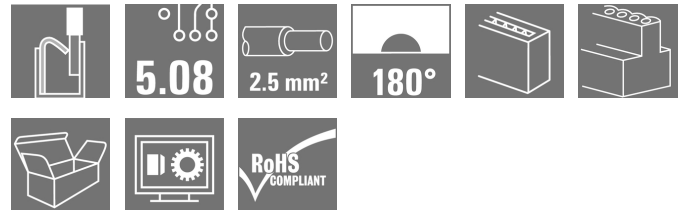


OMNIMATE Signal - series BL/SL 5.08 BLDF 5.08/05/180 SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
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

Type	BLDF 5.08/05/180 SN BK BX
Order No.	1000890000
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 ² , Box
GTIN (EAN)	4032248817078
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

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Technical data**Dimensions and weights**

Width	25.4 mm	Width (inches)	1 inch
Height	24.7 mm	Height (inches)	0.972 inch
Depth	28.3 mm	Depth (inches)	1.114 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, 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 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	≤ 5mΩ	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 of operational elements	orange	Material of operational elements	PBT
Colour chart (similar)	RAL 9011	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	CuSn	Contact surface	tinned
Layer structure of plug contact	4-8 μm Sn hot-dip tinned	Storage temperature, min.	-25 °C
Storage temperature, max.	50 °C	Max. relative humidity during storage	70 %
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, 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, min.	0.25 mm ²
w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm ²

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Technical data

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	
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.		
Max. clamping range	3.31 mm ²		


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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	35 mm
VPE width	140 mm	VPE height	350 mm

Cross-connector rated data according to DIN IEC

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

Creation date March 26, 2020 4:02:18 PM CET

Catalogue status 20.03.2020 / 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		

Notes

Notes	<ul style="list-style-type: none"> • 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.
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.

Approvals

Approvals



ROHS

Conform

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN 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
Engineering Data	EPLAN_WSCAD
Engineering Data	STEP
White paper PUSH IN wire connection	Download Whitepaper

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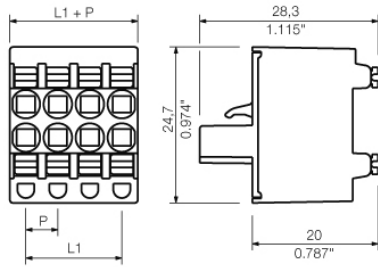
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**OMNIMATE Signal - series BL/SL 5.08
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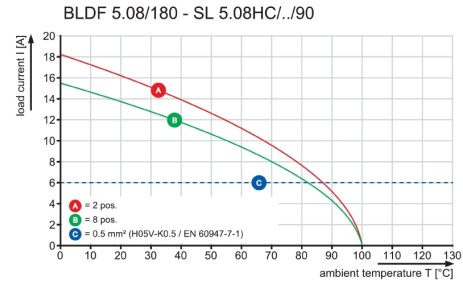
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Drawings

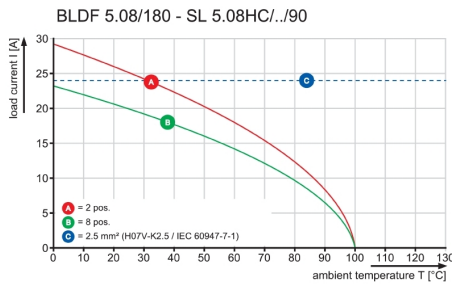
Dimensional drawing



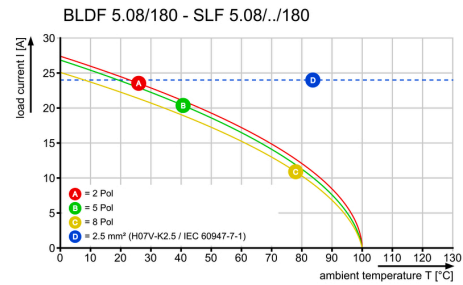
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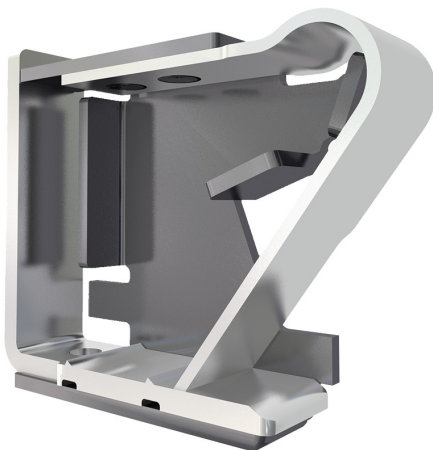
Graph



Graph



Product benefits



Solid PUSH IN contact
Safe and durable

Product benefits

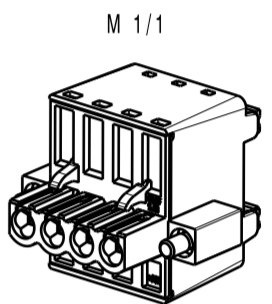
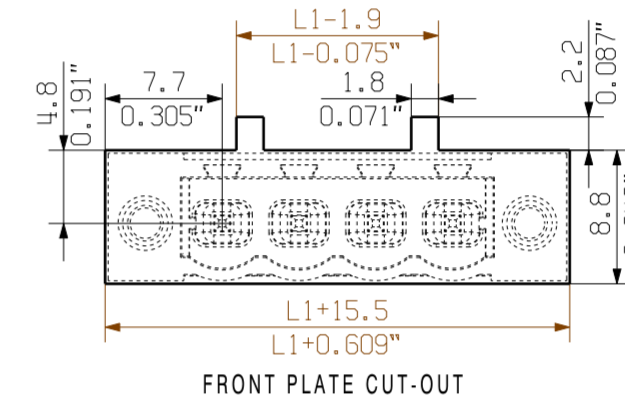
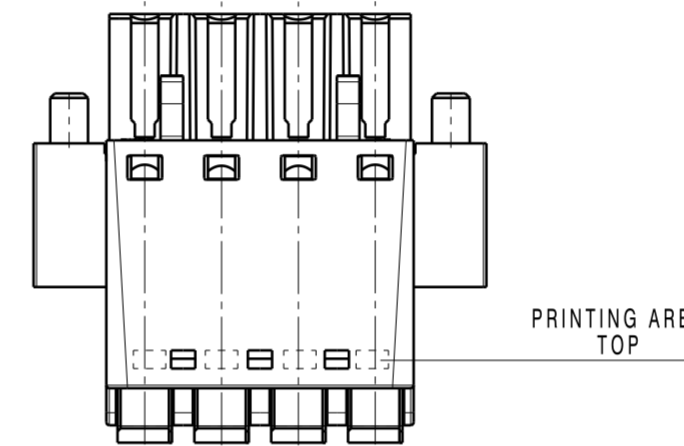
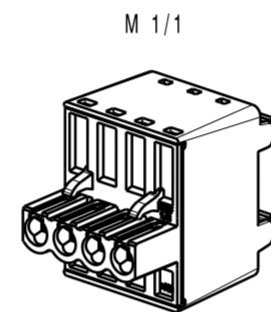
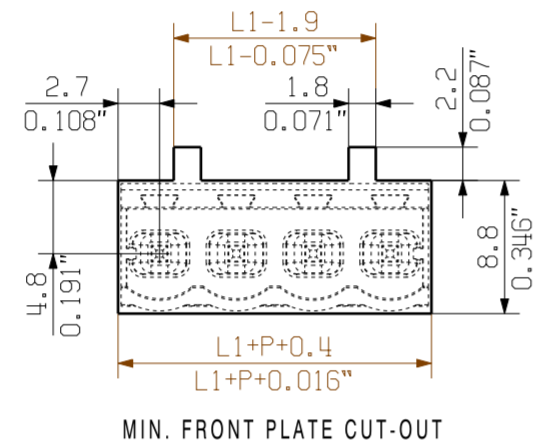
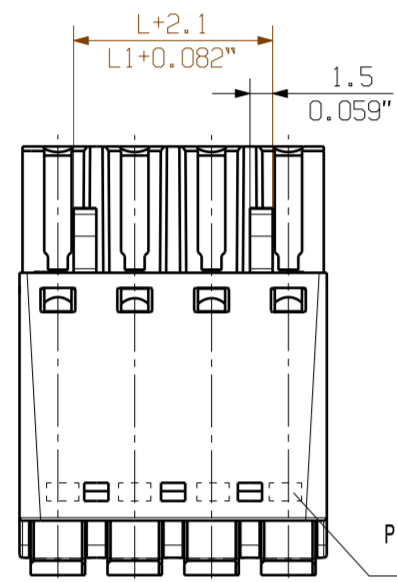
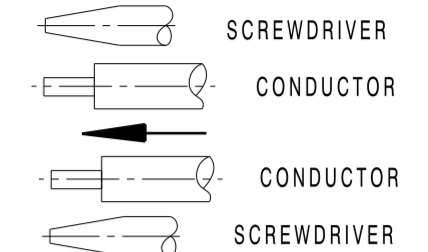
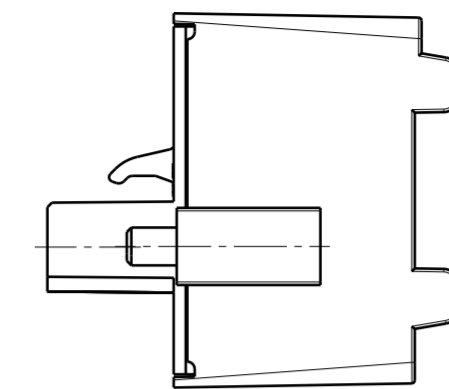
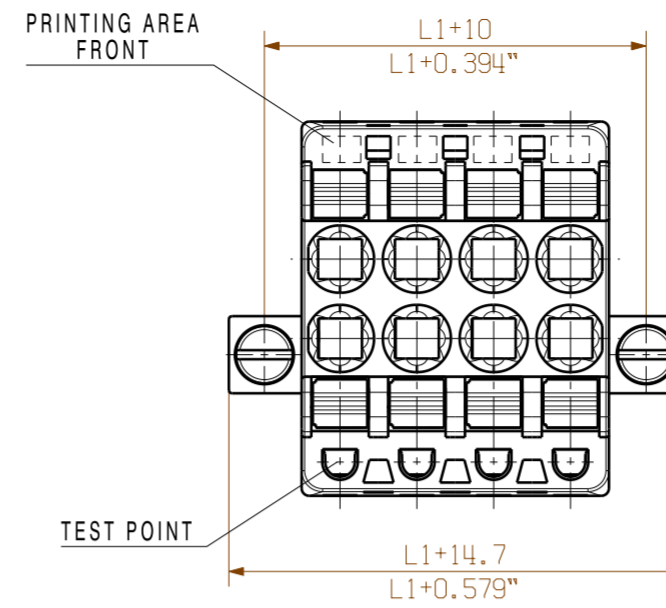
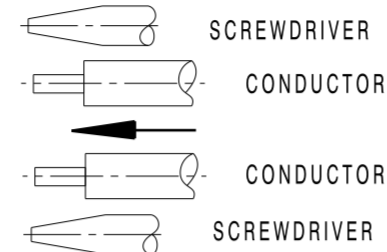
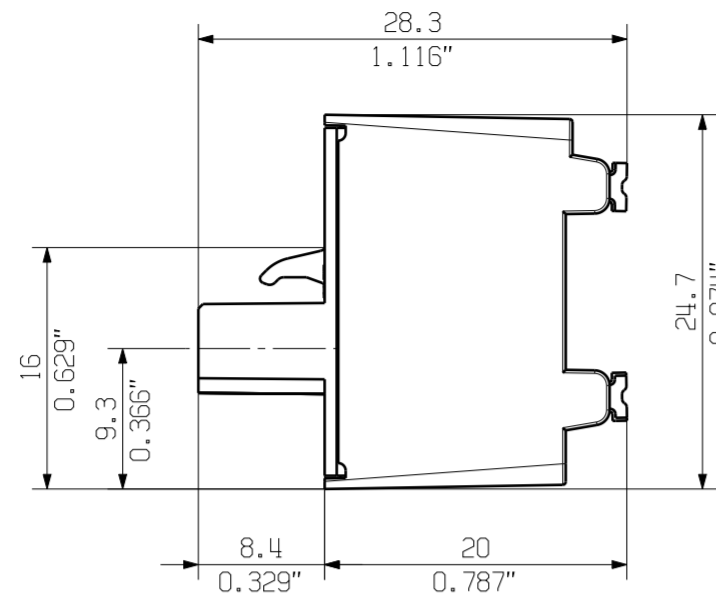
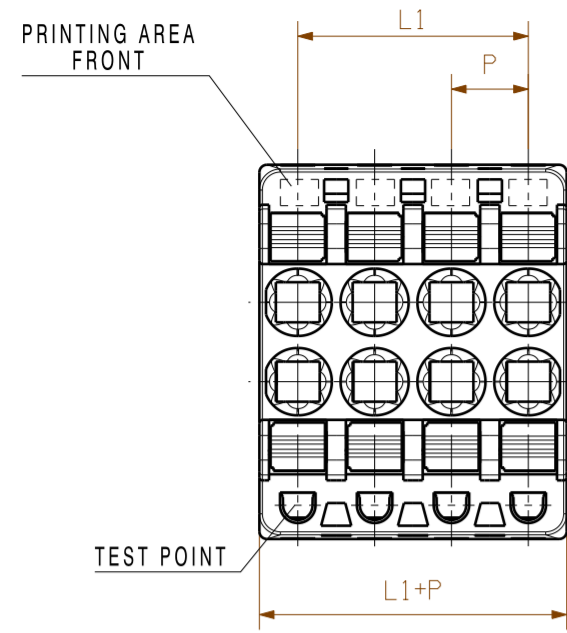


Cost-effective wiring
Quick and intuitive operation

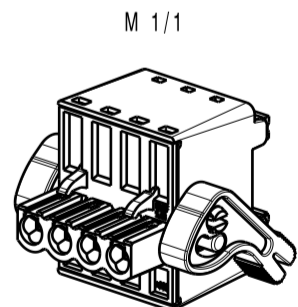
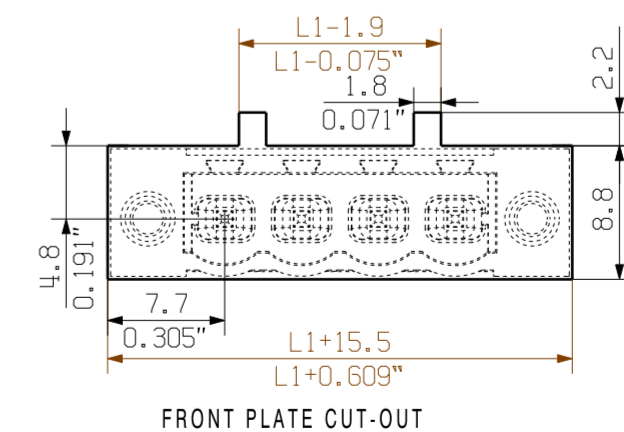
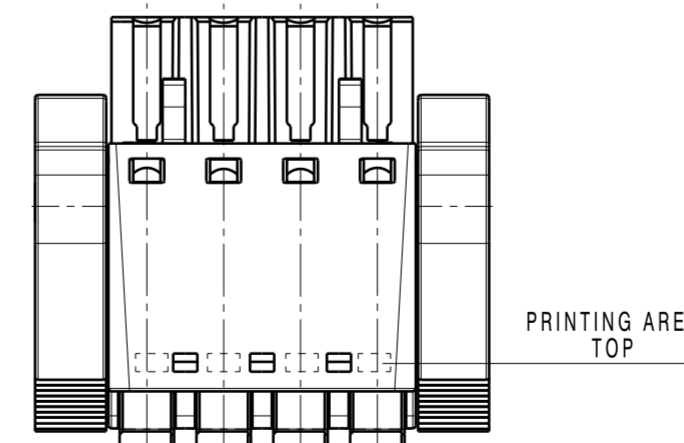
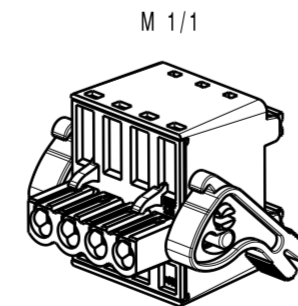
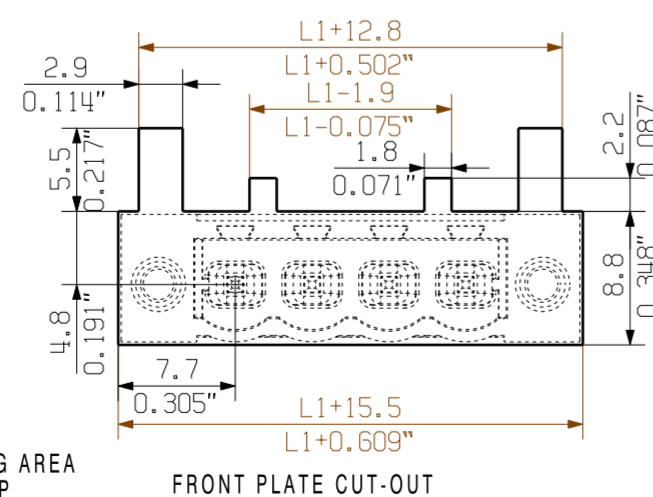
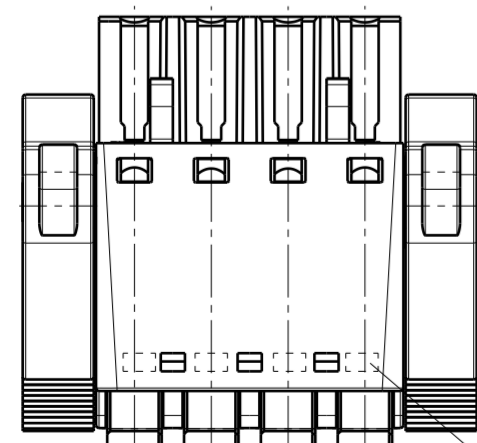
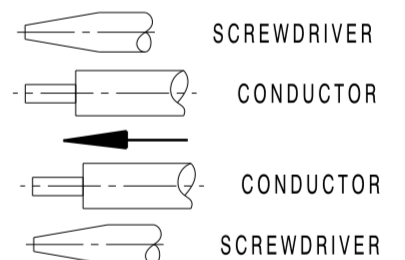
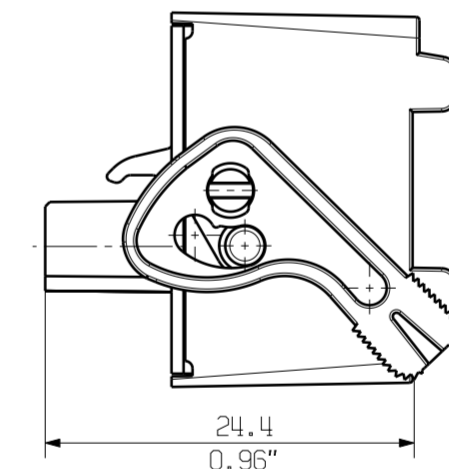
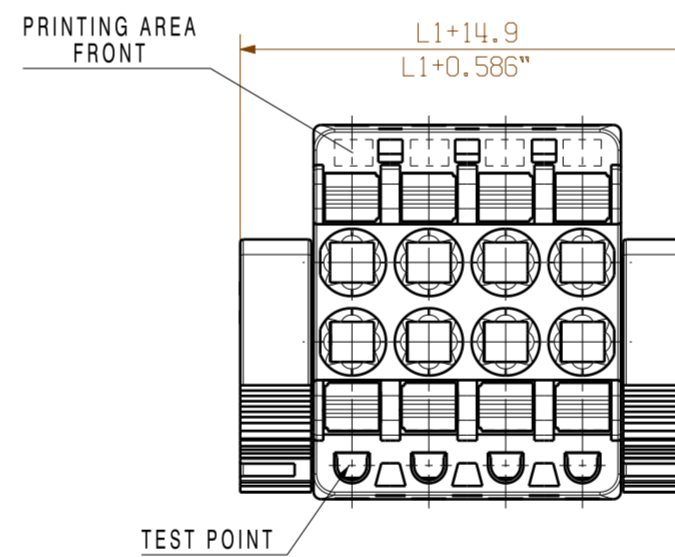
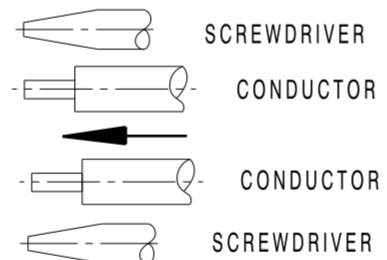
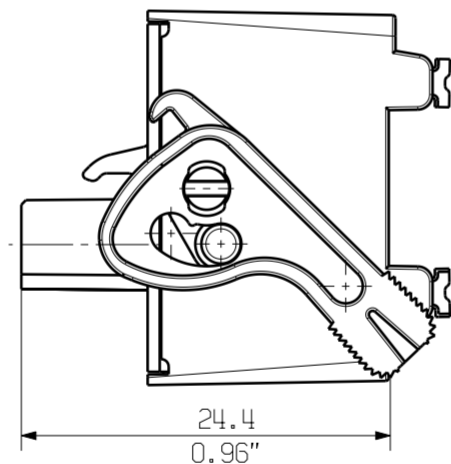
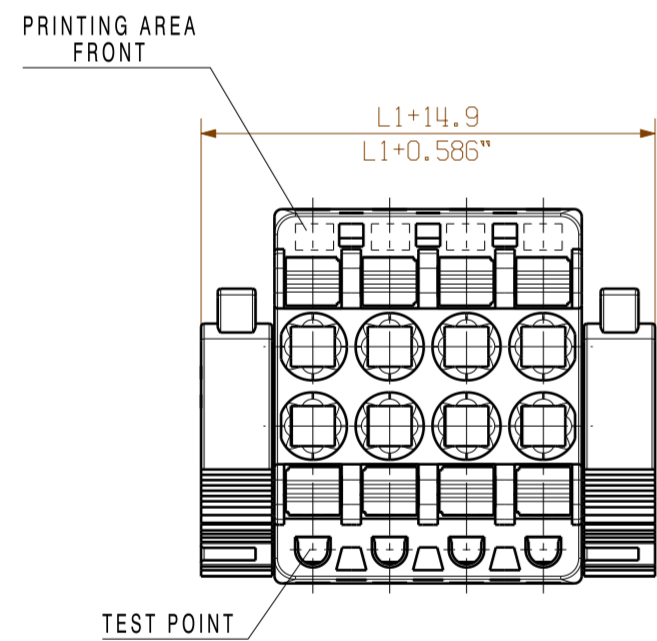
Data sheet**OMNIMATE Signal - series BL/SL 5.08**
BLDF 5.08/05/180 SN BK BX**Weidmüller Interface GmbH & Co. KG**
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com**Drawings****Product benefits**

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.

GENERAL TOLERANCE: DIN ISO 2768-m

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

EC00002032		Prim PLM Part No.: 002876		Prim ERP Part No.: 1001170000	
First Issue Date 01.03.2010		Max. nos. Modification		47786	
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		Approved	
Drawings Assembly		Product file: 7379 BLF 5.08 180		Drawing no. 02 of 02 sheets Issue no. 6 BLDF 5.08/.../180... BUCHSENLEISTE SOCKET BLOCK	

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