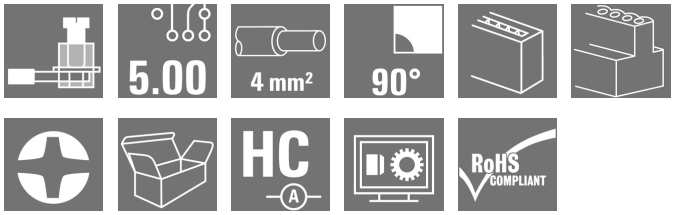
# BLZP 5.00HC/19/90 SN OR BX

**Weidmüller Interface GmbH & Co. KG**
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

## Product image

Similar to illustration




Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

### General ordering data

| | |
|---|---|
| Version | PCB plug-in connector, female plug, 5.00 mm, Number of poles: 19, 90°, Clamping yoke connection, Clamping range, max. : 4 mm², Box |
| Order No. | 1957880000 |
| Type | BLZP 5.00HC/19/90 SN OR BX |
| GTIN (EAN) | 4032248636990 |
| Qty. | 18 pc(s). |
| Product data | IEC: 400 V / 23 A / 0.2 - 4 mm²<br>UL: 300 V / 20 A / AWG 26 - AWG 12 |
| Packaging | Box |

Creation date March 26, 2021 2:44:17 PM CET

# BLZP 5.00HC/19/90 SN OR BX

**Weidmüller Interface GmbH & Co. KG**
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

## Technical data

### Dimensions and weights

| | | | |
|---|---|---|---|
| Depth | 27.2 mm | Depth (inches) | 1.071 inch |
| Height | 14.1 mm | Height (inches) | 0.555 inch |
| Net weight | 35.05 g | Width | 95 mm |
| Width (inches) | 3.74 inch | | |

### System Parameters

| | | | | |
|---|---|---|---|---|
| Product family | OMNIMATE Signal - series BL/SL 5.00 | | | |
| Type of connection | Field connection | | | |
| Wire connection method | Clamping yoke connection | | | |
| Pitch in mm (P) | 5 mm | | | |
| Pitch in inches (P) | 0.197 inch | | | |
| Conductor outlet direction | 90° | | | |
| Number of poles | 19 | | | |
| L1 in mm | 90 mm | | | |
| L1 in inches | 3.546 inch | | | |
| Number of rows | 1 | | | |
| Pin series quantity | 1 | | | |
| Rated cross-section | 4 mm² | | | |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch | | | |
| Volume resistance | ≤5 mΩ | | | |
| Can be coded | Yes | | | |
| Stripping length | 7 mm | | | |
| Clamping screw | M 2.5 | | | |
| Screwdriver blade | 0.6 x 3.5, PH 1, PZ 1 | | | |
| Screwdriver blade standard | DIN 5264, ISO 8764/2-PH, ISO 8764/2-PZ | | | |
| Plugging cycles | 25 | | | |
| Plugging force/pole, max. | 10 N | | | |
| Pulling force/pole, max. | 9 N | | | |
| Tightening torque | Torque type | Wire connection | | |
| | Usage information | Tightening torque | min. | 0.4 Nm |
| | | | max. | 0.5 Nm |

### Material data

| | | | |
|---|---|---|---|
| Insulating material | PBT | Colour | orange |
| Colour chart (similar) | RAL 2000 | Insulating material group | IIIa |
| Comparative Tracking Index (CTI) | ≥ 200 | UL 94 flammability rating | V-0 |
| Contact material | Copper alloy | 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. | -25 °C |
| Temperature range, installation, max. | 100 °C | | |

### Conductors suitable for connection

| | |
|---|---|
| Clamping range, min. | 0.13 mm² |
| Clamping range, max. | 4 mm² |
| Wire connection cross section AWG, min. | AWG 30 |
| Wire connection cross section AWG, max. | AWG 12 |
| Solid, min. H05(07) V-U | 0.2 mm² |
| Solid, max. H05(07) V-U | 4 mm² |

# BLZP 5.00HC/19/90 SN OR BX

**Weidmüller Interface GmbH & Co. KG**
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

## Technical data

| | | | | |
|---|---|---|---|---|
| Flexible, min. H05(07) V-K | 0.2 mm² | | | |
| Flexible, max. H05(07) V-K | 4 mm² | | | |
| w. plastic collar ferrule, DIN 46228 pt 4, min. | 0.2 mm² | | | |
| w. plastic collar ferrule, DIN 46228 pt 4, max. | 2.5 mm² | | | |
| w. wire end ferrule, DIN 46228 pt 1, min. | 0.2 mm² | | | |
| w. wire end ferrule, DIN 46228 pt 1, max. | 4 mm² | | | |
| Plug gauge in accordance with EN 60999 a x b; ø | 2.8 mm x 2.4 mm | | | |
| Clampable conductor | Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 0.5 mm² | |
| | wire end ferrule | Stripping length | nominal | 6 mm |
| | | Recommended wire-end ferrule | H0,5/6 | |
| | Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 1 mm² | |
| | wire end ferrule | Stripping length | nominal | 6 mm |
| | | Recommended wire-end ferrule | H1,0/6 | |
| | Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 1.5 mm² | |
| | wire end ferrule | Stripping length | nominal | 7 mm |
| | | Recommended wire-end ferrule | H1,5/7 | |
| | Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 2.5 mm² | |
| | wire end ferrule | Stripping length | nominal | 7 mm |
| | | Recommended wire-end ferrule | H2,5/7 | |
| | Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 0.75 mm² | |
| | wire end ferrule | Stripping length | nominal | 6 mm |
| | | Recommended wire-end ferrule | H0,75/6 | |
| 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. | | | |

### Rated data acc. to IEC

| | | | |
|---|---|---|---|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C) | 23 A |
| Rated current, max. number of poles (Tu=20°C) | 18 A | Rated current, min. number of poles (Tu=40°C) | 21 A |
| Rated current, max. number of poles (Tu=40°C) | 16 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 |

# BLZP 5.00HC/19/90 SN OR BX

**Weidmüller Interface GmbH & Co. KG**
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

## 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 C / CSA) | 50 V |
| Rated voltage (Use group D / CSA) | 300 V | Rated current (Use group B / CSA) | 20 A |
| Rated current (Use group D / CSA) | 20 A | Wire cross-section, AWG, min. | AWG 30 |
| Wire cross-section, AWG, max. | AWG 12 | 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) | 20 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 | 0 |
| VPE width | 0 | VPE height | 0 |

### 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 | ECLASS 11.0 | 27-46-02-02 |

# BLZP 5.00HC/19/90 SN OR BX

**Weidmüller Interface GmbH & Co. KG**
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

## Technical data

### Important note

| | |
|---|---|
| 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. |
| Notes | • Additional colours on request<br>• Gold-plated contact surfaces on request<br>• Rated current related to rated cross-section & min. No. of poles.<br>• Wire end ferrule without plastic collar to DIN 46228/1<br>• Wire end ferrule with plastic collar to DIN 46228/4<br>• P on drawing = pitch<br>• Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.<br>• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months |

### Approvals

| | |
|---|---|
| Approvals | |
| ROHS | Conform |
| UL File Number Search | E60693 |

### Downloads

| | |
|---|---|
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer |
| Engineering Data | STEP |
| Engineering Data | EPLAN, WSCAD |

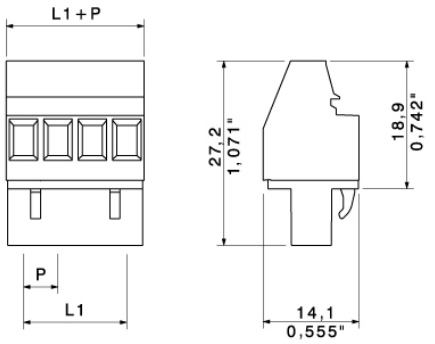
## BLZP 5.00HC/19/90 SN OR BX

**Weidmüller Interface GmbH & Co. KG**
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

# Drawings

### Dimensional drawing

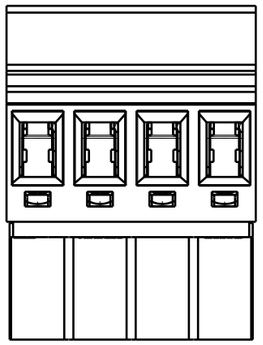


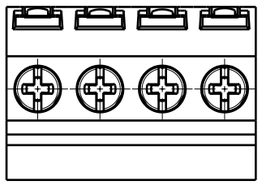
The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited.
Offenders will be held liable for the payment of damages. Weidmueller exclusively reserves the right to file for patents, utility models or designs.
© Weidmueller Interface GmbH & Co. KG

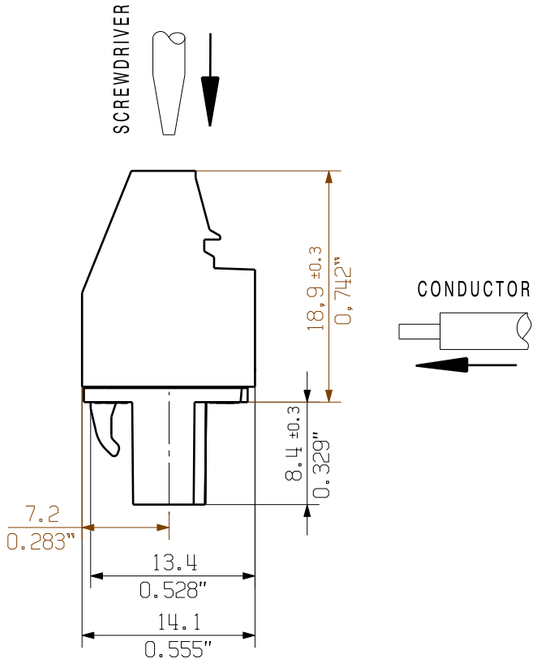
Dimensions without tolerances are no check dimensions

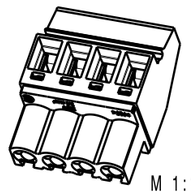
The English version is binding

## BLZP 5.00HC/04/270



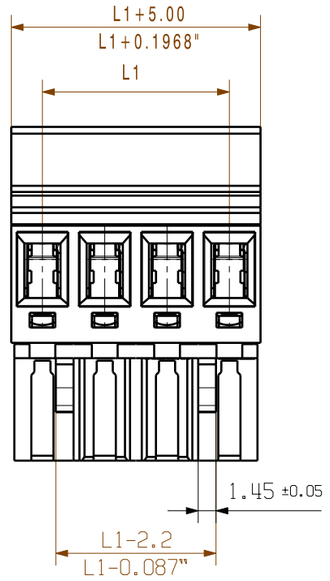


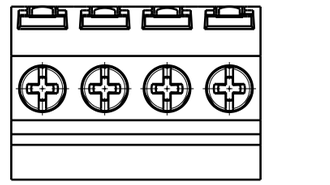


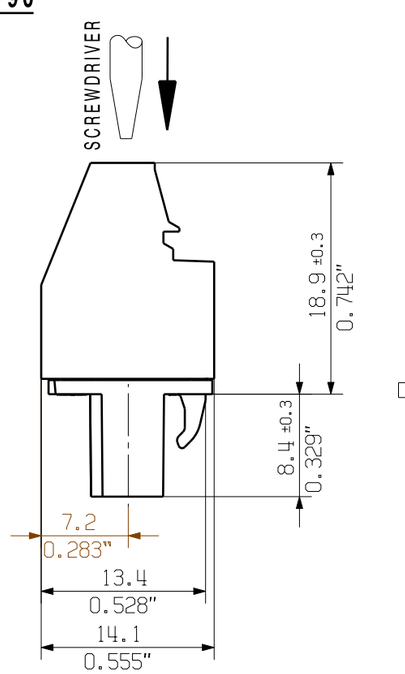



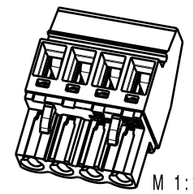
M 1:1

## BLZP 5.00HC/04/90





M 1:1

| n | L1 [mm] | L1 [inch] |
|---|---|---|
| 24 | 115,00 | 4,53 |
| 23 | 110,00 | 4,33 |
| 22 | 105,00 | 4,13 |
| 21 | 100,00 | 3,94 |
| 20 | 95,00 | 3,74 |
| 19 | 90,00 | 3,54 |
| 18 | 85,00 | 3,35 |
| 17 | 80,00 | 3,15 |
| 16 | 75,00 | 2,95 |
| 15 | 70,00 | 2,76 |
| 14 | 65,00 | 2,56 |
| 13 | 60,00 | 2,36 |
| 12 | 55,00 | 2,17 |
| 11 | 50,00 | 1,97 |
| 10 | 45,00 | 1,77 |
| 9 | 40,00 | 1,57 |
| 8 | 35,00 | 1,38 |
| 7 | 30,00 | 1,18 |
| 6 | 25,00 | 0,98 |
| 5 | 20,00 | 0,79 |
| 4 | 15,00 | 0,59 |
| 3 | 10,00 | 0,39 |
| 2 | 5,00 | 0,20 |

P = 5.00 RASTER/PITCH

n = POLZAHL/NO OF POLES

SHOWN: BLZP 5.00HC/04/90
BLZP 5.00HC/04/270

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The neccessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to 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 occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

GENERAL TOLERANCE:
DIN ISO 2768-m

RoHS COMPLIANT

99339/0
19.02.18 HERTEL_S 01
.
Modification

. . Cat.no.: .

Weidmüller

3 42481 06
Drawing no. Issue no.

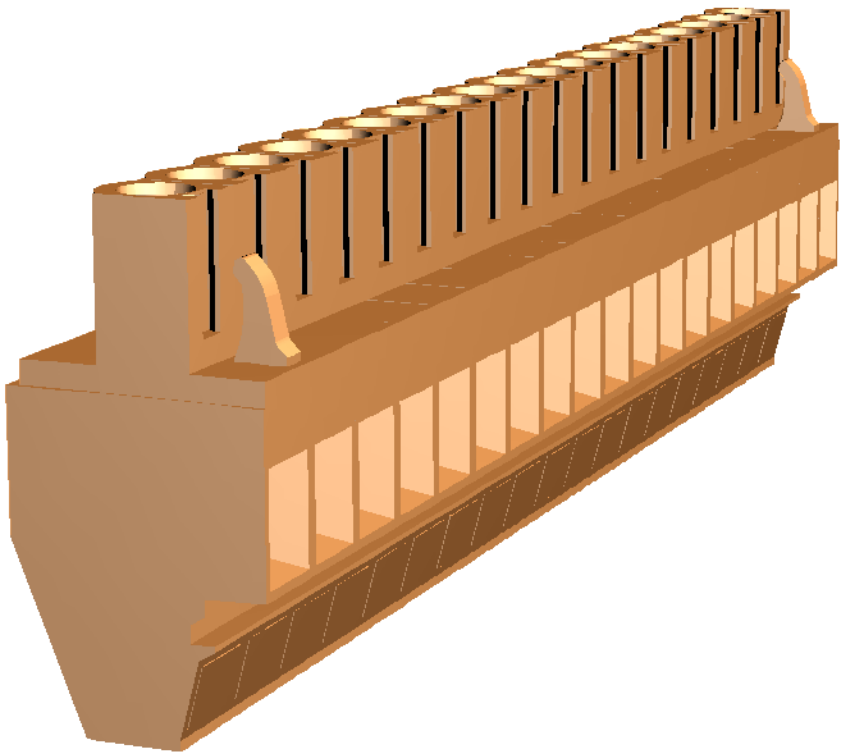
Sheet 01 of 04 sheets

| | Date | Name |
|---|---|---|
| Drawn | 19.02.2018 | HERTEL_S |
| Responsible | | HERTEL_S |
| Checked | 26.02.2018 | HELIS_MA |
| Approved | | LANG_T |

Scale: 2:1

Supersedes: .

# BLZP 5.00HC/../90/270

BUCHSENLEISTE
SOCKET BLOCK

Product file: BLZP 5.0X WG 7157