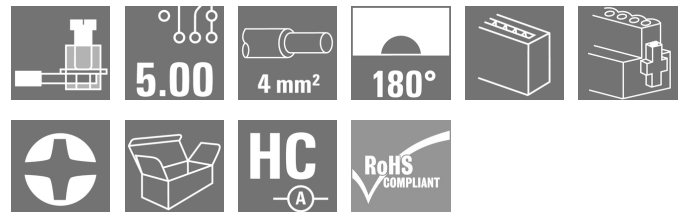


BLZP 5.00HC/02/180F SN BK BX

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

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: 2, 180°, Clamping yoke connection, Clamping range, max.: 4 mm², Box
Order No.	1956030000
Type	BLZP 5.00HC/02/180F SN BK BX
GTIN (EAN)	4032248634606
Qty.	90 pc(s).
Product data	IEC: 400 V / 23 A / 0.2 - 4 mm² UL: 300 V / 20 A / AWG 26 - AWG 12
Packaging	Box

Creation date February 5, 2024 10:51:06 AM CET

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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	20 mm	Width (inches)	0.787 inch
Net weight	4.967 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 "		
Conductor outlet direction	180°		
Number of poles	2		
L1 in mm	5 mm		
L1 in inches	0.197 "		
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		
Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged		
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	Illa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10⁸ Ω
UL 94 flammability rating	V-0	Contact material	Cu-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

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Technical data

Wire connection cross section AWG, min.	AWG 30
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, min.	0.2 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 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

Creation date February 5, 2024 10:51:06 AM CET

BLZP 5.00HC/02/180F SN BK BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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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 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

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	349 mm
VPE width	137 mm	VPE height	31 mm

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ETIM 9.0	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	ECLASS 13.0	27460202

BLZP 5.00HC/02/180F SN BK BX

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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	<ul style="list-style-type: none"> • 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. • In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load • Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

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 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 PO OMNIMATE EN

Creation date February 5, 2024 10:51:06 AM CET

Catalogue status 27.01.2024 / We reserve the right to make technical changes.

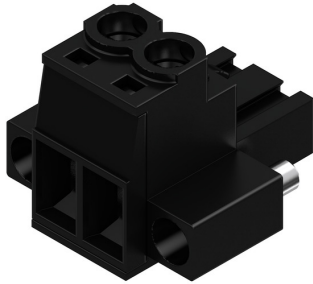
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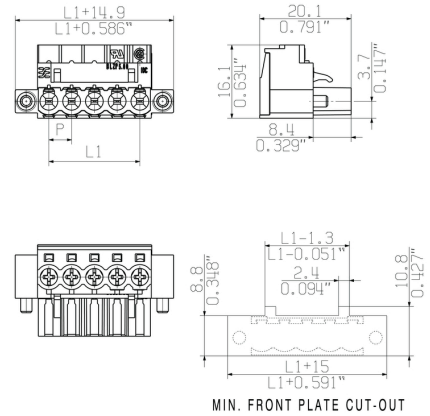
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Drawings

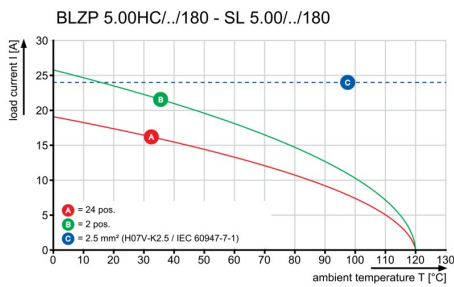
Product image



Dimensional drawing



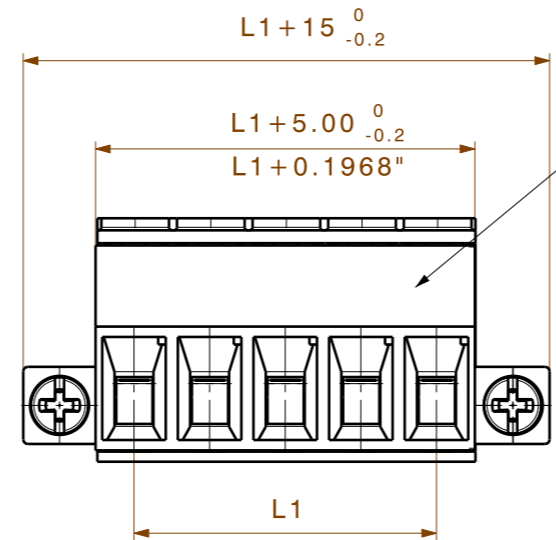
Graph



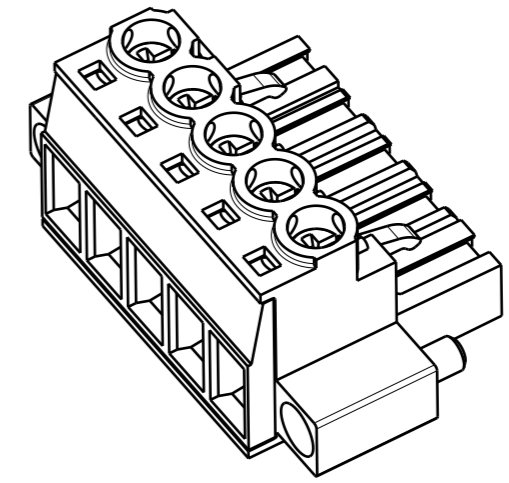
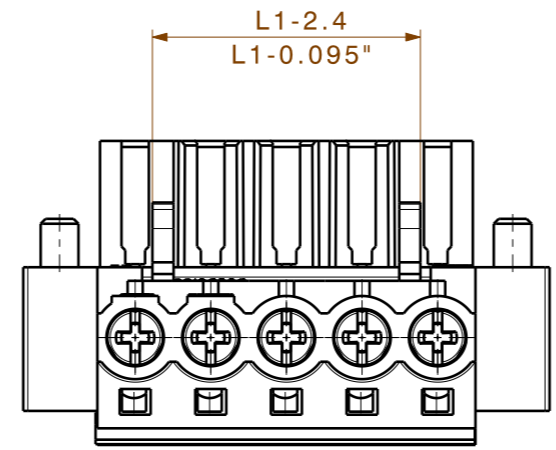
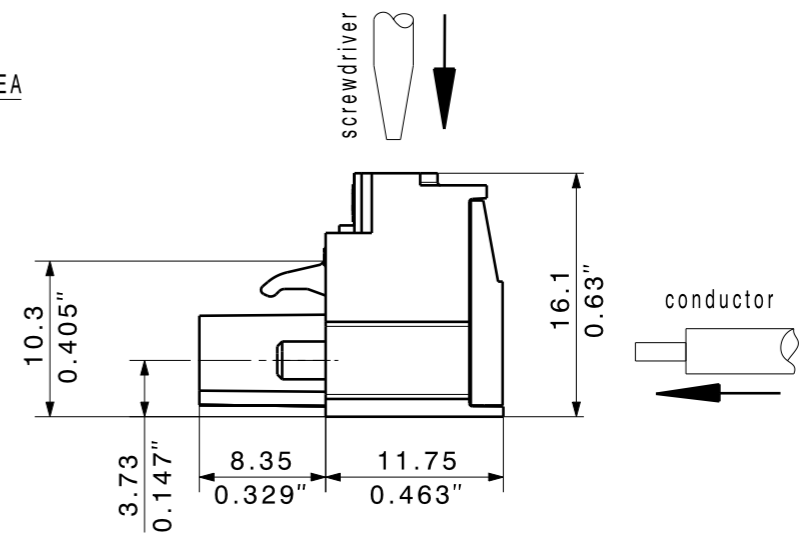
MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
 DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

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PRINTING AREA



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	DRAWING NO. C 42480 ISSUE NO. 09	
SCALE: 2:1		DRAWN	10.06.2015	HERTEL_S	SHEET 03 OF 03 SHEETS
SUPERSEDES: .		RESPONSIBLE		KRUG_M	
		CHECKED	15.06.2015	HELI_S_MA	
		APPROVED		LANG_T	PRODUCT FILE: BLZP 5.0X WG 180
				BLZP 5.00HC/././180.. BUCHSENLEISTE SOCKET BLOCK	
				7157	