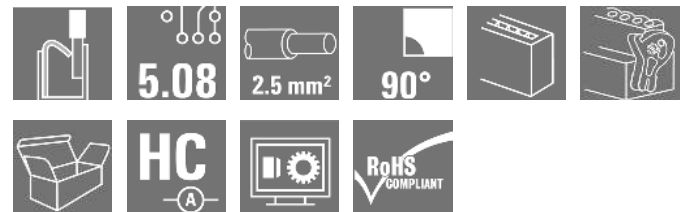


OMNIMATE Signal - series BL/SL 5.08 BLF 5.08HC/10/90LR SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Product image



Similar to illustration

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/10/90LR SN BK BX
Order No.	1000490001
Version	PCB plug-in connector, female plug, 5.08 mm, No. of poles: 10, 90°, PUSH IN, Tension-clamp connection, Clamping range, max.: 3.31 mm ² , Box
GTIN (EAN)	4032248690459
Qty.	30 pc(s).
Product data	IEC: 400 V / 24 A / 0.2 - 2.5 mm ² UL: 300 V / 18.5 A / AWG 26 - AWG 12
Packaging	Box

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Technical data**Dimensions and weights**

Width	60.62 mm	Width (inches)	2.387 inch
Height	20.6 mm	Height (inches)	0.811 inch
Depth	29.6 mm	Depth (inches)	1.165 inch
Net weight	23.97 g		

system parameters

Product family	OMNIMATE Signal - series BL/SL 5.08	Type of connection	Field connection
Wire connection method	PUSH IN, Tension-clamp connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 inch	Conductor outlet direction	90°
No. of poles	10	L1 in mm	45.72 mm
L1 in inches	1.8 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	4.50 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.	7 N	Pulling force/pole, max.	5.5 N

Material data

Insulating material	PBT	Colour code	black
Colour of operational elements	orange	Material of operational elements	PBT
Colour chart (similar)	RAL 9011	Insulating material group	Illa
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.	55 °C	Max. relative humidity during storage	80 %
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, 2.5 mm ² max.	
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.0 mm

Creation date April 25, 2019 7:09:52 PM CEST

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Technical data

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.5 mm ²
	AEH	Stripping length	nominal 12 mm
		Stripping length	nominal 10 mm
	Cross-section for conductor connection	Type	fine-wired
		nominal	0.75 mm ²
	AEH	Stripping length	nominal 12 mm
		Stripping length	nominal 10 mm
	Cross-section for conductor connection	Type	fine-wired
		nominal	1 mm ²
AEH	Stripping length	nominal 12 mm	
	Stripping length	nominal 10 mm	
Cross-section for conductor connection	Type	fine-wired	
	nominal	1.5 mm ²	
AEH	Stripping length	nominal 10 mm	
	Stripping length	nominal 12 mm	
Cross-section for conductor connection	Type	fine-wired	
	nominal	2.5 mm ²	
AEH	Stripping length	nominal 10 mm	
Max. clamping range	3.31 mm ²		

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. no. of poles (Tu=20°C)	24 A
Rated current, max. no. of poles (Tu=20°C)	19 A	Rated current, min. no. of poles (Tu=40°C)	21 A
Rated current, max. no. 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

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)	10 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.		

Data sheet

**OMNIMATE Signal - series BL/SL 5.08
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Technical data

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 26	Wire cross-section, AWG, max.	AWG 12
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

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

Classifications

ETIM 4.0	EC002637	ETIM 5.0	EC002637
ETIM 6.0	EC002637	UNSPSC	30-21-18-01
eClass 6.2	27-26-07-04	eClass 7.1	27-44-04-02
eClass 8.1	27-44-04-02	eClass 9.0	27-44-04-02
eClass 9.1	27-44-04-02		

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
-------	--

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.
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Approvals

Approvals



ROHS	Conform
------	---------

Data sheet

OMNIMATE Signal - series BL/SL 5.08 BLF 5.08HC/10/90LR SN BK BX

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Technical data

Downloads

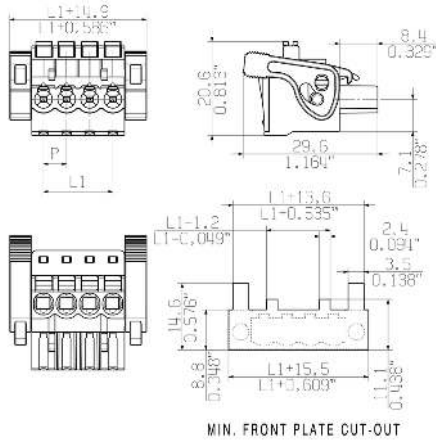
Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL MACHINE SAFETY EN FL HEATING ELECTR EN FL APPL INVERTER EN FL BASE STATION EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN
Engineering Data	WSCAD
Engineering Data	STEP
White Paper wire connection	Download Whitepaper

**OMNIMATE Signal - series BL/SL 5.08
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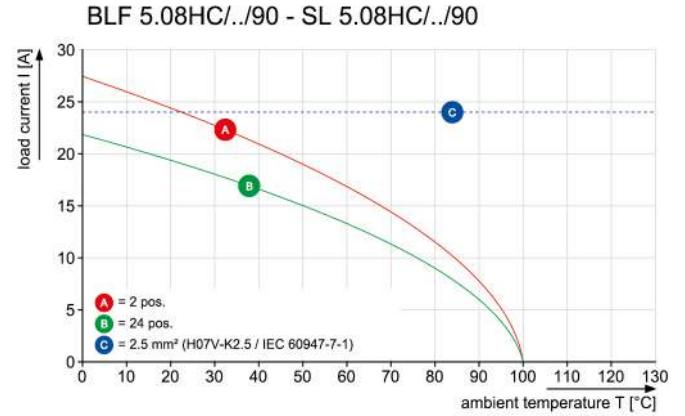
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Drawings

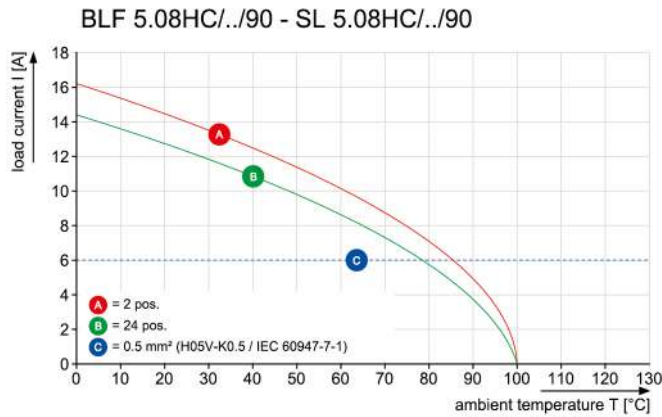
Dimensional drawing



Graph



Graph



Product benefits



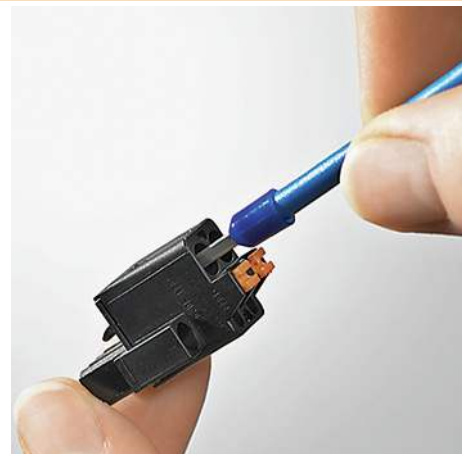
Uncompromising functionality
High vibration resistance

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
BLF 5.08HC/10/90LR SN BK BX**

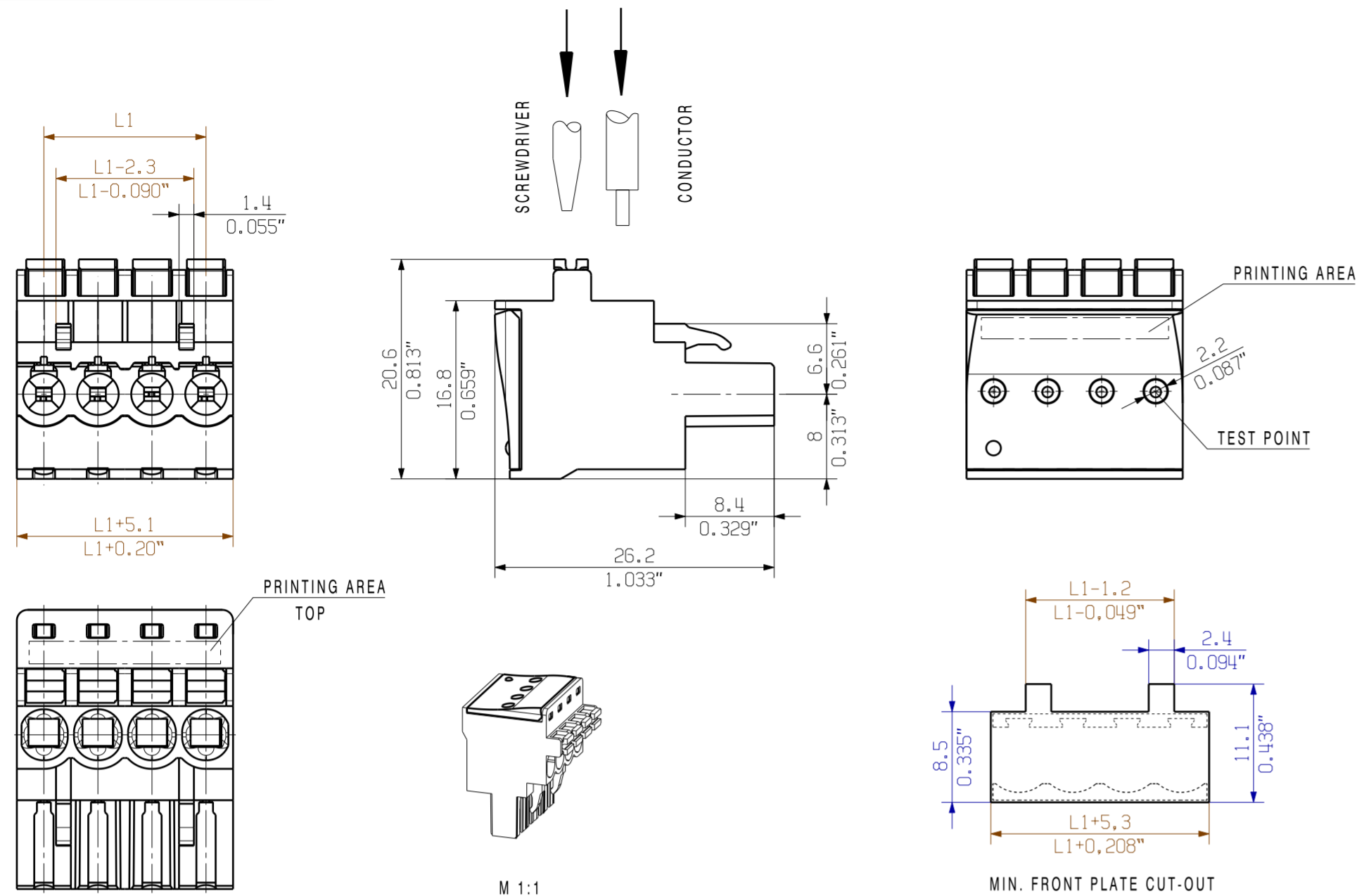
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Drawings**Product benefits**

Wide clamping range
Tool-free wire connection

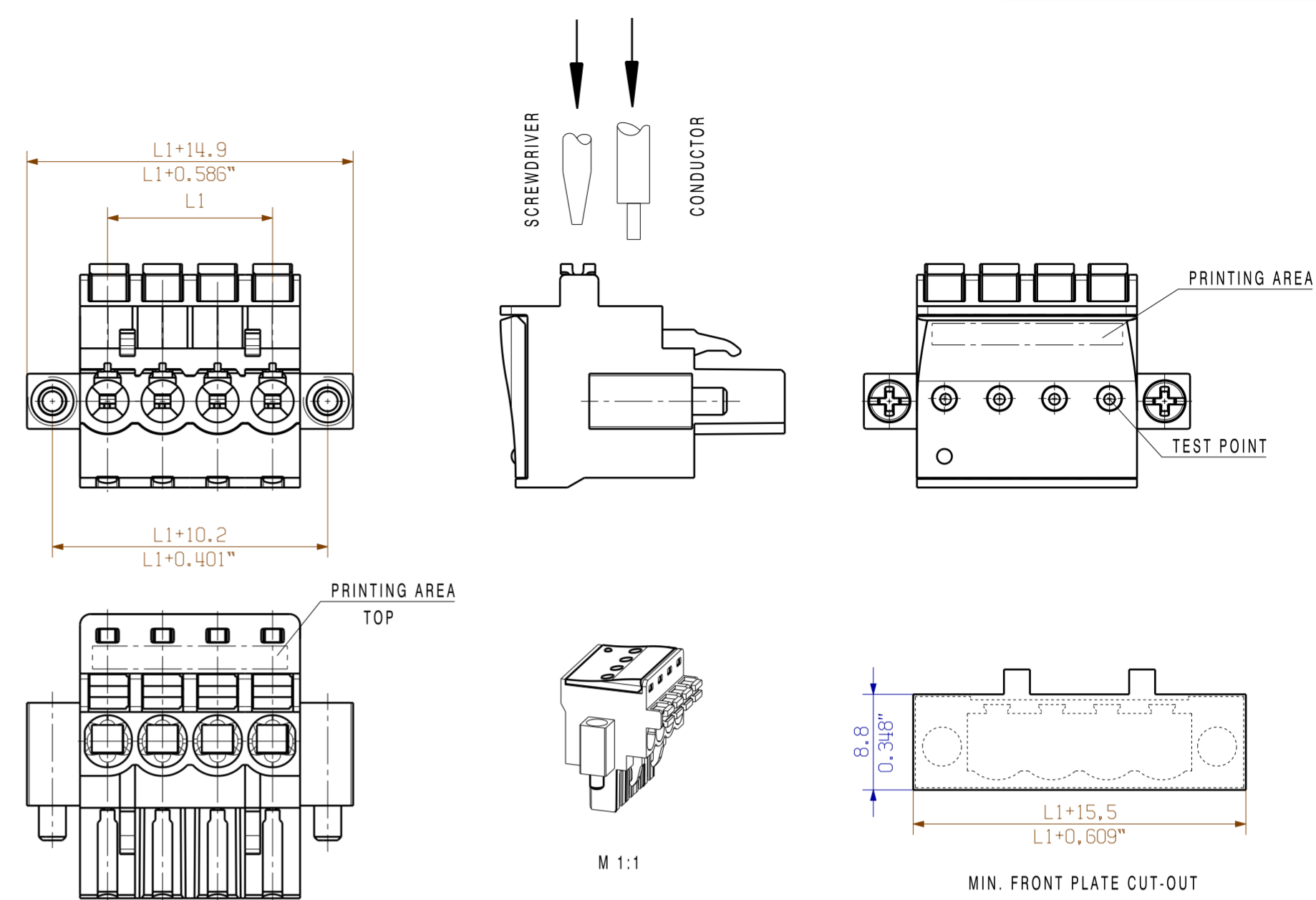
MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
 DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

SHOWN: BLF 5.08HC/04/90G SN ...

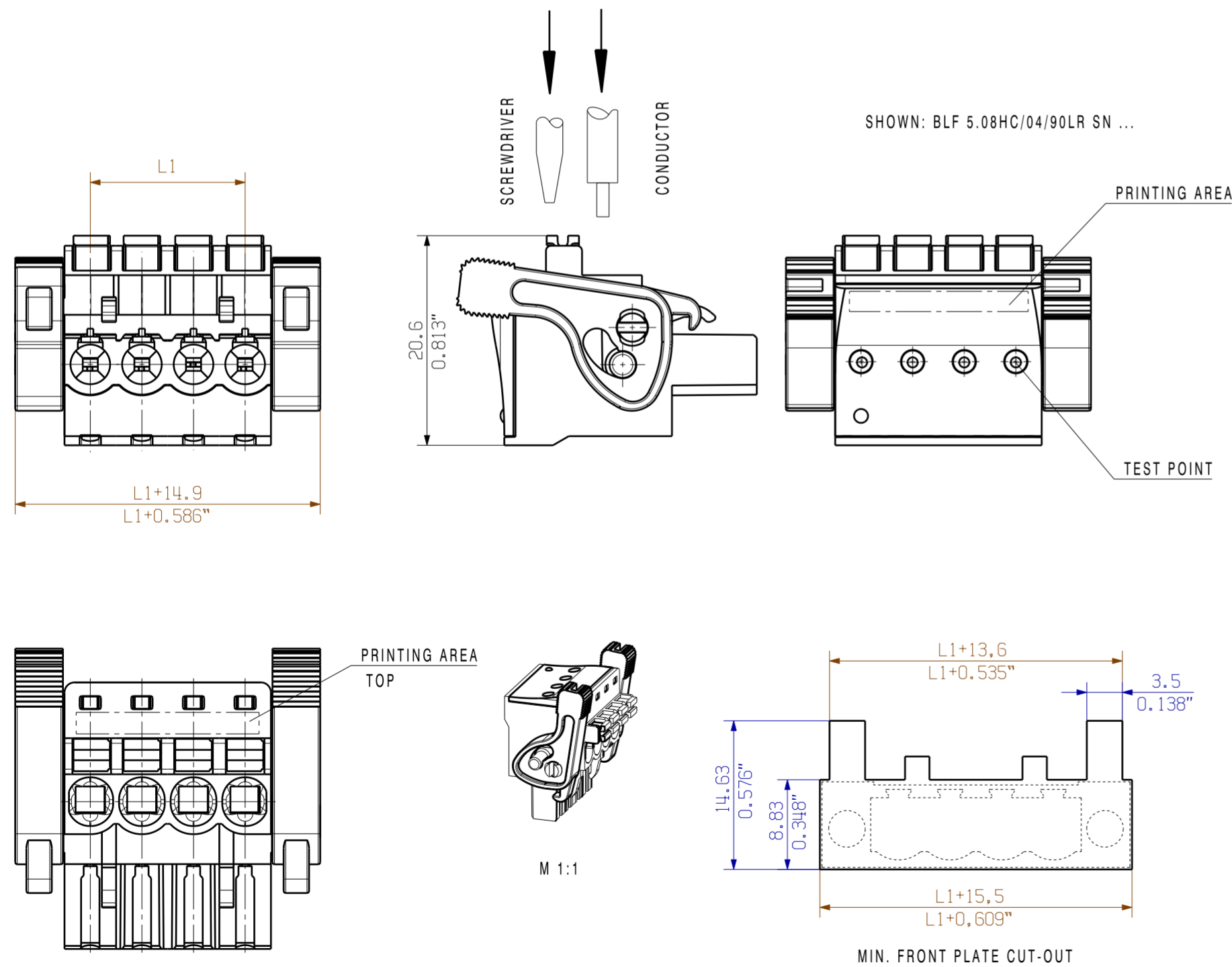


DIE DEUTSCHE VERSION IST VERBINDLICH
 THE GERMAN VERSION IS BINDING

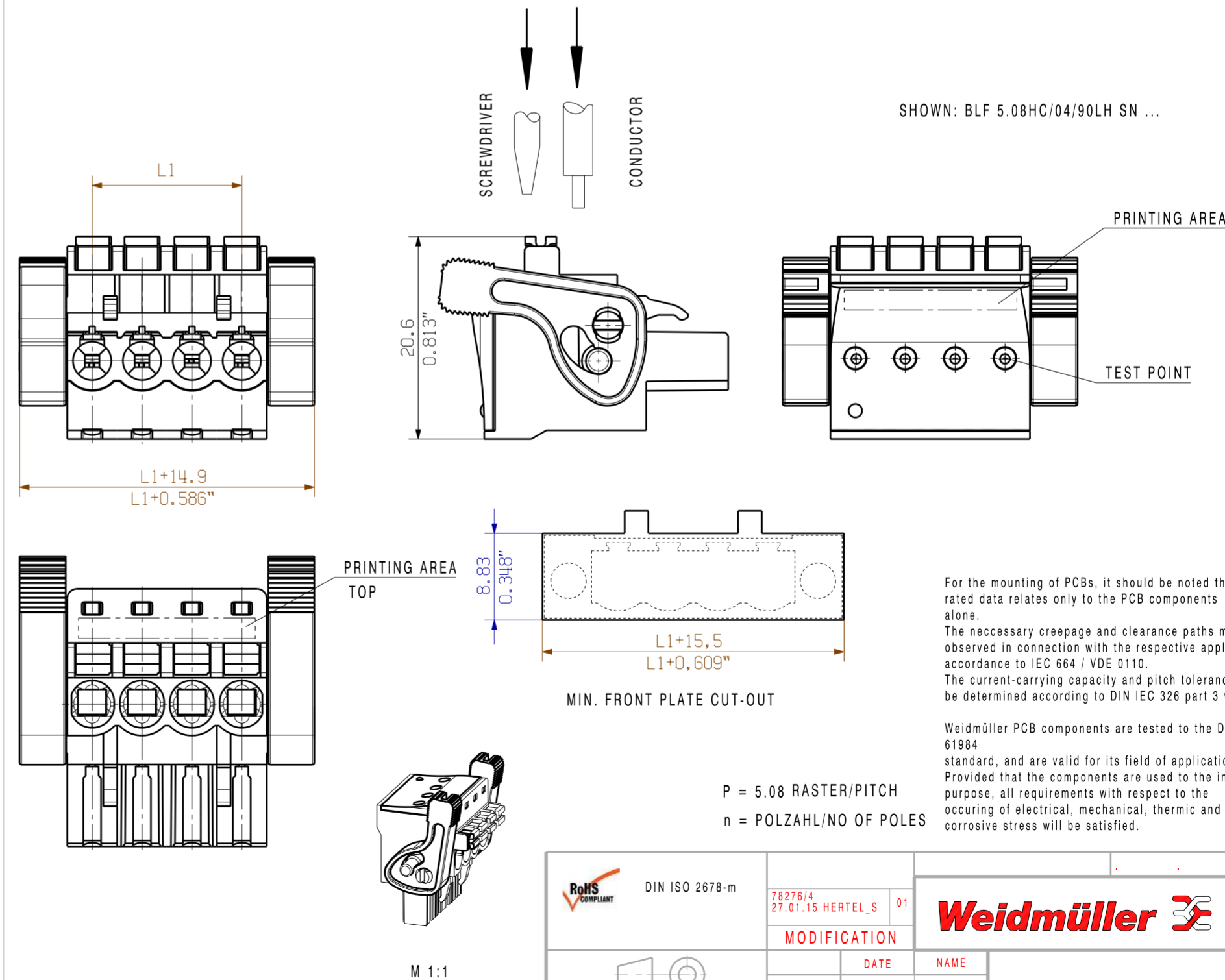
SHOWN: BLF 5.08HC/04/90F SN ...



SHOWN: BLF 5.08HC/04/90LR SN ...



SHOWN: BLF 5.08HC/04/90LH 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 of electrical, mechanical, thermic and corrosive stress will be satisfied.

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

21	101.60	4.000
20	96.52	3.800
19	91.44	3.600
18	86.36	3.400
17	81.28	3.200
16	76.2	3.000
15	71.12	2.800
14	66.04	2.600
13	60.96	2.400
12	55.88	2.200
11	50.8	2.000
10	45.72	1.800
9	40.64	1.600
8	35.56	1.400
7	30.48	1.200
6	25.4	1.000
5	20.32	0.800
4	15.24	0.600
3	10.16	0.400
2	5.08	0.200
n	L1	L1
	[mm]	[Inch]

RoHS COMPLIANT DIN ISO 2678-m

78276/4
 27.01.15 HERTEL_S 01

MODIFICATION

DATE	NAME
DRAWN 27.11.2008	POCTA_C
RESPONSIBLE	HERTEL_S
CHECKED 27.01.2015	HERTEL_S
APPROVED	LANG_T

SCALE: 2/1
 SUPERSEDES: .

CAT.NO.: .

Weidmüller

C 44256 05

DRAWING NO. SHEET 01 OF 01 SHEETS

BLF 5.08HC/.../90...SN...
 BUCHSENLEISTE
 SOCKET BLOCK

PRODUCT FILE: BLF 5.08 7379

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