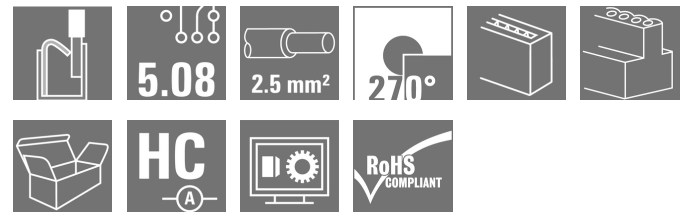


## OMNIMATE Signal - series BL/SL 5.08 BLF 5.08HC/08/270 SN OR BX

**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



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

### General ordering data

Type	BLF 5.08HC/08/270 SN OR BX
Order No.	<a href="#">1982760000</a>
Version	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 8, 270°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm², Box
GTIN (EAN)	4032248686858
Qty.	42 pc(s).
Product data	IEC: 400 V / 24 A / 0.2 - 2.5 mm² UL: 300 V / 18.5 A / AWG 26 - AWG 12
Packaging	Box

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**Technical data****Dimensions and weights**

Width	40.64	Width (inches)	1.6 inch
Height	20.6 mm	Height (inches)	0.811 inch
Depth	26.2 mm	Depth (inches)	1.031 inch
Net weight	16.35 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	270°
Number of poles	8	L1 in mm	35.56 mm
L1 in inches	1.4 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	≤ 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.	7 N	Pulling force/pole, max.	5.5 N

**Material data**

Insulating material	PBT	Colour	orange
Colour of operational elements	black	Material of operational elements	PBT
Colour chart (similar)	RAL 2000	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 <sup>8</sup> 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.	-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.	
w. wire end ferrule, DIN 46228 pt 1, 2.5 mm <sup>2</sup> max.	

Creation date August 9, 2020 12:21:33 AM CEST

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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 <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.

Max. clamping range 3.31 mm<sup>2</sup>

**Rated data acc. to IEC**

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	24 A
Rated current, max. number of poles (Tu=20°C)	19 A	Rated current, min. number of poles (Tu=40°C)	21 A
Rated current, max. number of poles (Tu=40°C)	16.5 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

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**Technical data****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)	10 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 26
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 12

**Packing**

Packaging	Box	VPE length	30 mm
VPE width	135 mm	VPE height	350 mm

**Type tests**

Test: Durability of markings	Standard	DIN EN 61984 section 7.3.2 / 09.02 taking pattern from DIN EN 60068-2-70 / 07.96
	Test	mark of origin, type identification, pitch, type of material, date clock
	Evaluation	available
	Test	durability
	Evaluation	passed
Test: Misengagement (Non-interchangeability)	Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN EN 60512-13-5 / 11.08
	Test	180° turned with coding elements
	Evaluation	passed
	Test	visual examination
	Evaluation	passed

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**Technical data**

Test: Clampable cross section	Standard	DIN EN 60999-1 section 7 and 9.1 / 12.00, DIN EN 60947-1 section 8.2.4.5.1 / 04.08	
	Conductor type	Type of conductor and conductor cross-section	solid 0.2 mm <sup>2</sup>
		Type of conductor and conductor cross-section	stranded 0.2 mm <sup>2</sup>
		Type of conductor and conductor cross-section	solid 2.5 mm <sup>2</sup>
		Type of conductor and conductor cross-section	stranded 2.5 mm <sup>2</sup>
		Type of conductor and conductor cross-section	AWG 26/1
		Type of conductor and conductor cross-section	AWG 26/19
		Type of conductor and conductor cross-section	AWG 14/1
		Type of conductor and conductor cross-section	AWG 14/19
Evaluation	passed		
Test for damage to and accidental loosening of conductors	Standard	DIN EN 60999-1 section 9.4 / 12.00	
	Requirement	0.2 kg	
	Conductor type	Type of conductor and conductor cross-section	AWG 26/1
		Type of conductor and conductor cross-section	AWG 26/19
	Evaluation	passed	
	Requirement	0.3 kg	
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5
		Type of conductor and conductor cross-section	H05V-K0.5
	Evaluation	passed	
	Requirement	0.7 kg	
	Conductor type	Type of conductor and conductor cross-section	H07V-U2.5
		Type of conductor and conductor cross-section	H07V-K2.5
	Evaluation	passed	
	Requirement	0.9 kg	
	Conductor type	Type of conductor and conductor cross-section	AWG 12/1
		Type of conductor and conductor cross-section	AWG 12/19
Evaluation	passed		

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**Technical data**

Pull-out test	Standard	DIN EN 60999-1 section 9.5 / 12.00		
	Requirement	≥10 N		
	Conductor type	Type of conductor and conductor cross-section	AWG 26/1	
		Type of conductor and conductor cross-section	AWG 26/19	
	Evaluation	passed		
	Requirement	≥20 N		
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5	
		Type of conductor and conductor cross-section	H05V-K0.5	
	Evaluation	passed		
	Requirement	≥50 N		
	Conductor type	Type of conductor and conductor cross-section	H07V-U2.5	
		Type of conductor and conductor cross-section	H07V-K2.5	
	Evaluation	passed		
	Requirement	≥60 N		
	Conductor type	Type of conductor and conductor cross-section	AWG 12/1	
		Type of conductor and conductor cross-section	AWG 12/19	
	Evaluation	passed		

**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	UNSPSC	30-21-18-01

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**Technical data**
**Notes**

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>
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	<a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">CAT 2 PORTFOLIOGUIDE EN</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>
Engineering Data	<a href="#">EPLAN, WSCAD</a>
Engineering Data	<a href="#">STEP</a>
White paper PUSH IN wire connection	<a href="#">Download Whitepaper</a>

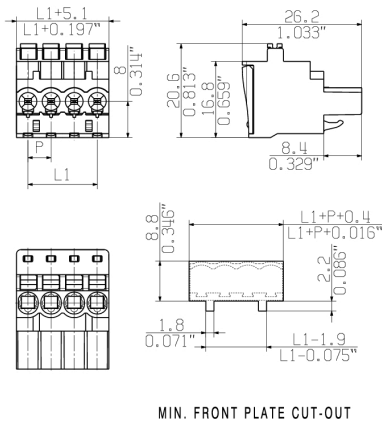
**Data sheet**

**OMNIMATE Signal - series BL/SL 5.08  
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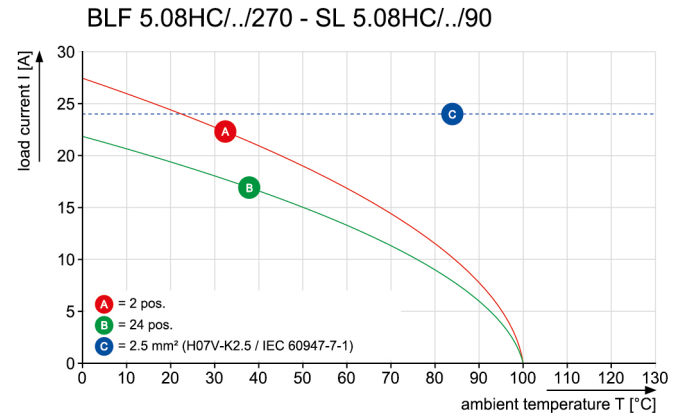
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**Drawings**

**Dimensional drawing**



**Graph**

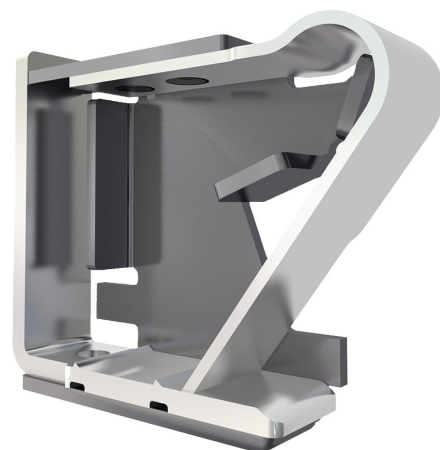


**Product benefits**



Uncompromising functionality  
High vibration resistance

**Product benefits**



Solid PUSH IN contact  
Safe and durable

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**Product benefits**



Cost-effective wiring  
Quick and intuitive operation

**Product benefits**

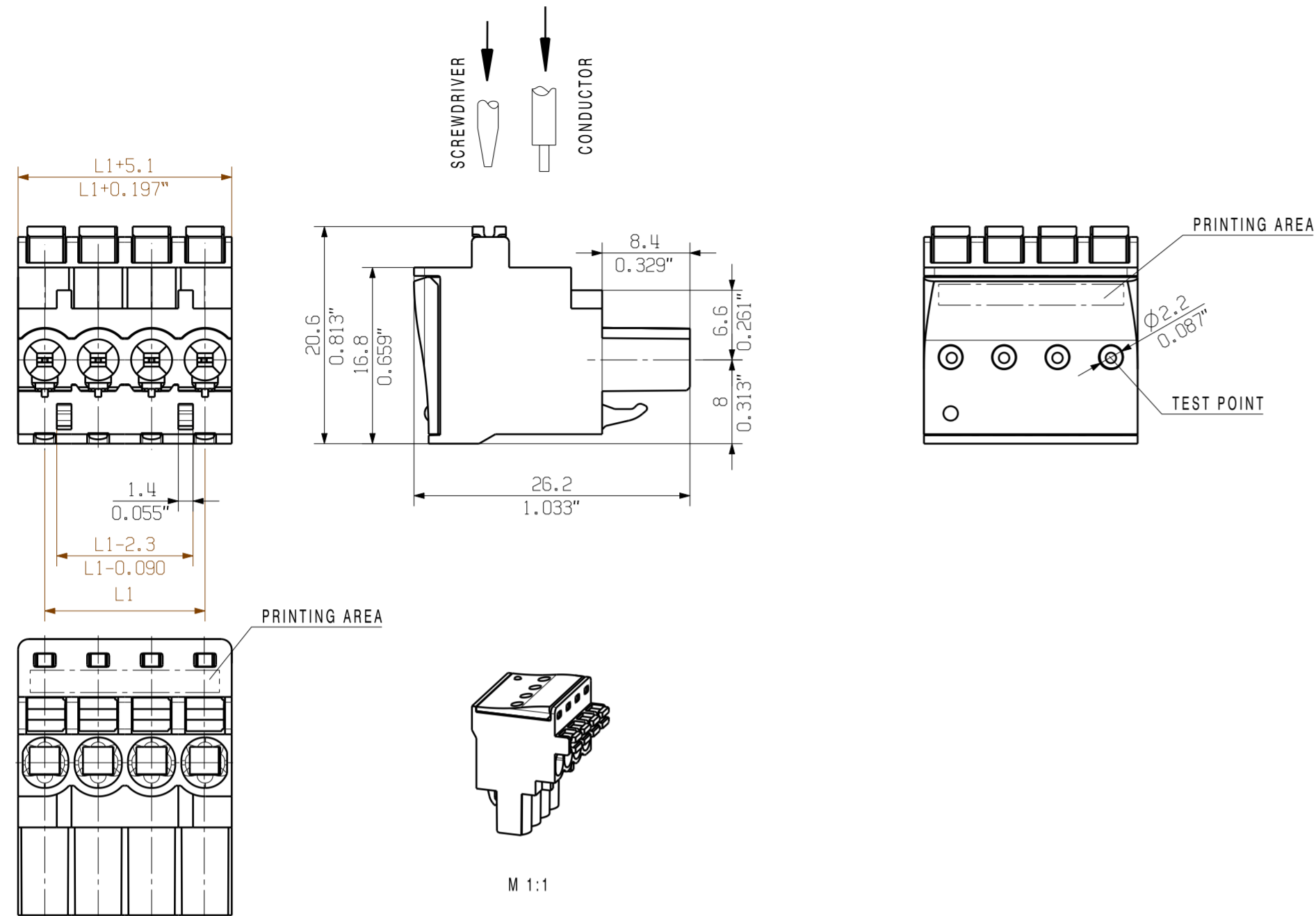


Wide clamping range  
Tool-free wire connection

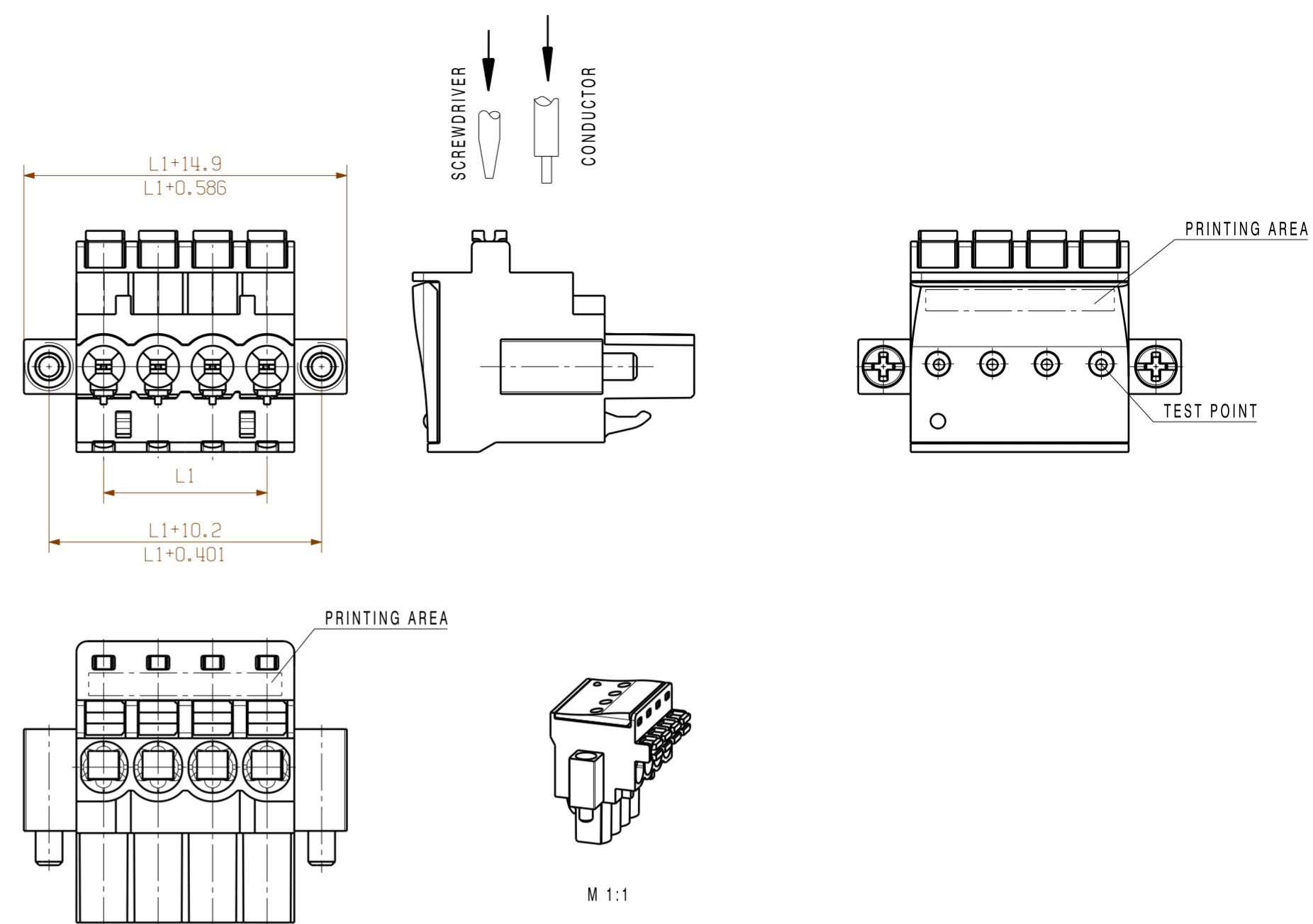
MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE  
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

DIE DEUTSCHE VERSION IST VERBINDLICH  
THE GERMAN VERSION IS BINDING

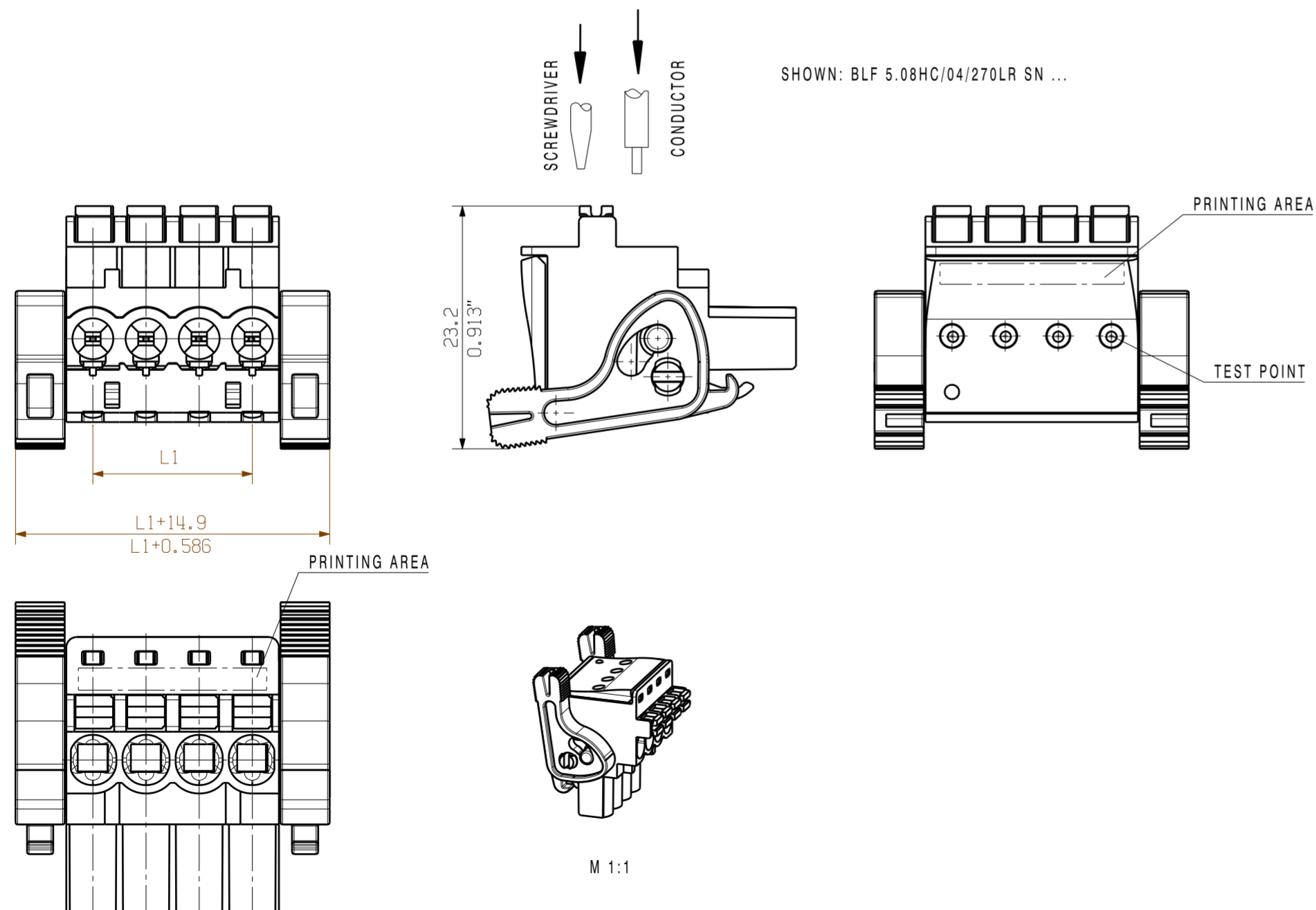
SHOWN: BLF 5.08HC/04/270G SN ...



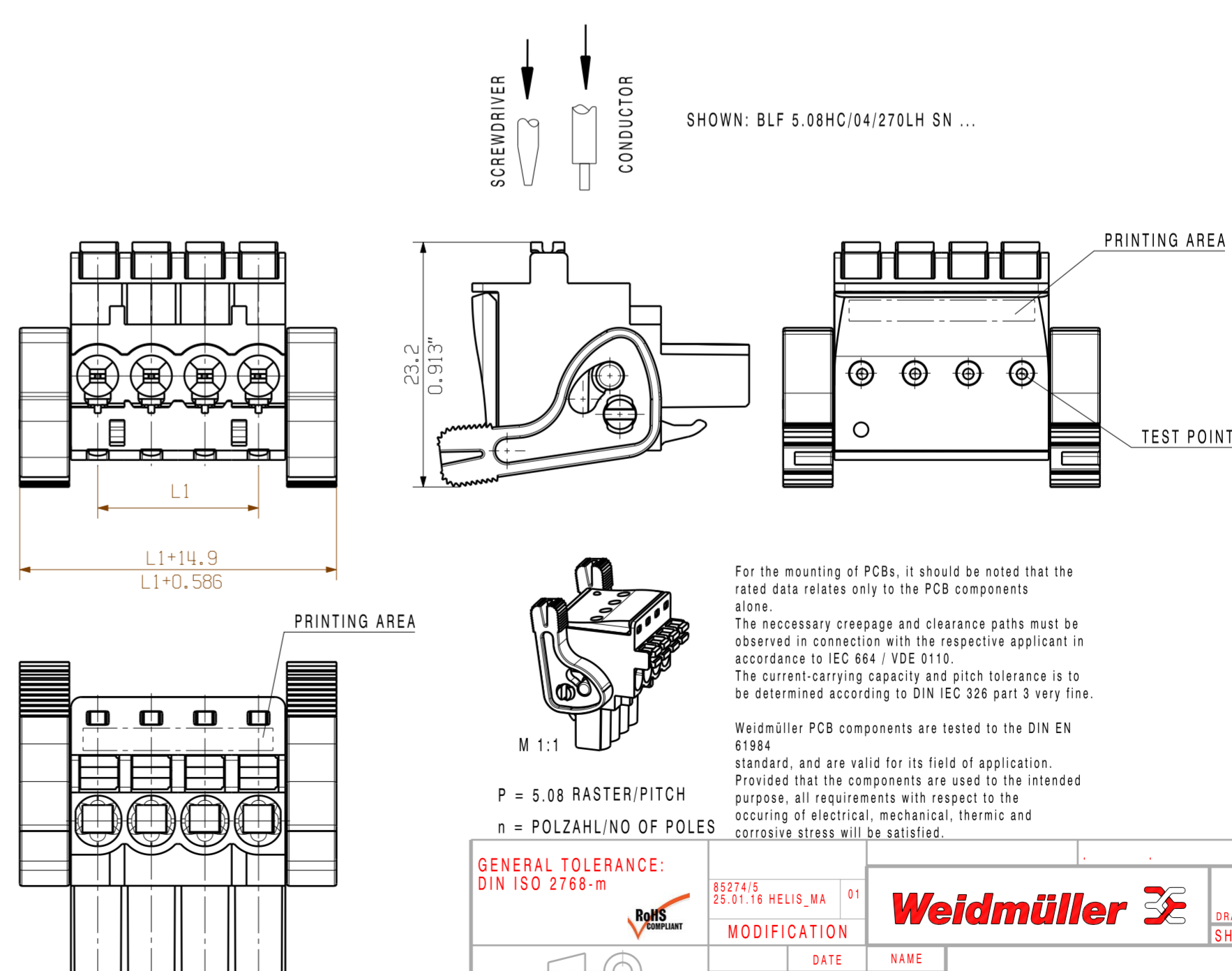
SHOWN: BLF 5.08HC/04/270F SN ...



SHOWN: BLF 5.08HC/04/270LR SN ...



SHOWN: BLF 5.08HC/04/270LH SN ...



For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.  
The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110.  
The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application. Provided that the components are used to the intended purpose, all requirements with respect to the occurring electrical, mechanical, thermic and corrosive stress will be satisfied.

P = 5.08 RASTER/PITCH  
n = POLZAHL/NO OF POLES

20	96.52	3.803
19	91.44	3.603
18	86.36	3.403
17	81.28	3.202
16	76.2	3.002
15	71.12	2.802
14	66.04	2.602
13	60.96	2.402
12	55.88	2.202
11	50.8	2.002
10	45.72	1.801
9	40.64	1.601
8	35.56	1.401
7	30.48	1.201
6	25.4	1.001
5	20.32	0.801
4	15.24	0.600
3	10.16	0.400
2	5.08	0.200
n	L1 [mm]	L1 [Inch]

GENERAL TOLERANCE:  
DIN ISO 2768-m

89274/5  
29.01.16 HELIS\_MA 01

MODIFICATION

**Weidmüller**

CAT.NO.: C 44258 05

DRAWING NO. SHEET 01 OF 01 SHEETS

SCALE: 2/1

DRAWN 27.11.2008 POCTA\_C

RESPONSIBLE HERTEL\_S

CHECKED 27.01.2016 HELIS\_MA

APPROVED LANG\_T

**BLF 5.08HC/././270...SN...**  
BUCHSENLEISTE  
SOCKET BLOCK

PRODUCT FILE: BLF 5.08

7379

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