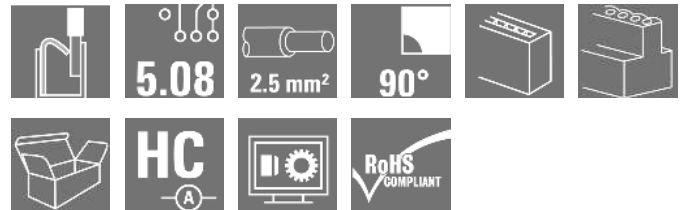


**OMNIMATE Signal - series BL/SL 5.08
BLF 5.08HC/08/90 SN BK BX**

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

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/08/90 SN BK BX |
| Order No. | 1000090001 |
| Version | PCB plug-in connector, female plug, 5.08 mm, No. of poles: 8, 90°, PUSH IN, Tension-clamp connection, Clamping range, max. : 3.31 mm², Box |
| GTIN (EAN) | 4032248690022 |
| 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 mm | Width (inches) | 1.6 inch |
| Height | 20.7 mm | Height (inches) | 0.815 inch |
| Depth | 26.2 mm | Depth (inches) | 1.031 inch |
| Net weight | 15.882 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 | 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 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 | IIIa |
| 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 8:27:40 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 mm²

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 BLF 5.08HC/08/90 SN BK BX

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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 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 |

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. |
|----------------|--|

Approvals

Approvals



| | |
|------|---------|
| ROHS | Conform |
|------|---------|

Data sheet**OMNIMATE Signal - series BL/SL 5.08
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Technical data**Downloads**

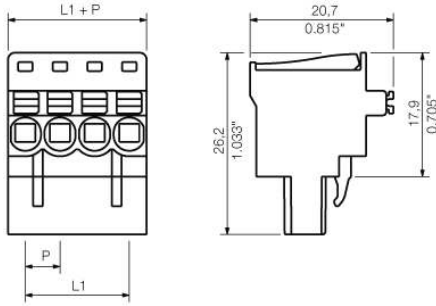
| | |
|---|---|
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer |
| Brochure/Catalogue | FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL MACHINE SAFETY EN FL HEATING ELECTR EN 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 | EPLAN_WSCAD |
| Engineering Data | STEP |
| White Paper wire connection | Download Whitepaper |

**OMNIMATE Signal - series BL/SL 5.08
BLF 5.08HC/08/90 SN BK BX**

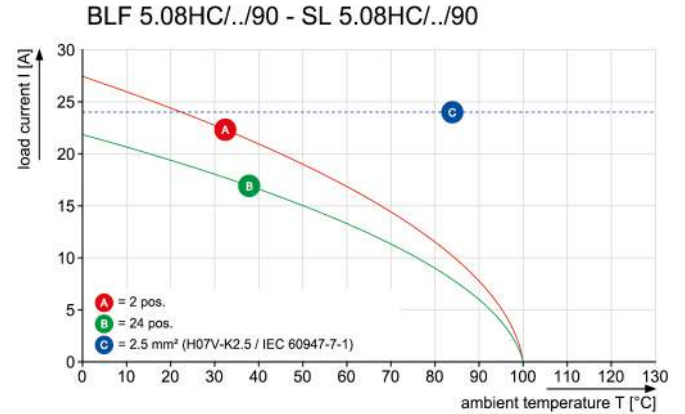
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Drawings

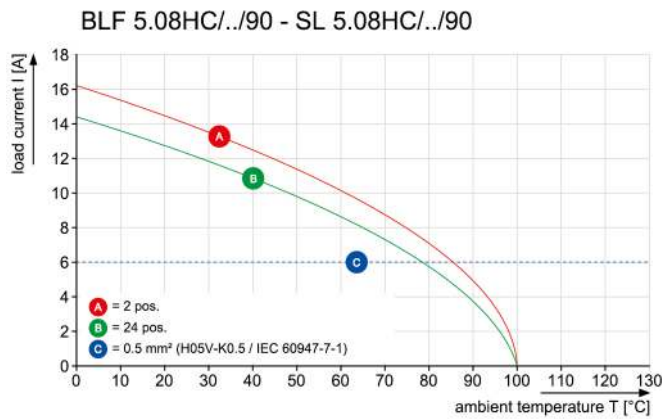
Dimensional drawing



Graph



Graph



Product benefits



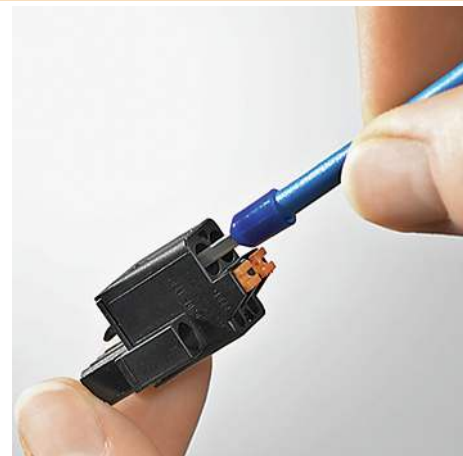
Uncompromising functionality
High vibration resistance

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/08/90 SN BK BX**

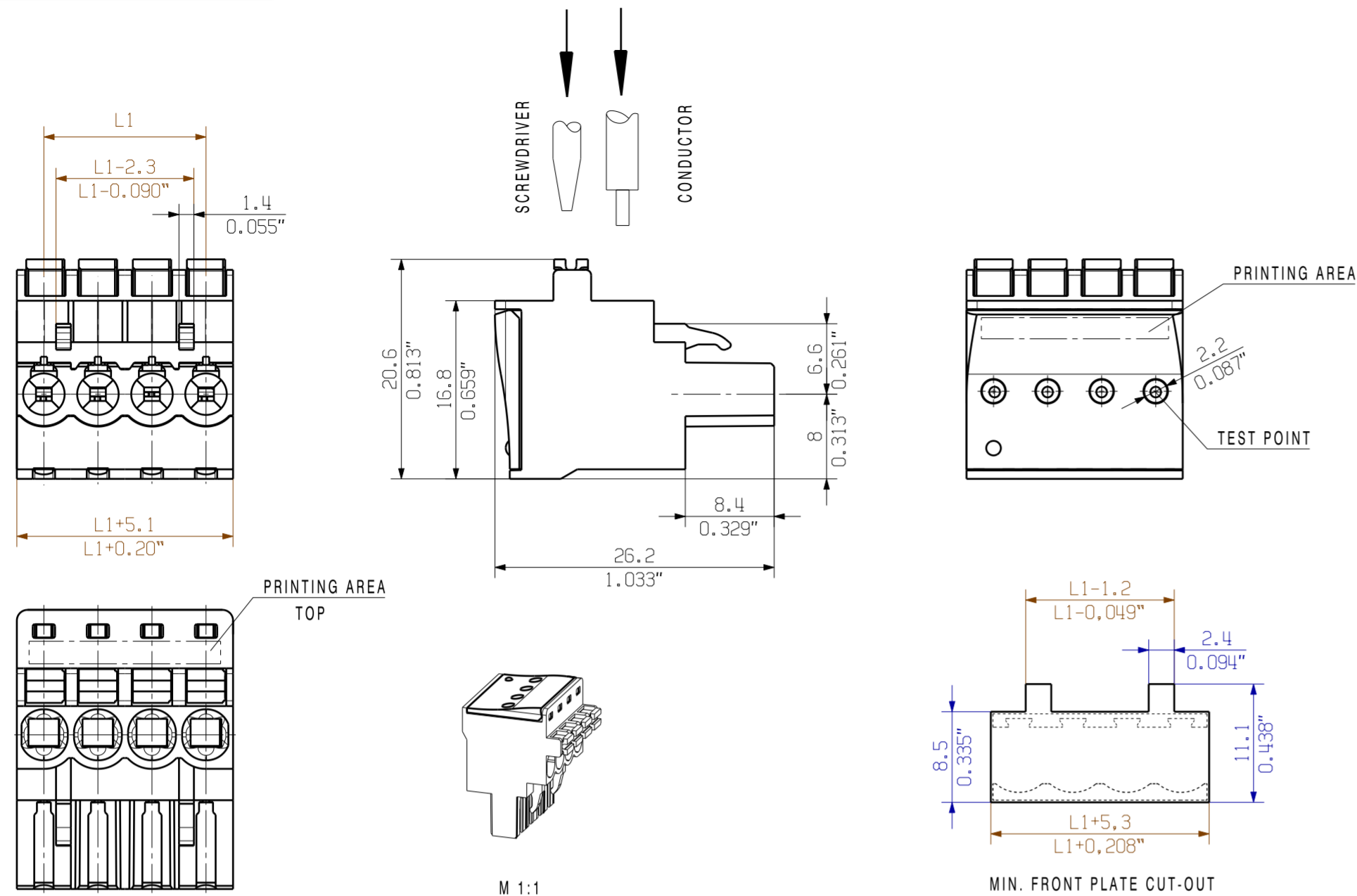
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Drawings**Product benefits**

Wide clamping range
Tool-free wire connection

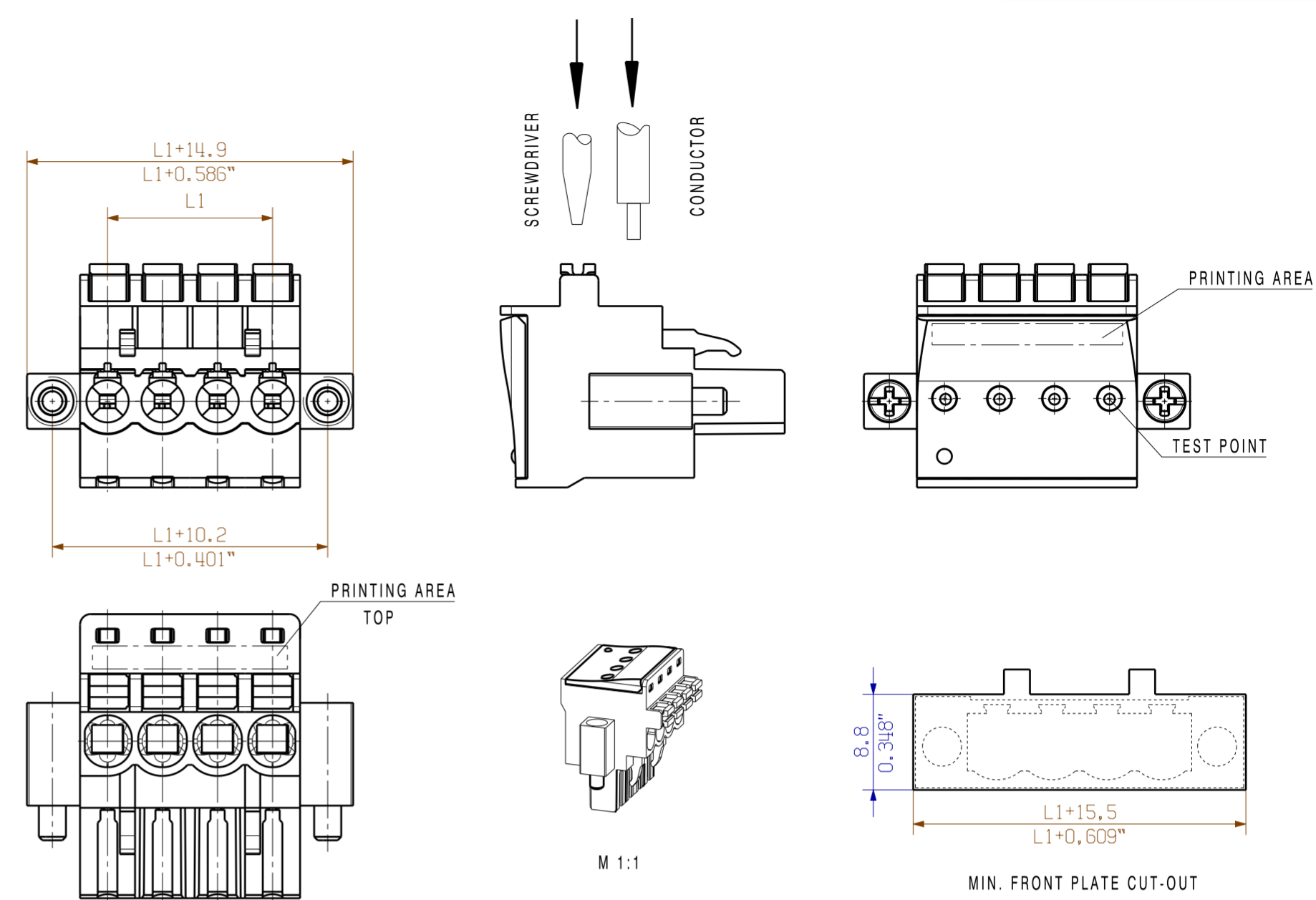
MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
 DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

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

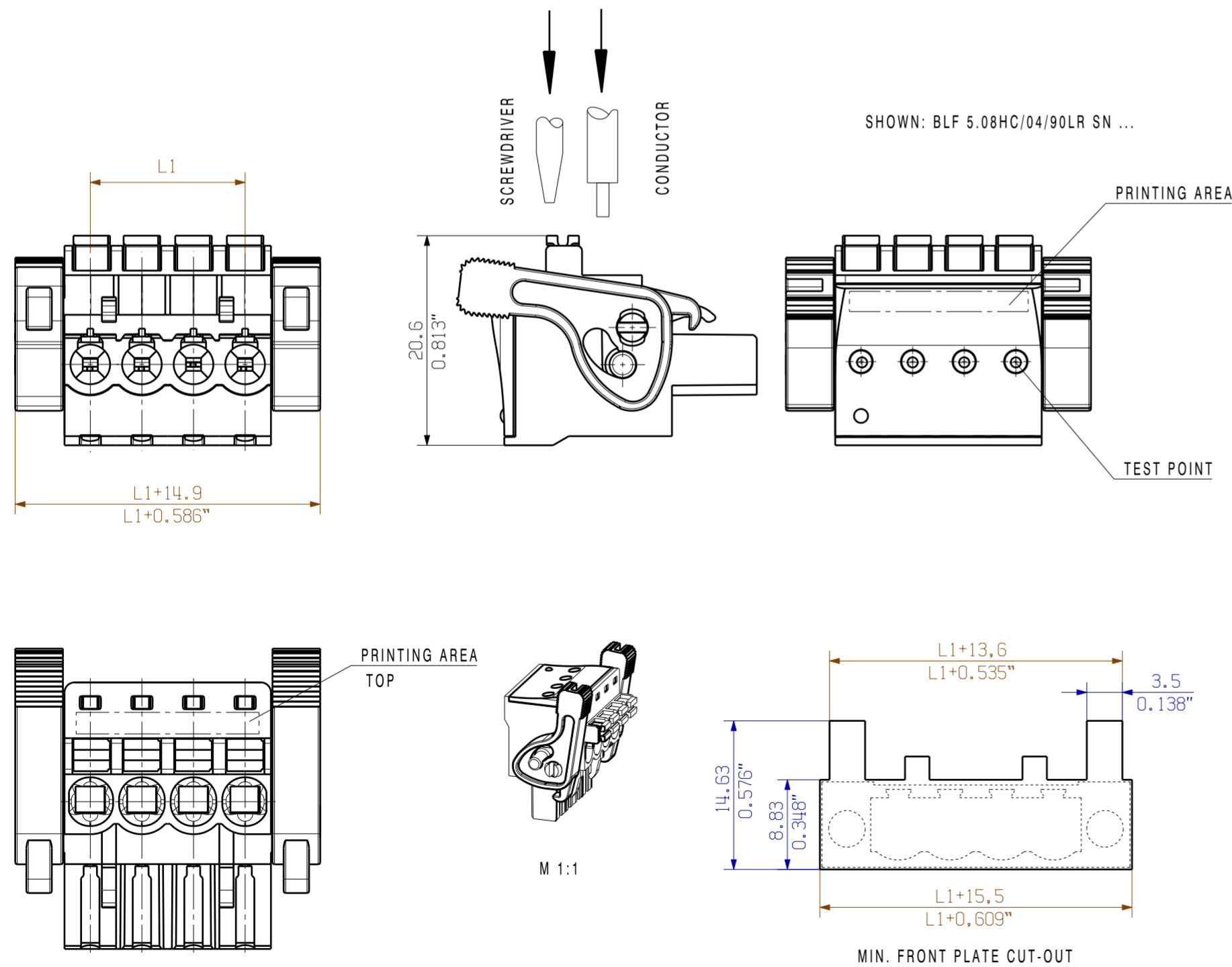


DIE DEUTSCHE VERSION IST VERBINDLICH
 THE GERMAN VERSION IS BINDING

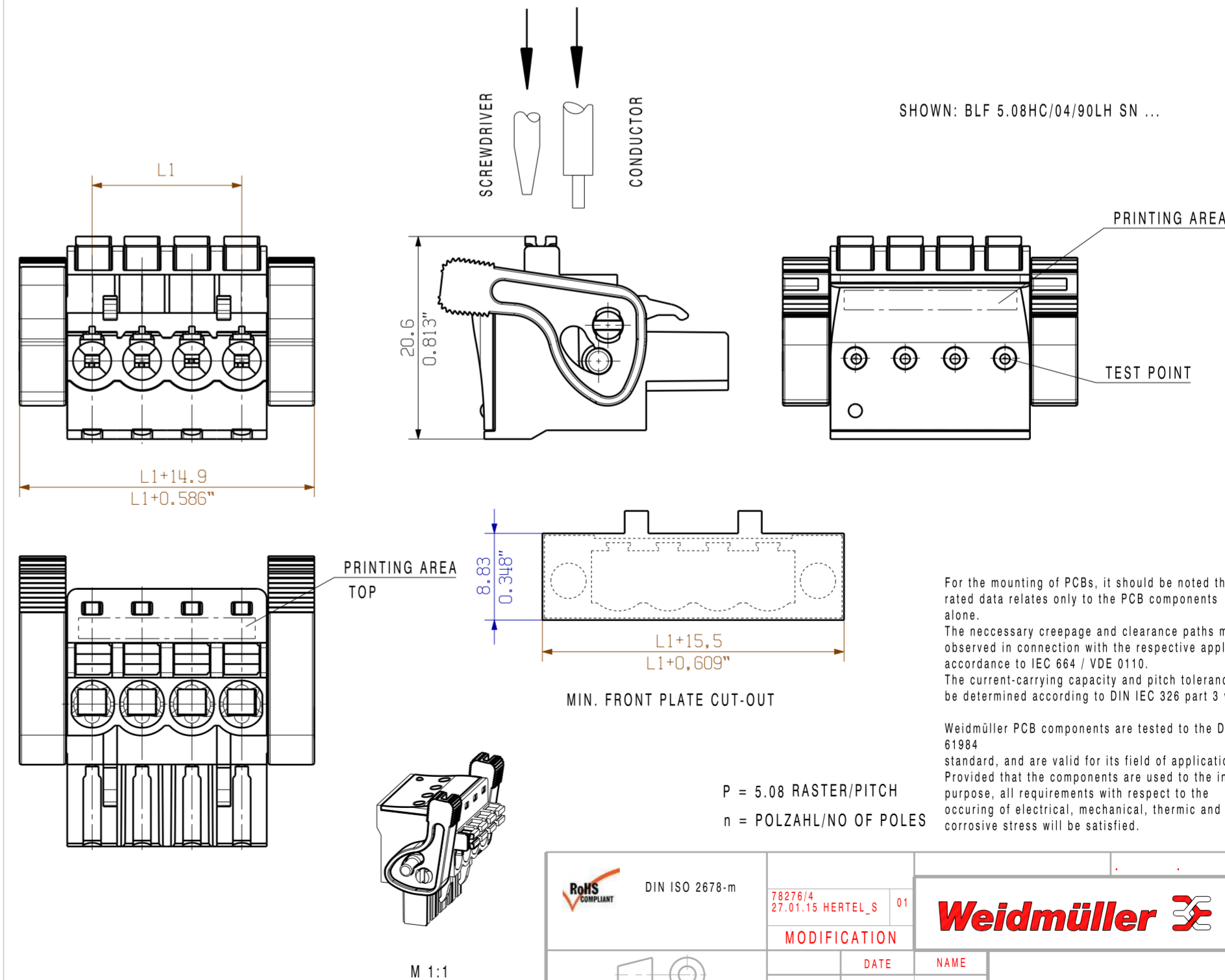
SHOWN: BLF 5.08HC/04/90F SN ...



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.: .

C 44256 05

DRIVING NO. SHEET 01 OF 01 SHEETS

Weidmüller

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

PRODUCT FILE: BLF 5.08 7379

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