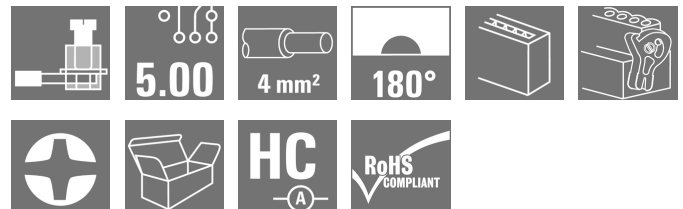


OMNIMATE Signal - series BL/SL 5.00
BLZP 5.00HC/05/180LR SN BK BX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
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 Germany
 Fon: +49 5231 14-0
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 www.weidmueller.com

Product image


Similar to illustration

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

Type	BLZP 5.00HC/05/180LR SN BK BX
Order No.	1956570000
Version	PCB plug-in connector, female plug, 5.00 mm, Number of poles: 5, 180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box
GTIN (EAN)	4032248635382
Qty.	48 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 August 21, 2020 9:33:55 PM CEST

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Technical data

Dimensions and weights

Width	34.8	Width (inches)	1.37 inch
Height	16.9 mm	Height (inches)	0.665 inch
Depth	29.6 mm	Depth (inches)	1.165 inch
Net weight	10.979 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	5	L1 in mm	20 mm
L1 in inches	0.788 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	Volume resistance	≤ 5mΩ
Can be coded	Yes	Stripping length	7 mm
Tightening torque, min.	0.4 Nm	Tightening torque, max.	0.5 Nm
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

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	GWFI	960 °C
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
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, 0.2 mm ² min.	
w. wire end ferrule, DIN 46228 pt 1, 4 mm ² max.	

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Technical data

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.

Max. clamping range 4 mm²

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

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.

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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 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 30 mm

VPE width 135 mm

VPE height 350 mm

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

UNSPSC 30-21-18-01

Notes

Notes

- 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
- 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

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

OMNIMATE Signal - series BL/SL 5.00 BLZP 5.00HC/05/180LR SN BK BX

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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

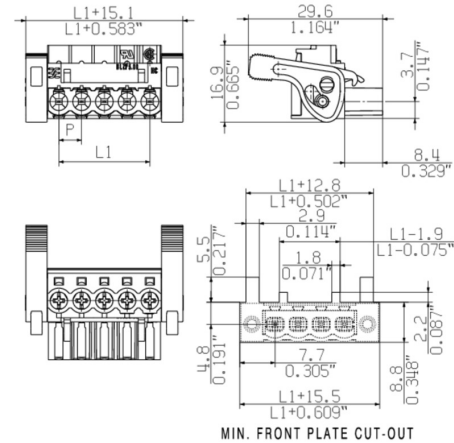
[STEP](#)

OMNIMATE Signal - series BL/SL 5.00 BLZP 5.00HC/05/180LR SN BK BX

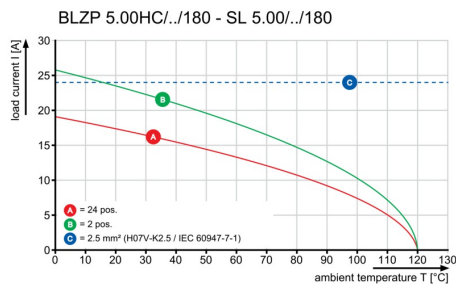
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Drawings

Dimensional drawing



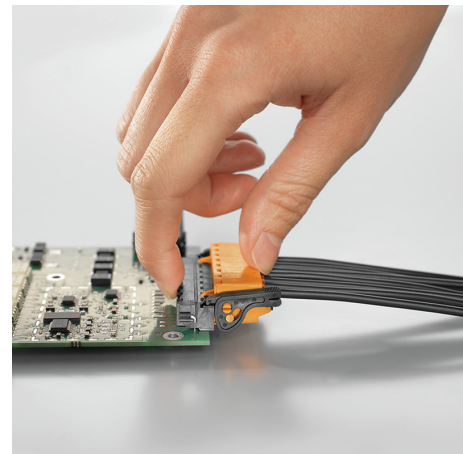
Graph



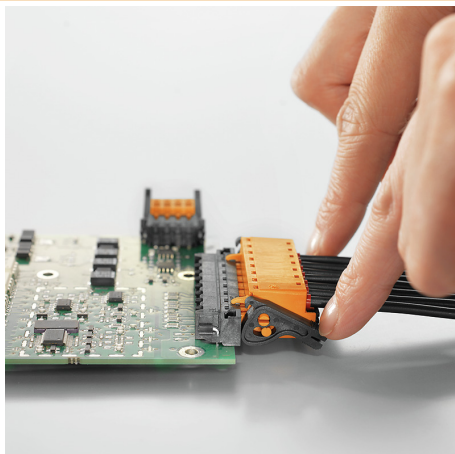
Self-locking
Immediately on plugging in

Product benefits

Product benefits



Self-locking
Immediately on plugging in



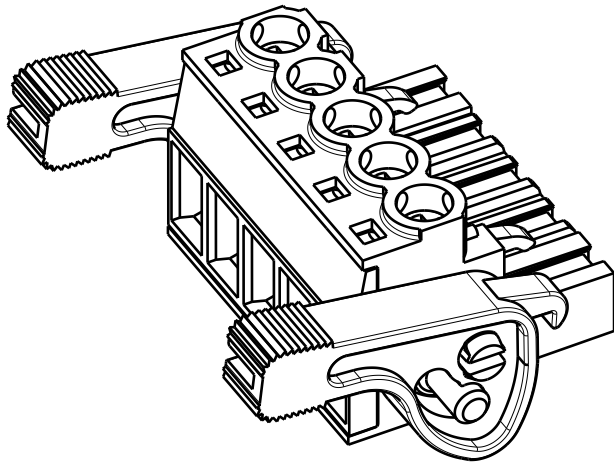
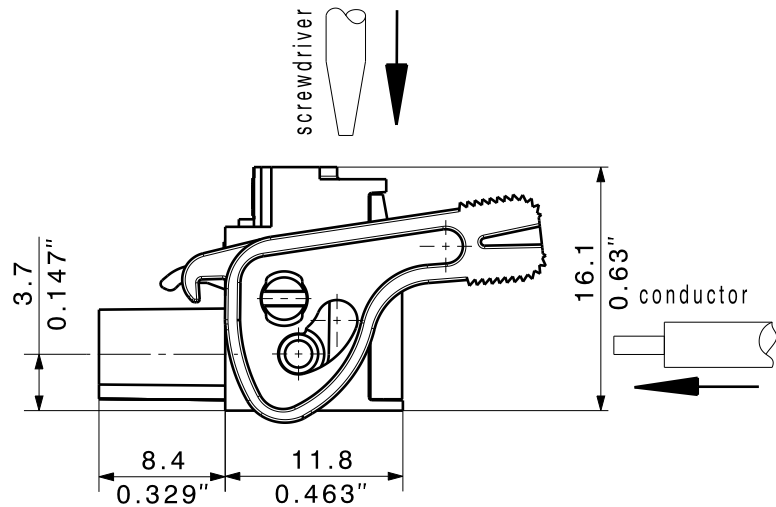
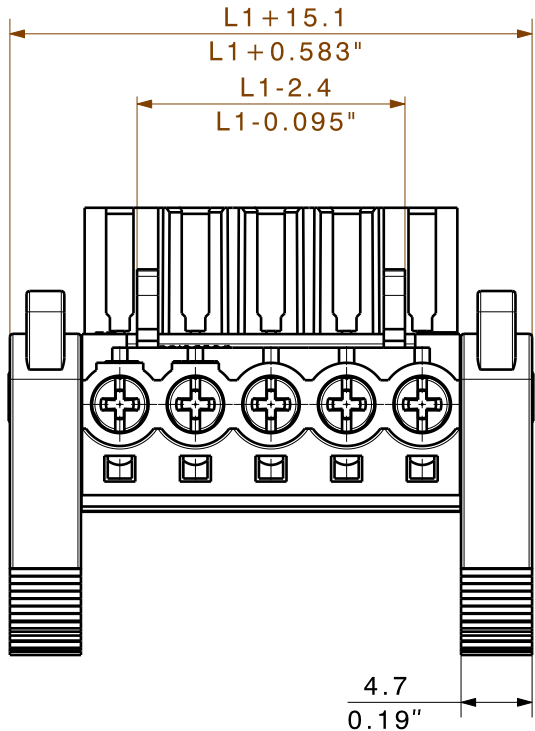
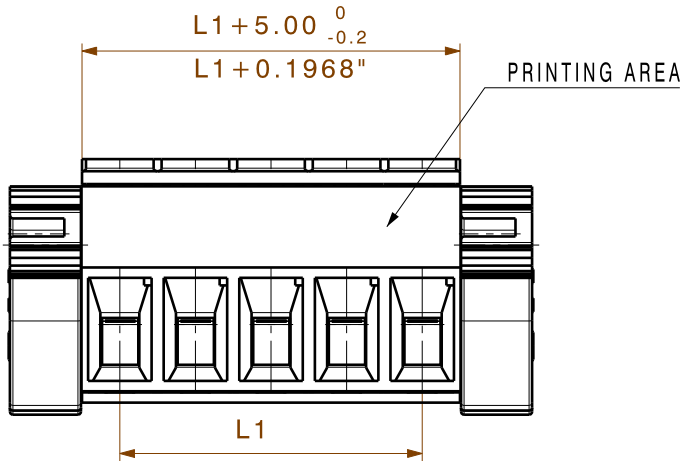
Gentle unlocking
Low mechanical stress

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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



n	L1 [mm]	L1 [Inch]	L4[mm]
24	115,00	4,530	130,100
23	110,00	4,333	125,100
22	105,00	4,136	120,100
21	100,00	3,939	115,100
20	95,00	3,742	110,100
19	90,00	3,545	105,100
18	85,00	3,348	100,100
17	80,00	3,151	95,100
16	75,00	2,954	90,100
15	70,00	2,757	85,100
14	65,00	2,560	80,100
13	60,00	2,363	75,100
12	55,00	2,166	70,100
11	50,00	1,969	65,100
10	45,00	1,772	60,100
9	40,00	1,575	55,100
8	35,00	1,378	50,100
7	30,00	1,181	45,100
6	25,00	0,984	40,100
5	20,00	0,787	35,100
4	15,00	0,590	30,100
3	10,00	0,393	25,100
2	5,00	0,196	20,100

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary 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 occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

SHOWN: BLZP 5.00HC/05/180LR

P = 5.00 RASTER/PITCH

n = POLZAHL/NO OF POLES

GENERAL TOLERANCE: DIN ISO 2768-m		78305/4 10.06.15 HERTEL_S 01		CAT.NO.: .	
RoHS COMPLIANT		MODIFICATION		Weidmüller	
DRAWN		DATE	NAME	C 42480 09	
RESPONSIBLE		10.06.2015	HERTEL_S	DRAWING NO. SHEET 02 OF 03 SHEETS	
CHECKED		15.06.2015	HELI_S_MA	ISSUE NO.	
APPROVED		LANG_T		7157	
SCALE: 2:1		PRODUCT FILE: BLZP 5.0X WG 180		BLZP 5.00HC/././180..	
SUPERSEDES: .				BUCHSENLEISTE SOCKET BLOCK	