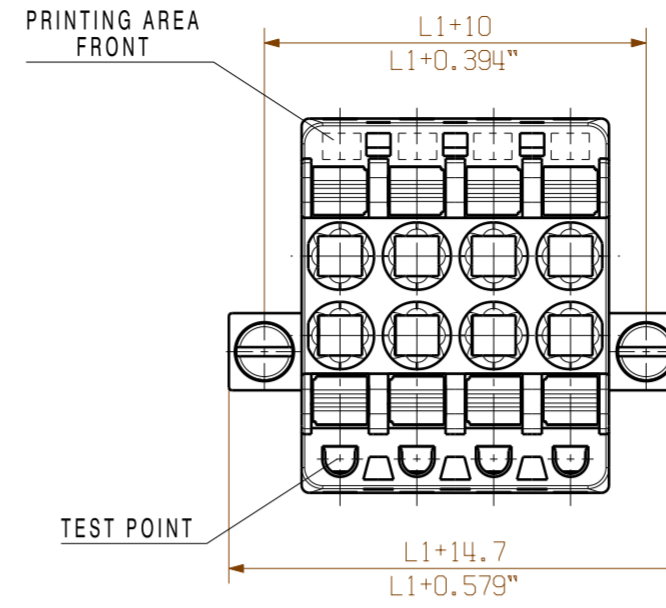
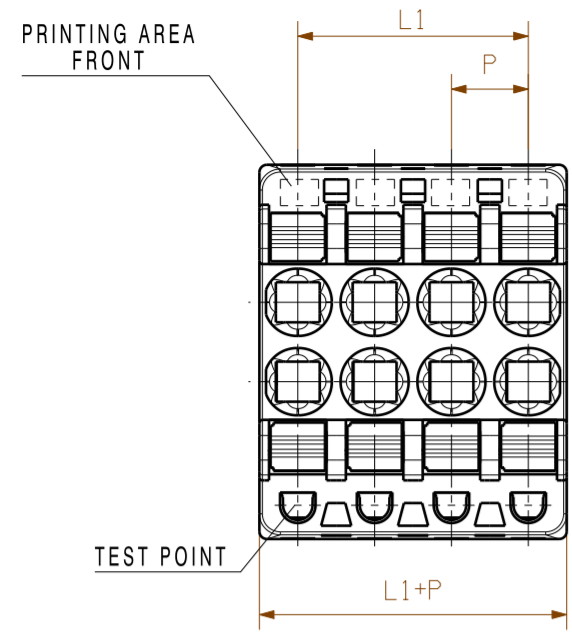
**Uncompromising functionality**

**High vibration resistant**

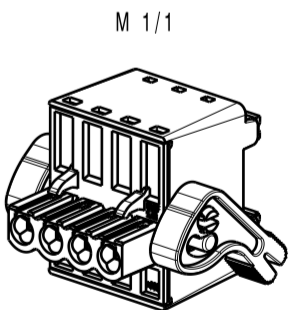
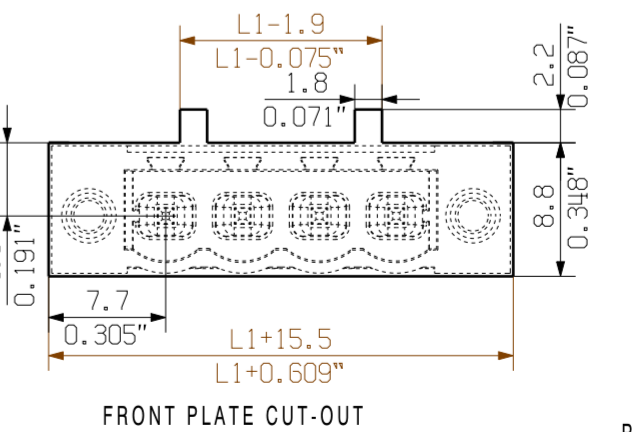
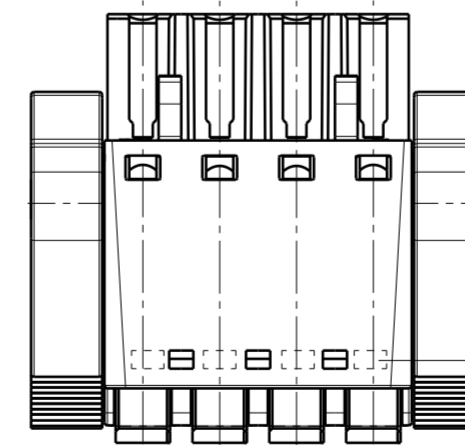
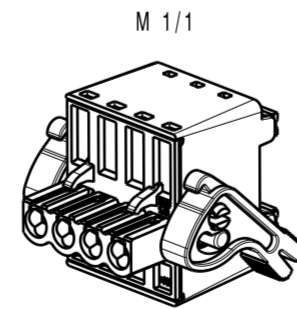
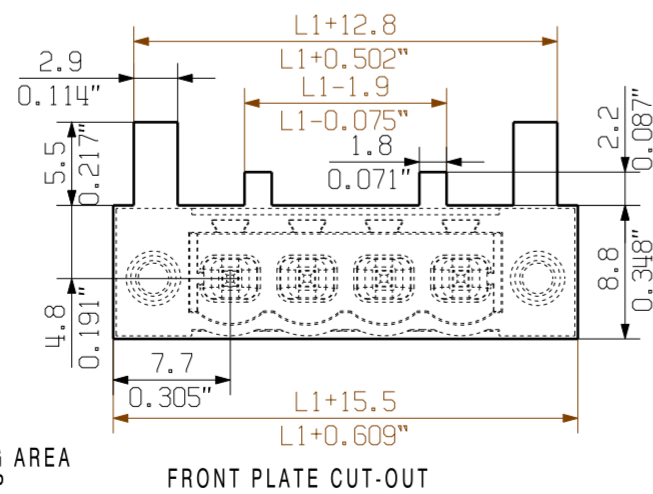
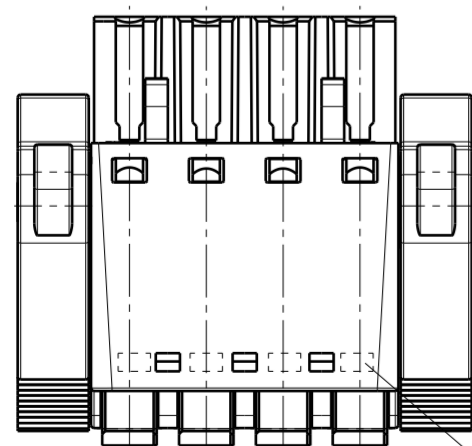
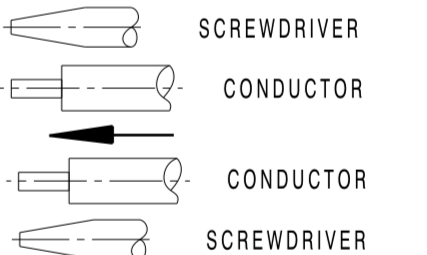
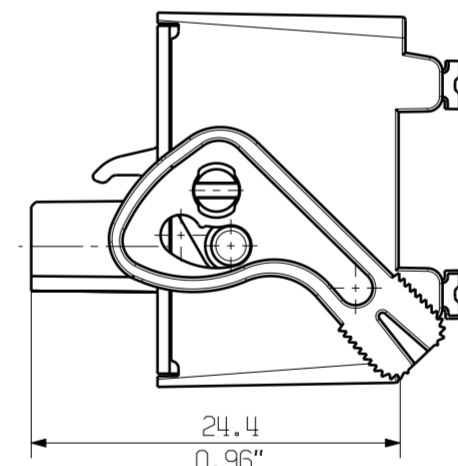
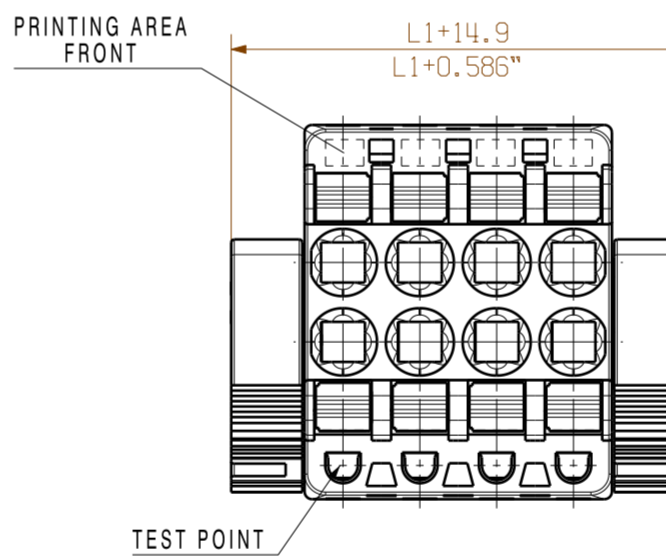
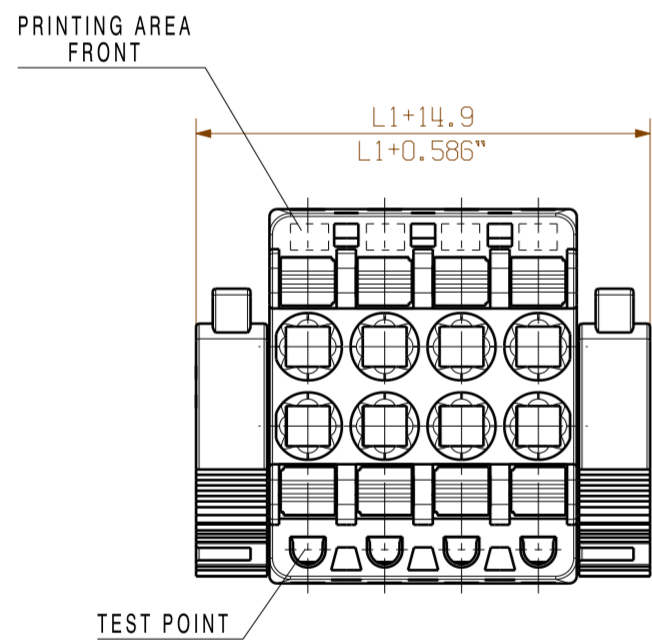




SHOWN: BLDf 5.08/04/180 G



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.

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

GENERAL TOLERANCE:  
DIN ISO 2768-m

SHOWN: BLDf 5.08/04/180 F

SHOWN: BLDf 5.08/04/180 LH

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 22.07.2019		Name Helis, Maria			
Responsible Hertel, Suzann		Date 31.07.2019		Name Hertel, Suzann	
Approved		Date		Name	
Scale: 2:1		Size: A2		BLDf 5.08/.../180... BUCHSENLEISTE SOCKET BLOCK	
Drawings Assembly		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