

BLZP 5.00HC/20/180F SN BK BX**Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

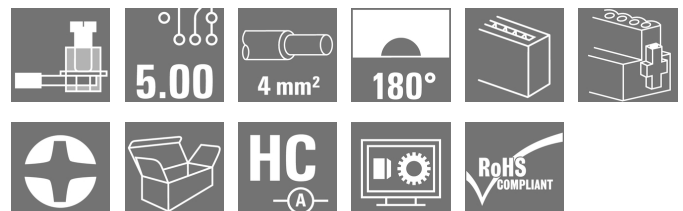
32760 Detmold

Tel. +49 5231 14-0

Fax. +49 5231 14-2083

info@weidmueller.com

www.weidmueller.com

Product image

Female plug with clamping-yoke screw system for connecting wires with straight (180°) 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: 20, 180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box
Order No.	1955850000
Type	BLZP 5.00HC/20/180F SN BK BX
GTIN (EAN)	4032248634408
Qty.	12 pc(s).
Product data	IEC: 400 V / 23 A / 0.2 - 4 mm² UL: 300 V / 20 A / AWG 26 - AWG 12
Packaging	Box

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Technical data**Dimensions and weights**

Depth	20.1 mm	Depth (inches)	0.791 inch
Height	16.1 mm	Height (inches)	0.634 inch
Width	110 mm	Width (inches)	4.331 inch
Net weight	35.94 g		

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	180°		
Number of poles	20		
L1 in mm	95 mm		
L1 in inches	3.743 inch		
Number of rows	1		
Pin series quantity	1		
Rated cross-section	4 mm ²		
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch		
Protection degree	IP20		
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
	Torque type	Screw flange	
	Usage information	Tightening torque	min. 0.2 Nm
			max. 0.25 Nm

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIla
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 ^{<sup>8</sup>} Ω
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 mm ²
Clamping range, max.	4 mm ²
Wire connection cross section AWG, min.	AWG 30

Creation date September 17, 2022 7:54:36 PM CEST

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Technical data

Wire connection cross section AWG, max.	AWG 12		
Solid, min. H05(07) V-U	0.2 mm ²		
Solid, max. H05(07) V-U	4 mm ²		
Flexible, min. H05(07) V-K	0.2 mm ²		
Flexible, max. H05(07) V-K	4 mm ²		
w. plastic collar ferrule, DIN 46228 pt 4, 0.2 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.	0.2 mm ²		
w. wire end ferrule, DIN 46228 pt 1, max.	4 mm ²		
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 mm ²
	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 mm ²
	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 mm ²
	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 mm ²
	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 mm ²
	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

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Technical data**Rated data acc. to CSA**

Institute (CSA)



Certificate No. (CSA)

www.weidmueller.com

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.

Reference to approval values

Specifications are maximum values, details - see approval certificate.

AWG 12

Packing

Packaging Box

VPE length 338 mm

VPE width 130 mm

VPE height 27 mm

Classifications

ETIM 6.0 EC002638

ETIM 7.0 EC002638

ETIM 8.0 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

ECLASS 12.0 27-46-02-02

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 variants 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
- 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.
- 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 UL Website

Certificate No. (cURus) E60693

Creation date September 17, 2022 7:54:36 PM CEST

Catalogue status 09.09.2022 / We reserve the right to make technical changes.

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Technical datainfo@weidmueller.comwww.weidmueller.com**Downloads**

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Engineering Data	EPLAN, WSCAD
Product Change Notification	20220106 BLT and BLZP in pitch 5.0x – Addition of a screw locking 20220106 BLT und BLZP im Raster 5.0x – Ergänzung einer Schraubensicherung
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE 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 PO OMNIMATE EN

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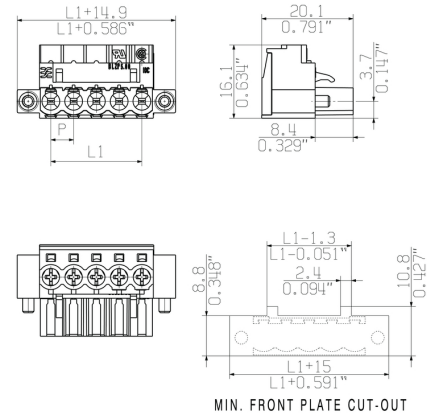
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Drawings

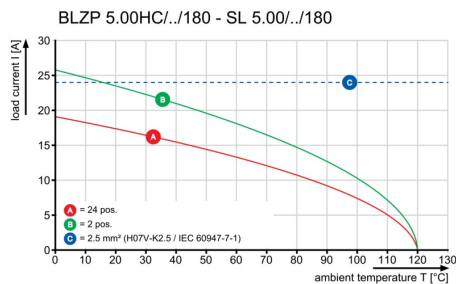
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Product image

Dimensional drawing



Graph

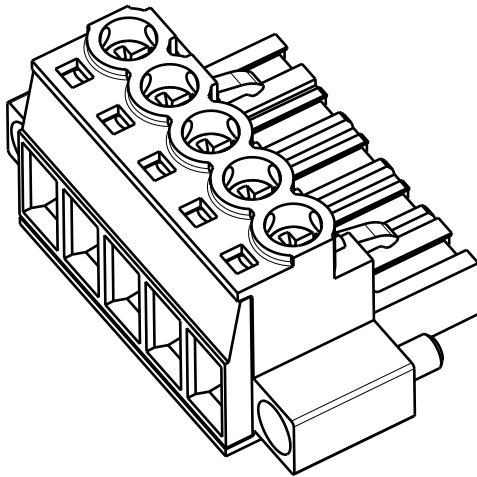
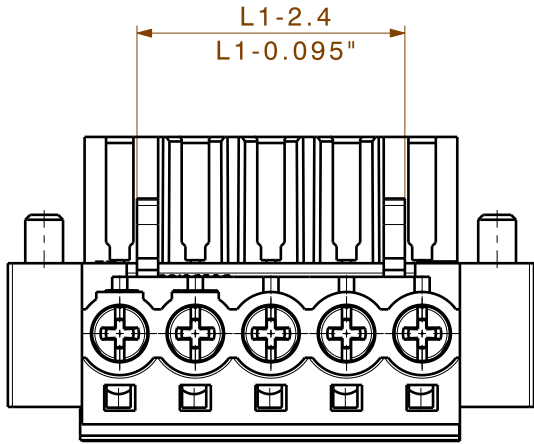
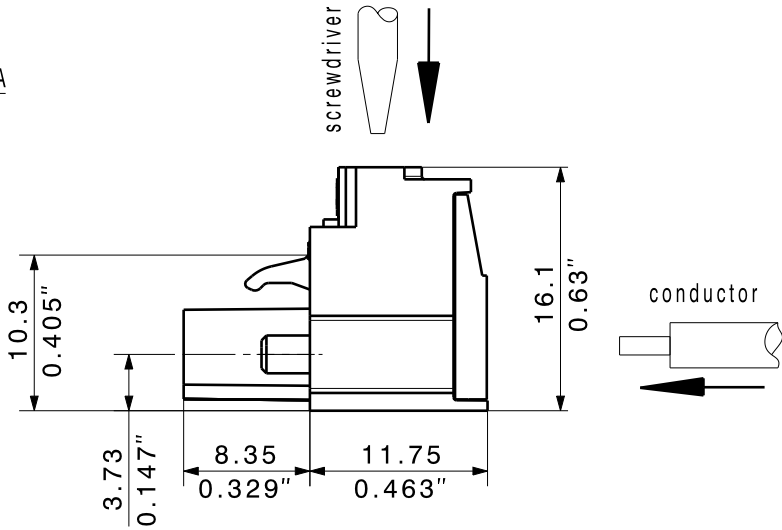
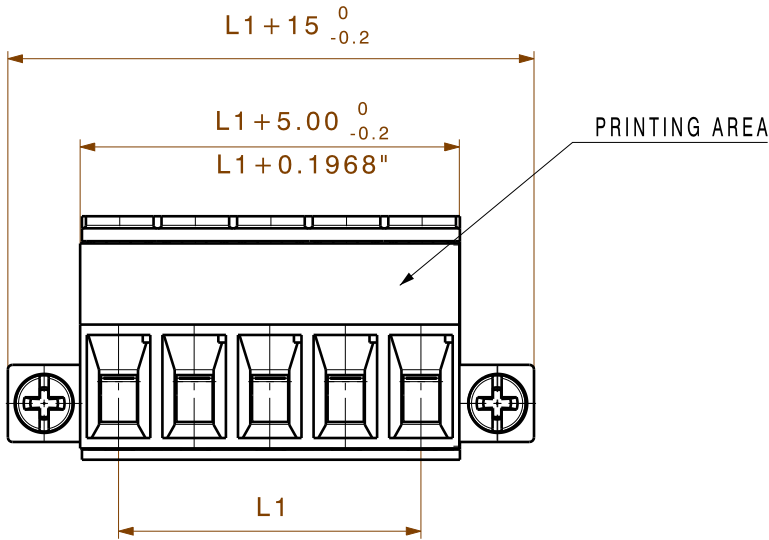


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MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING



24	115,00	4,530
23	110,00	4,333
22	105,00	4,136
21	100,00	3,939
20	95,00	3,742
19	90,00	3,545
18	85,00	3,348
17	80,00	3,151
16	75,00	2,954
15	70,00	2,757
14	65,00	2,560
13	60,00	2,363
12	55,00	2,166
11	50,00	1,969
10	45,00	1,772
9	40,00	1,575
8	35,00	1,378
7	30,00	1,181
6	25,00	0,984
5	20,00	0,787
4	15,00	0,590
3	10,00	0,393
2	5,00	0,196
n	L1 [mm]	L1 [Inch]

P = 5.00 RASTER/PITCH

n = POLZAHL/NO OF POLES

SHOWN: BLZP 5.00HC/05/180F

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.

GENERAL TOLERANCE: DIN ISO 2768-m		78305/4 10.06.15 HERTEL_S 01		CAT.NO.:	
		MODIFICATION		Weidmüller	
		DATE	NAME	BLZP 5.00HC/././180.. BUCHSENLEISTE SOCKET BLOCK	
DRAWN		10.06.2015	HERTEL_S		
RESPONSIBLE			KRUG_M		
SCALE: 2:1		CHECKED	15.06.2015	HELIS_MA	PRODUCT FILE: BLZP 5.0X WG 180 7157
SUPERSEDES: .		APPROVED		LANG_T	