

OMNIMATE Signal - series BL/SL 5.08 BLF 5.08HC/16/90F SN BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
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Product image



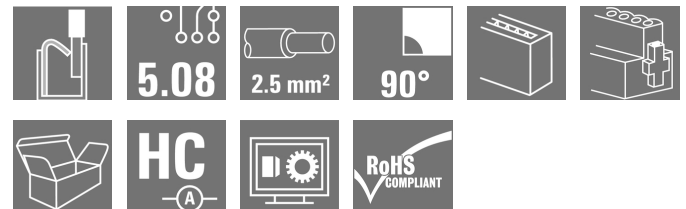
Similar to illustration

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/16/90F SN BK BX
Order No.	1000360001
Version	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 16, 90°, PUSH IN, Spring connection, Clamping range, max. : 3.31 mm ² , Box
GTIN (EAN)	4032248690329
Qty.	18 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	91.08	Width (inches)	3.586 inch
Height	20.6 mm	Height (inches)	0.811 inch
Depth	26.2 mm	Depth (inches)	1.031 inch
Net weight	36.556 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	90°
Number of poles	16	L1 in mm	76.2 mm
L1 in inches	3 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	Tightening torque for screw flange, max.	0.2 Nm
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	black
Colour of operational elements	orange	Material of operational elements	PBT
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
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, 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

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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		
	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.			
Max. clamping range	3.31 mm ²			

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 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.				

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

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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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 ²
		Type of conductor and conductor cross-section	stranded 0.2 mm ²
		Type of conductor and conductor cross-section	solid 2.5 mm ²
		Type of conductor and conductor cross-section	stranded 2.5 mm ²
		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

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.
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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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Data sheet

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Technical data

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

[WSCAD](#)

Engineering Data

[STEP](#)

White paper PUSH IN wire connection

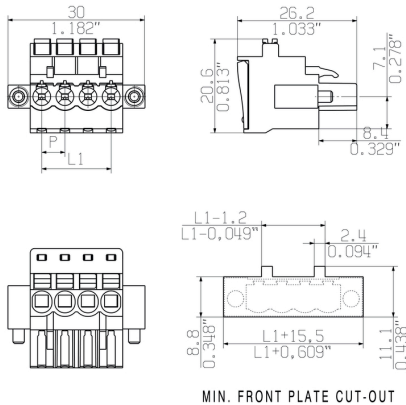
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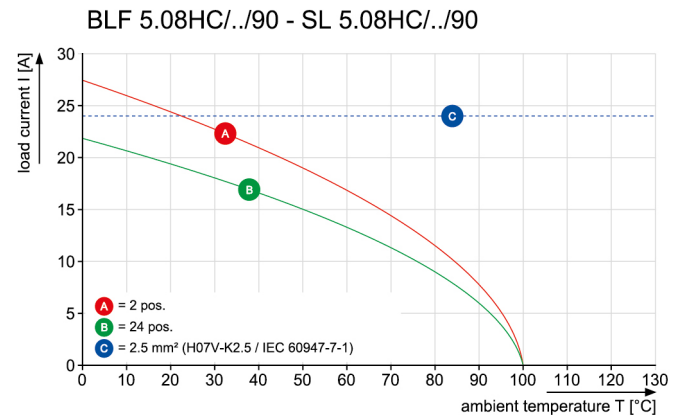
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Drawings

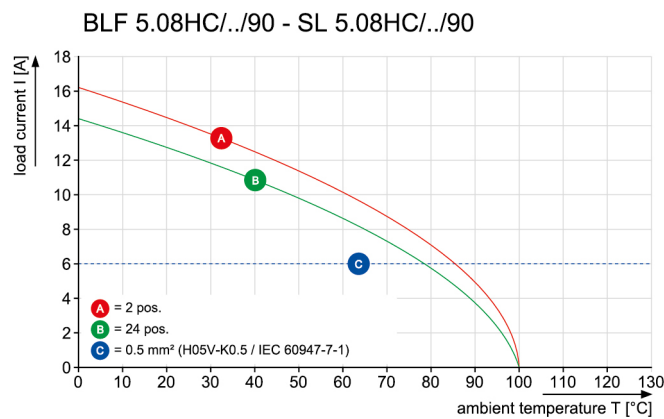
Dimensional drawing



Graph



Graph

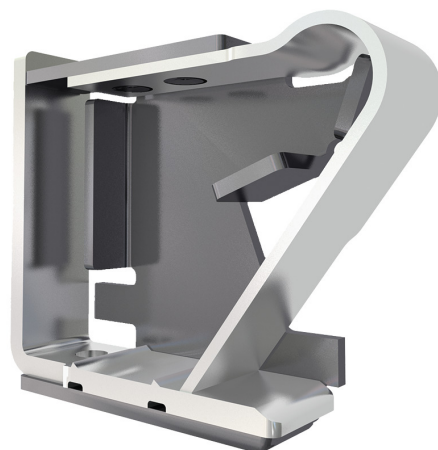


Product benefits



Uncompromising functionality
High vibration resistance

Product benefits



Solid PUSH IN contact
Safe and durable

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Product benefits

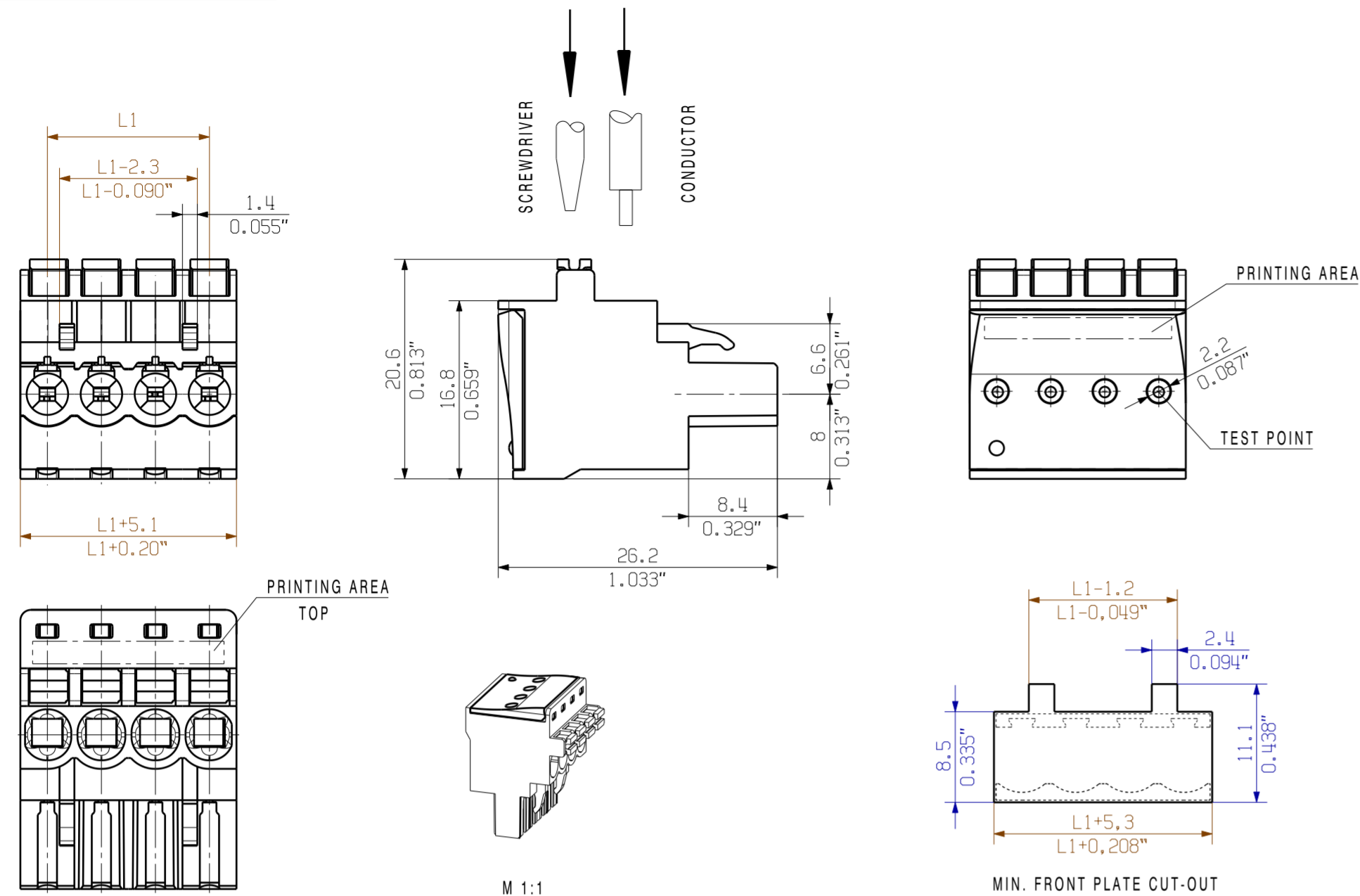
Cost-effective wiring
Quick and intuitive operation

Product benefits

Wide clamping range
Tool-free wire connection

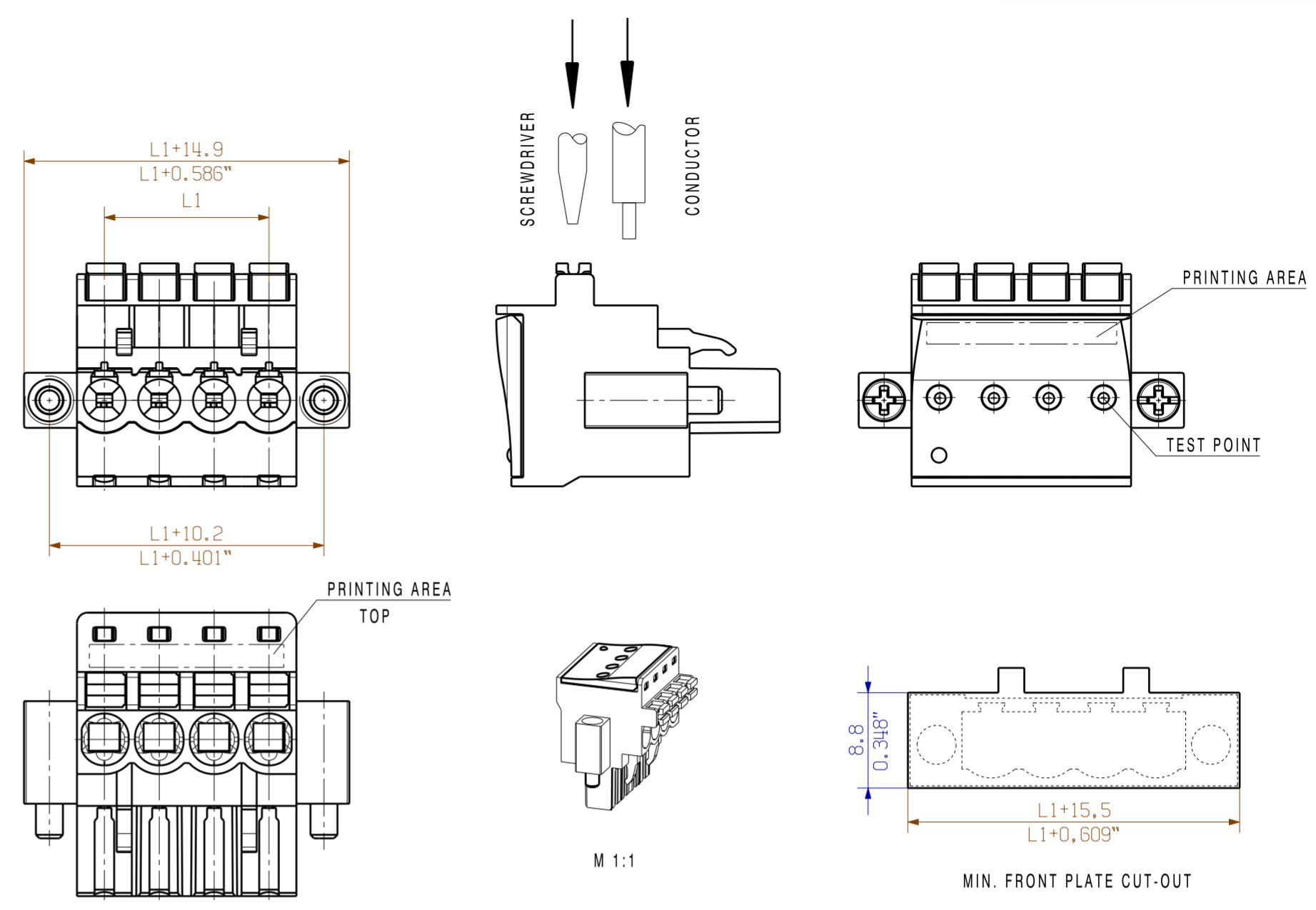
MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
 DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

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



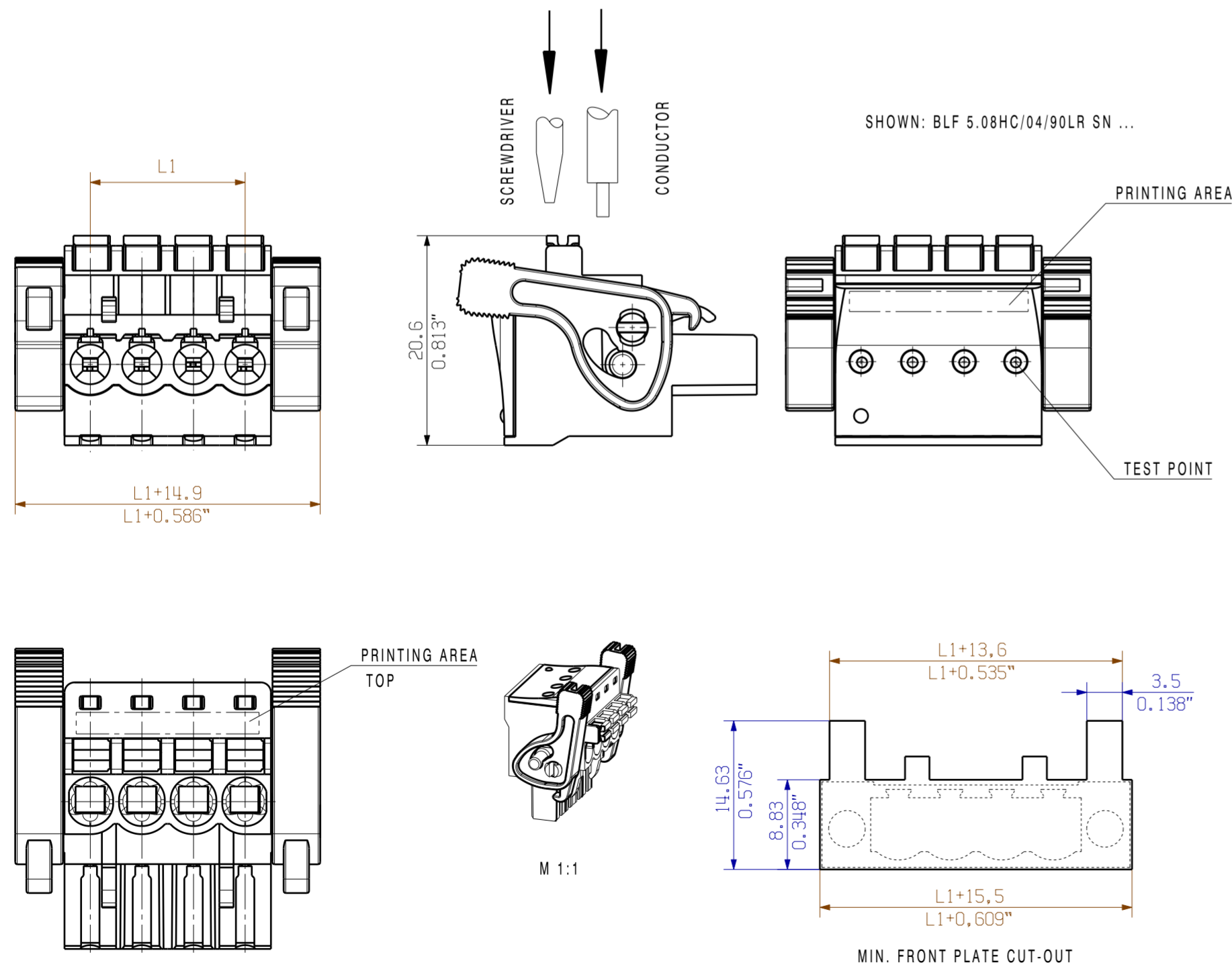
DIE DEUTSCHE VERSION IST VERBINDLICH
 THE GERMAN VERSION IS BINDING

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

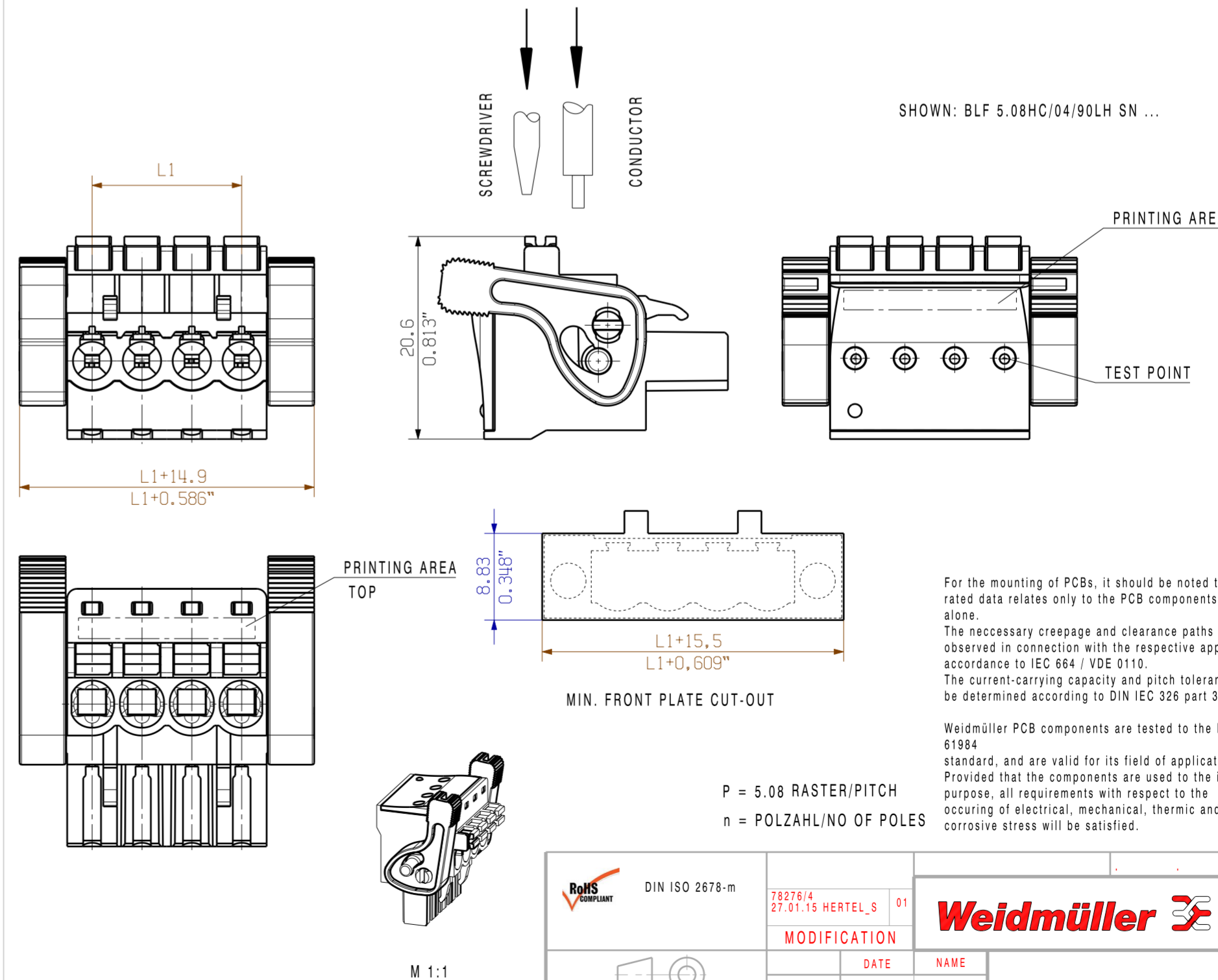


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SHOWN: BLF 5.08HC/04/90LR SN ...



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



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]

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

	DIN ISO 2678-m	78276/4 27.01.15 HERTEL_S 01		CAT.NO.: .	C 44256 05
		MODIFICATION		DRAWING NO. SHEET 01 OF 01 SHEETS	
	DATE	NAME	BLF 5.08HC/.../90...SN... BUCHSENLEISTE SOCKET BLOCK PRODUCT FILE: BLF 5.08 7379		
SCALE: 2/1	DRAWN	POCTA_C			
SUPERSEDES: .	RESPONSIBLE	HERTEL_S			
	CHECKED	HERTEL_S			
	APPROVED	LANG_T			