

BLDF 5.08/05/180 SN OR BX

Weidmüller Interface GmbH & Co. KG

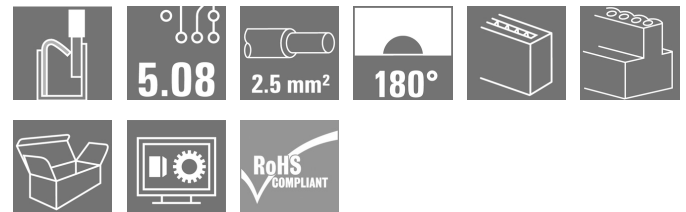
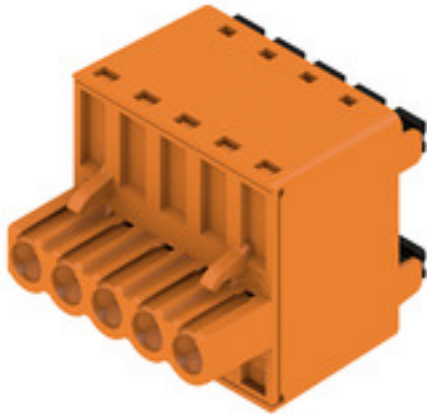
Klingenbergstraße 26

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 2.5mm² 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: 5, 180°, PUSH IN with actuator, Clamping range, max. : 3.31 mm ² , Box
Order No.	1001180000
Type	BLDF 5.08/05/180 SN OR BX
GTIN (EAN)	4032248818228
Qty.	48 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 12, 2024 12:13:33 PM CET

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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	25.4 mm	Width (inches)	1 inch
Net weight	14.45 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	5	L1 in mm	20.32 mm
L1 in inches	0.8 "	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	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	orange
Colour chart (similar)	RAL 2000	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 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
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, min.	0.25 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.25 mm ²
w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm ²
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.0 mm

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Catalogue status 09.03.2024 / We reserve the right to make technical changes.

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Technical data

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, 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	353 mm
VPE width	138 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

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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Technical data

Downloads

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

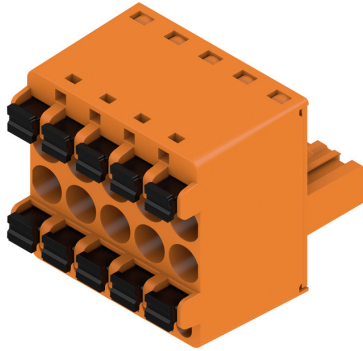
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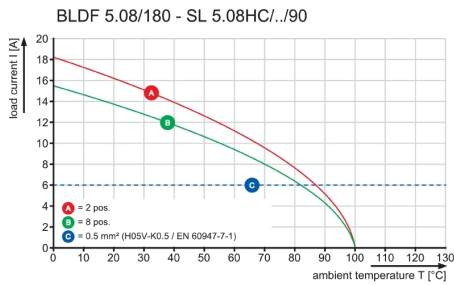
Drawings

Product image

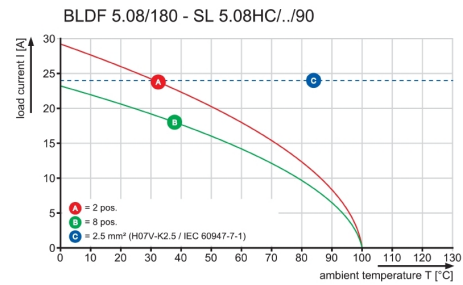


Dimensional drawing

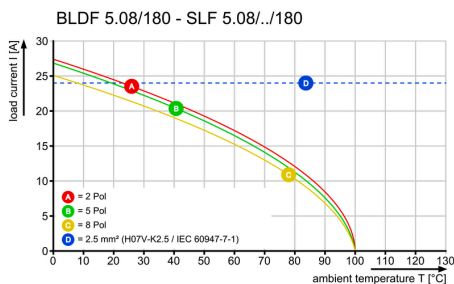
Graph



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.	1545710000	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.	1573010000	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			

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.	2749810000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4050118897012	
Qty.	1 pc(s).	

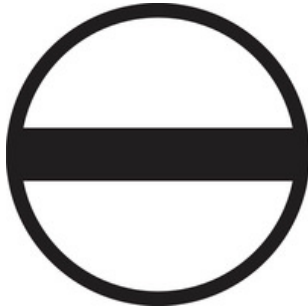
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Accessories

Slotted screwdriver



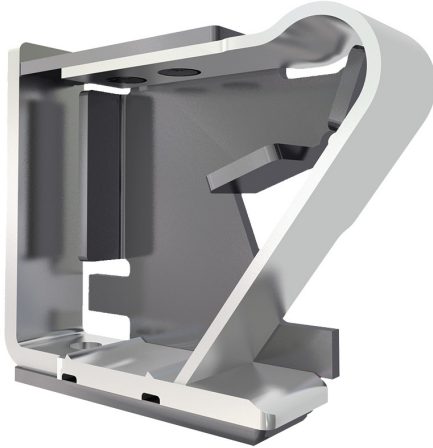
Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

General ordering data

Type	SDS 0.6X3.5X100	Version
Order No.	2749340000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4050118895568	
Qty.	1 pc(s).	
Type	SDS 0.6X3.5X200	Version
Order No.	9010110000	Screwdriver, Screwdriver
GTIN (EAN)	4032248300754	
Qty.	1 pc(s).	

Drawings

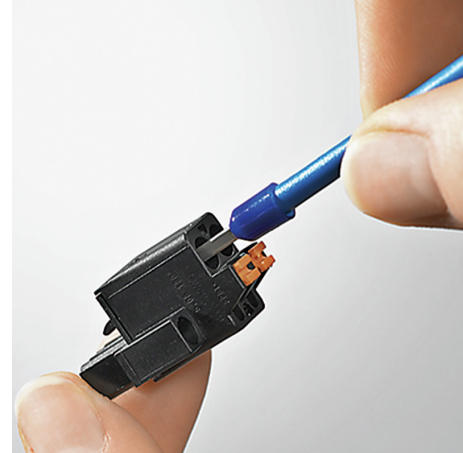
Product benefits



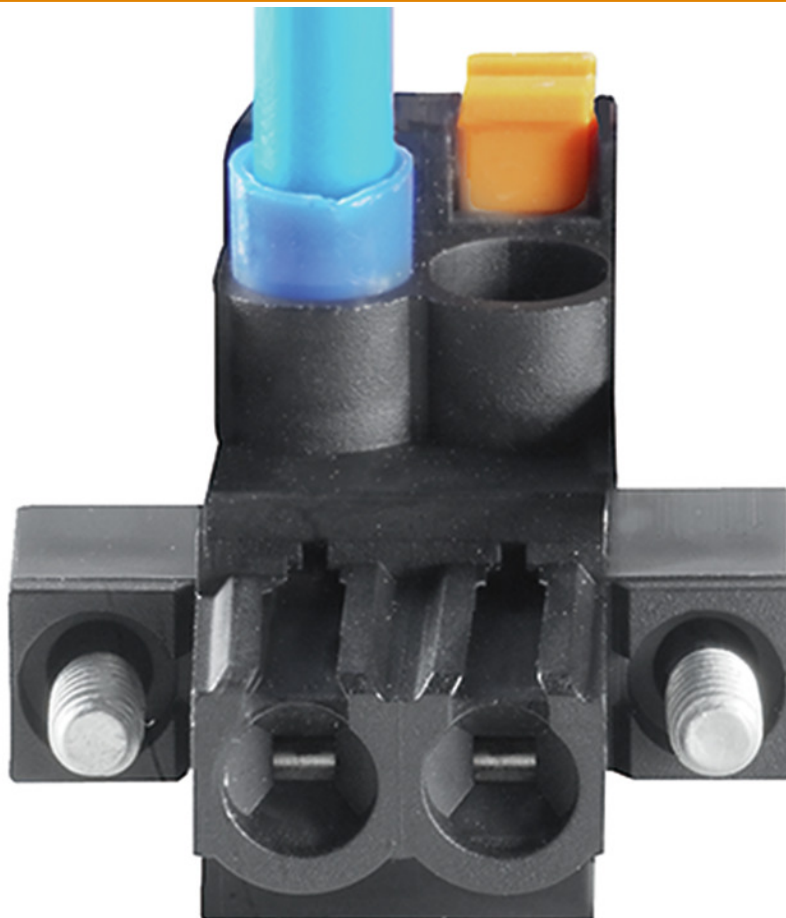
Solid PUSH IN contact
Safe and durable

Product benefits

Product benefits

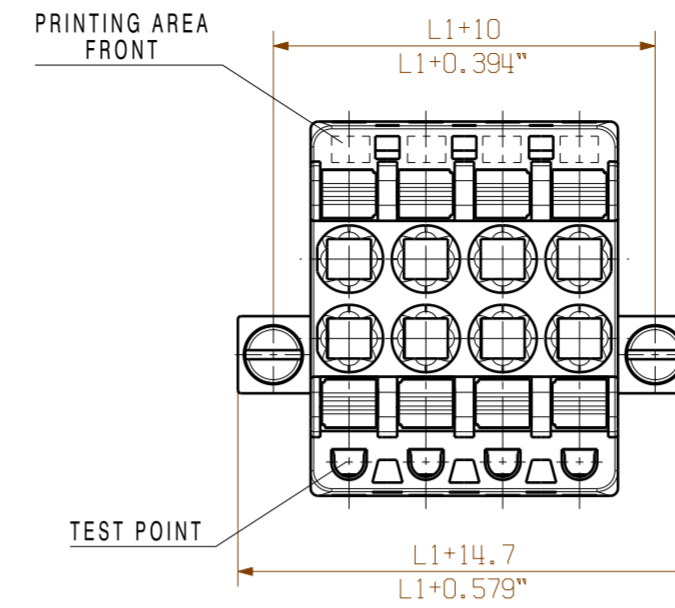
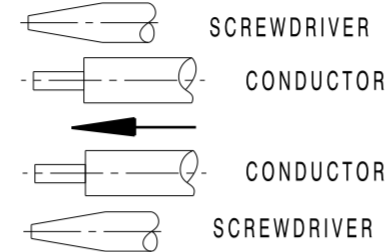
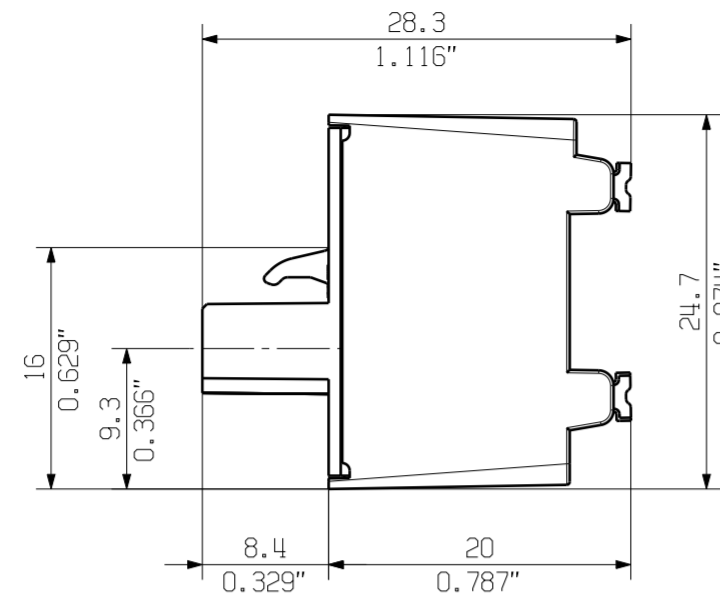
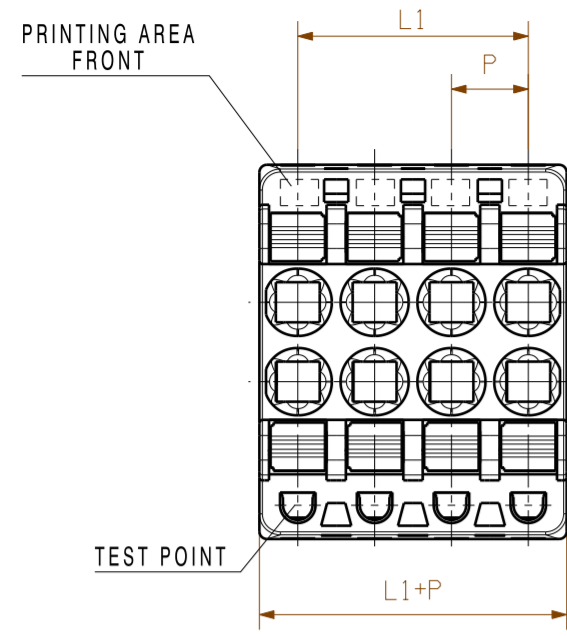


Cost-effective wiring
Quick and intuitive operation

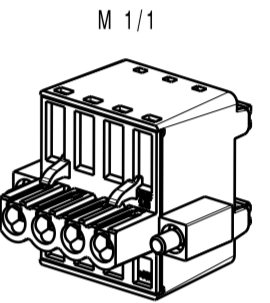
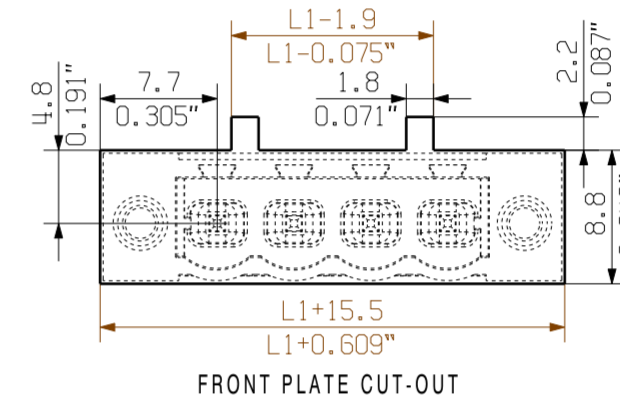
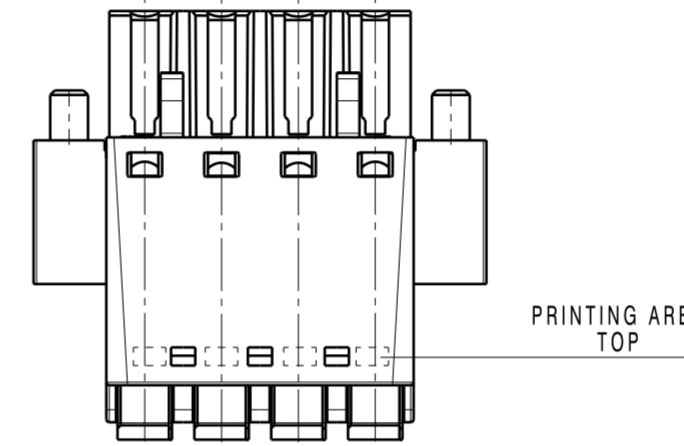
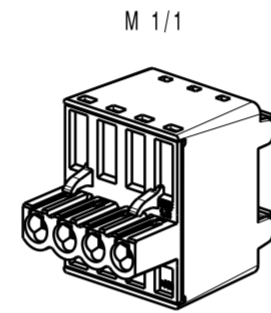
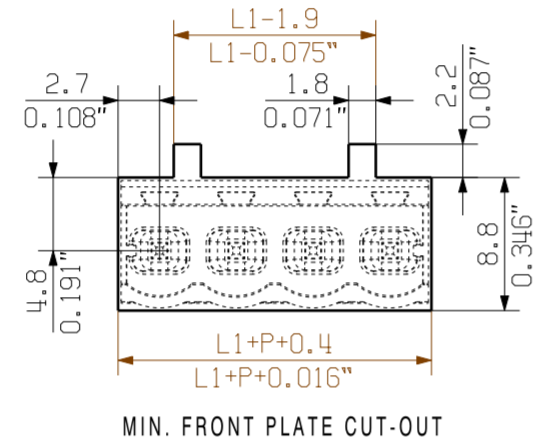
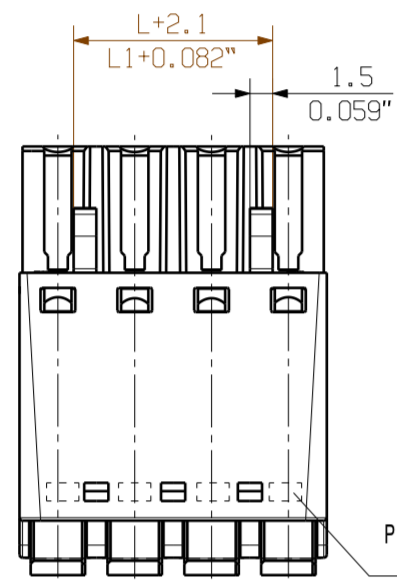
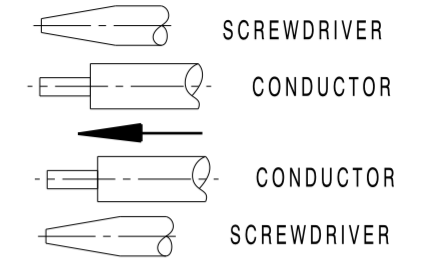
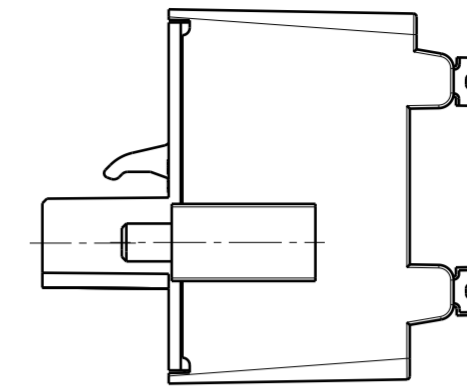


Wide clamping range
Tool-free wire connection

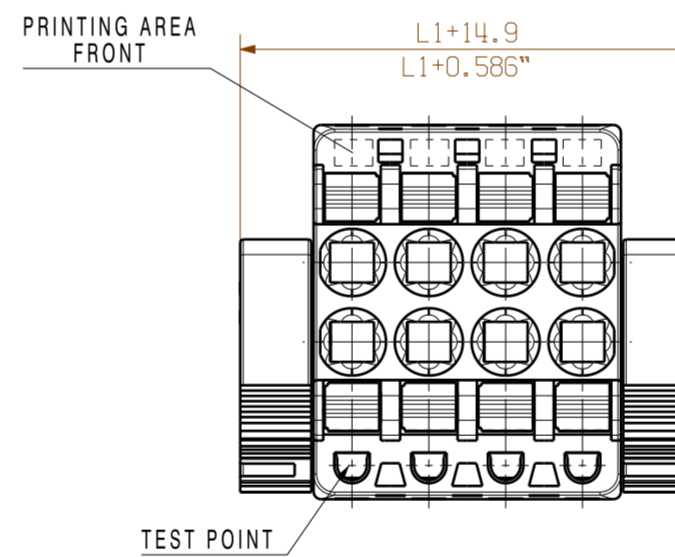
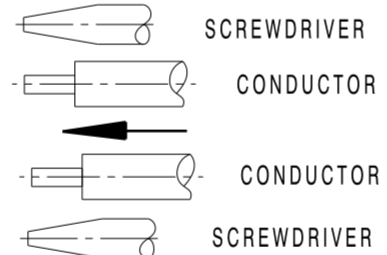
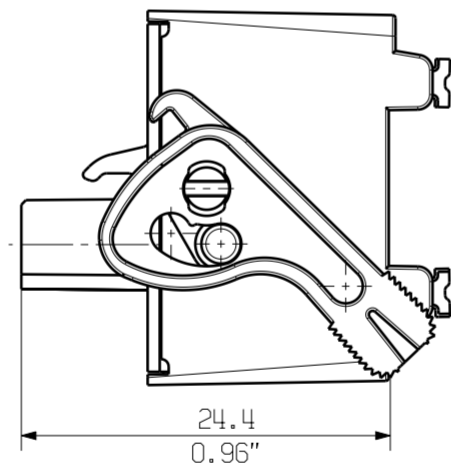
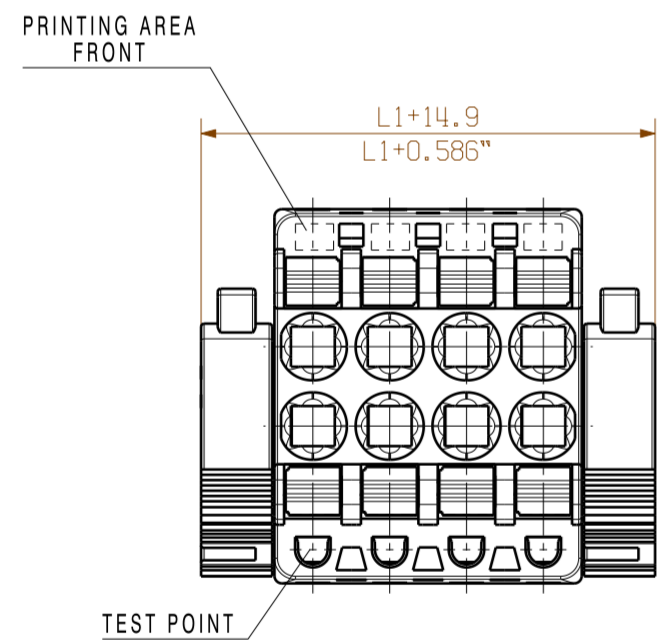
SHOWN: BLDf 5.08/04/180 G



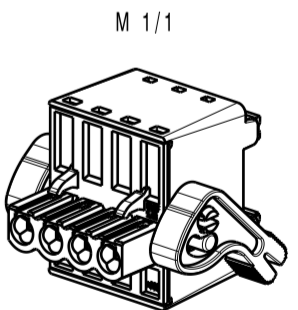
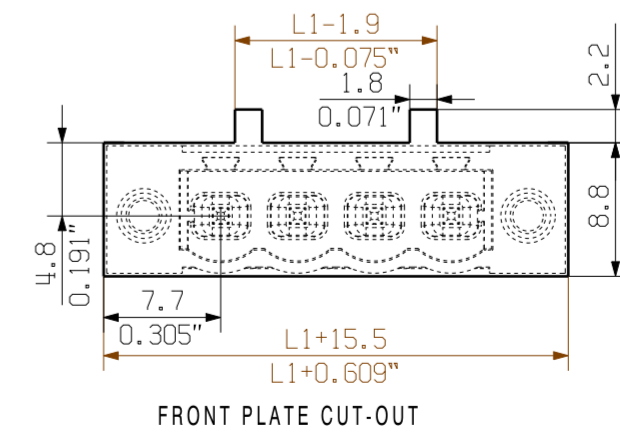
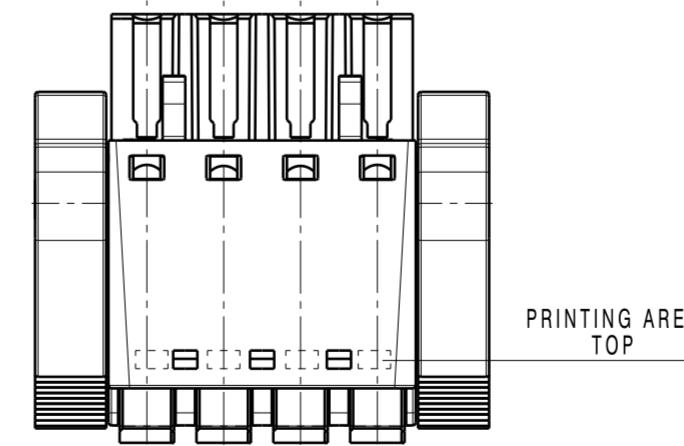
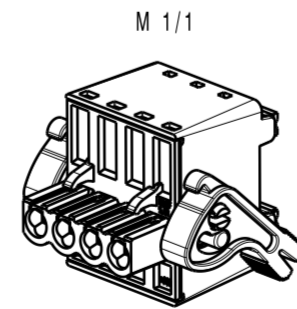
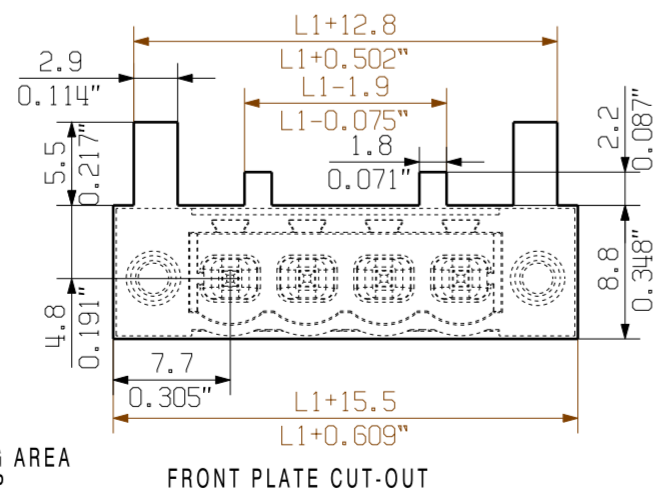
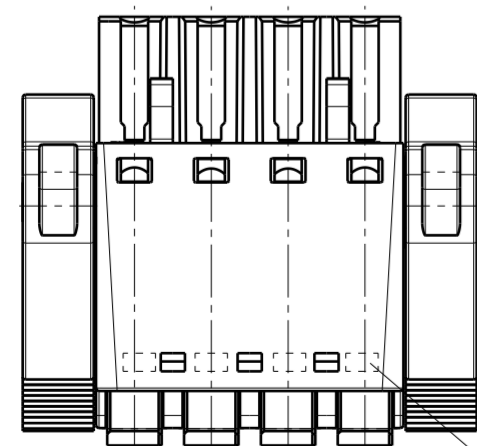
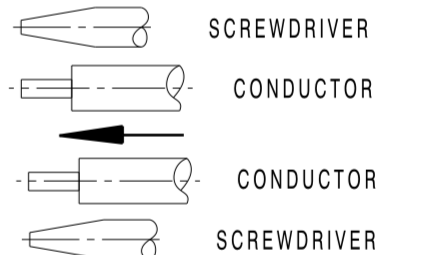
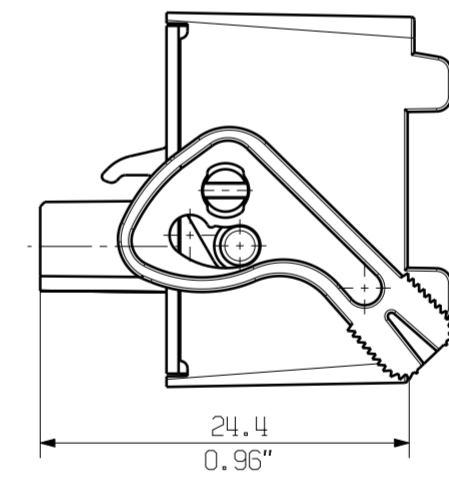
SHOWN: BLDf 5.08/04/180 F



SHOWN: BLDf 5.08/04/180 LR



SHOWN: BLDf 5.08/04/180 LH



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

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

P=5.08 RASTER
PITCH

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