

BLZP 5.00HC/12/180F SN BK BX**Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

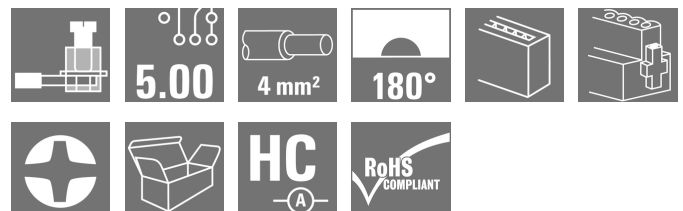
32760 Detmold

Tel. +49 5231 14-0

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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: 12, 180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box
Order No.	1955930000
Type	BLZP 5.00HC/12/180F SN BK BX
GTIN (EAN)	4032248634507
Qty.	24 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	70 mm	Width (inches)	2.756 inch
Net weight	22.58 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	12		
L1 in mm	55 mm		
L1 in inches	2.167 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	IIIa
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 7:56:31 PM CEST

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Technical data

Wire connection cross section AWG, max. AWG 12

Solid, min. H05(07) V-U 0.2 mm²Solid, max. H05(07) V-U 4 mm²Flexible, min. H05(07) V-K 0.2 mm²Flexible, max. H05(07) V-K 4 mm²w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm² min.w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm² max.w. wire end ferrule, DIN 46228 pt 1, 0.2 mm² min.w. wire end ferrule, DIN 46228 pt 1, 4 mm² max.

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, max. number of poles (Tu=20°C) 18 A

Rated current, max. number of poles (Tu=40°C) 16 A

Rated voltage for surge voltage class / pollution degree III/2 320 V

Rated impulse voltage for surge voltage class/ pollution degree II/2 4 kV

Rated impulse voltage for surge voltage class/ contamination degree III/3 4 kV

Rated current, min. number of poles (Tu=20°C) 23 A

Rated current, min. number of poles (Tu=40°C) 21 A

Rated voltage for surge voltage class / pollution degree II/2 400 V

Rated voltage for surge voltage class / pollution degree III/3 250 V

Rated impulse voltage for surge voltage class/ pollution degree III/2 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 7:56:31 PM CEST

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

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info@weidmueller.comwww.weidmueller.com**Technical data****Downloads**Approval/Certificate/Document of
Conformity[Declaration of the Manufacturer](#)

Engineering Data

[CAD data – STEP](#)

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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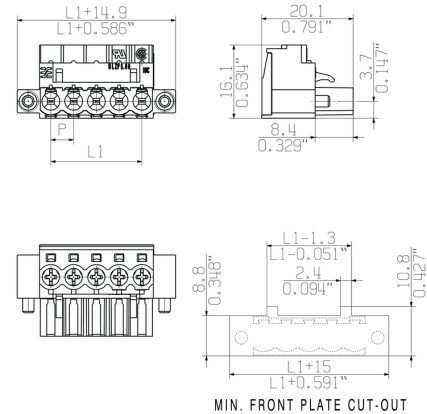
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Drawings

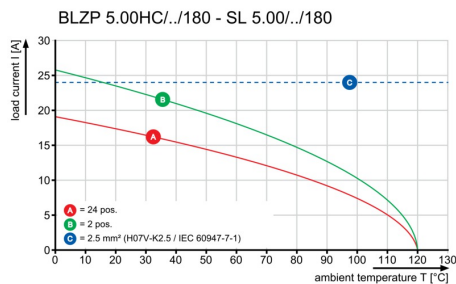
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Product image

Dimensional drawing



Graph

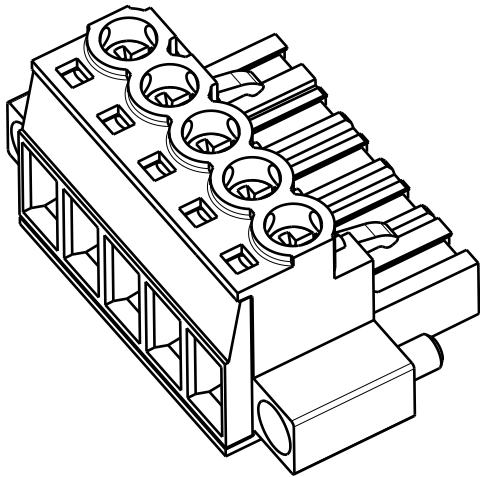
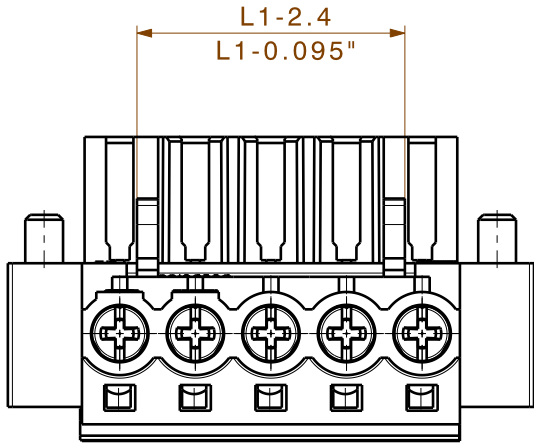
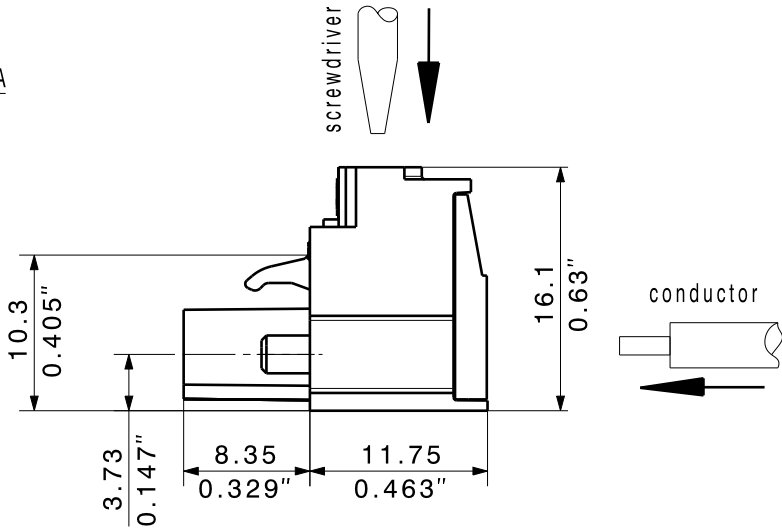
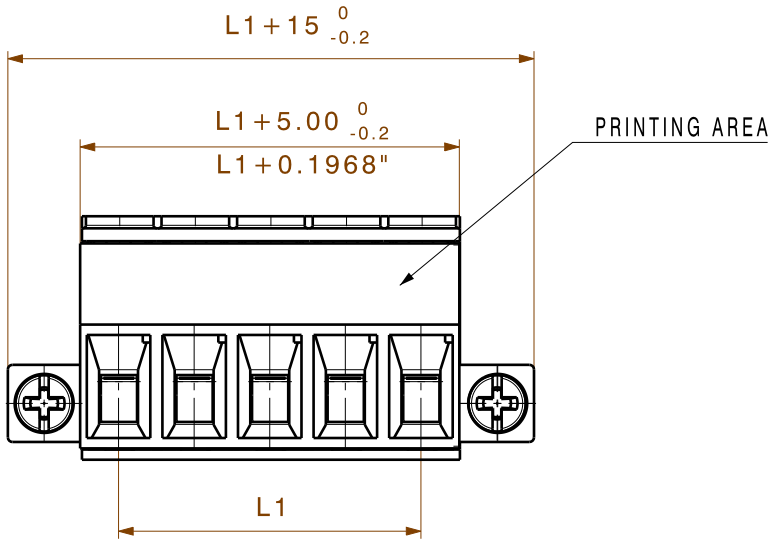


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MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

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

MODIFICATION

	DATE	NAME
DRAWN	10.06.2015	HERTEL_S
RESPONSIBLE		KRUG_M
CHECKED	15.06.2015	HELIS_MA
APPROVED		LANG_T

SCALE: 2:1
SUPERSEDES: .

CAT.NO.: .

C 42480 **09**

DRAWING NO. SHEET 03 OF 03 SHEETS

Weidmüller

BLZP 5.00HC/././180..
BUCHSENLEISTE
SOCKET BLOCK

PRODUCT FILE: BLZP 5.0X WG 180 7157